

Test Report issued under the responsibility of:



TEST REPORT IEC 61347-2-13 Part 2: Particular requirements: Section 13 – d.c. or a.c. supplied electronic controlgear for LED modules

Report Number:	50226014 001
Date of issue:	Apr. 17, 2019
Total number of pages	151
Name of Testing Laboratory preparing the Report:	TÜV Rheinland (Shenzhen) Co., Ltd.
Applicant's name:	Dongguan Rico Electronic Co., Ltd.
Address:	Shangling Industrial Park, Hengli Town, Dongguan City, 523460 Guangdong, China
Test specification:	
Standard:	IEC 61347-2-13:2014/AMD1:2016 used in conjunction with IEC 61347-1:2015
Test procedure:	CB Scheme
Non-standard test method	N/A
Test Report Form No	IEC61347_2_13F
Test Report Form(s) Originator :	Intertek Semko AB
Master TRF:	2016-10
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Test item description	LED Power Supply
Trade Mark	RICO [°]
Manufacturer	Same as applicant
Model/Type reference:	RKPO-zzxxxyyyy, RKPO-zzxxxyyyyCD-5, RKP-zzxxxyyyyDP-5, RKP-zzxxxyyyyCD-5, RKPO-zzxxxyyyy-D2, RKPO-zzxxxyyyyDP- 2, RKPO-EUxxxyyyyDP-2A, RKPO-zzxxxyyyyCD-2, RKP- zzxxxyyyyDP-2, RKPO-zzxxxyyyy-D1, RKPO-zzxxxyyyyCD-1 and RKP-zzxxxyyyyDP-1 (for xxx, yyyy and zz, see page 14 for details)
Ratings:	 I/P: 100-240Vac, 50/60Hz, 0.6A (for models RKPO-zzxxxyyy, RKPO-zzxxxyyyyCD-5, RKP-zzxxxyyyyDP-5, RKP-zzxxxyyyyCD-5) 100-240Vac, 50/60Hz, 0.3A (for models RKPO-zzxxxyyy-D2, RKPO-zzxxxyyyDP-2, RKPO-EUxxxyyyDP-2A, RKPO- zzxxxyyyyCD-2, RKP-zzxxxyyyDP-2, RKPO-zzxxxyyyy-D1, RKPO-zzxxxyyyyCD-1 and RKP-zzxxxyyyDP-1) O/P: see pages 15-16 for details

Res	Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):					
	CB Testing Laboratory:	TÜV Rheinland (Shen	zhen) Co., Ltd.			
Testing location/address:		East of F/1, F/2~F/4, Building 1, Cybio Technology Building No. 6 Langshan No.2 Road, North Hi-tech Industry Park 518057 Shenzhen Nanshan District China				
Tes	ted by (name, function, signature) :	Jet Luo (Project Handler)	_es h			
Арр	roved by (name, function, signature) . :	Jammy Zhang (Reviewer)	Jany Zhong			
	Testing procedure: CTF Stage 1:					
Tes	ting location/address:					
Tes	ted by (name, function, signature):					
Арр	roved by (name, function, signature) . :					
	Testing procedure: CTF Stage 2:					
Tes	ting location/address:					
Tes	ted by (name + signature):					
Wit	nessed by (name, function, signature):					
Арр	roved by (name, function, signature) . :					
	Testing procedure: CTF Stage 3:					
	Testing procedure: CTF Stage 4:					
Tes	ting location/address:					
Tested by (name, function, signature) :						
Witnessed by (name, function, signature):						
Approved by (name, function, signature) . :						
Sup	ervised by (name, function, signature):					
Γ						

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List of Attachments (including a total number of pages in each attachment):

- Attachment 1: IP degree test report for models RKPO-EUxxxyyyy, RKPO-zzxxxyyyyCD-5, RKPO-EUxxxyyyy-D2, RKPO-EUxxxyyyy-DP-2, RKPO-EUxxxyyyy-DP-2A, RKPO-zzxxxyyyyCD-2, RKPO-EUxxxyyyy-D1, RKPO-zzxxxyyyyCD-1 (6 pages)
- Attachment 2: UK plug test report for models RKPO-UKxxxyyyy, RKPO-UKxxxyyyy-D2, RKPO-UKxxxyyyy-D1 (5 pages)
- Attachment 3: German plug test report for models RKPO-EUxxxyyyy, RKPO-EUxxxyyyy-D2, RKPO-EUxxxyyyy-D1 (49 pages)
- Attachment 4: UK plug test report for models RKP-UKxxxyyyyDP-5 (5 pages)
- Attachment 5: UK plug test report for models RKPO-UKxxxyyyyDP-2 (5 pages)
- Attachment 6: UK plug test report for models RKP-UKxxxyyyyDP-2 (5 pages)
- Attachment 7: UK plug test report for models RKP-UKxxxyyyyDP-1 (5 pages)
- Attachment 8: EU plug test report for models RKP-EUxxxyyyyDP-2 (5 pages)
- Attachment 9: EU plug test report for models RKP-EUxxxyyyyDP-1 (5 pages)
- Attachment 10: 42 pages of photo document



Summary of lesting.	
Tests performed (name of test and test clause):	Testing location:
All applied clauses of IEC 61347-2-13:2014/AMD1:2016, IEC 61347-1: 2015 were considered.	Unless otherwise indicated, all tests were performed at the
Note:	location stated in "Testing
1. Maximum ambient temperature: 40°C	procedure and testing location".
2. The following tests have been made on representative models:	
3. Unless otherwise specified, all tests were performed on models	
RKPO-EU0503000, RKPO-EU1202000, RKPO-EU2401000, RKPO- UK0401500-D1, RKPO-UK0900666-D1, RKPO-UK1900315-D1, RKPO-UK2400250-D1, RKPO-UK0602000-D2, RKPO-UK1101090-D2, RKPO-UK1900630-D2, RKPO-UK2400500-D2, RKPO-EU0503000CD- 5, RKPO-EU1202000CD-5, RKPO-EU2401000CD-5, RKP- EU0503000CD-5, RKP-EU1202000CD-5, RKP-EU2401000CD-5, RKPO-EU0602000DP-2, RKPO-EU1101090DP-2, RKPO- EU1900630DP-2, RKPO-EU2400500DP-2, RKPO- EU1900630DP-2, RKPO-EU2400500DP-2, RKPO- EU1101090DP-2A, RKPO-EU1900630DP-2A, RKPO- EU2400500DP-2A, RKPO-EU2400500CD-2, RKPO- EU2400500DP-2, RKPO-EU0602000CD-2, RKPO-EU1101090CD-2, RKPO-EU1900630CD-2, RKPO-EU2400500CD-2, RKP- EU2400500DP-2, RKPO-EU1101090DP-2, RKPO-EU1900630DP-2, RKP- EU2400500DP-2, RKPO-UK0401500CD-1, RKPO-UK0900666CD-1, RKPO-UK1900315CD-1, RKPO-UK2400250CD-1, RKP- UK0401500DP-1, RKP-UK0900666DP-1, RKP-UK1900315DP-1, RKP- UK2400250DP-1 which represent all models.	
 4. All test above are derived from original CB reports 17057899 001 and 17057899 003 except for test data of models RKPO- EU0503000CD-5, RKPO-EU1202000CD-5, RKPO-EU2401000CD-5, RKP-EU0503000CD-5, RKP-EU1202000CD-5, RKP-EU2401000CD-5, RKPO-EU0602000DP-2, RKPO-EU1101090DP-2, RKPO- EU1900630DP-2, RKPO-EU2400500DP-2, RKPO-EU0602000DP-2A, RKPO-EU1101090DP-2A, RKPO-EU1900630DP-2A, RKPO- EU2400500DP-2A, RKPO-EU0602000CD-2, RKPO-EU1101090CD-2, RKPO-EU1900630CD-2, RKPO-EU2400500CD-2, RKPO- EU2400500DP-2, RKPO-EU2400500CD-2, RKP- EU0602000DP-2, RKPO-EU2400500CD-2, RKP- EU2400500DP-2, RKPO-UX24002500CD-1, RKP- EU2400500DP-2, RKPO-UK0401500CD-1, RKPO-UK0900666CD-1, RKPO-UK1900315CD-1, RKPO-UK2400250CD-1, RKP- UK0401500DP-1, RKP-UK0900666DP-1, RKP-UK1900315DP-1, RKP- UK2400250DP-1 and frequency of working voltage. 5. The EUTs passed the test. 	

Summary of compliance with National Differences:

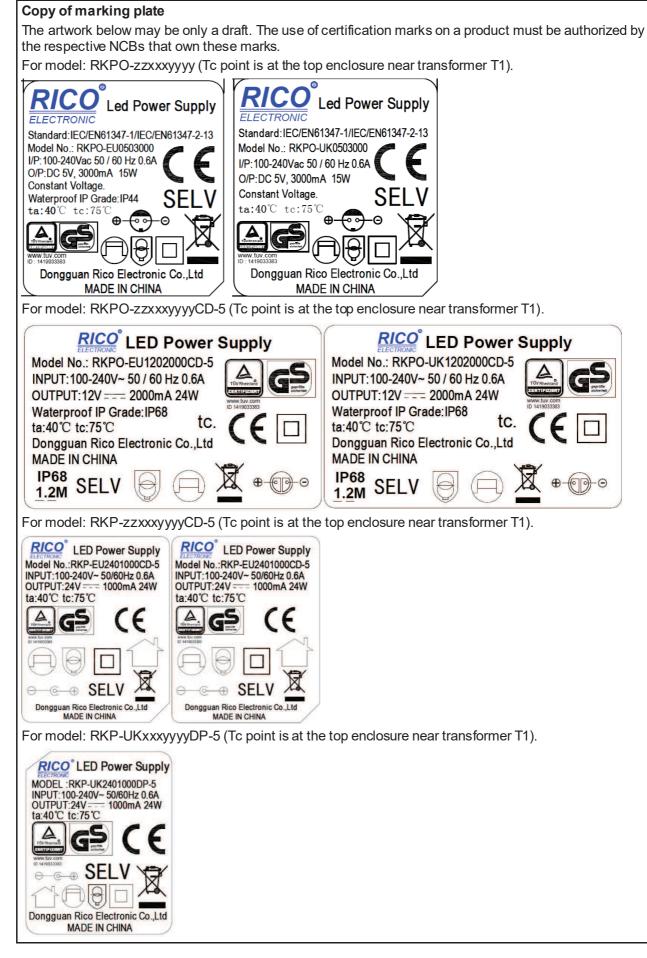
List of countries addressed:

Summary of testing:

Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

⊠ The product fulfils the requirements of EN 61347-2-13:2014 + A1 used in conjunction with EN 61347-1: 2015.





TRF No. IEC61347_2_13F

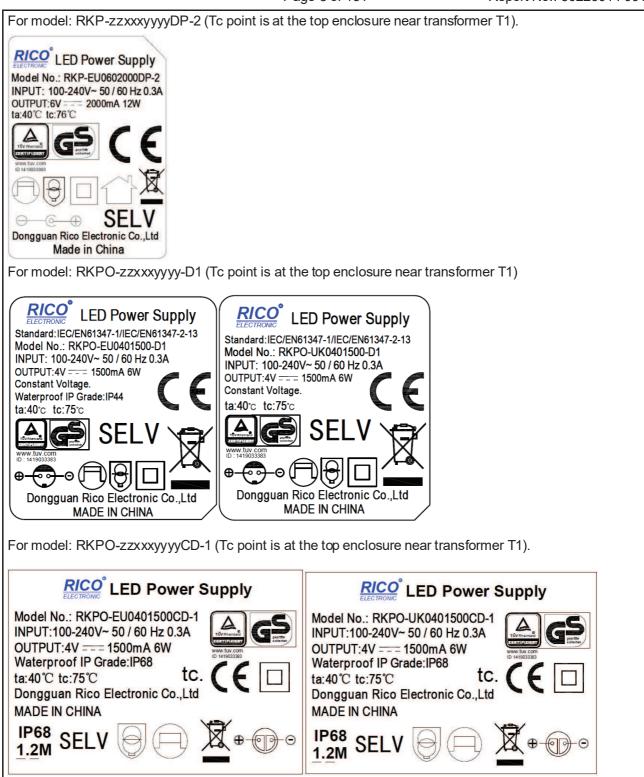
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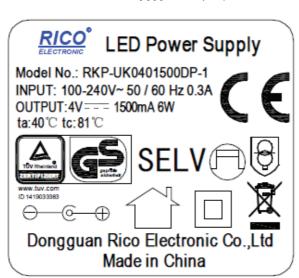




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For model: RKP-zzxxxyyyyDP-1 (Tc point is at the top enclosure near transformer T1).



Supplementary information

- 1. Above label for representing the other models.
- 2. IP44 for models RKPO-EUxxxyyyy, RKPO-EUxxxyyyy-D1 and RKPO-EUxxxyyyy-D2, RKPOzzxxxyyyyDP-2 only.

3. IP68 for models RKPO-zzxxxyyyyCD-5, RKPO-zzxxxyyyyCD-2, RKPO-zzxxxyyyyCD-1





Test item particulars:	
Classification of installation and use:	Class II, Independent SELV type
Supply Connection:	Direct plug-in for models: RKPO-EUxxxyyy, RKPO-UKxxxyyy, RKP- UKxxxyyyDP-5, RKPO-EUxxyyyDP-2, RKPO- UKxxxyyyDP-2, RKPO-EUxxyyyDP-2, RKPO- UKxxxyyyDP-2, RKPO-EUxxyyyDP-2, RKPO- EUxxyyyDP-2, RKPO-UKxxyyyDP-2, RKPO- EUxxxyyyDP-1, RKPO-UKxxyyyDP-1 Desk top type for models: RKPO-EUxxxyyyCD-5, RKPO-UKxxxyyyCD-5, RKPO-EUxxxyyyCD-2, RKPO-UKxxxyyyCD-2, RKPO-EUxxxyyyCD-1, RKPO-UKxxxyyyCD-2, RKPO-EUxxxyyyCD-1, RKPO-UKxxxyyyCD-1
Possible test case verdicts:	
- test case does not apply to the test object:	N/A
- test object does meet the requirement:	P (Pass)
- test object does not meet the requirement:	F (Fail)
Testing:	(Year-Month-Date)
Date of receipt of test item:	2019-02-19
Date (s) of performance of tests:	2016-03-18 to 2016-04-11(test date of CB report 17057899 001); 2017-05-03 to 2017-05-19 (test date of CB report 17057899 003); 2018-01-18 to 2018- 04-10 (test date of IEC report 50110576 001)
General remarks:	
"(See Enclosure #)" refers to additional information ap "(See appended table)" refers to a table appended to the	
Throughout this report a \Box comma / $igta$ point is us	sed as the decimal separator.
Clause numbers between brackets refer to clauses	in IEC 61347-1
Manufacturer's Declaration per sub-clause 4.2.5 of	IECEE 02:
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided	☐ Yes ⊠ Not applicable
When differences exist; they shall be identified in t	he General product information section.
Name and address of factory (ies) :	Dongguan Rico Electronic Co., Ltd. Shangling Industrial Park, Hengli Town, Dongguan City, 523460 Guangdong, China

General product information:

- The EUT covered by this report are three series (24W series, 12W series and 6W series) of Independent LED drive with models RKPO-zzxxxyyyy, RKPO-zzxxxyyyyCD-5, RKP-zzxxxyyyDP-5, RKP-zzxxxyyyyCD-5, RKPO-zzxxxyyyy-D2, RKPO-zzxxxyyyDP-2, RKPO-EUxxxyyyDP-2A, RKPOzzxxxyyyyCD-2, RKP-zzxxxyyyDP-2, RKPO-zzxxxyyyy-D1, RKPO-zzxxxyyyyCD-1 and RKPzzxxxyyyyDP-1 for LED modules or LED lamps.
- 2. Models RKPO-zzxxxyyy, RKPO-zzxxxyyyyCD-5, RKP-zzxxyyyyDP-5, RKP-zzxxxyyyyCD-5 are 24W series models, they are identical to each other except for plug portion, size of enclosure, IP degree, electrical rating, supply connection and rating of some functional components; Models RKPO-zzxxxyyyyDP-2, RKPO-zzxxxyyyDP-2, RKPO-EUxxxyyyyDP-2A, RKPO-zzxxxyyyyCD-2, RKP-zzxxxyyyyDP-2 are 12W series models, they are identical to each other except for plug portion, size of enclosure, IP degree, electrical rating, supply connection and rating of some functional components; Models RKPO-zzxxxyyyyDP-2 are 12W series models, they are identical to each other except for plug portion, size of enclosure, IP degree, electrical rating, supply connection and rating of some functional components; Models RKPO-zzxxxyyyy-D1, RKPO-zzxxxyyyyCD-1 and RKP-zzxxxyyyDP-1 are 6W series models, they are identical to each other except for plug portion, size of enclosure, IP degree, electrical rating, supply connection and rating of some functional components; Models RKPO-zzxxxyyyy-D1, RKPO-zzxxxyyyyCD-1 and RKP-zzxxxyyyDP-1 are 6W series models, they are identical to each other except for plug portion, size of enclosure, IP degree, electrical rating, supply connection and rating of some functional components, See tables A, B, C, D and E below for details.
- 3. The bottom enclosure and top enclosure are fixed by ultrasonic welding for all models except for models RKPO-zzxxxyyyyCD-1 and RKPO-zzxxxyyyyCD-2 are fixed by screws.
- 4. The bottom enclosure and top enclosure are fixed by screws for models RKP-zzxxxyyyDP-1 and RKP-zzxxxyyyDP-2.

Other comments:

This report is based on TUV Rheinland CB reports 17057899 001 to 17057899 003 and IEC test report 50110576 001 for issue a new CB report.



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Table A: Series model difference

Series m	odels	Electrical rating	Plug portion	IP degree	Supply connection
24W series	RKPO-EUxxxyyyy	Input: 100- 240Vac, 50/60Hz, 0.6A; Output: DC 3V,	German plug	IP44	Direct plug-in with detachable output cord
	RKPO-UKxxxyyyy	3.5V, 5V, 9V, 12V, 24V; 0.1A, 0.3A,	UK plug	IP20	Direct plug-in with detachable output cord
	RKPO-EUxxxyyyyCD-5	0.5A, 1.0A, 1.2A, 1.5A, 2.0A, 2.5A, 3.0A, 24W	Non-detachable German plug	IP68	Desk top with detachable output cord
	RKPO-UKxxxyyyyCD-5	maximum	Non-detachable UK plug	IP68	Desk top with detachable output cord
	RKP-UKxxxyyyyDP-5		UK plug	IP20	Direct plug-in with non-detachable output cord
	RKP-EUxxxyyyyyCD-5		Non-detachable EU plug	IP20	Desk top with non- detachable output cord
	RKP-UKxxxyyyyCD-5		Non-detachable UK plug	IP20	Desk top with non- detachable output cord
12W series	RKPO-EUxxxyyyy-D2	Input: 100- 240Vac, 50/60Hz, 0.3A; Output: DC 3- 24V, 0.1-1.5A, 12W maximum	German plug	IP44	Direct plug-in with detachable output cord
	RKPO-UKxxxyyyy-D2		UK plug	IP20	Direct plug-in with detachable output cord
	RKPO-EUxxxyyyyDP-2		German plug	IP44	Direct plug-in with detachable output cord
	RKPO-UKxxxyyyyDP-2		UK plug	IP20	Direct plug-in with detachable output cord
	RKPO-EUxxxyyyyDP-2A		German plug	IP44	Direct plug-in with detachable output cord
	RKPO-EUxxxyyyyCD-2		Non-detachable German plug	IP68	Desk top with detachable output cord
	RKPO-UKxxxyyyyCD-2		Non-detachable UK plug	IP68	Desk top with detachable output cord
	RKP-EUxxxyyyyDP-2		EU plug	IP20	Direct plug-in with non-detachable output cord
	RKP-UKxxxyyyyDP-2		UK plug	IP20	Direct plug-in with non-detachable output cord
6W	RKPO-EUxxxyyyy-D1 IEC61347 2 13F	Input: 100-	German plug	IP44	Direct plug-in with

TRF No. IEC61347_2_13F



Page 13 of 151 240Vac, series detachable output 50/60Hz, 0.3A; cord Output: DC 3-UK plug IP20 Direct plug-in with RKPO-UKxxxyyyy-D1 24V, 0.1-2.0A, detachable output 6W maximum cord IP68 RKPO-EUxxxyyyyCD-1 Non-detachable Desk top with detachable output German plug cord Non-detachable **IP68** Desk top with RKPO-UKxxxyyyyCD-1 UK plug detachable output cord Direct plug-in with IP20 RKP-EUxxxyyyyDP-1 EU plug non-detachable output cord RKP-UKxxxyyyyDP-1 UK plug IP20 Direct plug-in with non-detachable output cord Note: RKPO-zzxxxyyyy, RKPO-zzxxxyyyy-D2 and RKPO-zzxxxyyyy-D1 have the same plug portion and same size plastic enclosure. RKPO-zzxxxyyyyCD-1 and RKPO-zzxxxyyyyCD-2 have the same nondetachable power cord set and same size plastic enclosure.

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Table B: Definition of variablesFor 24W series models:

RKPO-zzxxxyyyy, RKPO-zzxxxyyyyCD-5, RKP-UKxxxyyyyDP-5 and RKP-zzxxxyyyyCD-5

Variable:	Range of variable:	Content:
XXX	030, 035, 050, 090, 120, 240	Three digits, indicate 10 time of output voltage in Volt. E.g.: 030=3.0Vdc, 240=24.0Vdc.
уууу	0100, 0300, 0500, 1000, 1200, 1500, 2000, 2500, 3000	Four digits, indicate 1000 times of output current in mA. E.g.: 0100=0.1A, 1500=1.5A.
ZZ	EU, UK	Represents the plug type for different countries. (EU=Europe or German, UK=United Kingdom)

<u>For 12W series models:</u> <u>RKPO-zzxxxyyyy-D2, RKPO-zzxxxyyyyDP-2, RKPO-EUxxxyyyyDP-2A, RKPO-zzxxxyyyyCD-2 and</u> RKP-zzxxxyyyyDP-2

Variable:	Range of variable:	Content:		
ххх	030-240	3 digits represent 10 times of output voltage in Volt. rising in steps of 0.1V. E.g.: 030=3.0VDC, 240=24.0VDC.		
уууу	0100-2000	4 digits represent 1000 times of output current in Ampere, rising in steps of 0.001A. E.g.: 0100=0.1A, 2000=2.0A.		
ZZ	EU, UK	Represents the plug type for different countries. (EU=Europe or German, UK=United Kingdom)		

For 6W series models:

RKPO-zzxxxyyyy-D1, RKPO-zzxxxyyyyCD-1 and RKP-zzxxxyyyyDP-1

Variable:	Range of variable:	Content:
ххх	030-240	3 digits represent 10 times of output voltage in Volt. rising in steps of 0.1V. E.g.: 030=3.0VDC, 240=24.0VDC.
уууу	0100-1500	4 digits represent 1000 times of output current in Ampere, rising in steps of 0.001A. E.g.: 0100=0.1A, 1500=1.5A.
ZZ	EU, UK	Represents the plug type for different countries. (EU=Europe or German, UK=United Kingdom)

Rating:

Independent controlgear, non-inherently short circuit proof, constant voltage output, Class II, ta=40°C, tc=75°C for all models except for models RKP-zzxxxyyyyDP-2 and RKP-zzxxxyyyyDP-1, tc=76°C for models RKP-zzxxxyyyDP-2, tc=81°C for models RKP-zzxxxyyyDP-1 (at the top of enclosure near transformer).



Table C: Model list For 24W series models:

Model	Output Voltage (V)	Output Current (A)	Output power (W)	Transformer (T1)	
	3	0.5	1.5	RK24-05V0	
	3	1	3	(aux. winding N4 Ø0.2mm*16Ts, sec. winding	
	3	1.5	4.5	N3: Ø0.55mm*6Ts)	
	3	2	6		
	3.5	0.5	1.75		
	3.5	1	3.5		
	3.5	1.2	4.2		
	3.5	1.5	5.25		
	5	0.5	2.5		
	5	1	5		
	5	1.5	7.5		
RKPO- zzxxxyyyy,	5	2	10		
RKPO-	5	2.5	12.5		
zzxxxyyyyCD-5, RKP-	5	3	15		
UKxxxyyyyDP-5	9	0.5	4.5	RK24-12V0	
and RKP- zzxxxyyyyCD-5	9	1	9	(aux. winding N4 Ø0.2mm*16Ts, sec. winding	
	9	1.5	13.5	N3: Ø0.6mm*12Ts)	
	9	2	18		
	12	0.3	3.6		
	12	0.5	6		
	12	1	12		
	12	1.5	18		
	12	2	24		
	24	0.1	2.4	RK24-24V0	
	24	0.3	7.2	(aux. winding N4 Ø0.2mm*16Ts, sec. winding	
	24	0.5	12	N3: Ø0.5mm*24Ts)	
	24	1	24		
All models have the same circuit diagram, PCB layout, construction, only turns of secondary of transformer may be different and ratings for some components are different.					



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For 12W series models:

		Output		Output power
Model	Input	Output voltage (VDC)	Output current (A)	(W)
RKPO-zzxxxyyyy-D2, RKPO-zzxxxyyyyDP- 2, RKPO- EUxxxyyyyDP-2A, RKPO-zzxxxyyyyCD-2 and RKP- zzxxxyyyyDP-2	100-240Vac, 50/60Hz, 0.3A	3.0-24.0	0.1-2.0	Max. 12.0

Notes:

1) Output voltage rising in steps of 0.1V.

2) Output current rising in steps of 0.001A.

The output voltage multiplied by output current cannot exceed the max. output power listed above.

For 6W series models:

		Output			
Model	Input	Output voltage (VDC)	Output current (A)	Output power (W)	
RKPO-zzxxxyyyy-D1, RKPO-zzxxxyyyyCD-1 and RKP- zzxxxyyyyDP-1	100-240Vac, 50/60Hz, 0.3A	3.0-24.0	0.1-1.5	Max. 6.0	
Notes: 1)Output voltage rising in steps of 0.1V.					

2)Output current rising in steps of 0.001A.

The output voltage multiplied by output current cannot exceed the max. output power listed above.



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Table D: Model different list of functional components For 24W series models:

RKPO-zzxxxyyyy, RKPO-zzxxxyyyyCD-5, RKP-UKxxxyyyyDP-5 and RKP-zzxxxyyyyCD-5

Model No.	R7, R8	R15	R16	D6	D7	C11	C12	T1
RKPO-zz0300500 RKPO-zz0300500CD-5 RKP-UK0300500DP-5 RKP-zz0300500CD-5 RKPO-zz0301000 RKPO-zz0301000CD-5	3Ω-6.8Ω	2.67K	9.53K	3A/40V	3A/40V	1000uF /10V	1000uF /10V	RK24- 05V0
RKP-UK0301000DP-5 RKP-zz0301000CD-5								
RKPO-zz0301500 RKPO-zz0301500CD-5 RKP-UK0301500DP-5 RKP-zz0301500CD-5	1Ω-3Ω							
RKPO-zz0302000 RKPO-zz0302000CD-5 RKP-UK0302000DP-5 RKP-zz0302000CD-5								
RKPO-zz0350500 RKPO-zz0350500CD-5 RKP-UK0350500DP-5 RKP-zz0350500CD-5	3Ω-6.8Ω	4.53K	9.53K	3A/40V	3A/40V	1000uF /10V	1000uF /10V	
RKPO-zz0351000 RKPO-zz0351000CD-5 RKP-UK0351000DP-5 RKP-zz0351000CD-5								
RKPO-zz0351200 RKPO-zz0351200CD-5 RKP-UK0351200DP-5 RKP-zz0351200CD-5								
RKPO-zz0351500 RKPO-zz0351500CD-5 RKP-UK0351500DP-5 RKP-zz0351500CD-5								
RKPO-zz0500500 RKPO-zz0500500CD-5 RKP-UK0500500DP-5 RKP-zz0500500CD-5	3Ω-6.8Ω	1.05K	1K	5A/40V	5A/40V	1000uF /10V	1000uF /10V	
RKPO-zz0501000 RKPO-zz0501000CD-5 RKP-UK0501000DP-5 RKP-zz0501000CD-5								
RKPO-zz0501500 RKPO-zz0501500CD-5								



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RKP-UK0501500DP-5 RKP-zz0501500CD-5								
RKPO-zz0502000 RKPO-zz0502000CD-5 RKP-UK0502000DP-5 RKP-zz0502000CD-5	1Ω-3Ω							
RKPO-zz0502500 RKPO-zz0502500CD-5 RKP-UK0502500DP-5 RKP-zz0502500CD-5								
RKPO-zz0503000 RKPO-zz0503000CD-5 RKP-UK0503000DP-5 RKP-zz0503000CD-5								
RKPO-zz0900500 RKPO-zz0900500CD-5 RKP-UK0900500DP-5 RKP-zz0900500CD-5	3Ω-6.8Ω	7.5K	2.74K	5A/ 100V	5A/ 100V	1000uF /16V	470uF/ 16V	RK24- 12V0
RKPO-zz0901000 RKPO-zz0901000CD-5 RKP-UK0901000DP-5 RKP-zz0901000CD-5								
RKPO-zz0901500 RKPO-zz0901500CD-5 RKP-UK0901500DP-5 RKP-zz0901500CD-5	1Ω-3Ω							
RKPO-zz0902000 RKPO-zz0902000CD-5 RKP-UK0902000DP-5 RKP-zz0902000CD-5								
RKPO-zz1200300 RKPO-zz1200300CD-5 RKP-UK1200300DP-5 RKP-zz1200300CD-5	3Ω-6.8Ω	10.7K	2.74K	5A/ 100V	5A/ 100V	1000uF /16V	470uF/ 16V	
RKPO-zz1200500 RKPO-zz1200500CD-5 RKP-UK1200500DP-5 RKP-zz1200500CD-5								
RKPO-zz1201000 RKPO-zz1201000CD-5 RKP-UK1201000DP-5 RKP-zz1201000CD-5								
RKPO-zz1201500 RKPO-zz1201500CD-5 RKP-UK1201500DP-5 RKP-zz1201500CD-5	1Ω-3Ω							



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RKPO-zz1202000 RKPO-zz1202000CD-5 RKP-UK1202000DP-5 RKP-zz1202000CD-5								
RKPO-zz2400100 RKPO-zz2400100CD-5 RKP-UK2400100DP-5 RKP-zz2400100CD-5	3Ω-6.8Ω	24K	2.74K	3A/ 200V	3A/ 200V	470uF/ 50V	220uF/ 50V	RK24- 24V0
RKPO-zz2400300 RKPO-zz2400300CD-5 RKP-UK2400300DP-5 RKP-zz2400300CD-5								
RKPO-zz2400500 RKPO-zz2400500CD-5 RKP-UK2400500DP-5 RKP-zz2400500CD-5	1Ω-3Ω							
RKPO-zz2401000 RKPO-zz2401000CD-5 RKP-UK2401000DP-5 RKP-zz2401000CD-5								



For 12W series models:

<u>RKPO-zzxxxyyyy-D2, RKPO-zzxxxyyyyDP-2, RKPO-EUxxxyyyyDP-2A, RKPO-zzxxxyyyyCD-2 and RKP-zzxxxyyyyDP-2</u>

Model	Transformer	R6	R9	D8	C11
RKPO-zzxxxyyyy-D2, RKPO- zzxxxyyyyDP-2, RKPO- EUxxxyyyyDP-2A, RKPO- zzxxxyyyyCD-2 and RKP- zzxxxyyyyDP-2 (xxx=030-089, yyyy=0200-2000)	RK12-05VI	0.5-5.1Ω	10Κ-51ΚΩ	2A40V Min	10V220UF Min
RKPO-zzxxxyyy-D2, RKPO- zzxxxyyyyDP-2, RKPO- EUxxxyyyyDP-2A, RKPO- zzxxxyyyyCD-2 and RKP- zzxxxyyyyDP-2 (xxx=090-189, yyyy=0100-1090)	RK12-12VI	0.5-5.1Ω	10Κ-51ΚΩ	2A60V Min	16V220UF Min
RKPO-zzxxxyyyy-D2, RKPO- zzxxxyyyyDP-2, RKPO- EUxxxyyyyDP-2A, RKPO- zzxxxyyyyCD-2 and RKP- zzxxxyyyyDP-2 (xxx=190-240, yyyy=0100-0630)	RK12-24VI	0.5-5.1Ω	10Κ-51ΚΩ	2A200V Min	25V100UF Min

may be different and ratings for some components are different.

For 6W series models: RKPO-zzxxxyyyy-D1, RKPO-zzxxxyyyyCD-1 and RKP-zzxxxyyyyDP-1

Model	Transformer	R6	R9	D8	C11
RKPO-zzxxxyyyy-D1, RKPO- zzxxxyyyyCD-1 and RKP- zzxxxyyyyDP-1 (xxx=030-089, yyyy=0200-1500)	RK06-05	0.5-5.1Ω	10K-51KΩ	2A40V Min	10V220UF Min
RKPO-zzxxxyyyy-D1, RKPO- zzxxxyyyyCD-1 and RKP- zzxxxyyyyDP-1 (xxx=090-189, yyyy=0100-0666)	RK06-12	0.5-5.1Ω	10Κ-51ΚΩ	2A60V Min	16V220UF Min
RKPO-zzxxxyyyy-D1, RKPO- zzxxxyyyyCD-1 and RKP- zzxxxyyyyDP-1 (xxx=190-240, yyyy=0100-0315)	RK06-24	0.5-5.1Ω	10Κ-51ΚΩ	2A200V Min	25V100UF Min

All models have the same circuit diagram, PCB layout, construction, only turns of secondary of transformer may be different and ratings for some components are different.

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Table E: size of enclosure

Series m	odels	Size of enclosure (L*W*H) (unit: mm) V(olume)= L*W*H (unit: mm³)			
24W	RKPO-EUxxxyyyy	79.7*48.3*32 (V=123184.32)			
series	RKPO-UKxxxyyyy	79.7*47*38.5 (V=144217.15)			
	RKPO-EUxxxyyyyCD-5	98*45*33 (V=145530.00)			
	RKPO-UKxxxyyyyCD-5	98*45*33 (V=145530.00)			
	RKP-UKxxxyyyyDP-5	83.5*47*39 (V=153055.5)			
	RKP-EUxxxyyyyCD-5	88*50*31 (V=136400.00)			
	RKP-UKxxxyyyyCD-5	88*50*31 (V=136400.00)			
12W	RKPO-EUxxxyyyy-D2	79.7*48.3*32 (V=123184.32)			
series	RKPO-UKxxxyyyy-D2	79.7*47*38.5 (V=144217.15)			
	RKPO-EUxxxyyyyDP-2	75.5*36*28 (V=76104.00)			
	RKPO-UKxxxyyyyDP-2	75.5*54*28 (V=114156.00)			
	RKPO-EUxxxyyyyDP-2A	81.31*43.0*35.4 (V=123770.08)			
	RKPO-EUxxxyyyyCD-2	82*48.5*33 (V=131241.00)			
	RKPO-UKxxxyyyyCD-2	82*48.5*33 (V=131241.00)			
	RKP-EUxxxyyyyDP-2	74*42*29 (V=90132.0)			
	RKP-UKxxxyyyyDP-2	74.9*49.01*46.67 (V=171318.52)			
6W_	RKPO-EUxxxyyyy-D1	79.7*48.3*32 (V=123184.32)			
series	RKPO-UKxxxyyyy-D1	79.7*47*38.5 (V=144217.15)			
	RKPO-EUxxxyyyyCD-1	82*48.5*33 (V=131241.00)			
	RKPO-UKxxxyyyyCD-1	82*48.5*33 (V=131241.00)			
	RKP-EUxxxyyyyDP-1	47.5*35*28 (V=46550.00)			
RKP-UKxxxyyyyDP-1 75.5*36*28 (V=76104.00)					
Note: RKPO-EUxxxyyy, RKPO-EUxxxyyy-D2 and RKPO-EUxxxyyy-D1 have the same size enclosure, RKPO-UKxxxyyy, RKPO-UKxxxyyy-D2 and RKPO-UKxxxyyy-D1 have the same size enclosure, RKPO-EUxxxyyyyCD-1 and RKPO-EUxxxyyyyCD-2 have the same size enclosure, RKPO- UKxxxyyyyCD-1 and RKPO-UKxxxyyyyCD-2 have the same size enclosure.					



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Clause	Requirement + Test	Result - Remark	Verdict

4 (4)) GENERAL REQUIREMENTS			
- (4)	Insulation materials according requirements in Annex N of IEC 61347-1	(see Annex N)	Р	
- (4)	Compliance of <u>independent controlgear enclosure</u> with IEC 60 598-1		Р	
- (4)	Built-in electronic controlgear with double or reinforced insulation comply with Annex O of IEC 61347-1		N/A	
4 (4)	SELV controlgear comply with Annex I of this part 2 and Annex L of IEC 61347-1	(see Annex L)	Р	
4 (-)	Transformer comply with IEC 61558		Р	
	Dielectric strength test of insulated winding wires is limited to 3 kV if input voltage $\leq 300 \text{ V}$		Р	

6 (6)	CLASSIFICATION					Р
	Built-in controlgear	Yes		No	\boxtimes	
	Independent controlgear	Yes	\boxtimes	No		
	Integral controlgear:	Yes		No	\boxtimes	
6 (-)	Auto-wound controlgear:	Yes		No	\boxtimes	
	Separating controlgear	Yes		No	\boxtimes	
	Isolating controlgear:	Yes	\boxtimes	No		
	SELV controlgear	Yes	\boxtimes	No		

7 (7)	MARKING		Р			
7.1 (7.1)	Mandatory markings					
	a) mark of origin	See the copy of marking plate	Р			
	b) model number or type reference	See page 2	Р			
	c) symbol for independent controlgear, if applicable	See the copy of marking plate	Р			
	d) correlation between interchangeable parts and controlgear marked		N/A			
	e) rated supply voltage (V)	100-240Vac	Р			
	supply frequency (Hz)	50/60Hz	Р			
	supply current (A)	See page 2	Р			
	f) earthing symbol	Class II equipment.	N/A			
	k) wiring diagram	See the copy of marking plate	Р			
	l) value of t _c	See the copy of marking plate	Р			

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Clause	Requirement + Test	Result - Remark	Verdict
	m) symbol for declared temperature		N/A
	t) LUM earthing symbol		N/A
	u) if not SELV maximum working voltage <i>U</i> _{out} between:		N/A
	- output terminals (V):		N/A
	- output terminals and earth (V):		N/A
7.1 (-)	Constant voltage type:	Yes 🛛 No 🗆	
	- rated output power Prated (W)	See copy of marking plate	Р
	- rated output voltage Urated (V):	See copy of marking plate	Р
	Constant current type:	Yes 🗌 🛛 No 🖾	
	- rated output power Prated (W):		N/A
	- rated output current Irated (A):		N/A
	Indication if for LED modules only		N/A
7.1 (7.2)	Marking durable and legible		Р
	Rubbing 15 s water, 15 s petroleum; marking legible		Р
7.2 (7.1)	Information to be provided, if applicable	•	Р
	h) declaration on protection against accidental contact	Mentioned in user manual	Р
	i) cross-section of conductors (mm ²)		N/A
	j) number, type and wattage of lamp(s)		N/A
	s) SELV symbol	SELV	Р
7.2 (-)	- declaration of mains connected windings		Р
,			

8 (10)	PROTECTION AGAINST ACCIDENTAL CONTACT WITH LIVE PARTS		Р
- (10.1)	Controlgear protected against accidental contact with live parts	Protected by accessible plastic enclosure	Р
- (A2)	Voltage measured with 50 k Ω	(see Annex A)	Р
- (A3)	Voltage > 35 V peak or > 60 V d.c. or protective impendance device	(see Annex A)	Р
- (10.1)	Lacquer or enamel not used for protection or insulation		Р
	Adequate mechanical strength on parts providing protection		N/A
- (10.2)	Capacitors > 0,5 μF: voltage after 1 min (V): < 50 V:	No such capacitors	N/A
- (10.3)	Controlgear providing SELV		Р

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Clause	Requirement + Test	Result - Remark	Verdict
	Accessible conductive parts are insulated from live parts by double or reinforced insulation in SELV controlgear	Double or reinforced insulation provided.	Р
	No connection between output circuit and the body or protective earthing circuit		Ρ
	No possibility of connection between output circuit and the body or protective earthing circuit through other conductive parts		Р
	SELV outputs separated by at least basic insulation		Ρ
	ELV conductive parts insulated as live parts		Р
	Tests according Annex L of IEC 61347-1	(see annex L)	Р
- (10.4)	Accessible conductive parts in SELV circuits		Р
	Output voltage under load $\leq 25~V~r.m.s.~or \leq 60~V~d.c.$	(See Annex A)	Р
	If output voltage > 25 V r.m.s. or > 60 V d.c.; No load output \leq 35 V peak or \leq 60 V d.c and touch current does not exceed 0,7 mA (peak) or 2 mA d.c.		Р
	One conductive part is insulated if output voltage or current exceeding the values above and withstand test voltage 500 V		N/A
	Double or reinforced insulation bridged by appropriate and at least two resistors or two Y2 capacitors or one Y1 capacitor	For 24W series models: Two Y1 capacitors CY1, CY2 used between primary circuit and SELV.	Ρ
		For 12W and 6W series models: One Y1 capacitor (CY1) used between primary circuit and SELV	
	Y1 or Y2 capacitors comply with IEC 60384-14	VDE approved Y1 capacitor	Р

 Y1 or Y2 capacitors comply with IEC 60384-14
 VDE approved Y1 capacitor provided.
 P

 Resistors comply with test (a) in 14.1 of IEC 60065
 N/A
 N/A

 9 (8)
 TERMINALS
 N/A

 Screw terminals according section 14 of IEC 60598-1:
 N/A

· · /			
	Screw terminals according section 14 of IEC 60598-1:		N/A
	Separately approved; component list		N/A
	Part of the controlgear		N/A
	Screwless terminals according section 15 of IEC 60	598-1:	N/A
	Separately approved; component list		N/A



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	IEC 6 ⁴	1347-2-13	
Clause	Requirement + Test	Result - Remark	Verdict
	Part of the controlgear		N/A

10 (9)	PROVISION FOR PROTECTIVE EARTHING Class II equipment	nt N/A
- (9.1)	Provisions for protective earthing	N/A
	Terminal complying with clause 8	N/A
	Locked against loosening and not possible to loosen by hand	N/A
	Not possible to loosen clamping means unintentionally on screwless terminals	N/A
	Earthing via means of fixing	N/A
	Earthing terminal only used for the earthing of the control gear	N/A
	All parts of material minimizing the danger of electrolytic corrosion	N/A
	Made of brass or equivalent material	N/A
	Contact surface bare metal	N/A
- (9.2)	Provision for functional earthing	N/A
	Comply with clause 8 and 9.1	N/A
	Functional earth insulated from live parts by double or reinforced insulation	N/A
- (9.3)	Earth contact via the track on the printed board	N/A
	Test with a current of 25 A between earthing terminal and each of the accessible metal parts; measured resistance (Ω) at \geq 10 A according 7.2.3 of IEC 60598-1: < 0,5 Ω	N/A
- (9.4)	Earthing of built-in lamp controlgear	N/A
	Earth by means of fixing to earthed metal of luminaire in compliance of 7.2 of IEC 60598-1	N/A
	Earthing terminal only for earthing the built-in controlgear	N/A
- (9.5)	Earthing via independent controlgear	N/A
- (9.5.1)	Earth connection to other equipment	N/A
	Looping or through connection, conductor min. 1,5 mm ² and of copper or equivalent	N/A
	Protective earthing wires in line with 5.3.1.1 and clause 7	N/A
- (9.5.2)	Earthing of the lamp compartments powered via the independent lamp controlgear	N/A



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	IEC 61347-2-13			
Clause	Requirement + Test	Result - Remark	Verdict	
	Test with a current of 25 A between input and output earth terminals; measured resistance (Ω) between earthing terminal and each of the accessible metal parts at \geq 10 A according 7.2.3 of IEC 60598-1: < 0,5 Ω		N/A	
	Output earthing terminal marked as in 7.1 t) of IEC 61347-1		N/A	

11 (11)	MOISTURE RESISTANCE AND INSULATION After storage 48 h at 91-95% relative humidity and 20-30 °C measuring of insulation resistance with d.c. 500 V (MΩ):		Р
			Ρ
	For basic insulation $\ge 2 \ M\Omega$:	Between L to N before fuse: 100 M Ω	Ρ
	For double or reinforced insulation $\ge 4 \text{ M}\Omega$:	Between L/N to outside: 100 M Ω Between L/N to output: 100 M Ω	Ρ
	Between primary and secondary circuits in controlgear providing SELV, values in Annex L in IEC 61347-1	See annex L	Ρ

12 (12)	ELECTRIC STRENGTH		Р
	Immediately after clause 11 electric strength test for 1 min		Р
	Basic insulation for SELV, test voltage 500 V		Р
	Working voltage \leq 50 V, test voltage 500 V	See only above.	N/A
	Working voltage > 50 V \leq 1000 V, test voltage (V):		Р
	Basic insulation, 2U + 1000 V	Between L to N before fuse: 1500 V	Р
	Supplementary insulation, 2U + 1000 V		Р



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Clause	Requirement + Test	Result - Remark	Verdict	
	Double or reinforced insulation, 4U + 2000 V	For 24W series model: Between L/N to secondary output: 3332 V Between L/N to plastic enclosure: 3332 V For 12W series model: Between L/N to secondary output: 3072 V Between L/N to plastic enclosure: 3072 V For 6W series model: Between L/N to secondary output: 2944 V Between L/N to plastic enclosure: 2944 V	P	
	No flashover or breakdown		Р	
	Solid or thin sheet insulation for double or reinforced insulation fulfil the requirements in Annex N in IEC 61347-1	(see annex N)	Р	

14 (14)	FAULT CONDITIONS		Р
- (14.1)	When operated under fault conditions the controlgear:		Р
	- does not emit flames or molten material		Р
	- does not produce flammable gases		Р
	- protection against accidental contact not impaired		Р
	Thermally protected controlgear does not exceed the marked temperature value		N/A
	Fault conditions: capacitors, resistors or inductors without proof of compliance with relevant specifications have been short-circuited or disconnected	(see appended table 14)	Р
- (14.2)	Short-circuit of creepage distances and clearances if less than specified in clause 16 in Part 1 (except between live parts and accessible metal parts)	(see appended table 14)	N/A



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	IEC 61347-2-13		
Clause	Requirement + Test	Result - Remark	Verdict
- (14.3)	Short-circuit or interruption of semiconductor devices	(see appended table 14)	Р
- (14.4)	Short-circuit across insulation consisting of lacquer, enamel or textile	(see appended table 14)	N/A
- (14.5)	Short-circuit across electrolytic capacitors	(see appended table 14)	Р
- (14.6)	After the tests has been carried out on three samples:		Р
	The insulation resistance $\geq 1 \ M\Omega$:	500ΜΩ> 1 ΜΩ	Р
	No flammable gases		Р
	No accessible parts have become live		Р
	During the tests, a five-layer tissue paper, where the test specimen is wrapped, does not ignite		Р
- (14.7)	Relevant fault condition tests with high-power supply		
14 (-)	Temperature declared thermally protected lamp controlgear fulfil requirements in Annex C		N/A

15 (-)	TRANSFORMER HEATING		Р
15.1	General		Р
	Transformer comply with clause L.6 and L.7 of IEC 61347-1		Р
	Output voltage of SELV controlgear not exceed limits in 10.4 of IEC 61347-1 during the test of 15.1 and 15.2		Ρ
15.2 (-)	2 (-) Normal operation Comply with clause L.6 of IEC 61347-1 (See annex 4)		Р
	Comply with clause L.6 of IEC 61347-1 (Se	e annex 4)	Р
15.3 (-)	Abnormal operation		Р
	Comply with clause L.7 of IEC 61347-1 (Se	e annex 4)	Р
	Double LED modules or equivalent load connected in parallel to the output terminals of constant voltage type		Ρ
	Double LED modules or equivalent load connected in parallel to the output terminals of constant current type		N/A
15 (-)	During and at the end of the tests no defect impairing s flammable gases produced	safety, nor any smoke or	Р



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Clause	Requirement + Test	Result - Remark	Verdict
16 (15)	CONSTRUCTION		Р
- (15.1)	Wood, cotton, silk, paper and similar fibrous m	aterial	P
	Wood, cotton, silk, paper and similar fibrous material not used as insulation		Р
- (15.2)	Printed circuits	4	Р
	Printed circuits used as internal connections complies with clause 14		Р
- (15.3)	Plugs and socket-outlets used in SELV or ELV	/ circuits	Р
	No dangerous compatibility between output socket-outlet and a plug for socket-outlets for input circuit in relation to installation rules, voltages and frequencies		Р
	Plugs and socket-outlets for SELV comply with IEC 60906-3 and IEC 60884-2-4		N/A
	Plugs and socket-outlets for SELV \leq 3 A, \leq 25 V r.m.s. or \leq 60 V d.c. and \leq 72 W comply with IEC 60906-3 and IEC 60884-2-4 or:		Р
	- plugs not able to enter socket-outlets of other standardised system		Р
	- socket-outlets not admit plugs of other standardised system		Р
	- socket-outlets without protective earth		Р
- (15.4)	Insulation between circuits and accessible particular	rts	Р
- (15.4.2)	SELV circuits		Р
	Source used to supply SELV circuits:		Р
	- safety isolating transformer in accordance with relevant part 2 of IEC 61558		N/A
	- controlgear providing SELV in accordance with relevant part 2 of IEC 61347		Р
	- another source		N/A
	Voltage in the circuit not higher than ELV		Р
	SELV circuits insulated from LV by double or reinforced insulation		Р
	SELV circuits insulated from non SELV circuits by double or reinforced insulation		N/A
	SELV circuits insulated from FELV circuits by supplementary insulation		N/A
	SELV circuits insulated from other SELV circuits by basic insulation		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	SELV circuits insulated from accessible conductive parts according Table 6 in 15.4.5		Р
			N1/ A

	conductive parts according Table 0 in 10.4.0	
- (15.4.3)	FELV circuits	N/A
	Source used to supply FELV circuits:	N/A
	- separating transformer in accordance with relevant part 2 of IEC 61558	N/A
	- separating controlgear providing basic insulation between input and output circuits in accordance with relevant part 2 of IEC 61347	N/A
	- another source	N/A
	- source in circuits separated by the LV supply by basic insulation	N/A
	Voltage in the circuit not higher than ELV	N/A
	FELV circuits insulated from LV supply by at least basic insulation	N/A
	FELV circuits insulated from other FELV circuits if functional purpose	N/A
	FELV circuits insulated from accessible conductive parts according Table 6 in 15.4.5	N/A
	Plugs and socket-outlets for FELV system comply with:	N/A
	- plugs not able to enter socket-outlets of other voltage systems	N/A
	- socket-outlets not admit plugs of other voltage systems	N/A
	- socket-outlets have a protective conductor contact	N/A
- (15.4.4)	Other circuits	Р
	Insulation between circuits other than SELV or FELV and accessible conductive parts in according Table 6 in 15.4.5.	P
- (15.4.5)	Insulation between circuits and accessible conductive parts	Р
	Accessible conductive parts insulated from active parts of electric circuits by insulating according Table 6	Р
	Requirements for Class II construction with equipotential bonding for protection against indirect contact with live parts:	N/A
	- all conductive parts are connected together	N/A
	- conductive parts are reliably connected together according test of IEC 60598-1 cl. 7.2.3	N/A
	- conductive parts comply with requirements of Annex A in case of insulation fault	N/A
	- <u>-</u> - <u>1</u>	

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Clause	Requirement + Test	Result - Remark	Verdict

17 (16)	CREEPAGE DISTANCES AND CLEARANCES		Р
- (16)	Creepage distances and clearances according to Table 3 and 4, as appropriate	(see appended table 17(16))	Р
	Controlgears providing SELV comply with L.1 in Annex L		Р
	Insulating lining of metallic enclosures		N/A
	Creepage distances not less than minimum clearance		N/A
- (16.2)	Creepage distances	·	Р
- (16.2.2)	Minimum creepage distances for working voltages		Р
	Creepage distances according to Table 7	(see appended table 17(16))	Р
- (16.2.3)	Creepage distances for working voltages with freq	uencies above 30 kHz	Р
	Creepage distances according to Table 8	(see appended table 17(16))	Р
- (16.3)	Clearances		Р
- (16.3.2)	Clearances for working voltages		Р
	Clearances distances according to Table 9	(see appended table 17(16))	Р
- (16.3.3)	Clearances for ignition voltages and working voltage	ges with higher frequencies	N/A
	Clearances distances for basic or supplementary insulation according to Table 10		N/A
	Clearances distances for reinforced insulation according to Table 11		N/A

18 (17)	SCREWS, CURRENT-CARRYING PARTS A	ND CONNECTIONS	Р
	Screws, current-carrying parts and connection (clause numbers between parentheses refer to	ns in compliance with IEC 60598-1 o IEC 60598-1)	Р
(4.11)	Electrical connections		Р
(4.11.1)	Contact pressure		Р
(4.11.2)	Screws:	· ·	N/A
	- self-tapping screws		N/A
	- thread-cutting screws		N/A
(4.11.3)	Screw locking:		N/A
	- spring washer		N/A
	- rivets		N/A
(4.11.4)	Material of current-carrying parts		Р
(4.11.5)	No contact to wood or mounting surface	No wood	Р



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	5	•	
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Clause	Requirement + Test	Result - Remark	Verdict
		1	1
(4.11.6)	Electro-mechanical contact systems		N/A
(4.12)	Mechanical connections and glands		Р
(4.12.1)	Screws not made of soft metal	The bottom enclosure and top enclosure are fixed by screws (diameter: 3.0mm).	Р
	Screws of insulating material		N/A
	Torque test: torque (Nm); part:	Screw on bottom enclosure: 0.5Nm	Р
	Torque test: torque (Nm); part:		N/A
	Torque test: torque (Nm); part:		N/A
(4.12.2)	Screws with diameter < 3 mm screwed into metal	No such screws used.	N/A
(4.12.4)	Locked connections:	·	N/A
	- fixed arms; torque (Nm):		N/A
	- lampholder; torque (Nm) :		N/A
	- push-button switches; torque 0,8 Nm :		N/A
(4.12.5)	Screwed glands; force (Nm):		N/A

19 (18)	RESISTANCE TO HEAT, FIRE AND TRACKING		Р
- (18.1)	Ball-pressure test:	Bobbin of transformer T1: accepted for phenolic material, for other parts, see Table 19 (18.1).	Р
- (18.2)	Test of printed boards:	UL approved PCB classified V-0 minimum.	N/A
		Compliance checked in accordance with 8.7 of IEC 61189-2 and relevant parts of IEC 61249-2.	
		(see appended table 19(18.2))	
- (18.3)	Glow-wire test:	See Test Table 19 (18.3)	Р
- (18.4)	Needle flame test:	See Test Table 19 (18.4)	Р
- (18.5)	Tracking test:	See Test Table 19 (18.5)	N/A

20 (19)	RESISTANCE TO CORROSION	N/A
	- test according 4.18.1 of IEC 60598-1	N/A
	- adequate varnish on the outer surface	N/A

	21 (-)	MAXIMUM WORKING VOLTAGE (Uout) IN ANY LOAD CONDITION	N/A
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Clause	Clause Requirement + Test Result - Remark Verdi			
	Not exceed declared maximum working voltage U_{out} in any load condition	SELV output.	N/A	

14	TABLE: tests of fault conditions	Р
Part	Simulated fault	Hazard
For model:	RKPO-EU0503000	
D1	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 S. No hazards. I/P: 0A O/P: 0A	NO
C1	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 S. No hazards. I/P: 0A O/P: 0A	NO
C2	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 S. No hazards. I/P: 0A_O/P: 0A	NO
U1 Pin 8-1	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 S. No hazards. I/P: 0A_O/P: 0A	NO
U1 Pin 3-4	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.061A/2.5W O/P: 0A	NO
U1 Pin 6-4	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.053A/2.6W O/P: 0A	NO
U2 pin 1-2	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.028A/3.6W O/P: 0A/0W	NO
U2 pin 3-4	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.028A/3.6W O/P: 0A/0W	NO
U2 pin 3	Open circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.028A/3.6W O/P: 0A/0W	NO
U2 pin 1	Open circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.028A/3.6W O/P: 0A/0W	NO
R8	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 S. No hazards. I/P: 0A_O/P: 0A	NO

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Clause	Requirement + Test	Result - Remark	Verdict	
T1 Pin1-2	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.028A/3.6W O/P: 0A/0W		NO	
T1 Pin 3-5	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.026A/3.6W O/P: 0A/0W		NO	
T1 Pin OA- OB	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed I/P: 0.031A/3.6W O/P: 0A/0W	10mins. No hazards.	NO	
D7	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed I/P: 0.061A/2.5W O/P: 0A/0W	10mins. No hazards.	NO	
Output	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 7 I/P: 0.051A/2.8W O/P: 0A/0W	10mins. No hazards.	NO	
For model:	RKPO-EU1202000		-	
D1	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 I/P: 0A O/P: 0A	S. No hazards.	NO	
C1	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 I/P: 0A O/P: 0A	S. No hazards.	NO	
C2	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 I/P: 0A O/P: 0A	S. No hazards.	NO	
U1 Pin 8-1	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 I/P: 0A O/P: 0A	S. No hazards.	NO	
U1 Pin 3-4	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 7 I/P: 0.044A/4.6W O/P: 0A	10mins. No hazards.	NO	
U1 Pin 6-4	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 7 I/P: 0.034A/2.6W O/P: 0A	10mins. No hazards.	NO	
U2 pin 1-2	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed I/P: 0.028A/3.6W O/P: 0A/0W	10mins. No hazards.	NO	
U2 pin 3-4	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed I/P: 0.028A/3.6W O/P: 0A/0W	10mins. No hazards.	NO	

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Clause	Requirement + Test	Result - Remark	Verdict		
U2 pin 3	Open circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.028A/3.6W O/P: 0A/0W		NO		
U2 pin 1	Open circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.028A/3.6W O/P: 0A/0W		NO		
R8	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 S. No hazards. I/P: 0A_O/P: 0A		NO		
T1 Pin1-2	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.028A/3.6W O/P: 0A/0W		NO		
T1 Pin 3-5	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.026A/3.6W O/P: 0A/0W		NO		
T1 Pin OA- OB	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.031A/3.6W O/P: 0A/0W		NO		
D7	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.041A/3.8W O/P: 0A/0W		NO		
Output	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.051A/2.8W O/P: 0A/0W		NO		
For model: F	RKPO-EU2401000		l		
D1	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 S I/P: 0A O/P: 0A	S. No hazards.	NO		
C1	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 S I/P: 0A O/P: 0A	S. No hazards.	NO		
C2	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 S. No hazards. I/P: 0A O/P: 0A		NO		
U1 Pin 8-1	Short circuit: 90V/264 V test result: Fuse opened immediately. Observed 1 S. No hazards. I/P: 0A O/P: 0A		NO		
U1 Pin 3-4	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 7 I/P: 0.042A/4.1W O/P: 0A	10mins. No hazards.	NO		

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Clause	Requirement + Test Result - Remark	Verdict		
U1 Pin 6-4	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.029A/2.5W O/P: 0A	NO		
U2 pin 1-2	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.028A/3.6W O/P: 0A/0W	NO		
U2 pin 3-4	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.028A/3.6W O/P: 0A/0W	NO		
U2 pin 3	Open circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.028A/3.6W O/P: 0A/0W	NO		
U2 pin 1	Open circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.028A/3.6W O/P: 0A/0W	NO		
R8	Short circuit: 90V/264 V test result: Fuse opened immediately. Q1 damage. Observed 1 S. No hazard I/P: 0A O/P: 0A	s. NO		
T1 Pin1-2	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.028A/3.6W O/P: 0A/0W	NO		
T1 Pin 3-5	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.026A/3.6W O/P: 0A/0W	NO		
T1 Pin OA- OB	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.031A/3.6W O/P: 0A/0W	NO		
D7	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.031A/3.6W O/P: 0A/0W	NO		
Output	Short circuit: 90V/264 V test result: Unit shut down immediately. Observed 10mins. No hazards. I/P: 0.051A/2.8W O/P: 0A/0W	NO		
For model: F	RKPO-zz2400250-D1 (test at input 90V/264V)	·		
BD1	Fault: Short circuit. Test result: F1 opened immediately, no flame emission, no molten metal	NO		
C2	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, r molten metal	NO		
IC1(1-8)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO		

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Clause	Requirement + Test Result - Remark	Verdict
IC1(5-8)	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal	NO
R6	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal	NO
R10	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
T1(1-3)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
T1(2-4)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
T1(A-B)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	
C12	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	
Output	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	
For model:	RKPO-zz1900315-D1 (test at input 90V/264V)	
BD1	Fault: Short circuit. Test result: F1 opened immediately, no flame emission, no molten metal	NO
C2	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal	NO
IC1(1-8)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
IC1(5-8)	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal	
R6	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal	
R10	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
T1(1-3)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO

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Clause	Requirement + Test	Result - Remark	Verdict
T1(2-4)	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
T1(OA-OB)	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
C12	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
Output	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
For model: F	KPO-zz0900666-D1 (test at input 90V/264V)		
BD1	Fault: Short circuit. Test result: F1 opened immediately, no flame emi	ssion, no molten metal	NO
C2	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal		NO
IC1(1-8)	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
IC1(5-8)	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal		NO
R6	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal		NO
R10	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
T1(1-3)	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
T1(2-4)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal		NO
T1(OA-OB)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal		NO
C12	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
Output	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
TRE No. IEC6	1017 0 105		

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Verdict

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Clause Requirement + Test

Result - Remark

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For model: F	RKPO-zz0401500-D1 (test at input 90V/264V)	
BD1	Fault: Short circuit. Test result: F1 opened immediately, no flame emission, no molten metal	NO
C2	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal	NO
IC1(1-8)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
IC1(5-8)	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal	NO
R6	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal	NO
R10	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
T1(1-3)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
T1(2-4)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
T1(OA-OB)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
C12	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
Output	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
For model: F		•
BD1	Fault: Short circuit. Test result: F1 opened immediately, no flame emission, no molten metal	NO
C2	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal	NO
IC1(1-8)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO

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Clause	Requirement + Test	Result - Remark	Verdict
IC1(5-8)	Fault: Short circuit. Test result: Unit shut down immediately, unrecover molten metal	erable, no flame emission, no	NO
R6	Fault: Short circuit. Test result: Unit shut down immediately, unrecove molten metal	erable, no flame emission, no	NO
R10	Fault: Short circuit. Test result: Unit shut down immediately, recovera molten metal	ble, no flame emission, no	NO
T1(1-3)	Fault: Short circuit. Test result: Unit shut down immediately, recovera molten metal	ble, no flame emission, no	NO
T1(2-4)	Fault: Short circuit. Test result: Unit shut down immediately, recovera molten metal	ble, no flame emission, no	NO
T1(OA-OB)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal		NO
C12	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal		NO
Output	t Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal		NO
For model: F	RKPO-zz1900630-D2 (test at input 90V/264V)		
BD1	Fault: Short circuit. Test result: F1 opened immediately, no flame emi	ission, no molten metal	NO
C2	Fault: Short circuit. Test result: Unit shut down immediately, unrecover molten metal	erable, no flame emission, no	NO
IC1(1-8)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal		NO
IC1(5-8)	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal		NO
R6	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal		NO
R10	10 Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal		NO
T1(1-3)	Fault: Short circuit. Test result: Unit shut down immediately, recovera molten metal	ble, no flame emission, no	NO

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Clause	Requirement + Test	Result - Remark	Verdict
T1(2-4)	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
T1(OA-OB)	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
C12	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
Output	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal		NO
For model: F			
BD1	Fault: Short circuit. Test result: F1 opened immediately, no flame emi	ssion, no molten metal	NO
C2	Fault: Short circuit. Test result: Unit shut down immediately, unrecove molten metal	erable, no flame emission, no	NO
IC1(1-8)	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
IC1(5-8)	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal		NO
R6	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal		NO
R10	Fault: Short circuit. Test result: Unit shut down immediately, recovera molten metal	ble, no flame emission, no	NO
T1(1-3)	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
T1(2-4)	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
T1(OA-OB)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal		NO
C12	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO
Output	Fault: Short circuit. Test result: Unit shut down immediately, recoveral molten metal	ble, no flame emission, no	NO

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Clause F	Requirement + Test	Result - Remark	Verdict

	2KPO-zz0602000-D2 (test at input 90V/264V)	
BD1	Fault: Short circuit. Test result: F1 opened immediately, no flame emission, no molten metal	NO
C2	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal	NO
IC1(1-8)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
IC1(5-8)	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal	NO
R6	Fault: Short circuit. Test result: Unit shut down immediately, unrecoverable, no flame emission, no molten metal	NO
R10	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
T1(1-3)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
T1(2-4)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
T1(OA-OB)	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
C12	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO
Output	Fault: Short circuit. Test result: Unit shut down immediately, recoverable, no flame emission, no molten metal	NO

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Clause Requirement + Test F	Result - Remark	Verdict

17 (16)	TABLE:	clearance	and creepage	distance me	asurements (r	nm)	Р
	Applicable part of IEC 61347-1 Table 7 – 11*						
Distances	Insulation	Measured clearance	Req	uired	Measured	Requ	ired
	type **	clearance	clearance	*Table	creepage	creepage	*Table
	Clearance and creepage distance measurements other than isolation transformer						
For 24W se	ries model						
Distance 1:	B/S#	*1)	1.5	9	*1)	2.5	7
L-N on PCB before F1	В	3.7	1.5	9	3.7	2.5	7
Different polarity of fuse F1	В	4.9	1.5	9	4.9	2.5	7
Distance 2:	R	*1)	3.0	9	*1)	5.0	7
Primary component C2 to accessible enclosure	R	5.2	3.0	9	5.2	5.0	7
Primary trace to secondary trace under CY1	R	6.5	3.0	9	6.5	5.0	7
Primary trace to secondary trace of CY2	R	7.0	3.0	9	7.0	5.0	7
Primary trace to secondary trace of U2	R	7.0	5.5	9	7.0	6.7	7
Trace of primary component R4 to secondary component R14		7.0	3.0	9	7.0	5.0	7
	Working voltage (V)				250 Vr.m.s e 333 Vr.m.s fo	xcept for or U2	—
Frequency i	fapplicable	(kHz)			60 Hz		

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Clause	Requirement + Test	Result - Remark		Verdict
PTI		< 600 🛛	> 600 🗌	

Peak value of the working voltage \hat{U}_{out} if applicable (kV):	354 Vpeak except for 374 Vpeak for U2			
Pulse voltage if applicable (kV):	No pulse voltage.			
Supplementary information: *1) see appended table 17 (16) in measurement section.				

		Clearand	e and creepa for isolati	ge distance m on transforme	reasurements Pr	;	
Distance 3:	B/S#	*1)	3.0	9	*1)	3.47 (3.3+0.17)	7, 8
Distance 4:	R#	*1)	5.5	9	*1)	6.94 (6.6+0.34)	7, 8
Primary trace to secondary trace under T1	R#	8.4	5.5	9	8.4	6.94 (6.6+0.34)	7, 8
Core to secondary pin of T1	R#	8.4	5.5	9	8.4	6.94 (6.6+0.34)	7, 8
Core to secondary pin of CY1	R#	11.0	5.5	9	11.0	6.94 (6.6+0.34)	7, 8
Core to secondary pin of U2	R#	10.0	5.5	9	10.0	6.94 (6.6+0.34)	7, 8
Core to secondary component U3	R#	12.0	5.5	9	12.0	6.94 (6.6+0.34)	7, 8
Core to secondary pin of CY2	R#	12.0	5.5	9	12.0	6.94 (6.6+0.34)	7, 8
Distance 5:	B/S#	*1)	4.1	Table 13 of IEC 61558-1	*1)	4.3	Table 13 of IEC 61558- 1
Distance 6:	R#	*1)	6.6	Table 13 of IEC 61558-1	*1)	8.3	Table 13 of IEC 61558- 1



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			IEC	61347-2-13				
Clause	Requirem	nent + Test			Result - Rem	ark		Verdict
Primary trace to secondary trace under T1	R#	8.4	6.6	Table 13 of IEC 61558-1	8.4	8.3		able 13 of C 61558- 1
Core to secondary pin of T1	R#	8.4	6.6	Table 13 of IEC 61558-1	8.4	8.3		able 13 of C 61558- 1
Core to secondary pin of CY1	R#	11.0	6.6	Table 13 of IEC 61558-1	11.0	8.3		able 13 of C 61558- 1
Core to secondary pin of U2	R#	10.0	6.6	Table 13 of IEC 61558-1	10.0	8.3		able 13 of C 61558- 1
Core to secondary component U3	R#	12.0	6.6	Table 13 of IEC 61558-1	12.0	8.3		able 13 of C 61558- 1
Core to secondary pin of CY2	R#	12.0	6.6	Table 13 of IEC 61558-1	12.0	8.3		able 13 of C 61558- 1
Working volta	age (V)			· · · · · · · · · · · · · · · · · · ·	327 Vrms			
					60 kHz			
PTI	PTI					< 600 🛛 👌 <u>></u> 600 🗆		
Peak value o	of the workin	ng voltage Û₀	_{ut} if applicabl	e (kV):	416 Vpeak			
Pulse voltage	e if applicab	le (kV)		:	No pulse volt	age.		
Cupplanant		op: *1) oo o o	nn and ad tabl	a 17 (16) in mag	a uram ant as a	lion	_	

Supplementary information: *1) see appended table 17 (16) in measurement section.

#B=basic insulation, R=Reinforced insulation.

1) 3 layers insulation tape wrapped around transformer and bottom of core.

2) Triple insulated wire used for secondary winding of the transformer.

3) Core of transformer considered as primary part.

4) Insulation tube and tape are used at primary windings and secondary windings crossing each other.

17 (16)	TABLE:	TABLE: clearance and creepage distance measurements (mm) P								
Applicable part of IEC 61347-1 Table 7 – 11*										
Distances	Insulation	Measured	Req	uired	Measured	Required				
	type **	De ** clearance	clearance	*Table	creepage	creepage	*Table			
	Clearance and creepage distance measurements other than isolation transformer									
For 12W se	For 12W series model									
Distance 1:	B/S#	*1)	1.5	9	*1)	2.5	7			

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IEC 61347-2-13										
Clause	Requirem	ient + Test			Result - Rem	ark	Verdict			
L-N on PCB before F1	B#	6.1	1.5	9	6.1	2.5	7			
Different polarity of fuse F1	B#	5.5	1.5	9	5.5	2.5	7			
Distance 2:	R#	*1)	3.0	9	*1)	5.0	7			
Primary component C1/C2 to accessible enclosure	R#	9.1	3.0	9	9.1	5.0	7			
Different pin of CY1	R#	6.5	3.0	9	6.5	5.0	7			
Primary component C1 to plug pin	R#	5.7	3.0	9	5.7	5.0	7			
Working volt	tage (V)			250 Vr.m.s		—				
Frequency i	f applicable ((kHz)		······	60 Hz					
PTI				:	< 600 🛛	<u>></u> 600 [] —			
Peak value	of the workin	ig voltage Û	out if applicable	(kV):	354 Vpeak					
Pulse voltag	je if applicab	le (kV)			No pulse volt	age.				
Supplement	tary informati	on: *1) see a	ppended table	e 17 (16) in mea	asurement sec	tion.				
		Clearand	e and creepa for isolati	ge distance n on transforme	neasurements er	;				
Distance 3:	B/S#	*1)	3.0	9	*1)	2.96 (2.7+0.26)	7, 8			
Distance 4:	R#	*1)	5.5	9	*1)	5.92 (5.4+0.52)	7, 8			
Primary trace of D1 to secondary pin of T1	R#	7.0	5.5	9	7.0	5.92 (5.4+0.52)	7, 8			
Core of T1 to secondary component C11	R#	8.0	5.5	9	8.0	5.92 (5.4+0.52)	7, 8			

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	IEC 61347-2-13										
Clause	Requirem	nent + Test			Result - Rem	ark	Verdict				
Core to	R#	12.6	5.5	9	12.6	5.92	7, 8				
secondary pin of T1	1\#	12.0	5.5	9	12.0	(5.4+0.52)	7,0				
Primary winding to secondary pin of T1	R#	7.8	5.5	9	7.8	5.92 (5.4+0.52)	7, 8				
Distance 5:	B/S#	*1)	2.7	Table 13 of IEC 61558-1	*1)	2.8	Table 13 of IEC 61558- 1				
Distance 6:	R#	*1)	5.2	Table 13 of IEC 61558-1	*1)	5.4	Table 13 of IEC 61558- 1				
Primary trace of D1 to secondary pin of T1	R#	7.0	5.2	Table 13 of IEC 61558-1	7.0	5.4	Table 13 of IEC 61558- 1				
Core of T1 to secondary component C11	R#	5.5	5.2	Table 13 of IEC 61558-1	5.5	5.4	Table 13 of IEC 61558- 1				
Core to secondary pin of T1	R#	12.6	5.2	Table 13 of IEC 61558-1	12.6	5.4	Table 13 of IEC 61558- 1				
Primary winding to secondary pin of T1	R#	7.8	5.2	Table 13 of IEC 61558-1	7.8	5.4	Table 13 of IEC 61558- 1				
Working volt	age (V)				268 Vrms						
Frequency i	f applicable ((kHz)		:	60 kHz						
PTI				:	< 600 🛛	<u>></u> 600 [
Peak value	of the workin	ng voltage Û	_{ut} if applicable	e (kV):	536 Vpeak						
Pulse voltag	je if applicab	le (kV)		:	No pulse volt	age.					
Supplement	arv informati	on: *1) see a	ppended table	e 17 (16) in mea	asurement sec	tion.					

Supplementary information: *1) see appended table 17 (16) in measurement section.

#B=basic insulation, R=Reinforced insulation.

- 1) Min. 3 layers insulation tape wrapped around transformer.
- 2) Triple insulated wire used for secondary winding of the transformer.

3) Core of transformer considered as primary part.

4) Insulation tube and tape are used at primary windings and secondary windings crossing each other.

5) Enclosure minimum thickness 2.5mm>0.86mm (working voltage 240V).

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	ILC 01347-2-15		
Clause	Requirement + Test	Result - Remark	Verdict

17 (16)	TABLE:	clearance	and creepage	distance me	asurements (r	nm)	Р
	•	Applic	cable part of I	EC 61347-1 Ta	able 7 – 11*		
Distances	Insulation	Measured	Req	uired	Measured	Requ	ired
	type **	clearance	clearance	*Table	creepage	creepage	*Table
				ge distance n lation transfo		5	
For 6W ser	ies models	RKPO-zzxx	xyyyy-D1, RK	PO-zzxxxyyy	yCD-1		
Distance 1:	B/S#	*1)	1.5	9	*1)	2.5	7
L-N on PCB before F1	B#	3.5	1.5	9	3.5	2.5	7
Different polarity of fuse F1	B#	2.9	1.5	9	2.9	2.5	7
Distance 2:	R#	*1)	3.0	9	*1)	5.0	7
Different pin of CY1	R#	5.3	3.0	9	5.3	5.0	7
Primary component C2 to accessible enclosure	R#	11.7	3.0	9	11.7	5.0	7
Winding of L1 to outside of plastic enclosure	R#	14.9	3.0	9	14.9	5.0	7
Working vol	tage (V)			:	250 Vr.m.s		
Frequency i	f applicable ((kHz)		······································	60 Hz		
					< 600 🛛	<u>></u> 600 []
Peak value	of the workin	ig voltage Û	out if applicable	(kV):	354 Vpeak		
Pulse volta	ge if applicab	le (kV)		· · · · · · · · · · · · · · · · · · ·	No pulse volt	age.	
Supplemen	tary informati	on: *1) see a	appended table	e 17 (16) in mea	asurement sect	tion.	
		Clearand		ge distance n on transforme		5	
Distance 3:	B/S#	*1)	1.5	9	*1)	2.77 (2.5+0.27)	7, 8
Distance 4:	R#	*1)	3.0	9	*1)	5.54 (5.0+0.54)	7, 8

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	IEC 61347-2-13											
Clause	Requirem	nent + Test			Result - Rer	nark	Verdict					
Core of T1 to outside of plastic enclosure	R#	12.5	3.0	9	12.5	5.54 (5.0+0.54)	7, 8					
Primary trace of D6 to secondary pin of T1	R#	5.8	3.0	9	5.8	5.54 (5.0+0.54)	7, 8					
Core of T1 to secondary component L1	R#	6.2	3.0	9	6.2	5.54 (5.0+0.54)	7, 8					
Core of T1 to secondary component C11	R#	6.7	3.0	9	6.7	5.54 (5.0+0.54)	7, 8					
Core of T1 to secondary pin of CY1	R#	7.5	3.0	9	7.5	5.54 (5.0+0.54)	7, 8					
Core of T1 to secondary pin of CY1	R#	7.5	3.0	9	7.5	5.54 (5.0+0.54)	7, 8					
Core of T1 to secondary pin A of T1	R#	6.2	3.0	9	6.2	5.54 (5.0+0.54)	7, 8					
Core of T1 to secondary pin B of T1	R#	6.1	3.0	9	6.1	5.54 (5.0+0.54)	7, 8					
Primary winding of T1 to secondary pin A of T1	R#	7.8	3.0	9	7.8	5.54 (5.0+0.54)	7, 8					
Primary winding of T1 to secondary pin B of T1	R#	10.1	3.0	9	10.1	5.54 (5.0+0.54)	7, 8					



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IEC 61347-2-13											
Clause	Requirem	nent + Test			Result - Rem	ark	Verdict				
Distance 5:	B/S#	*1)	2.5	Table 13 of IEC 61558-1	*1)	2.6	Table 13 of IEC 61558- 1				
Distance 6:	R#	*1)	4.7	Table 13 of IEC 61558-1	*1)	5.0	Table 13 of IEC 61558- 1				
Core of T1 to outside of plastic enclosure	R#	12.5	4.7	Table 13 of IEC 61558-1	12.5	5.0	Table 13 of IEC 61558- 1				
Primary trace of D6 to secondary pin of T1	R#	5.8	4.7	Table 13 of IEC 61558-1	5.8	5.0	Table 13 of IEC 61558- 1				
Core of T1 to secondary component L1	R#	6.2	4.7	Table 13 of IEC 61558-1	6.2	5.0	Table 13 of IEC 61558- 1				
Core of T1 to secondary component C11	R#	6.7	4.7	Table 13 of IEC 61558-1	6.7	5.0	Table 13 of IEC 61558- 1				
Core of T1 to secondary pin of CY1	R#	7.5	4.7	Table 13 of IEC 61558-1	7.5	5.0	Table 13 of IEC 61558- 1				
Core of T1 to secondary pin of CY1	R#	7.5	4.7	Table 13 of IEC 61558-1	7.5	5.0	Table 13 of IEC 61558- 1				
Core of T1 to secondary pin A of T1	R#	5.5	4.7	Table 13 of IEC 61558-1	5.5	5.0	Table 13 of IEC 61558- 1				
Core of T1 to secondary pin B of T1	R#	6.1	4.7	Table 13 of IEC 61558-1	6.1	5.0	Table 13 of IEC 61558- 1				



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	IEC 61347-2-13										
Clause	Requirem	nent + Test			Result - Rem	ark		Verdict			
Primary winding of T1 to secondary pin A of T1	R#	7.8	4.7	Table 13 of IEC 61558-1	7.8	5.0		able 13 of C 61558- 1			
Primary winding of T1 to secondary pin B of T1	R#	10.1	4.7	Table 13 of IEC 61558-1	10.1	5.0		able 13 of C 61558- 1			
Working volt	age (V)			· · · · · · · · · · · · · · · · · · ·	250 Vrms						
Frequency in	f applicable ((kHz)			60 kHz						
PTI				:	< 600 🛛	<u>></u> 600 [
Peak value	Peak value of the working voltage \hat{U}_{out} if applicable (kV)					548 Vpeak					
Pulse voltag	e if applicab	······	No pulse voltage.								
Supplement	ary informati	on: *1) see a	ppended tabl	e 17 (16) in mea	asurement sec	tion.					

B=basic insulation, R=Reinforced insulation.

1) Min. 3 layers insulation tape wrapped around transformer.

2) Triple insulated wire used for secondary winding of the transformer.

3) Core of transformer considered as primary part.

4) Insulation tube and tape are used at primary windings and secondary windings crossing each other.

5) Enclosure minimum thickness 2.5mm>0.86mm (working voltage 240V).

17 (16)	TABLE:	clearance	and creepage	distance me	asurements (r	nm) P			
		Applic	able part of l	EC 61347-1 Ta	able 7 – 11*				
	Insulation	Measured	Req	uired	Measured	Requ	iired		
	type **	clearance	clearance	*Table	creepage	creepage	*Table		
Clearance and creepage distance measurements other than isolation transformer									
For 6W ser	For 6W series model RKP-zzxxxyyyyDP-1								
Distance 1:	B/S#	*1)	1.5	9	*1)	2.5	7		
L-N on PCB before F1	B#	3.5	1.5	9	3.5	2.5	7		
Different polarity of fuse F1	B#	2.9	1.5	9	2.9	2.5	7		
Distance 2:	R#	*1)	3.0	9	*1)	5.0	7		
Different pin of CY1	R#	5.3	3.0	9	5.3	5.0	7		

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Clause	Requirem	nent + Test			Result - Rem	ark	Verdict
Primary component C2 to accessible enclosure	R#	6.2	3.0	9	6.2	5.0	7
Winding of L1 to outside of plastic enclosure	R#	8.0	3.0	9	8.0	5.0	7
Working volt	age (V)			:	250 Vr.m.s		—
Frequency if	f applicable ((kHz)		:	60 Hz		—
PTI				:	< 600 🛛	<u>></u> 600 □	
Peak value (of the workin	ig voltage Û₀	_{out} if applicable	(kV):	354 Vpeak		
Pulse voltag	e if applicab	le (kV)		:	No pulse volt	age.	
Supplement	ary informati	on: *1) see a	appended table	e 17 (16) in mea	asurement sec	tion.	
		Clearand		ge distance m on transforme		5	
Distance 3:	B/S#	*1)	1.5	9	*1)	2.77 (2.5+0.27)	7, 8
Distance 4:	R#	*1)	3.0	9	*1)	5.54 (5.0+0.54)	7, 8
Core of T1 to outside of plastic enclosure	R#	12.5	3.0	9	12.5	5.54 (5.0+0.54)	7, 8
Primary trace of D6 to secondary pin of T1	R#	5.8	3.0	9	5.8	5.54 (5.0+0.54)	7, 8
Core of T1 to secondary component L1	R#	6.0	3.0	9	6.0	5.54 (5.0+0.54)	7, 8
Core of T1 to secondary component C11	R#	6.7	3.0	9	6.7	5.54 (5.0+0.54)	7, 8

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			IEC 6	1347-2-13			
Clause	Requirem	nent + Test			Result - Rem	ark	Verdict
Core of T1 to secondary pin of CY1	R#	7.5	3.0	9	7.5	5.54 (5.0+0.54)	7, 8
Core of T1 to secondary pin of CY1	R#	7.5	3.0	9	7.5	5.54 (5.0+0.54)	7, 8
Core of T1 to secondary pin A of T1	R#	6.0	3.0	9	6.0	5.54 (5.0+0.54)	7, 8
Core of T1 to secondary pin B of T1	R#	6.1	3.0	9	6.1	5.54 (5.0+0.54)	7, 8
Primary winding of T1 to secondary pin A of T1	R#	7.8	3.0	9	7.8	5.54 (5.0+0.54)	7, 8
Primary winding of T1 to secondary pin B of T1	R#	10.1	3.0	9	10.1	5.54 (5.0+0.54)	7, 8
Distance 5:	B/S#	*1)	2.5	Table 13 of IEC 61558-1	*1)	2.6	Table 13 of IEC 61558- 1
Distance 6:	R#	*1)	4.7	Table 13 of IEC 61558-1	*1)	5.0	Table 13 of IEC 61558- 1
Core of T1 to outside of plastic enclosure	R#	12.5	4.7	Table 13 of IEC 61558-1	12.5	5.0	Table 13 of IEC 61558- 1
Primary trace of D6 to secondary pin of T1	R#	5.8	4.7	Table 13 of IEC 61558-1	5.8	5.0	Table 13 of IEC 61558- 1



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			IEC	61347-2-13			
Clause	Requirem	ient + Test			Result - Rem	ark	Verdict
Core of T1 to secondary component L1	R#	6.0	4.7	Table 13 of IEC 61558-1	6.0	5.0	Table 13 of IEC 61558- 1
Core of T1 to secondary component C11	R#	6.7	4.7	Table 13 of IEC 61558-1	6.7	5.0	Table 13 of IEC 61558- 1
Core of T1 to secondary pin of CY1	R#	7.5	4.7	Table 13 of IEC 61558-1	7.5	5.0	Table 13 of IEC 61558- 1
Core of T1 to secondary pin of CY1	R#	7.5	4.7	Table 13 of IEC 61558-1	7.5	5.0	Table 13 of IEC 61558- 1
Core of T1 to secondary pin A of T1	R#	5.5	4.7	Table 13 of IEC 61558-1	5.5	5.0	Table 13 of IEC 61558- 1
Core of T1 to secondary pin B of T1	R#	6.1	4.7	Table 13 of IEC 61558-1	6.1	5.0	Table 13 of IEC 61558- 1
Primary winding of T1 to secondary pin A of T1	R#	7.8	4.7	Table 13 of IEC 61558-1	7.8	5.0	Table 13 of IEC 61558- 1
Primary winding of T1 to secondary pin B of T1	R#	10.1	4.7	Table 13 of IEC 61558-1	10.1	5.0	Table 13 of IEC 61558- 1
Working volt	age (V)			:	250 Vrms		
					60 kHz		
				:	< 600 🛛	<u>></u> 600	
				le (kV):	548 Vpeak		
Pulse voltag	e if applicab	le (kV)		:	No pulse volt	age.	—

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Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information: *1) see appended table 17 (16) in measurement section. #B=basic insulation, R=Reinforced insulation.

1) Min. 3 layers insulation tape wrapped around transformer.

- 2) Triple insulated wire used for secondary winding of the transformer.
- 3) Core of transformer considered as primary part.
- 4) Insulation tube and tape are used at primary windings and secondary windings crossing each other.
- 5) Enclosure minimum thickness 2.5mm>0.86mm (working voltage 240V).

19 (18.1)	TABLE: Ball	Pressure Test			Р
Allowed impression diameter (mm)		2.0			
Object/ Part N	lo./ Material	Manufacturer/ trademark	Test temperature (°C)	Impression diame	eter (mm)
	ure, pin sleeve older / model:	SABIC INNOVATIVE PLASTICS B V	125	0.9	
Plug pin holde 943X(GG)(X)	er / model:	SABIC INNOVATIVE PLASTICS B V	125	0.9	
	ry information: l ade by phenoli		T1 and line choke L2 are ad	ccepted without tes	t as both

19 (18.2)	TABLE: Test of printed boards					
Object/ Part No./ Material	Manufacturer/ trademark	Duration of application of test flame (s)	lgnition of specified layer Yes/No	Duration of burning (s)	Verdict	
Supplementary information: UL approved PCB classified V-0 minimum. Compliance checked in accordance with 8.7 of IEC 61189-2 and relevant parts of IEC 61249-2.						

19 (18.3)	TAE	ABLE: Glow-wire test					
Glow wire temperature: 650°C							
Object/ Part N Material	lo./	Manufacturer/ trademark	lgnition of specified layer Yes/No	Duration of burning (s)	Verdict		
Plastic enclos pin sleeve and plug pin holde model: 357M(l r/	SABIC INNOVATIVE PLASTICS B V	No	0	Pass		
Plug pin holde model: 943X(GG)(X)	er /	SABIC INNOVATIVE PLASTICS B V	No	0	Pass		
Supplementar	ry info	ormation:			•		

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Clause	Requirement + Test	Result - Remark	Verdict

19 (18.4)	TABLE: Needle-fla	TABLE: Needle-flame testP					
Object/ Part No./ Material	Manufacturer/ trademark	Duration of application of test flame (s)	lgnition of specified layer Yes/No	Duration of burning (s)	Verdict		
Plastic enclosure, pin sleeve and plug pin holder / model: 357M(f1)	SABIC INNOVATIVE PLASTICS B V	10	No	0	Ρ		
Plug pin holder / model: 943X(GG)(X)	SABIC INNOVATIVE PLASTICS B V	10	No	0	Р		
	ry information: Bobbi ade by phenolic mate		nd line choke L1 are	accepted without tes	t as both		

19 (18.5)	TABLE	TABLE: Proof tracking test				N/A	
Test voltage	PTI		:	175 V			
Object/ Part N Material	lo./	Manufacturer/ trademark			ops without failure on three specime		Verdict
Supplementa	y inform	ation:					

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Clause	Requirement + Test	Result - Remark	Verdict

A (A)	ANNEX A - TEST TO ESTABLISH WHETHER A CONDUCTIVE PART IS A LIVE PART WHICH MAY CAUSE AN ELECTRIC SHOCK			
(A.1)	Comply with A.2 or A.3		Р	
(A.2)	Voltage \leq 35 V peak or \leq 60 V d.c:	Max. 24.21Vdc for 24W series model, Max. 24.25Vdc for models both 12W and 6W series models.	Р	
(A.3)	If voltage > 35 V peak or > 60 V d.c. or protective impendance device; touch current does not exceed 0,7 mA (peak) or 2 mA d.c.	For 24W series model: Max. 0.13 mA <0.7 mA (peak) For 12W series model: Max. 0.26 mA <0.7mA (peak) For 6W series model: 0.24 mA <0.7mA (peak)	Ρ	
	Comply with Annex G of IEC 60598-1		Р	

C (C)	ANNEX C – PARTICULAR REQUIREMENTS FOR ELECTRONIC LAMP CONTROLGEAR WITH MEANS OF PROTECTION AGAINST OVERHEATING	N/A
(C3)	GENERAL REQUIREMENTS	N/A
(C3.1)	Thermal protection means integral with the convertor, protected against mechanical damage	N/A
	Renewable only by means of a tool	N/A
	If function depending on polarity, for cord- connected equipment protection means in both leads	N/A
	Thermal links comply with IEC 60691	N/A
	Electrical controls comply with IEC 60730-2-3	N/A
(C3.2)	No risk of fire by breaking (clause C7)	N/A
(C5)	CLASSIFICATION	N/A
	a) automatic resetting type	—
	b) manual resetting type	
	c) non-renewable, non-resetting type	
	d) renewable, non-resetting type	
	e) other type of thermal protection; description:	N/A
(C6)	MARKING	N/A
(C6.1)	Symbol for temperature declared thermally protected ballasts	N/A
(C6.2)	Declaration of the type of protection provided	N/A



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Clause	Requirement + Test	Result - Remark	Verdict
(C7)	LIMITATION OF HEATING		N/A
(C7.1)	Preselection test:		N/A
	Test sample placed for at least 12 h in an oven having temperature (t $_{\rm c}$ - 5) K		N/A
	No operation of the protection device		N/A
(C7.2)	Functioning of protection means:		N/A
	Normal operation of the sample in a test enclosure according to Annex D at an ambient temperature such that (t_c +0; -5) °C is obtained		N/A
	No operation of the protection device		N/A
	Introducing of the most onerous test condition determined during test of clause 14		N/A
	Output of windings connected to the mains supply short-circuited, and other part of the convertor operated under normal conditions		N/A
	Increasing of the current through the windings continuously until operation of the protection means		N/A
	Continuous measuring of the highest surface temperature		N/A
	Ballasts according to C5 a) or C5 e) operated until stable conditions are achieved		N/A
	Automatic-resetting thermal protectors working 3 times		N/A
	Ballasts according to C5 b) working 6 times		N/A
	Ballasts according to C5 c) and C5) d) working once		N/A
	Highest temperature does not exceed the marked value		N/A
	Any overshoot of 10% over the marked value within 15 min		N/A

D (D)	ANNEX D – REQUIREMENTS FOR CARRY OUT THERMALLY PROTECTED LAMP CONTROLGE	N/A
	Tests in C7 performed in accordance with Annex D, if applicable	N/A

F	ANNEX F - DRAUGHT-PROOF ENCLOSURE	Р
	Draught-proof enclosure in accordance with the description	Р



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Clause	Requirement + Test	Result - Remark	Verdict
	Dimensions of the enclosure		Р
	Other design; description		N/A

H (H)	ANNEX H - TESTS	Р
	All tests performed in accordance with the advice given in Annex H, if applicable	Р

I (L)	ANNEX I: PARTICULAR ADDITIONAL REQUIRE A.C. SUPPLIED ELECTRONIC CONTROLGEAR		Р
(L.3)	Classification		Р
	Class I	Yes 🗌 No 🛛	
	Class II	Yes 🛛 No 🗆	
	Class III	Yes 🗌 🛛 No 🖾	
	non-inherently short circuit proof controlgear	Yes 🛛 No 🗆	
	inherently short circuit proof controlgear	Yes 🗌 🛛 No 🖾	
	fail safe controlgear	Yes 🗌 🛛 No 🖾	
	non-short-circuit proof controlgear	Yes 🗌 🛛 No 🖾	
(L.4)	Marking		Р
	Adequate symbols are used	See copy of marking plate for details.	Р
(L.5)	Protection against electric shock		N/A
	Comply with 9.2 of IEC 61558-1		N/A
(L.6)	Heating		Р
	No excessive temperatures in normal use		Р
	Value if capacitor t_c marked:	See annex 1	
	Winding insulation classified as Class	Class B	
	Comply with tests of clause 14 of IEC 61558-1 with adjustments		Р
(L.7)	Short-circuit and overload protection		Р
	Comply with tests of clause 15 of IEC 61558-1 with adjustments	See annex 4.	Р
(L.8)	Insulation resistance and electric strength		Р
(L.8.1)	Conditioned 48 h between 91 % and 95 %		Ρ
(L.8.2)	Insulation resistance		Р
	Between input- and output circuits not less than 5 M Ω	100 MΩ	Ρ

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Clause	Requirement + Test	Result - Remark	Verdict	
	Between metal parts of class II convertors which are separated from live parts by basic insulation only and the body not less than 5 M Ω :		N/A	
	Between metal foil in contact with the inner and outer surfaces of enclosures of insulating material not less than 2 M Ω	Min. 500 M Ω measured.	Р	

	outer surfaces of enclosures of insulating material not less than $2 M\Omega$	Min. 500 Mt2 measured.	
(L.8.3)	Electric strength		Р
	1) Between live parts of input circuits and live parts of output circuits:	For 24W series model: Between L/N to secondary output: 3885 V For 12W series model: Between L/N to secondary output: 3750 V For 6W series model: Between L/N to secondary output: 3750 V	Ρ
	2) Over basic or supplementary insulation betwee	n:	Р
	a) live parts having different polarity	Between L to N before fuse: 1500 V	Р
	b) live parts and body if intended to be connected to protective earth:		N/A
	c) accessible metal parts and a metal rod of the same diameter as the flexible cable or cord:		N/A
	d) live parts and an intermediate metal part:		N/A
	e) intermediate metal parts and the body		N/A
	f) each input circuit and all other input circuits:		N/A
	3) Over reinforced insulation between the body and live parts:	For 24W series model: Between L/N to plastic enclosure: 3885 V For 12W series model: Between L/N to plastic enclosure: 3750 V For 6W series model: Between L/N to plastic enclosure: 3750 V	Ρ
(L.9)	Construction	1	Р



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Clause	Requirement + Test	Result - Remark	Verdict
(L.9.1)	Transformer comply with 19.12 of IEC 61558-1 and 19 of IEC 61558-2-6	All windings fixed by bobbin and insulation tape	Р
		VDE approved triple insulated wires used for secondary winding of transformer T1	
	HF transformer comply with 19 of IEC 61558-2-16	Safety isolating transformer used. Double insulation or reinforced insulation between primary winding/core and secondary winding.	Ρ
		Insulation tape fold back used on primary enamelled wire and secondary triple insulated wire where can contact each other.	
(L.10)	Components		Р
	Protective devices comply with 20.6 – 20.11 of IEC 61558-1	VDE approved current fuse used for 24W series model.	Р
		VDE approved fusible resistor used for 12W and 6W series models.	
(L.11)	Creepage distances, clearances and distances	through insulation	Р
	Creepage distances and clearances not less than in Clause 16		Р
	Distance through insulation according Table L.5 in	n IEC 61347-1	Р
	1) Basic distance through insulation		N/A
	Required distance (mm)		
	Measured (mm)		N/A
	Supplementary information		
	2) Supplementary distance through insulation		N/A
	Required distance (mm)		
	Measured (mm)		N/A
	Supplementary information		
	3) Reinforced distance through insulation		Р
	Required distance (mm)	0.83mm	—
	Measured (mm)	Min. 1.5mm	Р
	Supplementary information	Enclosure	



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	IEC 61347-2-13	<u> </u>
Clause	Requirement + Test Result - Remark	Verdict
J (-)	ANNEX J IN THIS PART 2 – PARTICULAR ADDITIONAL SAFETY REQUIREMENTS FOR A.C., A.C./D.C. OR D.C. SUPPLIED ELECTRONIC CONTROLGEAR FOR EMERGENCY LIGHTING	N/A
J.1	General	N/A
	Intended for centralized emergency power supply Yes No	
J.2	Marking	N/A
J.2.1	Mandatory markings	N/A
	a) symbol EL	N/A
	b) rated emergency supply voltage (V)	N/A
J.2.2	Information to be provided if applicable	N/A
	a) Limits of ambient temperature	N/A
	b) Emergency output factor (EOF _x)	N/A
	c) Information if intended for use in luminaires for high-risk task area lighting	N/A
J.3	General notes on tests	N/A
	Length of output cable in tests	N/A
	Load instead of LED lamps/modules	N/A
J.4	Starting conditions	N/A
	Start rated load in emergency mode without adversely affecting the performance	N/A
J.5	Operating condition	N/A
	Comply with the requirements of 7.2 of IEC 62384 at 90% and 110% of rated emergency supply voltage	N/A
J.6	Emergency supply current	N/A
	Emergency supply current not differ more than ±15 %	N/A
	Supply of low impedance and low inductance	N/A
J.7	EMC immunity	N/A
	Comply with the requirements of IEC 61547	N/A
J.8	Pulse voltage from central battery systems	N/A
	Withstand pulses according Table J.1	N/A
J.9	Tests for abnormal conditions	N/A
	Comply with the requirements of 12 of IEC 62384	N/A
J.10	Comply with the requirements of 13 of IEC 62384	N/A
J.11	Functional safety (EOF _x)	N/A



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Clause	Requirement + Test	Result - Remark	Verdict					
	Declared emergency output factor (EOF _x) achieved during emergency operation		N/A					

(N)	ANNEX N: REQUIREMENTS FOR INSULATION MATERIALS USED FOR DOUBLE OR REINFORCED INSULATION				
(N.4)	General requirements		Р		
(N.4.1)	Material comply with IEC 60085 and IEC 60216 series		N/A		
(N.4.2)	Solid insulation		N/A		
	Electric strength test at least 5 kV or 1,35 x test voltage in Table N.1		N/A		
	If not classified according IEC 60085 and IEC 60216 series: Electric strength test increased 10 % of 5,5 kV or 1,5 x test voltage in Table N.1		N/A		
(N.4.3)	Thin sheet insulation				
(N.4.3.1)	Thickness and composition of thin sheet insulation				
	- Inside the ballast and not subjected to handling or abrasion during the production and during maintenance		Ρ		
	- Non-separated layers: Min. 3 layers and fulfil mandrel test of 150N		N/A		
	- Separated layers: Min. 2 layers and each layer fulfil mandrel test of 50N	Two layers insulation tape wrapped around transformer T1, over transformer bottom core.	Р		
	- Separated layers (alternative): Min. 3 layers and 2/3 of the layers fulfil mandrel test of 100N		N/A		
(N.4.3.2)	Mandrel test (electric strength test during mechan	ical stress)	Р		
	Electric strength test after mandrel test:		Р		
	- Non-separated layers: min. 5 kV or 1,35 x test voltage in Table N.1		N/A		
	- 2/3 of min. 3 separated layers: min. 5 kV or 1,25 x test voltage in Table N.1		N/A		
	- one of 2 separated layers: min. 5 kV or 1,25 x test voltage in Table N.1	One layer insulation tape with 50N pull force applied	Ρ		
		Test voltage: 5072.5V max.			
	No flashover or breakdown occurred		Р		



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Clause	Requirement + Test	Result - Remark	Verdict
(0)	ANNEX O: ADDITIONAL REQUIREMENTS FOR CONTROLGEAR WITH DOUBLE OR REINFORC		N/A
(O.6)	Marking		N/A
	Marking according clause 7 (7)	See clause 7	N/A
	Special symbol		N/A
	Meaning of the special symbol explained in catalogue		N/A
(0.7)	Protection against accidental contact with live	parts	N/A
	Requirements of clause 8 (10)	See clause 8	N/A
	Test finger not possible to make contact with basic insulated metal parts		N/A
(0.8)	Terminals	N/A	
	Clause 9 (8)	See clause 9	N/A
(O.9)	Provision for earthing	N/A	
	Functional earthing terminals comply with clause 9 of part 1	Class II equipment	N/A
	No protective earthing terminal		N/A
(O.10)	Moisture resistance and insulation	N/A	
	Clause 11 (11)	See clause 11	N/A
(0.11)	Electric strength	N/A	
	Clause 12 (12)	See clause 12	N/A
(0.13)	Fault conditions	N/A	
	Clause 14 (14)	See clause 14	N/A
	End of test, between live part and accessible metal parts or external parts of insulating material in contact with the supporting surface comply with dielectric strength test reduced to 35 % of values according Table 1 in part 1		N/A
	Insulation resistance according to 0.10 between live part and accessible metal parts or external parts of insulating material in contact with the supporting surface not less than 4 $M\Omega$		N/A
(0.14)	Construction		N/A
	Clause 17 (15)	See clause 17	N/A
	Accessible metal parts insulated from live parts by double or reinforced insulation		N/A
	Live part insulated from supporting surface in contact with external faces by double or reinforced insulation		N/A

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Clause	Requirement + Test	Result - Remark	Verdict			
(0.15)	Creepage distances and clearances		N/A			
(0.13)	Clause 18 (16)	See clause 18	N/A			
	Comply with corresponding values for luminaries		N/A			

	Comply with corresponding values for luminaries in IEC 60598-1	5	N/A		
(O.16)	Screws, current-carrying parts and connection	ons	N/A		
	Clause 19 (17)	See clause 19	N/A		
(O.17)	Resistance to heat and fire	istance to heat and fire			
	Clause 20 (18)	See clause 20	N/A		
(O.18)	Resistance to corrosion		N/A		
	Clause 21 (19)	See clause 21	N/A		

(P)	Creepage distances and clearances and distance through isolation (DTI) for lamp controlgear which are protected against pollution by the use of coating or potting				
(P.1)	General	N/A			
	P.2 applies if creepage distances less than the minimum in Table 7 and 8	N/A			
	P.3 applies if clearance less than the minimum in Table 9, 10 and 11	N/A			
(P.2)	Creepage distances				
(P.2.2)	Minimum creepage distances for working voltages and rated voltages with frequencies up to 30 kHz (Table P.1)				
	Basic or supplementary insulation:				
	Required creepage				
	Measured	N/A			
	Supplementary information				
	Reinforced insulation:	N/A			
	Required creepage:				
	Measured	N/A			
	Supplementary information				
(P.2.3)	Creepage distances for working voltages with frequencies above 30 kHz (Table P.2)				
	Voltage Û _{out} kV:				
	Frequency:				
	Required distance:				
	Measured	N/A			



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Requirement + Test Result - Remark Verdict Clause Supplementary information (P.2.4) Compliance with the required creepage distances N/A (P.2.4.1) Compliance in accordance with 16.3.3 and test N/A according P.2.4.2 Electrical tests after conditioning N/A (P.2.4.3) (P.2.4.3.1) Insulation resistance and electric strength N/A according Clause 11 and 12 (P.3) Distance through isolation N/A (P.3.4) Electrical tests after conditioning N/A (P.3.4.1) Insulation resistance and electric strength N/A according Clause 11 and 12 (P.3.4.2) Impulse voltage dielectrical test N/A Basic or supplementary insulation: N/A Working/rated voltage: N/A Impulse voltage..... Supplementary information Reinforced insulation: N/A Working/rated voltage: Impulse voltage: N/A

Supplementary information

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Clause	Requirement + Test	Result - Remark	Verdict			

ANNEX 1: com	ponent	S				Р	
object/part No.	code	manufacturer/ trademark	type/model	technical data	standard	mark(s) of conformity	
For 24W series	mode	ls	<u>.</u>	-	-		
German plug (for models RKPO- EUxxxyyyyCD- 5)	A	Kenic Electric Mfg. Co. Ltd.	KE-35	250Vac, 16A, IP44	DIN VDE 0620-1 (VDE 0620-1):2010- 02	VDE 40006739	
(Alternative)	D	Ningbo Qiaopu Electric Co., Ltd.	D02-F	250Vac, 16A, IP44	DIN VDE 0620-2-1 (VDE 0620-2- 1):2013-03	VDE 40003058	
UK plug (for models RKPO- UKxxxyyyyCD- 5)	А	Ching Cheng Wire Material Co Ltd	EL-210A	250Vac, 3-13A	BS 1363-1: 2016	BSI KM39096	
Power cord (for models RKPO- EUxxxyyyyCD- 5,RKPO- UKxxxyyyyCD- 5)	A	Ningbo Qiaopu Electric Co., Ltd.	H05RN-F, H05RR-F, H07RN-F	300/500Vac, 2x 1.0mm² Min.	DIN EN 50525-2-21 (VDE 0285- 525-2-21): 2012-01; EN 50525-2-21: 2011	VDE 40035531	
(Alternative)	D	Dong Guan Recheer Electric Wire & Cable Co., Ltd.	H05RN-F, H05RR-F, H07RN-F	300/500Vac, 2x 1.0mm² Min.	DIN EN 50525-2-21 (VDE 0285- 525-2- 21):2012-01; EN 50525-2- 21:2011	VDE 40015173	
(Alternative)	D	Ningbo Dabu Electric Appliance Co., Ltd.	H05RN-F, H05RR-F, H07RN-F	300/500Vac, 2x 1.0mm² Min.	DIN EN 50525-2-21 (VDE 0285- 525-2-21): 2012-01; EN 50525-2-21: 2011	VDE 40030691	
(Alternative)	D	Ningbo Xuanshi Electronics Co., Ltd.		300/500Vac, 2x 1.0mm² Min.	DIN EN 50525-2-21 (VDE 0285- 525-2- 21):2012-01; EN 50525-2- 21:2011	VDE 40017772	



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Clause	Require	ment + Test			Result - F	Remark		Verdict	
EU plug (for models RKP- EUxxxyyyyCD- 5)	A	Unirise Electric Wire & Cable Co., Ltd.	UE-221	250Va IP20	c, 2.5A,	c, 2.5A, DIN VDE 0620 Teil 101:1992- 05; EN 50075:1990		- 14452	
(Alternative)	D	Hong Shan Chuan Industry (Shen Zhen) Co., Ltd.	HSC-401	250Va IP20	c, 2.5A,	DIN VDE 0620 Teil 101:1992- 05; EN 50075:1990	VDE 4002	E 20005	
(Alternative)	D	Kenic Electric Mfg. Co. Ltd.	KE-23	250Va IP20	250Vac, 16A, DIN VDE IP20 0620-2-1 (VD 0620-2- 1):2016-01		VDE 4000	E 02191	
(Alternative)	D	Chao Hui Electrical Appliance Co., Ltd.	CH-221	250Vac, 2.5A, IP20		T 11 404 4000		17597	
UK plug (for models RKP- UKxxxyyyyCD- 5)	A	Luen Tai lp's Electrical (Shenzhen) Co., Ltd.	9518	250V, 13A		250V, 13A BS 1363-1: 2016		KM 90	
Power cord (for models RKP- EUxxxyyyyCD- 5, RKP- UKxxxyyyyCD- 5)	A	Unirise Electric Wire & Cable Co., Ltd.	H03VV-F, H03VVH2-F, H05VVH2-F	300/500Vac, 2x 0.75mm² min.		DIN EN 50525-2-11 (VDE 0285- 525-2- 11):2012-01; EN 50525-2- 11:2011	VDE 4001	17449	
(Alternative)	D	Ningbo Qiaopu Electric Co., Ltd.	H03VV-F, H03VVH2-F, H05VVH2-F	300/500Vac, 2x 0.75mm² min.		DIN EN 50525-2-11 (VDE 0285- 525-2- 11):2012-01; EN 50525-2- 11:2011	VDE 4003	35976	
(Alternative)	D	Ningbo Xuanshi Electronics Co., Ltd.	H03VV-F, H03VVH2-F, H05VVH2-F	300/500Vac, 2x 0.75mm² min.		DIN EN 50525-2-21 (VDE 0285- 525-2- 21):2012-01; EN 50525-2- 21:2011	VDE 400 ²	11761	
German Plug portion (for models RKPO- EUxxxyyyy)	С	Dongguan Rico Electronic Co., Ltd.	RKPO- EUxxxyyyy	250Vac, 0.6A		DIN VDE 0620-2-1: 2013	appl	ed with iance achment	



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IEC 61347-2-13 Requirement + Test **Result - Remark** Verdict Clause UK plug portion С Dongguan Rico RKPO-Tested with 250Vac, 0.6A BS 1363-1 (for models Electronic Co., appliance UKxxxyyyy **RKPO-**Ltd. (attachment 2) UKxxxyyyy) С RKP-Tested with UK Plug portion Dongguan Rico 250Vac, 0.6A BS 1363-1 Electronic Co.. (for models UKxxxyyyyDPappliance RKP-Ltd. 5 (attachment UKxxxyyyyDP-4) 5) Enclosure, plug В SABIC V-0, min. 1.5mm UL 94 UL E45329 357M(f1) pin holder, pin **INNOVATIVE** thickness, 120°C sleeve (for PLASTICS B V models RKPOzzxxxyyyy, **RKP-**UKxxxyyyyDP-5) С Metal material Interchangeabl Interchangeabl Copper content : Test with ___ Min. 64.5% of Plug pin (for е е appliance models RKPOzzxxxyyyy, RKP-UKxxxyyyyDP-5) Plastic of output B DONGGUAN PVC, V-0, 50°C QL 80A UL 94 UL E351522 Connector (for QILONG models RKPO-ELECTRICITY EUxxxyyyy, CO LTD **RKPO**zzxxxyyyyCD-5) С Test with Output Interchangeabl Interchangeabl Diameter: min. __ connector (for 5.8mm appliance e е models RKP-UKxxxyyyyDP-5, RKPzzxxxyyyyCD-5) D Internal input Interchangeabl Interchangeabl 24-18AWG, UL 758 UL E352132 wire (for models 80°C, 300V е e **RKPO**zzxxxyyyy) Internal input D 24-18AWG, Interchangeabl Interchangeabl UL 758 UL E352132 wire (for models 80°C, 300V е е RKP-UKxxxyyyyDP-5)



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Clause	Require	ment + Test			Result - F	Remark		Verdict
Internal output wire (for models RKPO- zzxxxyyyy, RKPO- zzxxxyyyyCD- 5)	D	Interchangeabl e	Interchangeabl e	curren min. 2 (for mo	odels output it>2A) or 1AWG odels output output	UL 758	ULE	352132
Output wire (for models RKP- UKxxxyyyyDP- 5, RKP- zzxxxyyyyCD- 5)	D	Interchangeabl e	Interchangeabl e	curren min. 2 (for mo	odels output ht>2A) or 1AWG odels output ot≤2A),	UL 758	UL E	352132
РСВ	B,C	Interchangeabl e	Interchangeabl e	V-0 or 130 °C		UL 94	UL	
Heat Shrinkable tube for fuse	В	DONGGUAN SALIPT CO LTD	SALIPT S-901- 300	300V, VW-1	125°C,	UL 224	UL	
Fuse (F1)	A	DONGGUAN HONGDA ELECTRONIC TECHNOLOGY	31TC	T2A, 2	50Vac	IEC/EN 60127- 1 IEC/EN 60127- 3	4002	8150
(Alternative)	D	Walter Electronic Co., Ltd	ICP-Series	T2A, 2	50Vac	IEC/EN 60127- 1 IEC/EN 60127- 3	4001	2824
(Alternative)	D	Dongguan Better Electronic Technology Co., Ltd.	334-Serie(s)	T2A, 2	50Vac	IEC/EN 60127- 1 IEC/EN 60127- 3	4002	25428
(Alternative)	D	Littelfuse Phils. Inc.	877	T2A, 2	50Vac	IEC/EN 60127- 1 IEC/EN 60127- 3		23242
Y- capacitor (CY1, CY2) (Y1 type) (Optional)	A	Dongguan Easy-gather Electronic Co., Ltd.	DCF		300pF, C, 125°C	IEC/EN 60384- 14		22942

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Clause F	Require	ment + Test		Result - Remark Ver				/erdict		
(Alternative) (Optional)	D	Guangdong South Hongming Electronic Science and Technology Co., Ltd.	F	Max. 3300pF, 250VAC, 125°C		1 /		IEC/EN 60384- 14	VDE 40036	393
Opto-coupler (U2)	A	Everlight Electronics Co., Ltd.	EL817 V	Ext. do 110°C	r.=7.7mm,	IEC/EN 60747- 5-5	VDE 1	32249		
(Alternative)	D	Changzhou Galaxy Century Micro- electronics Co., Ltd.	BPC-817 C	Ext. do 110 °C	r≥7.8mm,	IEC/EN 60747- 5-5	VDE 40034	140		
Line Filter (L1)	В	Dongguan Rico Electronic Co., Ltd.	UU9.8	130°C	130°C IEC/EN 6134 2-13		Testeo applia			
-Bobbin	В	CHANG CHUN PLASTICS CO LTD	T375J	Phenol 150°C	Phenolic, V-0, UL 94 150°C		UL E5	9481		
- Magnet Wire	В	DONG GUAN YIDA INDUSTRIAL CO LTD	UEW/155	155°C		UL 1446	UL E3	44055		
(Alternative)	С	Interchangeabl e	Interchangeabl e	130°C		UL 1446	UL			
Bridge Diodes (D1-D4)	С	Interchangeabl e	Interchangeabl e	Min. 14 600V	A, Min.	IEC/EN 61347- 2-13	Testeo applia			
Electrolytic Capacitor (C2)	С	Interchangeabl e	Interchangeabl e	33uF, I 105°C	Vin .400V,	IEC/EN 61347- 2-13	Testeo applia			
Transistors (C1)	С	Interchangeabl e	Interchangeabl e	22uF, I 105°C	Vin .400V,	IEC/EN 61347- 2-13	Testeo applia			
Transformer (T1) (For output: 3Vdc, 3.5Vdc, 5Vdc)	В	Dongguan Rico Electronic Co., Ltd.	RK24-05V0	Class I	3	IEC/EN 61347- 2-13	Testec applia			
Transformer (T1) (For output: 9Vdc, 12Vdc)	В	Dongguan Rico Electronic Co., Ltd.	RK24-12V0	Class I	3	IEC/EN 61347- 2-13	Testec applia			



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Clause Requirement + Test				. 10	Result - Remark			Verdict
Transformer (T1) (For output: 24Vdc)	В	Dongguan Rico Electronic Co., Ltd.	RK24-24V0	Class B		IEC/EN 61347- 2-13	Tested with appliance	
-Bobbin	B,C	Chang Chun Plastics Co., Ltd.	T375J	Phenolic, V-0, 150 °C, min. thickness 0.7mm.		UL 94, UL 746C	UL E59481	
-Magnet wire	B,C	DONG GUAN YIDA INDUSTRIAL CO LTD	UEW/155	155°C		UL 1446	UL E344055	
(Alternative)	D	Interchangeabl e	Interchangeabl e	130°C		UL 1446	UL	
-Insulation tape	B,C	Jingjiang Yahua Pressure Sensitive Glue Co Ltd	PZ,CT	130°C		UL 510	UL E165111	
(Alternative)	D	SUZHOU MAILADUONA ELECTRIC MATERIAL CO LTD	JY312	130 °C.		UL510	UL E188295	
-Triple insulated wire	I B,C	Furukawa Electric Co., Ltd	TEX-E	130°C		IEC/EN 60950-1, annex K of IEC/EN 61558-2-16	VDE 6735	
Silicone Rubbe	r B	Shen Zhen Anpin Silicone Material Co Ltd	AP-905B	V-0, 105°C		UL 94	UL E257078	
(Alternative)	D	Shenzhen Bonic Science & Technology Ltd	BN160	V-0, 150°C		UL 94	UL E254560	
(Alternative)	D	TIANHUAN TECH(DONGG UAN) CO LTD	TH100A/B2	V-0,,130 °C		UL 94	UL E257593	
For 12W and 6W series models								



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			IEC 61347-2		Report No.		
Clause	Require	ment + Test		Result - F	Remark		Verdict
German plug (for models RKPO- EUxxxyyyyCD- 2, RKPO- EUxxxyyyyCD- 1)		Kenic Electric Mfg. Co. Ltd.	KE-35	250Vac, 16A, IP44	DIN VDE 0620-1 (VDE 0620-1):2010- 02	VDE 4000	5 06739
(Alternative)	D	Ningbo Qiaopu Electric Co., Ltd.	D02-F	250Vac, 16A, IP44	DIN VDE 0620-2-1 (VDE 0620-2- 1):2013-03	VDE 4000	 03058
UK plug (for models RKPO- UKxxxyyyyCD- 2, RKPO- UKxxxyyyyCD- 1)		Ningbo Qiaopu Electric Co., Ltd	D09	300Vac, 13A (fused plug)	BS 1363-1: 1995 + A4: 2012	AST No.9	A Cert. 930
(Alternative)	D	Ching Cheng Wire Material Co Ltd	EL-210A	250Vac, 3-13A	BS 1363-1: 2016	BSI	KM39096
Power cord (for models RKPO- EUxxxyyyyCD- 2, RKPO- EUxxxyyyyCD- 1, RKPO- UKxxxyyyyCD- 2, RKPO- UKxxxyyyyCD- 1)		Ningbo Qiaopu Electric Co., Ltd.	H05RN-F, H05RR-F, H07RN-F	300/500Vac, 2x 1mm² Min.	DIN EN 50525-2-21 (VDE 0285- 525-2-21): 2012-01; EN 50525-2-21: 2011	VDE 4003	35531
(Alternative)	D	Ningbo Dabu Electric Appliance Co., Ltd.	H05RN-F, H05RR-F, H07RN-F	300/500Vac, 2x 1mm² Min.	DIN EN 50525-2-21 (VDE 0285- 525-2-21): 2012-01; EN 50525-2-21: 2011	VDE 4003	 30691
(Alternative)	D	Ningbo Xuanshi Electronics Co., Ltd.		300/500Vac, 2x 1mm² Min.	DIN EN 50525-2-21 (VDE 0285- 525-2- 21):2012-01; EN 50525-2- 21:2011	VDE 400	17772



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			IEC 61347-2	2-13				IEC 61347-2-13								
Clause	Require	ment + Test			Result - F	Remark		Verdict								
German Plug portion (for models RKPO- EUxxxyyyy-D2, RKPO- EUxxxyyyy-D1)	С	Dongguan Rico Electronic Co., Ltd.	RKPO- EUxxxyyyy	250Va	c, 0.3A	DIN VDE 0620-1:2010- 02	appl	ed with iance achment								
UK plug portion (for models RKPO- UKxxxyyyy-D2, RKPO- UKxxxyyyy-D1)		Dongguan Rico Electronic Co., Ltd.	RKPO- UKxxxyyyy	250Va	c, 0.3A	BS 1363-1	appl	ed with iance ichment								
German Plug portion (for models RKPO- EUxxxyyyyDP- 2)	С	Dongguan Rico Electronic Co., Ltd.	RKPO- EUxxxyyyyDP- 2	250Va	c, 0.3A	DIN VDE 0620-2-1: 2013	(test num	inland t report ber: 24075								
UK plug portion (for models RKPO- UKxxxyyyyDP- 2)	С	Dongguan Rico Electronic Co., Ltd.	RKPO- UKxxxyyyyDP- 2	250Va	c, 0.3A	BS 1363-1	appl	ed with iance achment								
German Plug portion (for models RKPO- EUxxxyyyyDP- 2A)	С	Dongguan Rico Electronic Co., Ltd.	RKPO- EUxxxyyyyDP- 2A	250Va	c, 0.3A	DIN VDE 0620-2-1: 2013	(test num	inland t report ber: 24076								
EU Plug portion (for models RKP- EUxxxyyyyDP- 2)	С	Dongguan Rico Electronic Co., Ltd.	RKP- EUxxxyyyyDP- 2	250Va	c, 0.3A	EN 50075	appl	ed with iance ichment								
UK plug portion (for models RKP- UKxxxyyyyDP- 2)	С	Dongguan Rico Electronic Co., Ltd.	RKP- UKxxxyyyyDP- 2	250Va	c, 0.3A	BS 1363-1	appl	ed with iance achment								
EU Plug portion (for models RKP- EUxxxyyyyDP- 1)	С	Dongguan Rico Electronic Co., Ltd.	RKP- EUxxxyyyyDP- 1	250Va	c, 0.3A	EN 50075	appl	ed with iance achment								



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	IEC 61347-2-13								
Clause F	Require	ment + Test			Result - F	Remark		Verdict	
UK Plug portion (for models RKP- UKxxxyyyyDP- 1)	С	Dongguan Rico Electronic Co., Ltd.	RKP- UKxxxyyyyDP- 1	250Va	c, 0.3A	BS 1363-1	appl	ed with iance chment	
Plug pin holder (for models RKPO- zzxxxyyyy-D2, RKPO- zzxxxyyyyD1, RKPO- zzxxyyyyDP-2, RKPO- zzxxyyyyDP- 2A, RKP- zzxxxyyyyDP-2, RKP- zzxxxyyyyDP-1)	B,C	SABIC INNOVATIVE PLASTICS B V	943X(GG)(X)		0, 120°C, ickness:	UL 746	UL E	45329	
UK ISOD material (for models RKPO- UKxxxyyyy-D2, RKPO- UKxxxyyyy-D1, RKPO- UKxxxyyyyDP- 2, RKP- UKxxxyyyyDP- 2, RKP- UKxxxyyyyDP- 1)	B,C	SABIC INNOVATIVE PLASTICS B V	943X(GG)(X)		0, 120°C, ickness:	UL 746	UL E	45329	
Plug pin sleeve (for models RKP- EUxxxyyyyDP- 2, RKP- EUxxxyyyyDP- 1)	B,C	SABIC INNOVATIVE PLASTICS B V	943X(GG)(X)		0, 120°C, ickness:	UL 746	UL E	45329	
Metal material of Plug pin	С	Interchangeabl e	Interchangeabl e	Copper Min. 64	content : 4.5%		appl (See	with iance chment 3)	
Enclosure	B,C	SABIC INNOVATIVE PLASTICS B V	357M(f1)	V-0, mi thickne 130°C	in. 2.5mm ess,	UL 746	UL	E45329	



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	IEC 61347-2-13							
Clause F	Require	ment + Test			Result - R	Remark		Verdict
	B,C	DONGGUAN	01.004		in 0.5mm			254522
DC Connector plastic (for models RKP- zzxxxyyyyDP-2, RKP- zzxxxyyyyDP-1)		QILONG ELECTRICITY CO LTD	QL80A		in. 2.5mm ess, 50°C	UL 746	ULE	351522
Output connector (for models RKP- zzxxxyyyyDP-2, RKP- zzxxxyyyyDP-1)	С	Interchangeabl e	Interchangeabl e	Diamet 5.8mm	ter: min.			with iance
Input lead wire (for models RKPO- zzxxxyyyy-D2, RKPO- zzxxxyyyy-D1, RKP- zzxxxyyyyDP- 1)	B,C	Interchangeabl e	Interchangeabl e	24AW0 18AW0 300V	G- G, 105⁰C,	UL 758	UL	
Internal output lead wire (for models RKPO- zzxxxyyyy-D2, RKPO- zzxxxyyyyDP-2, RKPO- zzxxxyyyyCD- 2, RKPO- zzxxxyyyy-D1, RKPO- zzxxxyyyyCD- 1)	B,C	Interchangeabl e	Interchangeabl e	Min. 18 (for mo curren min. 2 (for mo those o curren 90°C, 3	odels output t>2A) or 1AWG odels output tt≤2A),	UL 758	UL	
Output lead wire (for models RKP- zzxxxyyyyDP-2, RKP- zzxxxyyyyDP- 1)	B,C	Interchangeabl e	Interchangeabl e	Min. 18 (for mo those of curren min. 2 (for mo those of curren 90°C, 3	odels output t>2A) or 1AWG odels output tt≤2A),	UL 758	UL	
РСВ	D	Interchangeabl e	Interchangeabl e	V-1 or I 130 °C		UL 94, UL 746	UL	



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			IEC 61347-2	2-13				
Clause	Require	ment + Test		Res	sult - F	Remark		Verdict
Y- capacitor (CY1) (Y1 type)	В	Guangdong South Hongming Electronic Science and Technology Co., Ltd.	F	Max. 3300 250VAC, 1		IEC/EN 60384- 14	VDE 4003	6393
(Alternative)	D	Shantou High- New Technology Dev. Zone Songtian Enterprise Co., Ltd.	CD-Series	Max. 3300 275VAC, 1	•	IEC/EN 60384- 14	VDE 4002	5754
For 6W series	models	\$						
Fusible Resistor (F1)	В	DONGGUAN HONGDA ELECTRONIC TECHNOLOGY CO.,LTD Co., Ltd	RXF	1W&1WS,	10R	DIN EN 60065	VDE 4003	6858
Heat Shrinkable tube for fuse	B, C	DONGGUAN SALIPT CO LTD	SALIPT S-901- 300	Rating 300 Minimum 1		UL 224	UL E	209436
Bridge Diodes (BD1)	С	Interchangeabl e	Interchangeabl e	Min. 0.5A, Min. 600V		IEC/EN 61347- 2-13	Teste appli	ed with ance
Line Filter (L1)	С	Interchangeabl e	Interchangeabl e	130 °C, 1m	ιH	IEC/EN 61347- 2-13	Teste applia	ed with ance
Line Filter (L2)	С	Interchangeabl e	Interchangeabl e	130 °C, 1µl	Η	IEC/EN 61347- 2-13	Teste applia	
Current sensor Resistor (R6)	B, C	Interchangeabl e	Interchangeabl e	Min. 0.47Ω 1/4W.	, Min.	IEC/EN 61347- 2-13	Teste appli	ed with ance
IC1	С	Interchangeabl e	Interchangeabl e	Min. 600V, Min. 0.8A.		IEC/EN 61347- 2-13	Teste applia	ed with ance
Secondary capacitor C11	С	Interchangeabl e	Interchangeabl e	110 °C		IEC/EN 61347- 2-13	Teste appli	ed with ance
Transformer (T1) Output:3- 8.9Vdc	С	Dongguan Rico Electronic Co.,Ltd	RK06-05	Class B		IEC/EN 61347- 2-13	Teste appli	ed with ance



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			IEC 61347-2	2-13					
Clause F	Require	ment + Test			Result - F	Remark		Verdict	
Transformer (T1) Output:9- 18.9Vdc	С	Dongguan Rico Electronic Co.,Ltd	RK06-12	Class I	3	IEC/EN 61347- 2-13		ed with iance	
Transformer (T1) Output:19- 24Vdc	С	Dongguan Rico Electronic Co.,Ltd	RK06-24	Class B		IEC/EN 61347- 2-13		Tested with appliance	
Bobbin of T1	B, C	SUMITOMO BAKELITE CO LTD	PM-9820	Phenol 150 °C thickne 0.8mm	ess	UL 94	UL E	41429	
Insulation tape of T1	B, C	Jingjiang Yahua Pressure Sensitive Glue Co Ltd	PZ, CT	130°C		UL 510	UL E	165111	
(Alternative)	B, C	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1	130 °C.		UL 510	UL E	17385	
Triple insulated wire (T1)	В	Furukawa Electric Co., Ltd	TEX-E	130°C		IEC/EN 60950- 1, annex K of IEC/EN 61558- 2-16		6735	
(Alternative)	D	TOTOKU ELECTRIC CO.,LTD	TIW-2X	130°C		UL 2353	UL E	305883	
For 12W series	mode	ls							
Fusible resistor (F1)	В	DONGGUAN HONGDA ELECTRONIC TECHNOLOGY CO.,LTD Co., Ltd	RXF	1W&1\ 4.7R	NS,	DIN EN 60065	VDE 4003	36858	
Varistor (MOV1) (optional)	В	Guangdong South Hongming Electronic Science and Technology Co., Ltd.	ZVR-10D-471	Max. 3 85°C, \ coating 6KV/3I compli	g, ≺A	IEC/EN 61051- 1 IEC 61051-2 IEC 61051-2-2 UL 1449	4002	27789 2321851	



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			IEC 61347-2	2-13				
Clause I	Require	ment + Test			Result - F	Remark		Verdict
(Alternative) (optional)	D	SHANTOU HIGH-NEW TECHNOLOGY DEVELOPMNT ZONE SONGTIAN ENTERPRISE CO LTD	10D471K	Max. 30 85°C, V coating 6KV/3k complie	/-0 I, KA	IEC/EN 61051- 1 IEC 61051-2 IEC 61051-2-2 UL 1449	4002	23049 2330837
Bridge Diodes (BD1)	С	Interchangeabl e	Interchangeabl e	Min. 0.9 Min. 60		IEC/EN 61347- 2-13		ed with iance
Line Filter (L1)	С	Interchangeabl e	Interchangeabl e	130 °C,	1mH	IEC/EN 61347- 2-13		ed with iance
Current sensor Resistor (R5, R6)	С	Interchangeabl e	Interchangeabl e	Min. 0.9 min. 1/4		IEC/EN 61347- 2-13		ed with iance
IC1	С	Interchangeabl e	Interchangeabl e	Min. 80 Min. 0.8		IEC/EN 61347- 2-13		ed with iance
Transformer (T1) Output:3- 8.9Vdc	С	Dongguan Rico Electronic Co.,Ltd	RK12-05VI	Class E	3	IEC/EN 61347- 2-13		ed with iance
Transformer (T1) Output: 9- 18Vdc	С	Dongguan Rico Electronic Co.,Ltd	RK12-12VI	Class E	3	IEC/EN 61347- 2-13		ed with iance
Transformer (T1) Output:18- 24Vdc	С	Dongguan Rico Electronic Co.,Ltd	RK12-24VI	Class E	3	IEC/EN 61347- 2-13		ed with iance
Bobbin of T1	B, C	SUMITOMO BAKELITE CO LTD	PM-9820	Phenol 150 °C,		UL 94, UL 746C	UL E	541429
Insulation tape of T1	B, C	Jingjiang Yahua Pressure Sensitive Glue Co Ltd	PZ,CT	130°C		UL 510	UL E	165111
(Alternative)	D	3M COMPANY ELECTRICAL MARKETS DIV (EMD)	1350F-1	130 °C.		UL 510	UL E	17385
Triple insulated wire (T1)	В	Furukawa Electric Co., Ltd	TEX-E	130°C		IEC/EN 60950- 1, annex K of IEC/EN 61558- 2-16		6735



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			IEC 61347-2	2-13				
Clause	Require	ement + Test Result - Remark					Verdict	
(Alternative)	D	TOTOKU ELECTRIC CO.,LTD	TIW-2X	130°C		UL 2353	ULE	E305883
Silicone Rubbe	er B, C	Shen Zhen Anpin Silicone Material Co Ltd	AP-905B	V-0, 10)5°C	UL 94	UL E	257078
(Alternative)	D	Shenzhen Bonic Science & Technology Ltd	BN160	V-0, 15	50°C	UL 94	UL E	254560
(Alternative)	D	TIANHUAN TECH(DONGG UAN) CO LTD	TH100A/B2	V-0,13	0°C	UL 94	UL E	257593

The codes above have the following meaning:

- A The component is replaceable with another one, also certified, with equivalent characteristics
- B The component is replaceable if authorised by the test house
- C Integrated component tested together with the appliance
- D Alternative component



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	IEC 61347-2-13		
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 2	Screw terminals (part of the luminaire)		N/A
(14)	SCREW TERMINALS		N/A
(14.2)	Type of terminal	Not used.	
	Rated current (A)		
(14.3.2.1)	One or more conductors		N/A
(14.3.2.2)	Special preparation		N/A
(14.3.2.3)	Terminal size		N/A
	Cross-sectional area (mm ²)		
(14.3.3)	Conductor space (mm)		N/A
(14.4)	Mechanical tests	•	N/A
(14.4.1)	Minimum distance		N/A
(14.4.2)	Cannot slip out		N/A
(14.4.3)	Special preparation		N/A
(14.4.4)	Nominal diameter of thread (metric ISO thread)	Μ	N/A
	External wiring		N/A
	No soft metal		N/A
(14.4.5)	Corrosion		N/A
(14.4.6)	Nominal diameter of thread (mm)		N/A
	Torque (Nm)		N/A
(14.4.7)	Between metal surfaces		N/A
	Lug terminal		N/A
	Mantle terminal		N/A
	Pull test; pull (N)		N/A
(14.4.8)	Without undue damage		N/A

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	IEC 61347-2-13		
Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 3	Screwless terminals (part of the luminaire)		N/A
(15)	SCREWLESS TERMINALS		N/A
(15.2)	Type of terminal:	Not used.	
	Rated current (A):		
(15.3.1)	Material		N/A
(15.3.2)	Clamping		N/A
(15.3.3)	Stop		N/A
(15.3.4)	Unprepared conductors		N/A
(15.3.5)	Pressure on insulating material		N/A
(15.3.6)	Clear connection method		N/A
(15.3.7)	Clamping independently		N/A
(15.3.8)	Fixed in position		N/A
(15.3.10)	Conductor size		N/A
	Type of conductor		N/A
(15.5)	Terminals and connections for internal wiring		N/A
(15.5.1)	Mechanical tests		N/A
(15.5.1.1.1)	Pull test spring-type terminals (4 N, 4 samples):		N/A
(15.5.1.1.2)	Pull test pin or tab terminals (4 N, 4 samples):		N/A
	Insertion force not exceeding 50 N		N/A
(15.5.1.2)	Permanent connections: pull-off test (20 N)		N/A
(15.5.2)	Electrical tests		N/A
	Voltage drop (mV) after 1 h (4 samples):		N/A
	Voltage drop of two inseparable joints		N/A
	Number of cycles:		
	Voltage drop (mV) after 10th alt. 25th cycle (4 samples):		N/A
	Voltage drop (mV) after 50th alt. 100th cycle (4 samples)		N/A
	After ageing, voltage drop (mV) after 10th alt. 25th cycle (4 samples)		N/A
	After ageing, voltage drop (mV) after 50th alt. 100th cycle (4 samples):		N/A
(15.6)	Terminals and connections for external wiring		N/A
(15.6.1)	Conductors		N/A
	Terminal size and rating		N/A
15.6.2	Mechanical tests	·	N/A



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IEC 61347-2-13						
Clause	Requirement + Test	Result - Remark	Verdict			
(15.6.2.1)	Pull test spring-type terminals or welded connections (4 samples); pull (N)	.:	N/A			
(15.6.2.2)	Pull test pin or tab terminals (4 samples); pull (N)	.:	N/A			
(15.6.3)	Electrical tests		N/A			
	Tests according 15.6.3.1 + 15.6.3.2 in IEC 60598-	1	N/A			

(15.6.3.1) (15.6.3.2)	TAI	BLE: Contact resistance test / Heating tests							N/A			
	Vol	tag	e drop (r	nV) afte	r1h							
terminal			1	2	3	4	5	6	7	8	9	10
voltage drop	(mV)											N/A
Voltage drop of two inseparable joints			-	-	N/A							
		Vo	ltage dro	op after ´	10th alt.	25th cyc	le					N/A
		Ma	ax. allow	ed volta	ge drop (mV)						
terminal			1	2	3	4	5	6	7	8	9	10
voltage drop	(mV)											N/A
		Vo	ltage dro	op after 5	50th alt.	100th cy	cle					N/A
		Ma	ax. allow	ed volta	ge drop (mV)						
terminal			1	2	3	4	5	6	7	8	9	10
voltage drop	(mV)											N/A
		Со	ontinued	ageing:	voltage o	drop aftei	r 10th al	t. 25th cy	ycle			N/A
		Ma	ax. allow	ed volta	ge drop (mV)						
terminal			1	2	3	4	5	6	7	8	9	10
voltage drop	(mV)											N/A
		Со	ontinued	ageing:	voltage o	drop afte	r 50th al	t. 100th (cycle			N/A
		Ma	ax. allow	ed volta	ge drop (mV)						
terminal			1	2	3	4	5	6	7	8	9	10
voltage drop (mV)											N/A	
												N/A
Supplementa	ry inf	orm	nation:									



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IEC 61347-2-13						
Clause	Requirement + Test	Result - Remark	Verdict			

ANNEX 4 : temperatu		•					
Type re	ference		:	RKPO-EU0503000			
Load us	ed		:	Equivalent load or LED module			
Mountin	ng position of lu	minaire	:	On the black	testing board		
Та			:	40°C			—
- test : r	ated voltage		:	100V-240V			
- test : t	- test : test voltage(normal):				Input : $1.06U_R=106V; I=0.374A;$ P=19.3W; $1.06U_R=254.4V; I=0.179A;$ P=19.5W; Output: U=5.03V; I=3A		
- test : t	- test : test voltage(abnormal):				1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; I= 0.01A; P=0.09W 2. Over load: 1.1U _R = 264V; I= 0.201A; P=23.0W; Output: U=5.03V; I= 3.56A 0.9U _R = 90V; I= 0.485A; P=21.6W; Output: U=5.01V; I= 3.32A		
		Norma	I operation	•	,		
temperature (K/°C) of p	art	106V/60Hz		254.4V50Hz			Limit
		Horizontal	Vertical	Horizontal	Vertical		
Internal input wire		58.9	62.5	55.1	59.1		80
Ripple capacitor (C1)		68.9	71.3	62.7	66.5		105
Line choke (L1) winding		78.7	81.0	65.7	69.4		130
Line choke (L1) core		68.9	71.5	59.9	64.0		130
Ripple capacitor (C2)		78.6	78.7	76.1	77.9		105
Ripple capacitor (C4)		83.3	80.5	82.9	82.1		105
Y capacitor (CY1)		91.4	89.6	95.2	94.6		125
Transformer (T1) winding 1		98.6	96.4	105.3	104.6	110	
Transformer (T1) winding 2		99.3	97.3	106.3	105.7	110	
Transformer (T1) core		95.2	93.1	101.5	101.0		110
Optocoupler (U2)		75.6	71.1	77.9	74.4		110

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		IEC 6	61347-2-13	1				
Clause	Requirement + Test			Result - Re	Verdict			
PCB under nea	r Transformer (T1)	85.5	81.2	89.6	86.1	130		
Ripple capacito	or (C11)	93.9	95.4	99.0	96.5	105		
Ripple capacito	or (C12)	75.7	71.6	78.5	75.2	105		
Line choke (L2)) winding	82.7	79.0	85.9	82.9	130		
Internal output	wire	67.1	64.3	69.1	67.0	80		
Plastic enclosu holder (internal)	re near plug pin)	78.5	74.1	82.1	78.8	120		
Plastic enclosu	re near T1 (internal)	64.3	60.8	66.0	63.3	120		
Plastic enclosu connector (inte		75.3	74.5	78.9	79.6	120		
Plastic enclosu holder (externa	re near plug pin l)	68.6	69.0	71.0	70.4	75		
Plastic enclosu (external)(Tc)	re near T1	57.7	55.0	59.0	56.8	75		
Plastic enclosu connector (exte		63.8	62.8	65.9	66.1	70		
Plastic enclosu holder	re near plug pin	47.7	7 49.1 47.9 49.1		49.3	70		
Support		48.5	48.6	49.5	49.9	90		
Ambient		40.0	40.0	40.0	40.0			
		Abnorn						
temperature (K	/°C) of part		Abno	ormal				
		90V	/60Hz	264\	Limit			
1		Over	load conditio					
temperature (K	/°C) of part		Abno	ormal				
				264V/50Hz/ Horizontal		Limit 85		
Internal input w					57.5			
Line choke (L1)	^o				69.8			
Line choke (L1) core					62.7			
Transformer (T	1) winding 1			115.2		175-10=165.0		
Transformer (T	1) winding 2				116.5			
Transformer (T1) core				11	0.5	175-10=165.0		
Line choke (L2)) winding			94.7		175-10=165.0		
Internal output	wire			7	4.7	85		
Plastic enclosu holder (externa	re near plug pin l)			75.9		105		

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	IEC 6	1347-2-13				IEC 61347-2-13							
Clause Requirement + Test			Result - Re	mark		Verdict							
Plastic enclosure near T1 (external)(Tc)			6	0.8		105							
Plastic enclosure near output connector (external)			70.0			105							
Plastic enclosure near plug pin holder			4	9.1		105							
Support			5	1.8		105							
Ambient			4	0.0									
According to normal heating result, be worse. Due to test result of clause 14, the H Due to test result of clause 15.3, un abnormal condition.	neating result ca it shut down, no	an be referred o output, so ti	d to the norma he heating res	l condition. ult can be refe									
Type reference		:	RKPO-EU12	02000									
Load used		:	Equivalent loa	ad or LED mo	dule								
Mounting position of	Mounting position of luminaire:				On the black testing board								
Та	Та												
- test : rated voltage		:	100V-240V			—							
- test : test voltage(n	- test : test voltage(normal):				Input : $1.06U_R=106V; I=0.524A;$ P=28.9W; $1.06U_R=254.4V; I=0.240A;$ P=28.5W; Output: U=12.11V; I=2.0A;								
- test : test voltage(a					: 1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; I= 0.01A; P=0.11W 2. Over load: 1.1U _R = 264V; I= 0.296A, P=36.8W, Output: U=12.11V; I= 2.6A; 0.9U _R = 90V; I= 0.691A, P=34.8W; Output: U=12.11V; I= 2.3A								
Normal operation	earlean e												
temperature (K/°C) of part	106V	/60Hz	254.4	254.4V50Hz L		Limit							
	Horizontal	Vertical	Horizontal	Vertical									
Internal input wire	65.0	70.0	59.8	65.0	80								
Ripple capacitor (C1)	79.9	85.4	68.5	73.9		105							
Line choke (L1) winding	98.0	103.7	72.0	77.3		130							

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	IEC 6	61347-2-13		· ·				
Clause Requirement + Test			Result - Re	Result - Remark				
·		-		-				
Line choke (L1) core	89.7	95.6	67.4	72.8	130			
Ripple capacitor (C2)	89.3	91.2	81.2	84.1	105			
Ripple capacitor (C4)	96.1	93.0	90.2	89.2	105			
Y capacitor (CY1)	96.5	95.8	96.9	97.0	125			
Transformer (T1) winding 1	101.8	100.4	106.3	103.9	110			
Transformer (T1) winding 2	98.4	99.7	109.3	100.5	110			
Transformer (T1) core	99.0	97.7	104.8	99.6	110			
Optocoupler (U2)	84.9	79.9	84.8	80.7	110			
PCB under near Transformer (T1)	88.0	82.7	89.7	84.5	130			
Ripple capacitor (C11)	97.5	92.7	94.2	93.9	105			
Ripple capacitor (C12)	77.0	72.0	78.1	72.8	105			
Line choke (L2) winding	85.6	81.1	86.8	82.1	130			
Internal output wire	71.4	68.3	72.5	69.1	80			
Plastic enclosure near plug pin holder (internal)	93.6	88.7	91.7	87.8	120			
Plastic enclosure near T1 (internal)	69.3	65.7	69.4	66.1	120			
Plastic enclosure near output connector (internal)	72.2	69.5	73.0	70.4	120			
Plastic enclosure near plug pin holder (external)	70.1	67.6	67.3	69.4	75			
Plastic enclosure near T1 (external)(Tc)	61.5	58.7	62.1	59.2	75			
Plastic enclosure near output connector (external)	63.8	60.4	65.2	61.5	70			
Plastic enclosure near plug pin holder	51.0	54.8	50.4	53.6	70			
Support	44.9	44.4	45.2	44.9	90			
Ambient	40.0	40.0	40.0	40.0				
	Abnorn	nal condition	1	•				
temperature (K/°C) of part		Abn	ormal					
	90V	/60Hz	264\	/50Hz	Limit			
-								
	Over	load conditio						
temperature (K/°C) of part			ormal	-/ = = = = = + =	Limit			
				264V/50Hz/ Horizontal				
Internal input wire				62.9				
Line choke (L1) winding			76.4		175-10=165.0			

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		IEC 61347-2-13		0002	20014 001
Clause	Requirement + Test	120 01347-2-13	Result - Remark		Verdict
Olddoo	rtoquironionic + root		Roburt Homan		Voraiot
Line choke (L	.1) core		71.4	175-	10=165.0
Transformer (T1) winding 1			121.0	175-	10=165.0
Transformer ((T1) winding 2		140.5	175-	10=165.0
Transformer ((T1) core		123.0	175-	10=165.0
Line choke (L	2) winding		93.4	175-	10=165.0
Internal outpu	it wire		76.7		85
Plastic enclos holder (exterr	sure near plug pin nal)		83.0		105
Plastic enclos (external)(Tc)			64.8		105
Plastic enclos connector (ex	sure near output (ternal)		67.9		105
Plastic enclos holder	sure near plug pin		51.4	105	
Support			46.3	105	
Ambient			40.0		
	sult of clause 15.3, unit idition.	ating result can be referred shut down, no output, so tl	he heating result can be ref	erred to	D
			Equivalent load or LED mo		
			On the black testing board		
	1	· ·	40°C		
			100V-240V		
<u>.</u>	- test : test voltage(not				
	- test : test voltage(ab	1. Double the LED module equivalent load (connected parallel) 1.1U _R =264V; I= 0.01A; P= 2. Over load: $0.9U_R$ = 90V; I= 0.757A; P=38.4W; Output: U=24.13V; I= 1.29	d in 0.12W		



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Clause Requirement + Te		1347-2-13	Result - Re		
			I Vesuit - IVe	mark	Verdict
			1.1U _R = 264V P=39.0W; Output: U=24		
Normal operation					
temperature (K/°C) of part	106V	/60Hz	254.4	V50Hz	Limit
	Horizontal	Vertical	Horizontal	Vertical	
Internal input wire	61.7	62.5	55.0	56.6	80
Ripple capacitor (C1)	77.1	76.4	63.7	65.0	105
Line choke (L1) winding	98.3	97.4	69.2	70.4	130
Line choke (L1) core	91.7	89.9	69.8	70.7	130
Ripple capacitor (C2)	88.7	84.5	78.1	77.6	105
Ripple capacitor (C4)	90.5	80.7	83.3	77.9	105
Y capacitor (CY1)	92.6	85.8	90.0	87.1	125
Transformer (T1) winding 1	106.4	98.9	107.6	104.1	110
Transformer (T1) winding 2	109.8	102.1	107.4	107.8	110
Transformer (T1) core	105.4	97.8	107.3	103.7	110
Optocoupler (U2)	83.1	73.0	81.0	74.3	110
PCB under near Transformer (T1) 81.9	72.5	80.8	73.9	130
Ripple capacitor (C11)	76.6	68.0	75.1	68.8	105
Ripple capacitor (C12)	71.8	63.0	70.5	64.0	105
Line choke (L2) winding	88.7	80.2	87.1	81.2	130
Internal output wire	60.6	53.9	59.7	54.7	80
Plastic enclosure near plug pin holder (internal)	87.7	76.8	83.3	77.3	120
Plastic enclosure near T1 (interna	al) 73.4	69.1	69.7	68.8	120
Plastic enclosure near output connector (internal)	73.0	67.8	74.5	71.0	120
Plastic enclosure near plug pin holder (external)	70.0	69.9	67.3	70.9	75
Plastic enclosure near T1 (external)(Tc)	61.5	52.9	60.3	53.9	75
Plastic enclosure near output connector (external)	61.0	59.6	61.0	57.3	70
Plastic enclosure near plug pin holder	49.6	49.8	47.3	48.4	70
Support	46.0	43.1	45.9	43.1	90
Ambient	40.0	40.0	40.0	40.0	



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IEC	61	347	-2-13	
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	IEC 01347-2-13		
Clause	Requirement + Test	Result - Remark	Verdict

	Abnormal condition	ו	
temperature (K/°C) of part	Abn	ormal	
	90V/60Hz	264V50Hz	Limit
	Overload condition	-	
temperature (K/°C) of part	Abn	ormal	
		264V/50Hz/ Horizontal	Limit
Internal input wire		57.8	85
Line choke (L1) winding		75.6	175-10=165.0
Line choke (L1) core		75.4	175-10=165.0
Transformer (T1) winding 1		117.0	175-10=165.0
Transformer (T1) winding 2		121.5	175-10=165.0
Transformer (T1) core		116.4	175-10=165.0
Line choke (L2) winding	ine choke (L2) winding 93.9		175-10=165.0
nternal output wire		63.1	85
Plastic enclosure near plug pin holder (external)		72.0	105
Plastic enclosure near T1 (external)(Tc)		63.3	105
Plastic enclosure near output connector (external)		62.8	105
Plastic enclosure near plug pin holder		48.7	105
Support		46.7	105
Ambient		40.0	
According to normal heating result, The worse. Due to test result of clause 14, the he Due to test result of clause 15.3, unit abnormal condition.	ating result can be referred	to the normal condition.	
Type reference:		RKPO-EU0503000CD-5	_
Load used		Equivalent load or LED mo	dule
Mounting position of Iu	ıminaire:	On the black testing board	
Та		40°C	
	:	100V-240V	



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		IEC 6	1347-2-13				
Clause	Requirement + Test			Result - Remark			Verdict
				Input : 1.06U _R =106V; I=0.374A; P=19.3W; 1.06U _R =254.4V; I=0.179A; P=19.5W; Output: U=5.03V; I=3A			
- test : test voltage(abnormal): Normal operation			· · · · · · · · · · · · · · · · · · ·				
-		106V/60Hz		254.4V50Hz			Limit
temperature (K/°C) of part		Label up	Label down		Label down		
Power cord		51.5	53.6	56.3	53.6		105
Ambient							
		Abnorm	al condition	1	II		
temperature	e (K/°C) of part	Abı		normal			
		90V/60Hz		264V50Hz			Limit
-							
		Overl	oad condition	•			
temperature (K/°C) of part			ADN	normal			Limit
Power cord				264V/50Hz/ Label down 56.0			105
Ambient			40.0				
	o normal heating result, Th	e overload he	eating perform			n will h	e worse
Due to test i	result of clause 14, the hearesult of clause 15.3, unit s	ating result ca	an be referred	d to the norma	l condition.		
Type reference		:	RKPO-EU12	02000CD-5			
Load used		:	Equivalent loa	ad or LED mod	dule		
	Mounting position of lu	minaire	:				
	Та		:	40°C			
			100V-240V				



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- test : test voltage(normal) Input : 1.06U _R =106V; I=0.524A; P=28.9W; 1.06U _R =254.4V; I=0.240A; P=28.5W; Output: U=12.11V; I=2.0A; - - test : test voltage(abnormal) 1. Double the LED modules or equivalent load (connected in parallel) - 1.1U _R =264V; I=0.01A; P=0.11W 2. Over load: 1.1U _R =264V; I= 0.01A; P=0.11W 2. Over load: 1.1U _R =264V; I= 0.09A, P=38.8W; Output: U=12.11V; I= 2.6A; 0.9U _R =90V; I= 0.691A, P=34.8W; Output: U=12.11V; I= 2.3A - Normal operation Label up Label down Label down - Pewer cord 59.8 54.8 63.2 56.3 105 Ambient 40.0 40.0 40.0 - - 0Verload condition 264V/50Hz Limit - - Temperature (K/°C) of part 106V/60Hz 264V/50Hz Limit - - - - - Overload condition - - - - - - - - - - - - - - - - - - - - - - - </th <th></th> <th></th> <th>IEC 6</th> <th>1347-2-13</th> <th></th> <th></th> <th></th> <th></th>			IEC 6	1347-2-13				
1.06U _n =106V; I=0.524A; P=28.9V; U6U _n =254.4V; I=0.240A; P=28.5W; Output: U=12.11V; I=2.0A; - - test : test voltage(abnormal) 1. Double the LED modules or equivalent load (connected in parallel) - 1.1U _n =264V; I= 0.01A; P=0.11W 2. Over load: 1.1U _n =264V; I= 0.01A; P=0.11W 2. Over load: 1.1U _n =264V; I= 0.01A; P=0.11W 2. Over load: 1.1U _n =264V; I= 0.0691A, P=38.6W; Output: U=12.11V; I= 2.3A - Normal operation Label up Label down Label up Label down P=38.8W; Output: U=12.11V; I= 2.3A Normal operation - - - temperature (K/°C) of part 106V/60Hz 254.4V50Hz Limit - Label up Label down Label down - Power cord 59.8 54.8 63.2 56.3 105 Ambient 40.0 40.0 40.0 - - - - - - - - 90V/60Hz 264V50Hz Limit - - - - 40.0 - 264V/50Hz/ Limit - - - - - - - -	Clause Requirement + Test				Result - Remark			Verdict
equivalent load (connected in parallel) 1.1Us=264V; l= 0.01A; P=0.11W 2. Over load: 1.1Us=264V; l= 0.296A, P=36.8W; Output: U=12.11V; l= 2.6A; 0.9Us= 90V; l= 0.691A, P=36.8W; Output: U=12.11V; l= 2.6A; 0.9Us= 90V; l= 0.691A, P=36.8W; Output: U=12.11V; l= 2.6A; 0.9Us= 90V; l= 0.691A, P=36.8W; Output: U=12.11V; l= 2.6A; 0.9Us= 90V; l= 0.691A, P=36.8W; Output: U=12.11V; l= 2.6A; 0.9Us=300V; l= 0.691A, P=36.8W; Output: U=12.11V; l= 2.64 59.8 54.8 63.2 56.3 105 Ambient 40.0 40.0 40.0 40.0 90V/60Hz 264V/50Hz Limit - - - - - - - - - - - - - - <td></td> <td colspan="4">F</td> <td colspan="3">1.06U_R=106V; I=0.524A; P=28.9W; 1.06U_R=254.4V; I=0.240A; P=28.5W; Output:</td>		F				1.06U _R =106V; I=0.524A; P=28.9W; 1.06U _R =254.4V; I=0.240A; P=28.5W; Output:		
temperature (K/°C) of part 106V/60Hz 254.4V50Hz Limit Label up Label up Label up Label up Label down Power cord 59.8 54.8 63.2 56.3 105 Ambient 40.0 40.0 40.0 40.0 Abnormal condition temperature (K/°C) of part Abnormal 0V/60Hz 264V50Hz Limit		- test : test voltage(abnormal):			equivalent load (connected in parallel) 1.1U _R =264V; I= 0.01A; P=0.11W 2. Over load: 1.1U _R = 264V; I= 0.296A, P=36.8W, Output: U=12.11V; I= 2.6A; 0.9U _R = 90V; I= 0.691A, P=34.8W;		in .11W	
Label up Label up Label down Label up Label down Power cord 59.8 54.8 63.2 56.3 105 Ambient 40.0 40.0 40.0 40.0	-	106V/60Hz		254.4V50Hz			l imit	
Power cord 59.8 54.8 63.2 56.3 105 Ambient 40.0 40.0 40.0 40.0								
Abnormal condition temperature (K/°C) of part Abnormal 90V/60Hz 264V50Hz Limit Overload condition temperature (K/°C) of part Abnormal Overload condition temperature (K/°C) of part Abnormal Overload condition Power cord According to normal heating result, The overload heating performed at Label up condition will be worse. Due to test result of clause 14, the heating result can be referred to the normal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition. Type reference. RKPO-EU2401000CD-5 Load used. Equivalent load or LED module				54.8	63.2	56.3		105
temperature (K/°C) of part Abnormal 90V/60Hz 264V50Hz Limit Overload condition temperature (K/°C) of part Abnormal Overload condition temperature (K/°C) of part Abnormal Overload condition temperature (K/°C) of part Abnormal Overload condition Power cord According to normal heating result, The overload heating performed at Label up condition will be worse. Due to test result of clause 14, the heating result can be referred to the normal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition. Load used Equivalent load or LED module	Ambient							
90V/60Hz 264V50Hz Limit Overload condition temperature (K/°C) of part Abnormal 264V/50Hz/ Label up Limit Power cord 64.6 105 Ambient 40.0 According to normal heating result, The overload heating performed at Label up condition will be worse. Due to test result of clause 14, the heating result can be referred to the normal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition. Type reference. : RKPO-EU2401000CD-5 Load used. : Equivalent load or LED module			Abnorm	nal condition	1			
Overload condition temperature (K/°C) of part Abnormal 264V/50Hz/ Label up Limit Power cord 64.6 105 Ambient 40.0 According to normal heating result, The overload heating performed at Label up condition will be worse. Due to test result of clause 14, the heating result can be referred to the normal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition. Type reference. RKPO-EU2401000CD-5 Load used. Equivalent load or LED module	temperature (k	⟨/°C) of part	Abr					
Overload condition temperature (K/°C) of part Abnormal 264V/50Hz/ Label up Limit Power cord 64.6 105 Ambient 40.0 According to normal heating result, The overload heating performed at Label up condition will be worse. Due to test result of clause 14, the heating result can be referred to the normal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition. Type reference. RKPO-EU2401000CD-5 Load used Equivalent load or LED module			90V/60Hz		264V50Hz			Limit
temperature (K/°C) of part Abnormal 264V/50Hz/ Label up Limit Power cord 64.6 105 Ambient 40.0 According to normal heating result, The overload heating performed at Label up condition will be worse. Due to test result of clause 14, the heating result can be referred to the normal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition. Type reference. : RKPO-EU2401000CD-5 Load used : Equivalent load or LED module								
Image: description of the observe o	t				-			
Power cord 64.6 105 Ambient 40.0 According to normal heating result, The overload heating performed at Label up condition will be worse. Due to test result of clause 14, the heating result can be referred to the normal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition. Type reference. RKPO-EU2401000CD-5	temperature (r	(/°C) or part		ADI				Limit
Ambient 40.0 According to normal heating result, The overload heating performed at Label up condition will be worse. Due to test result of clause 14, the heating result can be referred to the normal condition. Due to test result of clause 14, the heating result can be referred to the normal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition. Type reference. : RKPO-EU2401000CD-5 Load used. : Equivalent load or LED module	Power cord							
According to normal heating result, The overload heating performed at Label up condition will be worse. Due to test result of clause 14, the heating result can be referred to the normal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition. Type reference. RKPO-EU2401000CD-5 Load used. Equivalent load or LED module								
Load used Equivalent load or LED module	According to n Due to test res Due to test res	ult of clause 14, the he sult of clause 15.3, unit s	ating result ca	an be referred	ned at Label u to the norma	p condition w l condition.		vorse.
		Type reference		:	RKPO-EU240)1000CD-5		
				:			dule	
	Mounting position of luminaire			:				
Ta					-			
					100V-240V			



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	IEC 6	61347-2-13				
Clause Requirement + Test	equivalent load (connected in parallel) 1.1U _R =264V; I= 0.01A; P=0.12W 2. Over load: 0.9U _R = 90V; I= 0.757A; P=38.4W; Output: U=24.13V; I= 1.29A; 1.1U _R = 264V; I= 0.312A;			Verdict		
- test : test voltage(normal):						
	P=39.0W; Output: U=24	. 13V; I= 1.43A	A			
Normal operation						
temperature (K/°C) of part	_	/60Hz		V50Hz		
	Label up	Label down		Label down		
Power cord 56.4 52.3 53.0		59.7	105			
Ambient	40.0	40.0	40.0	40.0		
tomporature (K/OC) of part	Abnorn	nal condition	normal			
temperature (K/°C) of part	90V/60Hz		264V50Hz			Limit
	Over	oad conditi	on			
temperature (K/°C) of part			normal			
-			264V/50Hz	/ Label down		Limit
Power cord			57.8			105
Ambient			40.0			
According to normal heating result, Due to test result of clause 14, the Due to test result of clause 15.3, un abnormal condition.	neating result c	an be referred	d to the norma	l condition.		
Type reference		:	RKP-EU0503	000CD-5		
Load used:				dule		
Mounting position of luminaire			'			
Та			<u> </u>			
- test : rated voltage			100V-240V			
	2101					



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		IEC 6	1347-2-13				
Clause	Requirement + Test			Result - Remark			Verdict
				1			
			Input : $1.06U_R=106V$; I=0.374A; P=19.3W; $1.06U_R=254.4V$; I=0.179A; P=19.5W; Output: U=5.03V; I=3A			_	
- test : test voltage(abnormal):							
Normal operation							
temperature (K/°C) of part			/60Hz	_	V50Hz	Lim	
		Label up	Label down		Label down		405
Power cord			105				
Internal output Ambient		69.1 40.0	69.1 40.0				80
Ambient			nal conditior				
temperature (l	K/°C) of part			ormal			
		90V/60Hz		264V50Hz			Limit
		Over	load conditi	on			
temperature (l	K/°C) of part		Abn	ormal			
				264V/50Hz/ Label down			Limit
Power cord				51.2			105
Internal output wire 70.8			85				
Ambient							
Due to test res	normal heating result, Th sult of clause 14, the he sult of clause 15.3, unit dition.	ating result ca	an be referred	d to the norma	l condition.		
	Type reference		:	RKP-EU1202000CD-5			
	Load used		I			dule	
	Mounting position of lu	minaire		On the black	tosting board		



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	IEC 61347-2-13		
Clause	Requirement + Test	Result - Remark	Verdict

	Та		:	40°C			
	- test : rated voltage			100V-240V			
			Input : $1.06U_R=106V; I=0.524A;$ P=28.9W; $1.06U_R=254.4V; I=0.240A;$ P=28.5W; Output: U=12.11V; I=2.0A;				
	- test : test voltage(abnormal):			1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; I= 0.01A; P=0.11 ¹ 2. Over load: 1.1U _R = 264V; I= 0.296A, P=36.8W, Output: U=12.11V; I= 2.6A; 0.9U _R = 90V; I= 0.691A,		in .11W	
				P=34.8W; Output: U=12			
Normal oper	ation		I				
temperature (K/°C) of part		106V/60Hz		254.4V50Hz		l	Limit
		Label up	Label down	Label up	Label down		
Power cord	Power cord		54.2	68.1	56.6		105
Internal outpu	t wire	76.4	73.7	7 72.9 71.8			80
Ambient		40.0	40.0	40.0 40.0			
		Abnorn	nal condition	ו			
temperature (K/°C) of part			Abn	bnormal			
		90V	/60Hz	264V50Hz		l	Limit
		Over	load conditio				
temperature (K/°C) of part		Abn		normal			
				264V/50Hz/ Label up		l	Limit
Power cord					1.8		105
•	ernal output wire 65.9				85		
Ambient				40.0			
Due to test re	normal heating result, Tr sult of clause 14, the he sult of clause 15.3, unit dition.	ating result c	an be referred	to the norma	l condition.		
	Type reference			RKP-EU2401			



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		IEC 61347-2-13		
Clause	Requirement + Test		Result - Remark	Verdict

Load used		:	Equivalent loa	ad or LED mod	dule	—
Mounting position of Iu	Mounting position of luminaire					
Та		:	40°C			
- test : rated voltage		:	100V-240V			
- test : test voltage(no	- test : test voltage(normal): Ir 1 F 1 F C C					
- test : test voltage(ab	1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; I= 0.01A; P=0.12W 2. Over load: 0.9U _R = 90V; I= 0.757A; P=38.4W; Output: U=24.13V; I= 1.29A; 1.1U _R = 264V; I= 0.312A; P=39.0W; Output: U=24.13V; I= 1.43A					
Normal operation						
temperature (K/°C) of part	106V	/60Hz	254.4	V50Hz	L	₋imit
	Label up	Label down	Label up	Label down		
Power cord	69.2	54.0	69.8	56.1		108
Internal output wire	62.6	59.6	61.6	60.1		80
Ambient	40.0	40.0	40.0	40.0		
	Abnorn	nal condition				
temperature (K/°C) of part			ormal			
	90V	/60Hz	264V50Hz		l	_imit
			<u> </u>			
tomporaturo (K/SO) of rest	Over	load conditio	ormal			
temperature (K/°C) of part		ADN			1	_imit
Power cord			264V/50Hz/ Label up			105
Internal output wire			53.8 56.2			85
Ambient				0.2		
Ambient			4	0.0		



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Clause Requirement + Test Result - Remark Verdict			IEC 61347-2-13		
	Clause	Requirement + Test		Result - Remark	Verdict

According to normal heating result, The overload heating performed at Label up condition will be worse.
Due to test result of clause 14, the heating result can be referred to the normal condition.
 Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition.

Ту	pe reference		·····::	RKPO-UK2400500-D2			
Lc	ad used		Equivalent load or LED module				
M	ounting position of	luminaire	:	On the black	testing board		
Ta	I		:	40°C			
- t	est : rated voltage		:	100V-240V			
- t	1. P O U 1. P O U U U U U				Input : $1.06U_R = 254.4 \text{ V}; \text{ I=0.108 A};$ P = 13.6W Output: U = 24.0 V; I=0.5A; $1.06U_R = 106 \text{ V}; \text{ I=0.224A};$ P = 14.0W Output: U = 24.0 V; I=0.5A		
- t	est : test voltage(a	bnormal): 1. Double the LED modules or equivalent load (connected in parallel) 1. $1U_R=264V$; I= 0.01A; P=0.05 2. Over load: 0.9U_R= 90V; I= 0.242A; P=14.6W; Output: U=23.05V; I= 0.536A; 1. $1U_R=264V$; I= 0.101A; P=14.3W; Output: U=24.25V; I= 0.53A				in 0.05W 6A;	
Normal operatio		_					
temperature (K/°C	C) of part		/60Hz		√50Hz	Li	mit
Plastic enclosure holder, outside	near plug pin	Horizontal 48.1	Vertical 49.9	Horizontal 47.5	Vertical 47.7	7	75
Plastic enclosure near plug pin holder, inside		49.1	50.6	47.9	48.3	1	30
Input lead wire		64.6	66.6	53.1	54.4	8	80
MOV1		61.7	64.3	54.5	55.7	8	85
C1 body		65.2	66.8	58.0	58.9	1	05
C2 body		67.9	68.6	62.1	62.6	1	05
C3 body		65.2	63.5	63.6	62.1	1	05
CY1 body		65.0	63.1	64.5	62.6	1	25

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		IEC 6	1347-2-13				
Clause	Requirement + Test			Result - Re	mark		Verdict
T1 winding		70.2	69.6	69.1	68.4		110
T1 bobbin		69.9	68.8	69.3	68.2		110
C11 body		53.9	53.1	53.4	52.4		105
PCB near T1		70.3	68.1	70.2	68.0		130
Output lead		50.6	49.9	50.2	49.3		90
Tc point		48.0	47.6	47.4	46.9		75
-	osure near T1, outside	48.0	47.6	47.4	46.9		85
Plastic enclo	osure near T1, inside	51.4	50.4	50.9	49.9	-	130
Support		41.9	44.2	41.0	41.0		90
Ambient		40.0	40.0	40.0	40.0		
		Abnorn	nal condition	1		1	
temperature	(K/°C) of part		Abn	ormal			
		90V/60Hz		264V50Hz		Limit	
		Over	load conditio				
temperature	(K/°C) of part	000 (/0011		ormal	/	<u> </u>	,
1.4 1.1	, .		/ Horizontal		/ Horizontal		imit
Internal input			9.4		6.5		85
Transformer		72.3		71.9			0=165.0
Transformer	· · /	71.9		71.5			0=165.0
Internal outp		51.0		51.0			85
Plastic enclo (Tc)	osure near T1 (external)	49.3		49.2		1	105
Support		46.4		44.7		105	
Ambient		4	0.0	40.0			
Due to test r	o normal heating result, The esult of clause 14, the he esult of clause 15.3, unit ndition.	ating result c	an be referred	l to the norma	condition.		
	Type reference			RKPO-UK19	00630-D2		
	Load used			Equivalent loa	ad or LED mo	dule	
	Mounting position of lu			On the black testing board			
	Та			40°C			_
	- test : rated voltage			100V-240V			

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	IEC 6	1347-2-13			
Clause Requirement + Test			Result - Re	mark	Verdict
- test : test voltage(no	ormal)	:	Input : $1.06U_R = 254.$ P=13.2W Output: U=19.0V; I=0 $1.06U_R = 106$ P=13.7W Output: U=19.0V; I=0	.63A; V; I=0.222A;	A; —
- test : test voltage(ab	- test : test voltage(abnormal):				5A; 5A
Normal operation			-	,	
temperature (K/°C) of part	106V	/60Hz	254.4	V50Hz	Limit
	Horizontal	Vertical	Horizontal	Vertical	
Plastic enclosure near plug pin holder, outside	44.9	47.2	44.7	44.9	75
Plastic enclosure near plug pin holder, inside	46.1	48.9	45.4	45.9	130
Input lead wire	60.7	65.0	53.0	55.4	80
MOV1	66.3	71.4	56.7	59.3	85
C1 body	72.9	76.2	62.2	64.4	105
C2 body	77.0	77.7	68.3	68.8	105
C3 body	73.6	72.1	69.7	68.4	105
CY1 body	80.5	78.6	76.2	76.1	125
T1 winding	79.4	78.2	78.8	75.1	110
T1 bobbin	76.7	74.7	69.3	68.1	110
C11 body	76.3	75.4	74.4	72.9	105
PCB near T1	63.6	63.1	62.4	60.7	130
Output lead wire	60.0	59.5	59.3	57.4	90
Tc point	50.2	51.7	49.7	49.7	75
Plastic enclosure near T1, inside	75.1	74.2	74.5	72.4	130



IEC 61347-2-13 **Result - Remark** Verdict Clause Requirement + Test Plastic enclosure near T1, outside 49.7 50.2 51.7 49.7 85 42.3 44.0 42.8 42.4 90 Support Ambient 40.0 40.0 40.0 40.0 ___ Abnormal condition temperature (K/°C) of part Abnormal 90V/60Hz 264V50Hz Limit ___ Overload condition Abnormal temperature (K/°C) of part 90V/60Hz/ Horizontal 264V/50Hz/ Horizontal Limit 57.4 85 Internal input wire 65.6 Transformer (T1) winding 80.5 84.3 175-10=165.0 Transformer (T1) core 79.8 78.1 175-10=165.0 Internal output wire 59.8 60.9 85 Plastic enclosure near T1 (external) 51.7 52.8 105 (Tc) 44.2 43.8 105 Support Ambient 40.0 40.0 ___ According to normal heating result, The overload heating performed at horizontal condition will be worse. Due to test result of clause 14, the heating result can be referred to the normal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition. RKPO-UK1101090-D2 Type reference..... Load used.....: Equivalent load or LED module Mounting position of luminaire: On the black testing board 40°C Та.....: 100V-240V - test : rated voltage: Input : - test : test voltage(normal).....: 1.06U_R =254.4 V; I=0.111 A; P=14.3W Output: U=11.0V; I=1.09A; 1.06U_R = 106 V; I=0.243A; P=15.0W Output: U=11.0V; I=1.09A 1. Double the LED modules or - test : test voltage(abnormal).....: equivalent load (connected in parallel) $1.1U_{R} = 264V; I = 0.011A;$

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Clause	Requirement + Test			Result - Re	mark		Verdict
				P=0.12W		- 1	
				2. Over load: 0.9U _R = 90V;	I= 0.293A; P=).867V; I= 1.28		
		1.1U _R = 264V P=20W;	; I= 0.133A;				
				Output: U=11	.152V; I= 1.23	BA	
Normal ope		106\/	/60Hz	254 4	V50Hz	1	imit
temperature	(K/°C) of part	Horizontal	Vertical	Horizontal	Vertical	L	
Plastic enclo holder, outsid	sure near plug pin de	46.5	47.2	48.7	46.4		75
Plastic enclo holder, inside	sure near plug pin e	47.2	48.4	48.4	46.5		130
Input lead wir	e	64.3	58.2	56.5	50.2		80
MOV1		69.6	62.3	59.9	52.7		85
C1 body		79.3	75.4	67.1	61.3		105
C2 body		82.6	82.7	72.5	68.9		105
C3 body		79.9	77.8	74.4	68.8		105
CY1 body		82.0	84.8	79.5	79.1		125
T1 winding		93.2	96.2	88.6	88.3		110
T1 bobbin		84.5	89.1	80.7	83.0		110
PCB near T1		104.3	105.6	103.5	105.3		130
C11 body		73.7	79.4	71.7	74.0		105
Output lead v	vire	67.9	73.5	66.7	68.9		90
Tc point		53.0	56.5	52.5	52.6		75
Plastic enclo	sure near T1, inside	86.7	86.4	87.0	84.5		130
Plastic enclo	sure near T1, outside	53.0	56.5	52.5	52.6		85
Support		43.0	42.2	44.6	41.6		90
Ambient		40.0	40.0	40.0	40.0		
		Abnorm	nal conditio				
temperature	(K/°C) of part	0014		normal			1
		900/	(60Hz	264	/50Hz	L	imit
		Over	 oad conditi	on			
temperature	(K/°C) of part	U U U		normal			
		90V/60H	z/ Vertical		Iz/ Vertical	L	imit

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	1 490	102 01 101		Порон не			
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Clause Requirement + Tes	Result - Remark			Verdict			
Internal input wire	58	3.6	50	6.5		85	
Transformer (T1) winding	99	9.9	90	0.0	175-	10=165.0	
Transformer (T1) core	91	1.4	82	2.5	175-	10=165.0	
Internal output wire	76	6.6	7	1.3		85	
Plastic enclosure near T1 (externa (Tc)	al) 57	7.1	54	4.2		105	
Support	44	1.7	44	4.2		105	
Ambient	40).0	40	0.0			
Due to test result of clause 14, the Due to test result of clause 15.3, u abnormal condition.	unit shut down, no	output, so tl	he heating res	ult can be refe	erred t	c	
	Type reference				RKPO-UK0602000-D2 Equivalent load or LED module		
	Load used				aure		
Mounting position of luminaire			On the black	testing board			
Ta:			40°C				
- test : rated voltag	- test : rated voltage						
- test : test voltage	Input : $1.06U_R = 254.4 \text{ V}; I=0.111 \text{ A};$ P=14.0W Output: U=6.0V; I=2.00 A; $1.06U_R = 106 \text{ V}; I=0.233\text{ A};$ P=14.6W Output: U=6.0V; I=2.00 A						
- test : test voltage	:	.: 1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; I= 0.011A; P=0.12W 2. Over load: 0.9U _R = 90V; I= 0.262A; P=16.2W; Output: U=5.46V; I= 225A; 1.1U _R = 264V; I= 0.119A; P=16.8W; Output: U=5.79V; I= 2.4A					
Normal operation	4001/		054-4			Lingit	
temperature (K/°C) of part	106V/			V50Hz		Limit	
	Horizontal	Vertical	Horizontal	Vertical			



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Result - Remark Verdict

Clause Requirement	t + Test			Result - Re	Verdict	
Plastic enclosure near plug	enclosure near plug pin 46.8 49			44.8	47	75
holder, outside	- lu	40.0	40	44.0	47.4	400
Plastic enclosure near plug holder, inside	nin	46.3	49	44.8	47.1	130
Input lead wire		76.7	76.2	57.9	63.1	80
MOV1		71.0	76.6	59.5	64.1	85
C1 body		77.7	82.2	65.9	70.6	105
C2 body		80.8	82.0	71.4	73.9	105
C3 body		77.8	77.7	72.7	73.5	105
CY1 body		78.3	77.4	74.2	74.2	125
T1 winding		95.1	94.1	89.8	89.9	110
T1 bobbin		86.4	85.8	81.7	81.7 82.3	
PCB near T1		109.9	104.5	102.9 99.7		130
C11 body		79.4 82.8 74.5		73.2	105	
Output lead wire		65.8 64.1 62.4		62.4	61.9	90
Tc point		53.7 53.3		51.7	52.4	75
Plastic enclosure near T1, ir	nside	59.1 59.0		56.6	57.3	130
Plastic enclosure near T1, o	utside	53.7 53.3		51.7	52.4	85
Support		41.4 42.6		41.1	42.3	90
Ambient		40 40.0		40.0	40.0	
		Abnorn	nal condition			
temperature (K/°C) of part				ormal		
		90V	/60Hz	264\	Limit	
tomporature (K/0C) of port		Over	load conditio			
temperature (K/°C) of part		Abno 90V/60Hz/Horizontal			264V/50Hz/ Vertical	
Internal input wire		90V/60Hz/Horizontal 78.2		67.8		Limit 85
Transformer (T1) winding		9	6.1	97.7		175-10=165.0
Transformer (T1) core		8	8.4	8	9.0	175-10=165.0
Internal output wire		6	5.4	6	6.8	85
Plastic enclosure near T1 (e (Tc)	xternal)	5	3.7	5	5.5	105
Support		4	2.9	44	4.0	105
Ambient		4	0.0	40	0.0	



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Clause	Requirement + Test	Result - Remark	Verdict

According to normal heating result, Th 90V/60Hz, Horizontal position will be Due to test result of clause 14, the he Due to test result of clause 15.3, unit abnormal condition.	worse. ating result ca	an be referred	d to the norma	condition.		
Type reference	Type reference					
Load used		:	Equivalent load or LED module			
Mounting position of Iu	uminaire	:	On the black testing board			
Та	Та:					_
- test : rated voltage		:	100V-240V			
- test : test voltage(no	rmal)	:	Input : 1.06U _R =254. P=14.0W Output: U=6.0V; I=2.0 1.06U _R =106 P=14.6W Output: U=6.0V; I=2.0	00A; V; I=0.233A;	Α;	
	- test : test voltage(abnormal):			1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; I= 0.011A; P=0.12W 2. Over load: 0.9U _R = 90V; I= 0.262A; P=16.2W; Output: U=5.46V; I= 225A; 1.1U _R = 264V; I= 0.119A; P=16.8W; Output: U=5.79V; I= 2.4A		
Normal operation	4001/		054.4			· :4
temperature (K/°C) of part	106V Horizontal	/60Hz Vertical	Horizontal	√50Hz Vertical	L	imit
Plastic enclosure near plug pin holder, outside	46.6	45.0	47.7	47.8		75
Plastic enclosure near plug pin holder, inside	47.9	46.0	49.7	49.2		130
MOV1	80.6	62.1	82.9	66.5		85
C1 body	88.5	69.1	86.8	71.2		105
C2 body	99.8	83.2	95.1	82.9		105
C3 body	91.7	80.8	85.9	79.2		105
CY1 body	90.9	83.4	85.5	81.4		125

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Clause Requirement + Test			Result - Re	Verdict		
	400.5	04.4	00.5	04.4	440	
T1 winding	102.5	94.4	96.5	91.4	110	
T1 bobbin	100.0	92.0	94.7	89.5	110	
PCB near T1	111.6	100.9	106.0	98.8	130	
C11 body	88.4	80.3	84.0	79.0	105	
Output lead wire	84.1	77.7	79.8	76.2	90	
Tc point (near T1)	60.6	57.3	57.8	57.0	75	
Plastic enclosure near T1, outside	68.5	63.7	58.5	57.4	85	
Plastic enclosure near T1, inside	74.0	69.2	69.6	67.5	130	
Support	45.5	43.7	46.4	46.5	90	
Ambient	40.0	40.0	40.0	40.0		
	Abnorn	nal condition				
temperature (K/°C) of part		ormal		Limit		
	90V	90V/60Hz		264V50Hz		
	Over	load condition				
temperature (K/°C) of part	ormal					
	90V/60H	90V/60Hz/ Vertical		Limit		
Transformer (T1) winding	10	04.0	- '		175-10=165.0	
Internal output wire	8	5.7	-		105	
Plastic enclosure near T1 (external) (Tc)	6	8.3			105	
Support	4	5.9	-		105	
Ambient 40.0		0.0				
According to normal heating result, Due to test result of clause 14, the h Due to test result of clause 15.3, uni abnormal condition.	eating result c	an be referred	d to the norma	l condition.		
Type reference		:	RKPO-EU110)1090DP-2		
Load used		:	Equivalent load or LED module			
Mounting position of	luminaire	:	On the black testing board		—	
Та		:	40°C			
- test : rated voltage.		:	100V-240V			



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		IEC 6	1347-2-13			
Clause	Requirement + Test Result - Remark					Verdic
	- test : test voltage(no	Input : 1.06U _R =254. P=14.3W Output: U=11.0V; I=1 1.06U _R =106 P=15.0W Output: U=11.0V; I=1	x; —			
	- test : test voltage(ab	1. Double the equivalent loa parallel) 1.1U _R =264V; P=0.12W 2. Over load: $0.9U_R=90V$; I Output: U=10 1.1U _R =264V; P=20W; Output: U=11	in 18W; 89A;			
Normal oper	ation					•
temperature (K/°C) of part		106V/	/60Hz	254.4	√50Hz	Limit
		Horizontal	Vertical	Horizontal	Vertical	
Plastic enclosure near plug pin holder, outside		44.4	44.7	45.3	44.6	75
Plastic enclosure near plug pin holder, inside		46.5	47.4	47.9	47.4	130
C1 body		90.8	66.8	88.9	68.0	105
C1 body C2 body		90.8 97.4	66.8 76.6	88.9 92.6	68.0 75.7	105 105
-						
C2 body		97.4	76.6	92.6	75.7	105
C2 body C3 body		97.4 90.1	76.6 74.9	92.6 85.5	75.7 74.0	105 105
C2 body C3 body CY1 body		97.4 90.1 89.9	76.6 74.9 81.2	92.6 85.5 85.6	75.7 74.0 79.2	105 105 125
C2 body C3 body CY1 body T1 winding		97.4 90.1 89.9 103.1	76.6 74.9 81.2 90.6	92.6 85.5 85.6 96.8	75.7 74.0 79.2 87.2	105 105 125 110
C2 body C3 body CY1 body T1 winding T1 bobbin		97.4 90.1 89.9 103.1 96.0	76.6 74.9 81.2 90.6 87.6	92.6 85.5 85.6 96.8 91.8	75.7 74.0 79.2 87.2 85.1	105 105 125 110 110
C2 body C3 body CY1 body T1 winding T1 bobbin PCB near T1	vire	97.4 90.1 89.9 103.1 96.0 103.5	76.6 74.9 81.2 90.6 87.6 97.7	92.6 85.5 85.6 96.8 91.8 100.0	75.7 74.0 79.2 87.2 85.1 95.2	105 105 125 110 110 130
C2 body C3 body CY1 body T1 winding T1 bobbin PCB near T1 C11 body		97.4 90.1 89.9 103.1 96.0 103.5 81.3	76.6 74.9 81.2 90.6 87.6 97.7 73.5	92.6 85.5 85.6 96.8 91.8 100.0 77.4	75.7 74.0 79.2 87.2 85.1 95.2 71.2	105 105 125 110 110 130 105
C2 body C3 body CY1 body T1 winding T1 bobbin PCB near T1 C11 body Output lead w Tc point (near		97.4 90.1 89.9 103.1 96.0 103.5 81.3 76.7	76.6 74.9 81.2 90.6 87.6 97.7 73.5 70.9	92.6 85.5 85.6 96.8 91.8 100.0 77.4 73.3	75.7 74.0 79.2 87.2 85.1 95.2 71.2 68.8	105 105 125 110 110 130 105 90
C2 body C3 body CY1 body T1 winding T1 bobbin PCB near T1 C11 body Output lead w Tc point (near Plastic enclos	- T1)	97.4 90.1 89.9 103.1 96.0 103.5 81.3 76.7 58.5	76.6 74.9 81.2 90.6 87.6 97.7 73.5 70.9 55.7	92.6 85.5 85.6 96.8 91.8 100.0 77.4 73.3 53.3	75.7 74.0 79.2 87.2 85.1 95.2 71.2 68.8 51.7	105 105 125 110 110 130 105 90 75
C2 body C3 body CY1 body T1 winding T1 bobbin PCB near T1 C11 body Output lead w Tc point (near Plastic enclos	⁻ T1) sure near T1, outside	97.4 90.1 89.9 103.1 96.0 103.5 81.3 76.7 58.5 65.0	76.6 74.9 81.2 90.6 87.6 97.7 73.5 70.9 55.7 61.5	92.6 85.5 85.6 96.8 91.8 100.0 77.4 73.3 53.3 62.0	75.7 74.0 79.2 87.2 85.1 95.2 71.2 68.8 51.7 59.4	105 105 125 110 110 130 105 90 75 85

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		IEC 61347-2-13				
Clause	Requirement + Test	Result - Remark			Verdict	
to man a mature (۸br	ormal			
temperature (K/°C) of part		90V/60Hz	264V50Hz	Limit		
		900700112	204 V 301 12			
		 Overload conditi	 on			
temperature (K/°C) of part		normal			
		90V/60Hz/ Horizontal	-		Limit	
Transformer (T1) winding	103.9		175-	10=165.0	
Internal outpu	ıt wire	79.7			105	
Plastic enclos (Tc)	sure near T1 (external)	65.8		105		
Support		45.0			105	
Ambient		40.0				
Due to test re abnormal con	dition.		he heating result can be refe	erred to	0	
	Type reference	:	RKPO-EU1900630DP-2			
	Load used:		Equivalent load or LED mo	dule		
	Mounting position of luminaire		On the black testing board			
	Та	:	40°C			
	- test : rated voltage	:	100V-240V			
	- test : test voltage(nor	mal):	Input : 1.06U _R =254.4 V; I=0.107 Å P=13.2W Output: U=19.0V; I=0.63A; 1.06U _R =106 V; I=0.222A; P=13.7W Output: U=19.0V; I=0.63A	Ą;		
	- test : test voltage(abr	normal):	1. Double the LED modules equivalent load (connected parallel) 1.1U _R =264V; I= 0.017A; P=0.12W 2. Over load: 0.9U _R = 90V; I= 0.226A; P=13.5W; Output: U=18.01V; I= 0.625 1.1U _R = 264V; I= 0.099A; P=13.7W; Output: U=18.66V; I= 0.655	in 5Α;		

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IEC 61347-2-13					
Clause	Requirement + Test	Result - Remark	Verdict		

temperature (K/°C) of part	106V/60Hz		254.4V50Hz		Limit
	Horizontal	Vertical	Horizontal	Vertical	
Plastic enclosure near plug pin holder, outside	44.5	45.3	45.7	51.3	75
Plastic enclosure near plug pin holder, inside	45.7	48.3	47.2	51.5	130
C1 body	73.4	65.3	74.0	67.6	105
C2 body	78.4	74.0	78.5	75.4	105
C3 body	73.3	72.9	72.4	73.0	105
CY1 body	75.1	77.2	76.0	78.9	125
T1 winding	80.6	82.2	81.8	84.3	110
T1 bobbin	80.4	82.3	81.8	84.7	110
PCB near T1	91.3	92.7	92.8	95.4	130
C11 body	65.7	66.7	67.3	69.4	105
Output lead wire	64.2	65.0	65.7	67.8	90
Tc point (near T1)	50.1	50.4	52.3	54.1	75
Plastic enclosure near T1, outside	56.2	56.9	58.4	60.4	85
Plastic enclosure near T1, inside	61.2	61.1	60.7	61.8	130
Support	43.4	43.4	44.4	49.4	90
Ambient	40.0	40.0	40.0	40.0	
	Abnorm	nal condition			
temperature (K/°C) of part			ormal		
	90V/60Hz 264V50Hz		Limit		
	Overl	oad conditic			
temperature (K/°C) of part		Abn	ormal		
			264V/50Hz/ Vertical		Limit
Transformer (T1) winding	· ·		97.8		175-10=165.0
Internal output wire			75.1		105
Plastic enclosure near T1 (external) (Tc)			64.1		105
Support			44.1		105
Ambient			40	0.0	
According to normal heating result, T Due to test result of clause 14, the he Due to test result of clause 15.3, unit abnormal condition.	ating result ca	an be referred	to the norma	condition.	



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IEC 61347-2-13					
Clause	Requirement + Test	Result - Remark	Verdict		

Type reference		:	RKPO-EU240	0500DP-2			
Load used	Load used:			Equivalent load or LED module			
Mounting position of I	Mounting position of luminaire			testing board			
Та		:	40°C				
- test : rated voltage		:	100V-240V				
- test : test voltage(no	- test : test voltage(normal):			: Input : $1.06U_R = 254.4 \text{ V}; \text{ I=0.108 A};$ P=13.6W Output: U=24.0V; I=0.5A; $1.06U_R = 106 \text{ V}; \text{ I=0.224A};$ P=14.0W Output: U=24.0V; I=0.5A			
				: 1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; I= 0.01A; P=0.05W 2. Over load: 0.9U _R = 90V; I= 0.242A; P=14.6W; Output: U=23.05V; I= 0.536A; 1.1U _R = 264V; I= 0.101A; P=14.3W; Output: U=24.25V; I= 0.53A			
Normal operation	1061/	/60Hz	254.4	/50U-7		Limit	
temperature (K/°C) of part	Horizontal	Vertical	Horizontal	Vertical	-		
Plastic enclosure near plug pin holder, outside	46.5	45.9	48.9	47.0		75	
Plastic enclosure near plug pin holder, inside	47.2	46.6	49.8	47.7		130	
C1 body	87.2	67.4	85.5	67.4		105	
C2 body	94.8	77.0	91.1	75.6		105	
C3 body	89.1	75.3	84.5	73.6		105	
CY1 body	86.3	78.8	82.2	76.3		125	
T1 winding	90.6	83.0	86.8	80.4		110	
T1 bobbin	82.4	76.4	74.6	69.4		110	
PCB near T1	93.1	88.8	90.0	86.9		130	
C11 body	72.0	67.0	68.3	64.4		105	
Output lead wire	70.4	66.2	67.2	63.9		90	

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Clause	Requirement + Test			Result - Re	mark		Verdict
Tc point (ne	ar T1)	68.0	63.3	61.0	58.2		75
	osure near T1, outside	61.7	59.0	59.1	56.9		85
	osure near T1, inside	83.1	76.0	77.2	71.6		130
Support		44.7	43.5	46.8	45.1		90
Ambient		40.0	40.0	40.0	40.0		
			al condition				
temperature	e (K/°C) of part		Abn	ormal			
		90V/	60Hz	264	/50Hz		Limit
					-		
		Overl	oad conditi	on		1	
temperature	e (K/°C) of part		Abn	ormal			
		90V/60Hz	/ Horizontal		-	Limit	
Transforme	r (T1) winding	93.5				175-10=165	
Internal outp	out wire	72.3				105	
Plastic encl (Tc)	osure near T1 (external)	62.6				105	
Support		45	5.2				105
Ambient		4(0.5	-			
Due to test	o normal heating result, Th result of clause 14, the he result of clause 15.3, unit ondition.	ating result ca	an be referred	d to the norma	l condition.		
	Type reference		:	RKPO-EU060	2000DP-2A		
	Load used		:	Equivalent load or LED module			
	Mounting position of lu	minaire	:	On the black testing board			
	Та		:	40°C			
	- test : rated voltage:			100V-240V			
	- test : test voltage(normal):			 Input : 1.06U_R =254.4 V; I=0.111 A; P=14.0W Output: U=6.0V; I=2.00A; 1.06U_R =106 V; I=0.233A; P=14.6W Output: U=6.0V; I=2.00A 			
	- test : test voltage(abi	normal)	::	: 1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; I= 0.011A;			

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		IEC 6	1347-2-13			
Clause Red	Requirement + Test			Result - Re	Verdict	
				P=0.12W 2. Over load: 0.9U _R = 90V; I P=16.2W; Output: U=5.4 1.1U _R = 264V; P=16.8W; Output: U=5.7	46V; I= 225A ; I= 0.119A;	x;
Normal operation						
temperature (K/°C)) of part		/60Hz		√50Hz	Limit
		Horizontal	Vertical	Horizontal	Vertical	
Plastic enclosure r holder, outside	ear plug pin	52.8	48.4	51.5	46.3	75
Plastic enclosure n holder, inside	ear plug pin	54.7	49.7	53.0	47.5	130
MOV1		84.7	67.0	81.0	63.0	85
C1 body		90.5	73.2	86.5	68.5	105
C2 body		97.9	85.3	94.6	80.8	105
C3 body		89.9	83.6	89.4	81.0	105
CY1 body		93.0	89.6	93.2	88.1	125
T1 winding		108.7	103.5	109.9	102.6	110
T1 bobbin		104.2	99.3	105.9	98.9	110
PCB near T1		104.0	99.0	105.7	98.3	130
C11 body		90.9	83.5	96.6	86.5	105
Tc point (near T1)		74.5	72.4	75.0	70.4	75
Plastic enclosure n	ear T1, outside	71.7	69.6	72.2	67.6	85
Plastic enclosure n	near T1, inside	85.5	82.5	83.0	78.8	130
Support		50.5	46.0	49.1	43.9	90
Ambient		40.0	40.0	40.0	40.0	
		Abnorm	al conditio	n		-
temperature (K/°C)) of part		Abı	normal		
		90V/60Hz		264V50Hz		Limit
-		Overl	 oad conditi			
temperature (K/°C)) of part		Abı	normal		
		-	-	264V/50Hz/ Horizontal		Limit
Transformer (T1) w	vinding	-	-	11	2.2	175-10=165.0
Plastic enclosure n (Tc)	near T1 (external)		-	73.6		105



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Clause Requirement +	Test			Result - Remark		Verdict	
				4	7.0		405
Support			-		7.3		105
Ambient					0.0		
According to normal heating re Due to test result of clause 14 Due to test result of clause 15 abnormal condition.	, the he .3, unit	eating result ca shut down, no	an be referred o output, so t	to the norma he heating res	l condition. ult can be refe		
Type reference			:	RKPO-EU110	01090DP-2A		
Load used			:	Equivalent loa	ad or LED mo	dule	—
Mounting posit	ion of Iu	uminaire	:	On the black	testing board		
Та			:	40°C			—
- test : rated vo	ltage		:	100V-240V			
	- test : test voltage(normal): - test : test voltage(abnormal):			1.06U _R =254.4 V; I=0.111 A; P=14.3W Output: U=11.0V; I=1.09A; 1.06U _R =106 V; I=0.243A; P=15.0W Output: U=11.0V; I=1.09A			
				P=0.12W 2. Over load: 0.9U _R = 90V; I= 0.293A; P= 18W Output: U=10.867V; I= 1.289A; 1.1U _R = 264V; I= 0.133A; P=20W; Output: U=11.152V; I= 1.23A			
Normal operation				1			
temperature (K/°C) of part			/60Hz		V50Hz		Limit
		Horizontal	Vertical	Horizontal	Vertical		75
Plastic enclosure near plug pir holder, outside	I	51.5	47.1	50.2	45.3		75
Plastic enclosure near plug pin holder, inside		53.5	48.3	52.2	46.6		130
MOV1		78.3	62.6	75.0	59.6		85
C1 body		81.7	66.8	78.9	63.6	105	
C2 body		87.1	75.5	85.3	72.9		105
C3 body		78.3	72.8	78.7	71.3		105

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Clause Requirement + Test	Requirement + Test			Result - Remark		
	70.0	70.0	04.0	77.0	1	405
CY1 body	79.8	78.0	81.2	77.8		125
T1 winding	89.6	86.7	91.6	87.1		110
T1 bobbin	89.4	86.3	91.1	86.7		110
PCB near T1	90.5	87.0	91.9	86.7		130
C11 body	64.8	62.9	69.4	65.4		105
Tc point (near T1)	62.9	61.9	63.3	60.8		75
Plastic enclosure near T1, outside	59.9	59.0	61.3	58.2		85
Plastic enclosure near T1, inside	69.7	68.2	69.8	66.7		130
Support	49.2	44.8	47.9	43.0		90
Ambient	40.0	40.0	40.0	40.0		
	Abnorn	nal condition	1			
temperature (K/°C) of part		Abn	ormal			
	90V/60Hz		264V50Hz		Limit	
	Over	oad conditio	on			
temperature (K/°C) of part	Abno		normal			
			264V/50Hz/ Horizontal		Limit	
Transformer (T1) winding			92.7		175-10=165.0	
Plastic enclosure near T1 (external) (Tc)			64.6		105	
Support			46.3		105	
Ambient			40.0			
According to normal heating result, The Due to test result of clause 14, the he Due to test result of clause 15.3, unit abnormal condition.	ating result c	an be referred	l to the normal	condition.		
Type reference		:	RKPO-EU190	0630DP-2A		
Load used		:	Equivalent load or LED module		dule	
Mounting position of lu	minaire	:	On the black	testing board		—
Та		:	40°C			
- test : rated voltage			100V-240V			

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	IEC 6	1347-2-13				
Clause Requirement + Test			Result - Re	mark	Verdict	
- test : test voltage(no	ormal)	:	Input : $1.06U_R = 254.$ P = 13.2W Output: U = 19.0V; I = 0 $1.06U_R = 106$ P = 13.7W Output: U = 19.0V; I = 0	.63A; V; I=0.222A;	A; —	
- test : test voltage(ab	- test : test voltage(abnormal):					
Normal operation						
temperature (K/°C) of part	106V	/60Hz	254.4	V50Hz	Limit	
	Horizontal	Vertical	Horizontal	Vertical		
Plastic enclosure near plug pin holder, outside	52.1	47.2	49.9	45.3	75	
Plastic enclosure near plug pin holder, inside	53.0	47.4	50.1	45.2	130	
MOV1	71.1	57.9	69.3	55.6	85	
C1 body	75.3	61.8	74.3	60.0	105	
C2 body	80.1	69.0	80.1	68.2	105	
C3 body	73.6	67.2	73.6	66.2	105	
CY1 body	74.5	71.6	75.0	71.6	125	
T1 winding	82.3	78.6	83.9	79.9	110	
T1 bobbin	79.6	75.9	81.3	77.0	110	
PCB near T1	83.2	76.8	83.7	76.6	130	
C11 body	60.8	58.8	63.6	60.8	105	
Tc point (near T1)	62.3	60.0	63.6	60.7	75	
Plastic enclosure near T1, outside	62.5	59.4	60.2	56.6	85	
Plastic enclosure near T1, inside	65.2	62.8	67.6	64.4	130	
Support	49.8	44.8	47.5	43.0	90	
Ambient	40.0	40.0	40.0	40.0		



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Requirement + Test Clause Result - Remark Verdict

	Abnormal condition	ı		
temperature (K/°C) of part	Abnormal			
	90V/60Hz	264V50Hz	l	_imit
	Overload condition			
temperature (K/°C) of part	Abn	ormal		
		264V/50Hz/ Horizontal		_imit
Transformer (T1) winding		80.2	175-	10=165.0
Plastic enclosure near T1 (external) (Tc)		60.5		105
Support		45.6		105
Ambient		40.0		
Due to test result of clause 14, the head Due to test result of clause 15.3, unit stabnormal condition.	shut down, no output, so th	he heating result can be refe	erredto	0
	:	RKPO-EU2400500DP-2A		
	:	Equivalent load or LED module		
Mounting position of lu	minaire:	On the black testing board		
Та	:	40°C	—	
- test : rated voltage	:	100V-240V		
- test : test voltage(nor	mal):	: Input : $1.06U_R = 254.4 \text{ V}; I=0.108 \text{ A};$ P=13.6W Output: U=24.0V; I=0.5A; $1.06U_R = 106 \text{ V}; I=0.224\text{A};$ P=14.0W Output: U=24.0V; I=0.5A		_
- test : test voltage(abr	- test : test voltage(abnormal):		s or in 0.05W ôA;	



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		IEC 6	1347-2-13				
Clause	Requirement + Test			Result - Re	mark		Verdict
		4001/		054.4		1 1	
temperature (K/°C) of part	Horizontal	/60Hz Vertical	254.4 Horizontal	√50Hz Vertical		Limit
Direction and a		ΠΟΠΖΟΠΙΔΙ	ventical	ΠΟΠΖΟΠΙΑΙ	Ventical		75
Plastic enclos holder, outsid	sure near plug pin e	51.7	47.9	49.9	46.3		75
Plastic enclos holder, inside	sure near plug pin	53.3	48.6	50.9	46.8		130
MOV1		72.3	60.1	70.4	57.7		85
C1 body		74.3	63.2	74.0	61.6		105
C2 body		80.4	72.7	80.6	72.3		105
C3 body		77.0	74.0	76.7	73.3		105
CY1 body		74.5	74.5	74.9	75.1		125
T1 winding		83.1	82.7	83.8	83.8		110
T1 bobbin		78.8	78.4	79.6	79.3		110
PCB near T1		84.9	83.8	84.8	84.2		130
C11 body		59.9	59.4	61.4	60.9		105
Tc point (near	[.] T1)	62.8	62.3	62.3	61.6		75
Plastic enclos	sure near T1, outside	62.0	60.8	60.5	59.2		85
Plastic enclos	sure near T1, inside	67.8	67.2	67.8	67.1		130
Support		49.4	45.6	47.5	43.9		90
Ambient		40.0	40.0	40.0	40.0		
		Abnorm	al condition	1			
temperature (K/°C) of part	Abno		ormal			
		90V/	60Hz	264\		Limit	
			-		-		
		Overl	oad conditi	on		_	
temperature (K/°C) of part		Abn	ormal			
				264V/50Hz	/ Horizontal		Limit
Transformer (T1) winding			85.1		175-	10=165.0
Plastic enclos (Tc)	sure near T1 (external)			63	3.2		105
Support				40	5.3	105	
Ambient				40.0			
Due to test re Due to test re	According to normal heating result, The overload heating performed at Horizontal condition will be worse. Due to test result of clause 14, the heating result can be referred to the normal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition.						
	Type reference		:	RKPO-EU060)2000CD-2		
	Load used		:	Equivalent loa	ad or LED mo	dule	

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Clause Deguinement Test Deguine Deguine Deguine Deguine Deguinement Test		IEC 61347-2-13		
Clause Requirement + Test Result - Remark Vero	Clause	Requirement + Test	Result - Remark	Verdict

N	lounting position of lu	minaire	:	On the black	testing board		
Т	a		:	40°C			
-	test : rated voltage		:	100V-240V			
- '	test : test voltage(nor	mal)		Input : $1.06U_R = 254.$ P = 14.0W Output: U = 6.0V; I = 2.0 $1.06U_R = 106$ P = 14.6W Output: U = 6.0V; I = 2.0	V; I=0.233A;	;	_
-	test : test voltage(abr	normal)		equivalent loa parallel) 1.1U _R =264V; P=0.12W 2. Over load: 0.9U _R = 90V; P=16.2W;	I= 0.262A; 46V; I= 225A; ; I= 0.119A;	in	
Normal operation	on						
temperature (K/°	C) of part	106V	/60Hz	254.4	V50Hz	L	_imit
		Label up	Label down	Label up	Label down		
Power cord		61.7	55.3	62.3	55.0		105
Ambient		40.0	40.0	40.0	40.0		
		Abnorm	nal condition	1			
temperature (K/°	C) of part			ormal			
		90V/	/60Hz	264V50Hz		l	_imit
		Over	oad conditio				
temperature (K/°	C) of part		Abn	ormal			
					z/ Label up	l	_imit
Power cord					9.7		105
Ambient				4	0.0		
Due to test result	mal heating result, Th t of clause 14, the hea t of clause 15.3, unit s on.	ating result ca	an be referred	l to the norma	l condition.		



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Clause	Requirement + Test	Result - Remark	Verdict

	Type reference		:	RKPO-EU110)1090CD-2		
	Load used		:	Equivalent load or LED module		lule	
	Mounting position of lu			On the black	testing board		
	Та			40°C			
	- test : rated voltage			100V-240V			
	- test : test voltage(nor	mal)	:	Input : $1.06U_R = 254.$ P = 14.3W Output: U = 11.0V; I = 1 $1.06U_R = 106$ P = 15.0W Output: U = 11.0V; I = 1	V; I=0.243A;	,	
	- test : test voltage(abi	normal)	:	parallel) 1.1U _R =264V; P=0.12W 2. Over load: 0.9U _R = 90V; I Output: U=10 1.1U _R = 264V P=20W;	id (connected i I= 0.011A; = 0.293A; P= .867V; I= 1.28	in 18W; 9A;	
Normal opera							
temperature (k	⟨/°C) of part		/60Hz		√50Hz	L	_imit
Dowercord		Label up	Label down		Label down		105
Power cord Ambient		59.4 40.0	53.8 40.0	60.9 40.0	53.6 40.0		105
			40.0 nal condition		40.0		
temperature (k	(/°C) of part			normal			
		90V/	/60Hz		/50Hz	L	₋imit
					-		
		Overl	oad conditio	 on			
temperature (k	K/°C) of part		Abn	ormal			
				264V/50Hz	/ Label down	L	₋imit
Power cord			-	6	1.9		105
i onor oora							



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	IEC 61347-2-13		
Clause	Requirement + Test	Result - Remark	Verdict

According to normal heating result, The overload heating performed at Label down condition will be worse
Due to test result of clause 14, the heating result can be referred to the normal condition.
Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition.

	Type reference			RKPO-EU19	00630CD-2		
	Load used			Equivalent load or LED module			
	Mounting position of Iu			On the black testing board			
	Та			40°C			
	- test : rated voltage			100V-240V			
	- test : test voltage(nor			Input :	V; I=0.222A;	λ;	
	- test : test voltage(abr	normal)	:	equivalent loa parallel) $1.1U_R=264V;$ P=0.12W 2. Over load: 0.9U_R=90V; P=13.5W; Output: U=18 $1.1U_R=264V$ P=13.7W;	I= 0.226A; 8.01V; I= 0.625	in 5A;	
Normal operation	ation						
temperature (I	°C) of part</td <td></td> <td>/60Hz</td> <td>-</td> <td>V50Hz</td> <td>L</td> <td>Limit</td>		/60Hz	-	V50Hz	L	Limit
		Label up	Label down	Label up	Label down		
Power cord		59.4	52.3	59.2	52.3		105
Ambient		40.0	40.0	40.0	40.0		
tomporature //	(/°C) of part	ADNOM	nal condition	ormal			
temperature (I		901/	/60Hz		/50Hz		Limit
		300		2041			
		Over	 load conditio	l on			
tomporaturo (l	⟨/°C) of part			ormal			
	, Joipan						



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	IEC 6	61347-2-13					
Clause Requirement + Test			Result - Re	mark		Verdict	
Power cord	5	5.5				105	
		0.0			105		
Ambient According to normal heating result, T					ill boy		
Due to test result of clause 14, the he Due to test result of clause 15.3, unit abnormal condition.	ating result c	an be referred	l to the norma	l condition.			
Type reference		:	RKPO-EU24	00500CD-2			
Load used		: Equivalent load or LED mod			dule		
Mounting position of lu	uminaire	:	On the black	testing board			
Та							
- test : rated voltage		:	100V-240V				
- test : test voltage(no	- test : test voltage(normal):				λ;		
			P=14.0W Output: U=24.0V; I=0.5A				
- test : test voltage(ab	- test : test voltage(abnormal):				1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; I= 0.01A; P=0.05W 2. Over load: $0.9U_R$ = 90V; I= 0.242A; P=14.6W;		
			Output: U=23.05V; I= 0.536A;				
			1.1U _R = 264V; l= 0.101A; P=14.3W;				
			Output: U=24.25V; I= 0.53A		A		
Normal operation							
temperature (K/°C) of part		/60Hz		V50Hz		Limit	
Power cord	Label up 58.6	Label down 53.4	Label up 59.3	Label down 52.7		105	
Ambient	40.0	40.0	40.0	40.0			
		nal condition		+0.0			
temperature (K/°C) of part			ormal				
, , , , , , ,	90V	/60Hz	264\	/50Hz		Limit	
	Over	load conditio	on				

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	1347-2-13					
Clause Requirement + Test			Result - Re	mark		Verdict
temperature (K/°C) of part		Abn	onormal			
						Limit
Power cord				7.7		105
Ambient				0.0		
According to normal heating result, The Due to test result of clause 14, the heating to test result of clause 15.3, unit abnormal condition.	ating result ca shut down, no	an be referred o output, so tl	d to the norma he heating res	l condition. ult can be refe		
Type reference			RKP-EU0602			
Load used	Equivalent loa	ad or LED mo	dule			
Mounting position of Iu	On the black	testing board				
Та		:	40°C			
- test : rated voltage		:	100V-240V			—
- test : test voltage(no		Input : $1.06U_R = 254.4 \text{ V}; \text{ I=0.111 A};$ P=14.0W Output: U=6.0V; I=2.00A; $1.06U_R = 106 \text{ V}; \text{ I=0.233A};$ P=14.6W Output: U=6.0V; I=2.00A				
- test : test voltage(ab	:	: 1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; I= 0.011A; P=0.12W 2. Over load: 0.9U _R = 90V; I= 0.262A; P=16.2W; Output: U=5.46V; I= 225A; 1.1U _R = 264V; I= 0.119A; P=16.8W; Output: U=5.79V; I= 2.4A				
Normal operation	4001/	/0011	054.4	(50)		,
temperature (K/°C) of part	106V Horizontal	/60Hz Vertical	254.4 Horizontal	√50Hz Vertical		Limit
Plastic enclosure near plug pin holder, outside	49.3	47.8	49.9	49.2		75
Plastic enclosure near plug pin holder, inside	51.7	48.6	52.3	50.0		130
MOV1	79.9	61.3	79.9	62.9		85

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		IEC 6	61347-2-13				
Clause	Requirement + Test			Result - Re	mark		Verdict
C1 body		84.7	66.5	85.1	68.3		105
C2 body		96.0	78.7	96.2	80.4		105
C3 body		92.8	81.7	90.6	80.2		105
CY1 body		93.1	85.3	92.1	85.1		125
T1 winding		102.5	93.3	103.1	94.5		110
T1 bobbin		94.8	86.9	95.1	88.2		110
PCB near T	1	111.5	98.0	110.7	99.2		130
C11 body		72.4	66.9	72.8	67.7		105
Output lead	l wire	80.0	73.2	81.5	75.0		90
Tc point (ne	ear T1)	70.1	65.5	75.4	70.7		76
Plastic encl	losure near T1, outside	71.6	65.7	70.0	65.3		85
	losure near T1, inside	88.0	79.9	84.4	77.6		130
Support		47.6	46.7	49.7	49.2		90
Ambient		40.0	40.0	40.0	40.0		
		Abnorn	nal condition	1			
temperature	e (K/°C) of part		Abr	ormal			
		90V/60Hz		264\	/50Hz		Limit
		Overload condition		on			
temperature	e (K/°C) of part		Abr	ormal			
		90V/60Hz	/ Horizontal				Limit
Transforme	r (T1) winding	101.8		-		175-10=165.0	
Internal out	put wire	79.5		-		105	
Plastic encl (Tc)	losure near T1 (external)	74.1				105	
Support		49.5				105	
Ambient		40.0					
Due to test	result of clause 14, the he result of clause 15.3, unit	ating result c	ne overload heating perform ating result can be referred		med at Horizontal condition will l to the normal condition. the heating result can be referred		
	Type reference			RKP-EU1101	090DP-2		
	Load used			Equivalent loa		dule	
<u> </u>	Mounting position of Iu			On the black			
	Та			40°C			
	- test : rated voltage			100V-240V			
	9		-	-			

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		IEC 6	1347-2-13			
Clause	Requirement + Test			Result - Re	mark	Verdic
	- test : test voltage(no	rmal)	:	Input : 1.06U _R =254. P=14.3W Output: U=11.0V; I=1 1.06U _R =106 P=15.0W Output: U=11.0V; I=1	.09A; V; I=0.243A;	x; —
	- test : test voltage(ab	normal)	:	1. Double the equivalent loa parallel) 1.1U _R =264V; P=0.12W 2. Over load: $0.9U_R=90V$; I Output: U=10 1.1U _R =264V; P=20W; Output: U=11	in 18W; 89A;	
Normal oper	ation			• •		
temperature (K/°C) of part	106V/	/60Hz	254.4	√50Hz	Limit
		Horizontal	Vertical	Horizontal	Vertical	
Plastic enclos holder, outsid	sure near plug pin e	47.3	46.5	46.6	46.4	75
Plastic enclos holder, inside	sure near plug pin	49.4	47.2	49.1	47.4	130
C1 body		81.4	62.9	82.1	63.4	105
C2 body						
		87.5	71.4	88.8	72.6	105
C3 body		87.5 83.5	71.4 75.3	88.8 82.3	72.6 74.1	105 105
C3 body		83.5	75.3	82.3	74.1	105
C3 body CY1 body		83.5 83.9	75.3 78.8	82.3 81.2	74.1 75.8	105 125
C3 body CY1 body T1 winding		83.5 83.9 85.8	75.3 78.8 80.6	82.3 81.2 86.4	74.1 75.8 81.2	105 125 110
C3 body CY1 body T1 winding T1 bobbin		83.5 83.9 85.8 88.8	75.3 78.8 80.6 82.4	82.3 81.2 86.4 89.9	74.1 75.8 81.2 83.6	105 125 110 110
C3 body CY1 body T1 winding T1 bobbin PCB near T1	ire	83.5 83.9 85.8 88.8 100.3	75.3 78.8 80.6 82.4 88.6	82.3 81.2 86.4 89.9 99.0	74.1 75.8 81.2 83.6 88.1	105 125 110 110 130
C3 body CY1 body T1 winding T1 bobbin PCB near T1 C11 body		83.5 83.9 85.8 88.8 100.3 69.0	75.3 78.8 80.6 82.4 88.6 64.3	82.3 81.2 86.4 89.9 99.0 70.8	74.1 75.8 81.2 83.6 88.1 65.8	105 125 110 110 130 105
C3 body CY1 body T1 winding T1 bobbin PCB near T1 C11 body Output lead w Tc point (near		83.5 83.9 85.8 88.8 100.3 69.0 63.2	75.3 78.8 80.6 82.4 88.6 64.3 60.0	82.3 81.2 86.4 89.9 99.0 70.8 63.9	74.1 75.8 81.2 83.6 88.1 65.8 60.8	105 125 110 110 130 105 90
C3 body CY1 body T1 winding T1 bobbin PCB near T1 C11 body Output lead w Tc point (near Plastic enclos	⁻ T1)	83.5 83.9 85.8 88.8 100.3 69.0 63.2 60.0	75.3 78.8 80.6 82.4 88.6 64.3 60.0 57.2	82.3 81.2 86.4 89.9 99.0 70.8 63.9 62.6	74.1 75.8 81.2 83.6 88.1 65.8 60.8 59.8	105 125 110 110 130 105 90 76
C3 body CY1 body T1 winding T1 bobbin PCB near T1 C11 body Output lead w Tc point (near Plastic enclos	[.] T1) sure near T1, outside	83.5 83.9 85.8 88.8 100.3 69.0 63.2 60.0 62.2	75.3 78.8 80.6 82.4 88.6 64.3 60.0 57.2 59.1	82.3 81.2 86.4 89.9 99.0 70.8 63.9 62.6 58.6	74.1 75.8 81.2 83.6 88.1 65.8 60.8 59.8 56.2	105 125 110 110 130 105 90 76 85

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		IEC 61347-2-13			
Clause	Requirement + Test		Result - Remark		Verdict
temperature (/K/°C) of part	Abr	ormal		
		90V/60Hz	264V50Hz	Limit	
		Overload conditi	on	1	
temperature ((K/°C) of part	Abr	ormal		
			264V/50Hz/ Horizontal		Limit
Transformer ((T1) winding		88.7	175-	10=165.0
Internal outpu	ıt wire		63.3		105
Plastic enclos (Tc)	sure near T1 (external)	-	62.0		105
Support			44.9		105
Ambient			40.0		
	sult of clause 15.3, unit dition.		he heating result can be refe	erred to	D
	Type reference	:	RKP-EU1900630DP-2		—
	Load used		Equivalent load or LED mo	dule	
	Mounting position of Iu	minaire:	On the black testing board		
	Та	:	40°C		
	- test : rated voltage	:	100V-240V		
- test : test voltage(normal)		mal):	Input : 1.06 U_R =254.4 V; I=0.107 Å P=13.2W Output: U=19.0V; I=0.63A; 1.06 U_R =106 V; I=0.222A; P=13.7W Output: U=19.0V; I=0.63A	Α;	
	- test : test voltage(abi	normal)	1. Double the LED modules equivalent load (connected parallel) 1.1U _R =264V; I= 0.017A; P=0.12W 2. Over load: 0.9U _R = 90V; I= 0.226A; P=13.5W; Output: U=18.01V; I= 0.628 1.1U _R = 264V; I= 0.099A; P=13.7W; Output: U=18.66V; I= 0.658	in 5Α;	

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Clause	Requirement + Test	Result - Remark	Verdict

temperature (K/°C) of part	106V	/60Hz	254.4	√50Hz	Limit
	Horizontal	Vertical	Horizontal	Vertical	
Plastic enclosure near plug pin holder, outside	49.5	48.2	49.2	47.1	75
Plastic enclosure near plug pin holder, inside	50.7	47.9	50.7	47.3	130
C1 body	80.0	61.9	79.5	62.2	105
C2 body	89.3	71.9	88.2	72.2	105
C3 body	87.7	75.2	83.5	72.1	105
CY1 body	85.5	77.8	82.2	76.0	125
T1 winding	91.4	81.9	89.1	81.1	110
T1 bobbin	86.3	77.8	84.2	77.2	110
PCB near T1	84.5	75.9	81.8	75.4	130
C11 body	68.6	63.4	68.2	63.8	105
Output lead wire	69.2	63.8	68.3	64.0	90
Tc point (near T1)	67.5	60.8	71.2	65.0	76
Plastic enclosure near T1, outside	66.7	61.5	65.1	61.6	85
Plastic enclosure near T1, inside	78.8	72.8	79.3	74.2	130
Support	48.2	47.4	47.9	46.3	90
Ambient	40.0	40.0	40.0	40.0	
	Abnorm	al condition			
temperature (K/°C) of part		Abno	ormal		
	90V/	'60Hz	264\	/50Hz	Limit
		-		-	
	Overl	oad conditio	on		
temperature (K/°C) of part		Abno	ormal		
	90V/60Hz	/ Horizontal	264V/50H	lz/Vertical	Limit
Transformer (T1) winding	8	3.0			175-10=165.0
Internal output wire	70	6.9			105
Plastic enclosure near T1 (external) (Tc)	6	5.9			105
Support	40	5.1			105
Ambient	40	0.0			
According to normal heating result, The Due to test result of clause 14, the heat the test result of clause 15.3, unit abnormal condition.	ating result ca	an be referred	to the norma	condition.	



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Clause	Requirement + Test	Result - Remark	Verdict	

Type reference		:	RKP-EU2400	500DP-2		
Load used		:	Equivalent load or LED module			
Mounting position of I	uminaire	:	On the black	testing board		
Та		:	40°C			
- test : rated voltage		:	100V-240V			
- test : test voltage(no	- test : test voltage(normal)			1.06U _R =254.4 V; I=0.108 A; P=13.6W Output: U=24.0V; I=0.5A; 1.06U _R =106 V; I=0.224A; P=14.0W Output: U=24.0V; I=0.5A		
Normal operation	1061/		254.4			lipsit
temperature (K/°C) of part	Horizontal	/60Hz Vertical	Horizontal	√50Hz Vertical		Limit
Plastic enclosure near plug pin holder, outside	52.0	47.9	53.2	49.2		75
Plastic enclosure near plug pin holder, inside	53.8	49.6	55.6	50.4		130
C1 body	81.0	68.2	81.5	64.1		105
C2 body	85.5	69.3	88.4	71.7		105
C3 body	86.1	73.8	85.2	73.7		105
CY1 body	83.3	75.7	82.2	75.8		125
T1 winding	winding 88.9		90.2	82.0		110
T1 bobbin	88.9	79.7	90.6	81.7		110
PCB near T1	103.1	88.4	99.7	89.0		130
C11 body	67.0	62.1	68.3	63.7		80
Output lead wire	72.8	66.3	73.3	67.9		90

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Clause	Requirement + Test			Result - Re	mark		Verdict
Tc point (ne	ar T1)	64.0	59.2	64.8	60.9		76
	osure near T1, outside	65.8	61.9	67.7	64.4		85
	osure near T1, inside	75.1	68.9	75.8	68.6		130
Support		50.0	47.8	51.0	48.0		90
Ambient		40.0	40.0	40.0	40.0		
		Abnorm	al condition	1			
temperature	e (K/°C) of part		Abr	ormal			
		90V/	60Hz	264	/50Hz		Limit
		-	-				
		Overl	oad conditi	on			
temperature	e (K/°C) of part		Abr	ormal			
		-	-	264V/50Hz	z/ Horizontal		Limit
Transforme	r (T1) winding	-	-	9	1.4	175-10=165	
Internal outp	out wire			74	74.3		105
Plastic encl (Tc)	osure near T1 (external)	-	-	69.1		105	
Support		-	-	49.0		105	
Ambient		-	-	4(0.0		
Due to test		ating result ca shut down, no	an be referred o output, so t	d to the norma he heating res	l condition. ult can be refe		
	Type reference		:	RKPO-UK04	01500-D1		
	Load used		:	Equivalent load or LED module			
	Mounting position of lu	minaire	:	On the black testing board			
	Та		:	40°C			
	- test : rated voltage:			100V-240V			
	- test : test voltage(nor	mal)	:	Input : 1.06U _R =254. P=8.74W Output: U=4.0V; I=1.8 1.06U _R =106 P=9.13W Output: U=4.0V; I=1.8	50A; V; I=0.14A;	Ą;	
	- test : test voltage(abr	normal)	:	1. Double the equivalent loa parallel) 1.1U _R =264V;	d (connected		

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		IEC 6	1347-2-13			
Clause	Requirement + Test			Result - Re	mark	Verdict
Normal op	oration			P=0.12W 2. Over load: 0.9U _R = 90V; I P=11.0W; Output: U=3.8 1.1U _R = 264V; P=11.1W; Output: U=4.0		
	e (K/°C) of part	106V	/60Hz	254.4	√50Hz	Limit
		Horizontal	Vertical	Horizontal	Vertical	
Plastic encl holder, outs	osure near plug pin ide	43.6	44.4	43.3	42.9	75
Plastic encl holder, insid	osure near plug pin de	44.6	45.8	44.7	44.1	130
Input lead w	<i>v</i> ire	62.6	56.9	57.1	50.6	80
C5 body		83.5	80.3	77.0	68.9	105
C1 body		84.3	79.8	76.6	68.7	105
C2 body		82.0	79.9	77.9	71.9	105
L2 winding		75.0	69.5	69.9	61.9	120
CY1 body		76.3	78.0	76.0	74.2	125
T1 winding		89.8	91.5	89.9	87.3	110
T1 bobbin		79.8	78.9	79.4	75.2	110
PCB near T	1	77.2	78.6	77.8	76.4	130
C11 body		82.2	89.2	85.6	85.3	105
C12 body		64.7	70.0	65.3	68.4	105
L1 winding		71.5	77.2	73.1	76.6	120
Output lead	wire	62.8	70.1	64.2	70.9	90
Tc point		68.3	70.1	68.1	66.3	75
Plastic encl	osure near T1, inside	74.5	76.9	74.6	73.5	130
Plastic encl	osure near T1, outside	68.3	70.1	68.1	66.3	85
Support		42.4	42.0	43.5	42.3	90
Ambient		40.0	40.0	40.0	40.0	
		Abnorm	al conditio			
temperature	e (K/°C) of part			normal		
		90V/	60Hz	264	/50Hz	Limit



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Clause	Requirement + Test	Result - Remark	Verdict	

	Overload condition	on		
temperature (K/°C) of part	Abn	ormal		
	90V/50Hz/ Vertical	264V/50Hz/ Horizontal	l	_imit
Internal input wire	59.7	57.5		85
Transformer (T1) winding	96.4	94.4	175-1	10=165.0
Transformer (T1) core	84.4	80.1	175-1	10=165.0
Internal output wire	73.3	75.4		85
Plastic enclosure near T1 (external) (Tc)	73.8	73.1		105
Support	43.8	43.0		105
Ambient	40.0	40.0		
Due to test result of clause 14, the he Due to test result of clause 15.3, unit abnormal condition. Type reference	-		erred to	
		Equivalent load or LED mo	dule	
Mounting position of Iu	ıminaire:	On the black testing board		
	:	40°C		
- test : rated voltage	:	100V-240V		
- test : test voltage(no	rmal):	Input : $1.06U_R = 254.4 \text{ V}; I=0.058 \text{ A}$ P=7.01W Output: U=9.0V; I=0.66A; $1.06U_R = 106 \text{ V}; I=0.114\text{ A};$ P=7.14W Output: U=9.0V; I=0.66A	۹;	
- test : test voltage(ab	normal):	1. Double the LED modules equivalent load (connected parallel) 1.1U _R =264V; I= 0.013A; P=0.12W 2. Over load: 0.9U _R = 90V; I= 0.182A; P=10.7W; Output: U=8.26V; I= 0.985/ 1.1U _R = 264V; I= 0.081A; P=11.9W; Output: U=8.61V; I= 1.095/	in A;	

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Clause	Requirement + Test	Result - Remark	Verdict

temperature (K/°C) of part	106V	/60Hz	254.4	√50Hz	Limit
	Horizontal	Vertical	Horizontal	Vertical	
Plastic enclosure near plug pin holder, outside	44.4	45.4	49.5	49.3	75
Plastic enclosure near plug pin holder, inside	43.9	45.6	49.5	50.4	130
Input lead wire	57.8	59.2	65.9	64.4	80
C5 body	64.6	66.0	76.4	74.4	105
C1 body	65.9	68.3	81.2	80.4	105
C2 body	66.2	68.2	83.6	82.5	105
L2 winding	63.1	64.6	77.3	75.7	120
CY1 body	62.0	58.7	77.0	67.3	125
T1 winding	73.6	71.9	92.1	84.4	110
T1 bobbin	68.5	68.0	84.7	79.6	110
PCB near T1	66.0	62.8	84.6	74.0	130
C11 body	64.1	61.3	75.4	67.7	105
C12 body	55.8	53.0	65.7	57.6	105
L1 winding	56.9	54.4	66.3	59.0	120
Output lead wire	54.9	52.2	63.0	55.9	90
Tc point	56.4	52.7	68.6	57.8	75
Plastic enclosure near T1, inside	62.3	59.4	81.0	70.3	130
Plastic enclosure near T1, outside	56.4	52.7	68.6	57.8	85
Support	41.7	41.2	48.6	41.2	90
Ambient	40.0	40.0	40.0	40.0	
	Abnorm	nal condition	I		•
temperature (K/°C) of part			ormal		
	90V/	60Hz	264\/	/50Hz	Limit
	·				
	Overl	oad conditio			
temperature (K/°C) of part	00\//60U-	Abn / Horizontal	ormal	/ Horizontal	Limit
Internal input wire		7.0			85
Transformer (T1) winding		9.5	75.2		05 175-10=165.0
Transformer (T1) winding		2.5		5.0 5.6	175-10=165.0
Internal output wire		2.5 9.8		9.7	85

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		IEC 6	1347-2-13				
Clause	Requirement + Test			Result - Re	mark		Verdict
Plastic enclos (Tc)	sure near T1 (external)	57	7.6	57	7.0		105
Support		47	7.3	44	1.5		105
Ambient		40	0.0	40).0		
Due to test rea	normal heating result, Th sult of clause 14, the he sult of clause 15.3, unit dition.	ating result ca	an be referred	d to the normal	condition.		
	Type reference		:	RKPO-UK190)0315-D1		—
	Load used		:	Equivalent loa	ad or LED mo	dule	—
	Mounting position of lu	uminaire	:	On the black	testing board		—
	Та:			40°C			
	- test : rated voltage:			100V-240V			
	- test : test voltage(normal):				Input : 1.06U _R =254.4 V; I=0.056 A; P=7.01W Output: U=19.0V; I=0.315A; 1.06U _R =106 V; I=0.116A; P=7.33W Output: U=19.0V; I=0.315A		
- test : test voltage(abnormal):			1. Double the LED modules or equivalent load (connected in parallel) 1. $1U_R=264V$; I= 0.01A; P=0.12W 2. Over load: 0.9U_R= 90V; I= 0.144; P=8.6W; Output: U=18.63V; I= 0.365A; 1. $1U_R=264V$; I= 0.059A; P=8.34W; Output: U=18.66V; I= 0.375A				
Normal oper	ation						
temperature (K/°C) of part			/60Hz		/50Hz		Limit
		Horizontal	Vertical	Horizontal	Vertical		
Plastic enclos holder, outsid	sure near plug pin e	48.9	50.3	48.5	49.6	75	
Plastic enclos holder, inside	sure near plug pin	50.7	52.6	50.5	51.9		130
Input lead wire	9	66.5	67.6	58.4	59.5		80
C5 body		67.8	69.5	64.0	65.5		105
C1 body		73.8	76.2	68.4	70.4		105

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		IEC 6	51347-2-13					
Clause Requi	rement + Test			Result - Re	mark		Verdict	
C2 body		74.6	69.8	69.2	69.0		105	
L2 winding		70.5	73.6	65.8	68.3		120	
CY1 body		69.8	69.2	67.6	67.3		125	
T1 winding		79.2	80.0	76.1	77.0		110	
T1 bobbin		65.7	62.5	59.4	61.2		110	
PCB near T1		73.9	71.6	71.0	69.6		130	
C11 body		61.5	60.6	60.1	59.6		105	
Output lead wire		53.5	51.8	52.2	51.2		90	
Tc point		51.9	49.4	50.5	48.8		75	
Plastic enclosure nea	r T1, inside	55.5	52.8	53.9	52.1		130	
Plastic enclosure nea	r T1, outside	51.9	49.4	50.5	48.8		85	
Support		43.8	41.5	46.0	41.3		90	
Ambient		40.0	40.0	40.0	40.0			
		Abnorn	nal conditio	า		1		
temperature (K/°C) of	part		Abr	ormal				
		90V/60Hz		264\	/50Hz		Limit	
		Over	oad conditi	on				
temperature (K/°C) of	part			ormal		ļ		
			z/Vertical 264V/50Hz/Vertical			Limit		
Internal input wire		67.7		_	9.8	85		
Transformer (T1) wind	-	86.3			3.5	175-10=165.0		
Transformer (T1) core	9	78.2		76.7		175-10=165.0		
Internal output wire		5	53.7		54.2		85	
Plastic enclosure nea (Tc)	r T1 (external)	53.6		53.5		105		
Support		43.9		45.0			105	
Ambient		40.0		40.0				
According to normal h Due to test result of c Due to test result of c abnormal condition.	lause 14, the he	ating result c	an be referred	d to the norma	l condition.			
Type reference:			RKPO-UK2400250-D1					
	used			Equivalent load or LED module				
Mount	ting position of lu	minaire	:	On the black	testing board			
				40°C	0			

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Clause	Requirement + Test	Result - Remark	Verdict		

- test : rated voltage	- test : rated voltage				
- test : test voltage(no	rmal)	:	Input : 1.06UR =254 P=6.96W Output: U=24.0V; I=0 1.06UR =106 P=7.22W Output: U=24.0V; I=0	.25A; V; I=0.108A;	A;
test : test voltage(ab) Normal operation	1. Double the equivalent loa parallel) 1.1U _R =264V; P=0.12W 2. Over load: 0.9U _R = 90V; I P=10.07W; Output: U=23 1.1U _R = 264V; P=10.03W; Output: U=23	in 59A;			
temperature (K/°C) of part	106V	/60Hz	254.4	√50Hz	Limit
	Horizontal	Vertical	Horizontal	Vertical	
Plastic enclosure near plug pin holder, outside	45.2	45.8	46.6	47.3	75
Plastic enclosure near plug pin holder, inside	45.6	46.3	46.8	47.6	130
Input lead wire	66.0	62.5	58.6	56.7	80
C1 body	73.9	70.6	68.8	65.8	105
C2 body	76.5	73.9	72.8	70.6	105
L2 winding	68.5	63.1	64.0	59.8	120
C5 body	73.9	72.3	69.3	67.0	105
		70.8	68.3	69.4	125
CY1 body	69.3	70.0	00.0	00.4	
	69.3 64.8	69.2	64.4	68.3	105
CY1 body					105 110
CY1 body C11	64.8	69.2	64.4	68.3	
CY1 body C11 T1 winding	64.8 81.8	69.2 82.6	64.4 80.5	68.3 80.8	110

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Clause	Requirement + Test			Result - Re	Ilt - Remark			
Tc point		59.0	60.5	58.1	59.4		75	
Plastic enclo	osure near T1, inside	55.9	54.6	54.4	53.6		130	
Plastic enclo	osure near T1, outside	59.0	60.5	58.1	59.4		85	
Support		42.1	43.1	42.4	43.7		90	
Ambient	Ambient 40.0 40.0 40.0		40.0					
		Abnorm	al condition	1 1		•		
temperature	(K/°C) of part		Abr	ormal				
		90V/	60Hz	264\	/50Hz		Limit	
			-					
		Overl	oad conditi					
temperature	(K/°C) of part			ormal				
			z/Vertical		Iz/ Vertical		Limit	
Internal input wire		73.8			66.5		85	
	(T1) winding	95.8		95.8			10=165.0	
Transformer (T1) core		86.3		_	86.3		10=165.0	
Internal output wire		58	3.4	5	8.4		85	
Plastic enclo (Tc)	osure near T1 (external)	61.0		6	61.0		105	
Support		44.5		4	4.5		105	
Ambient		40	0.0	4	0.0			
Due to test r	o normal heating result, Tr result of clause 14, the he result of clause 15.3, unit prodition.	ating result ca	an be referred	d to the norma he heating res	l condition. ult can be refe			
Type reference			:	RKPO-UK0401500CD-1				
	Load used:			Equivalent load or LED module				
	Mounting position of luminaire			On the black testing board				
	Та:			40°C				
	- test : rated voltage:			100V-240V				
	- test : test voltage(normal):		: Input : $1.06U_R = 254.4 \text{ V}; I=0.068 \text{ A};$ P=8.74W Output: U=4.0V; I=1.50A; $1.06U_R = 106 \text{ V}; I=0.14\text{A};$ P=9.13W Output: U=4.0V; I=1.50A					



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		IEC 6	1347-2-13				
Clause	Requirement + Test			Result - Re	mark		Verdict
				1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; I= 0.012A; P=0.12W 2. Over load: $0.9U_R=90V$; I= 0.185A; P=11.0W; Output: U=3.83V; I= 1.839A; 1.1U_R= 264V; I= 0.081A; P=11.1W; Output: U=4.091V; I= 1.909A			
Normal operation			•				
temperature (ł	°C) of part</td <td></td> <td>/60Hz</td> <td></td> <td>√50Hz</td> <td></td> <td>Limit</td>		/60Hz		√50Hz		Limit
		Label up	Label down		Label down		
Power cord		63.9	60.0	62.9 58.7			105
Ambient		40.0	40.0				
		Abnorn	nal condition				
temperature (ł	°C) of part</td <td>0.01/</td> <td></td> <td colspan="3">264V50Hz</td> <td>Lingit</td>	0.01/		264V50Hz			Lingit
		900	/60Hz	204 V	/SUHZ	Limit	
			 load conditio				
temperature (ł	(IOC) of part	Oven		ormal			
temperature (r		90///60H-	z/ Label up				Limit
Power cord			3.2				105
							105
Ambient	normal heating result, Th		0.0			Ilbox	
Due to test res	sult of clause 14, the he sult of clause 15.3, unit a	ating result c	an be referred	to the norma	l condition.		
	Type reference		:	RKPO-UK09	00666CD-1		
	Load used		:	Equivalent loa	ad or LED mod	dule	
	Mounting position of Iu	minaire	:				
	Та		:	40°C	<u> </u>		
	- test : rated voltage			100V-240V			



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			61347-2-13		,	
Clause	Requirement + Test			Result - Re	mark	Verdict
- test : test voltage(normal):				Input : $1.06U_R = 254.$ P=7.01W Output: U=9.0V; I=0.6 $1.06U_R = 106$ P=7.14W Output: U=9.0V; I=0.6	V; I=0.114A;	s;
	- test : test voltage(abnormal):			1. Double the equivalent loa parallel) 1.1U _R =264V; P=0.12W 2. Over load: 0.9U _R = 90V; P=10.7W; Output: U=8.2 1.1U _R = 264V P=11.9W; Output: U=8.0	in V;	
Normal ope	ration					
temperature (K/°C) of part		106V/60Hz		254.4V50Hz		Limit
		Label up	Label down	Label up	Label down	
Power cord		58.4	56.0	58.9	56.2	105
Ambient		40.0	40.0	40.0	40.0	
		Abnorn	nal condition			
temperature	(K/°C) of part			normal		
		90V	/60Hz	264V50Hz		Limit
		Over	load condition			
temperature (K/°C) of part			Abr	ormal		L ine it
		-		264V/50Hz/ Label up		Limit
Power cord					6.9	105
Ambient					0.0	
Due to test re	normal heating result, Th esult of clause 14, the he esult of clause 15.3, unit ndition.	ating result c	an be referred	d to the norma	l condition.	
	Type reference		:	RKPO-UK19	00315CD-1	
	Load used		:	Equivalent loa	ad or LED mod	dule
	Mounting position of lu	minaire	:	On the black	testing board	



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Clause	Requirement + Test	Result - Remark	Verdict			

Та		::	40°C			
- test : rated voltage		:	100V-240V			
- test : test voltage(nor	$\begin{array}{l} \text{Input:} \\ 1.06U_{\text{R}} = 254. \\ \text{P=7.01W} \\ \text{Output:} \\ \text{U=19.0V; I=0} \\ 1.06U_{\text{R}} = 106 \\ \text{P=7.33W} \\ \text{Output:} \\ \text{U=19.0V; I=0} \end{array}$.315A; V; I=0.116A;				
				1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; I= 0.01A; P=0.12W 2. Over load: 0.9U _R = 90V; I= 0.144; P=8.6W; Output: U=18.63V; I= 0.365A; 1.1U _R = 264V; I= 0.059A; P=8.34W; Output: U=18.66V; I= 0.375A		
Normal operation	4001		054.4	(50)		,
temperature (K/°C) of part	Label up	/60Hz Label down		√50Hz Label down	Limit	
Power cord	54.2	50.3	52.4	49.4		105
Ambient	40.0	40.0	40.0	40.0		
	Abnorm	nal conditior	<u>ו</u>			
temperature (K/°C) of part		Abn	ormal			
	90V/	/60Hz	264	264V50Hz		_imit
				-		
	Over	load condition	on			
temperature (K/°C) of part			ormal			
	90V/60Hz	z/ Label up			L	₋imit
Power cord	5	0.5	·	-		105
Ambient	4	0.0		-		
According to normal heating result, Th		an be referred	d to the normal	condition.		
Due to test result of clause 14, the here Due to test result of clause 15.3, unit s abnormal condition.	shut down, no	o output, so t	ne neating res		ineu io	
Due to test result of clause 15.3, unit s			RKPO-UK24			



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Clause	Requirement + Test	Result - Remark	Verdict		
		•			

	Mounting position of lu	Mounting position of luminaire			On the black testing board		
	Та		:	40°C			
	- test : rated voltage		:	100V-240V	_		
	1. P O U 1. P O			Input : 1.06UR =254 P=6.96W Output: U=24.0V; I=0 1.06UR =106 P=7.22W Output: U=24.0V; I=0	A; —		
	- test : test voltage(abnormal):			1. Double the equivalent loa parallel) 1.1U _R =264V; P=0.12W 2. Over load: $0.9U_R=90V; I$ P=10.07W; Output: U=23 1.1U _R =264V; P=10.03W; Output: U=23	in 9A;		
Normal opera		(00)	(00)	0.54 (1)	(=0)		
temperature (ł	°C) of part</td <td></td> <td>/60Hz</td> <td></td> <td>√50Hz</td> <td>Limit</td>		/60Hz		√50Hz	Limit	
Power cord		Label up 54.2	Label down 50.3	Label up 52.4	Label down 49.4	105	
Ambient		40.0	40.0	52.4 40.0	49.4		
			nal condition		- 1 0.0		
temperature (k	⟨/°C) of part			normal			
1	90V/60Hz		264V50Hz		Limit		
		Overl	oad conditio	on			
temperature (K/°C) of part			Abn	ormal			
90V/60Hz/ Label u		z/ Label up	264V/50Hz/ Vertical		Limit		
Power cord		57.1		-		105	
Power cord		5	1.1			100	



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Clause	Requirement + Test	Result - Remark	Verdict		

According to norma	I heating result, The overload heating performed at Label up condition will be worse.
Due to test result of	clause 14, the heating result can be referred to the normal condition.
Due to test result of abnormal condition	clause 15.3, unit shut down, no output, so the heating result can be referred to

abriornal condition.							
Type reference		:	RKP-UK0401		—		
Load used		I	Equivalent load or LED module				
Mounting position of lu	uminaire	:	On the black testing board				
Та		:	40°C				
- test : rated voltage	- test : rated voltage						
- test : test voltage(no	- test : test voltage(normal): I 1 1 1 1 1 1 1 1 1 1			Input : $1.06U_R = 254.4 \text{ V}; I=0.068 \text{ A};$ P=8.74W Output: U=4.0V; I=1.50A; $1.06U_R = 106 \text{ V}; I=0.14\text{A};$ P=9.13W Output: U=4.0V; I=1.50A			
				1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; \models 0.012A; P=0.12W 2. Over load: 0.9U _R = 90V; \models 0.185A; P=11.0W; Output: U=3.83V; \models 1.839A; 1.1U _R = 264V; \models 0.081A; P=11.1W; Output: U=4.091V; \models 1.909A			
Normal operation temperature (K/°C) of part	106\/	/60Hz	254 4	V50Hz		Limit	
	Horizontal	Vertical	Horizontal	Vertical			
Plastic enclosure near plug pin holder, outside	48.0	48.1	49.8	49.3		75	
Plastic enclosure near plug pin holder, inside	51.5	51.5	53.4	52.9	130		
Input lead wire	78.9	73.4	80.5	74.0		80	
C5 body	91.7	87.5	94.1	89.1		105	
C1 body	86.6	84.5	87.0	84.5		105	
C2 body	93.8	95.7	93.4	94.9		105	
L2 winding	86.4	84.7	86.0	84.1		120	

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Clause Requirement + T	est		Result - Re	mark		Verdict	
CY1 body	93.2	99.5	92.3	98.3		125	
T1 winding	102.1	107.2	102.9	108.1		110	
T1 bobbin	102.1	107.2		107.1		110	
			102.0				
PCB near T1	106.4	113.0	106.0	113.2		130	
C11 body	100.1	105.0	100.8	105.8		110	
C12 body	80.2	84.0	79.2	82.8		105	
L1 winding	83.4	87.3	83.4	87.0		120	
Output lead wire	84.0	88.1	83.3	87.1		90	
Tc point	77.1	80.7	70.9	74.2		81	
Plastic enclosure near T1, inside		89.8	82.9	86.7		130	
Plastic enclosure near T1, outsic	le 54.4	55.7	57.0	58.2		85	
Support	46.7	46.7	48.3	48.0		90	
Ambient	40.0	40.0	40.0	40.0			
	Abnorn	nal conditio					
temperature (K/°C) of part			normal				
	90V	90V/60Hz		264V50Hz		Limit	
	Over	load condit					
temperature (K/°C) of part			normal			,	
				264V/60Hz/ Vertical		Limit	
Internal input wire				71.3		85	
Transformer (T1) winding				108.9		175-10=165.0	
Internal output wire				2.1	105		
Plastic enclosure near T1 (external)(Tc)				80.0		105	
Support				46.6		105	
Ambient				40.0			
According to normal heating rest Due to test result of clause 14, th Due to test result of clause 15.3, abnormal condition.	he heating result c	an be referre	ed to the norma	l condition.			
Type reference:			RKP-UK0900666DP-1				
Load used			Equivalent load or LED module				
Mounting position of luminaire:							
Та		:	40°C	Ű			
- test : rated volta		:	100V-240V				
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	IEC 6	1347-2-13					
Clause Requirement + Test	Requirement + Test			Result - Remark			
- test : test voltage(no	ormal)	$\label{eq:response} \begin{array}{l} \text{Input:} \\ 1.06U_{\text{R}} = 254. \\ \text{P=7.01W} \\ \text{Output:} \\ \text{U=9.0V; I=0.0} \\ 1.06U_{\text{R}} = 106 \\ \text{P=7.14W} \\ \text{Output:} \\ \text{U=9.0V; I=0.0} \end{array}$	A; —				
- test : test voltage(al	- test : test voltage(abnormal):				A;		
Normal operation					·		
temperature (K/°C) of part		/60Hz		V50Hz	Limit		
	Horizontal	Vertical	Horizontal	Vertical			
Plastic enclosure near plug pin holder, outside	44.9	46.5	48.2	47.8	75		
Plastic enclosure near plug pin holder, inside	49.2	50.8	52.7	52.5	130		
Input lead wire	63.0	60.1	65.1	60.4	80		
C5 body	82.6	80.8	83.9	80.5	105		
C1 body	76.7	74.2	79.1	74.9	105		
C2 body	81.7	82.0	85.0	83.9	105		
L2 winding	76.4	73.7	78.9	74.5	120		
CY1 body	78.2	82.6	81.6	84.7	125		
T1 winding	83.4	86.0	86.0	86.8	110		
T1 bobbin	88.6	93.1	90.9	94.1	110		
PCB near T1	76.7	80.5	77.9	79.9	130		
C11 body	81.2	87.9	82.8	88.3	105		
C12 body	65.9	69.8	69.1	71.7	105		
L1 winding	72.3	77.2	74.9	78.5	120		
Output lead wire	56.7	60.3	59.5	61.7	90		

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Clause	Requirement + Test			Result - Re	mark		Verdict
Tc point		61.3 63.3		59.8	61.6		81
Plastic enc	losure near T1, inside	56.5	58.7	60.6	61.5		130
Plastic enc	losure near T1, outside	50.9	53.1	54.7	55.6		85
Support		43.7	45.1	46.8	46.5		90
Ambient		40.0	40.0	40.0	40.0		
		Abnorm	alcondition	1			
temperature	e (K/°C) of part		Abr	ormal			
		90V/	60Hz	264\	/50Hz	L	.imit
		-					
		Overl	oad conditi				
temperature	e (K/°C) of part		Abr	ormal			
					lz/Vertical		.imit
Internal inp					6.3	85	
Transforme	er (T1) winding	-		8	86.1		0=165.0
Internal out				57.2			105
Plastic enc (external)(T	losure near T1 [[] c)			58.2		105	
Support				43.5		105	
Ambient				40.0			
Due to test	to normal heating result, Tr result of clause 14, the he result of clause 15.3, unit ondition.	ating result ca	an be referred	d to the norma	l condition.		
	Type reference		:	RKP-UK1900	315DP-1		
	Load used						
	Mounting position of lu	minaire	:	On the black testing board			
	Та		:	40°C			
	- test : rated voltage:			100V-240V			
	- test : test voltage(normal)		:	Input : 1.06U _R =254. P=7.01W Output: U=19.0V; I=0 1.06U _R =106	.315A;	Ą;	
	- test : test voltage(abi			P=7.33W Output: U=19.0V; I=0 1. Double the		sor	
				equivalent loa			

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Clause Requirement + Tes	t	Result - Remark			Verdict
			2. Over load: 0.9U _R = 90V; I Output: U=18 1.1U _R = 264V; P=8.34W;	I= 0.01A; P=0. = 0.144; P=8.6 .63V; I= 0.365A ; I= 0.059A; .66V; I= 0.375A	W; A;
Normal operation					
temperature (K/°C) of part		/60Hz	254.4		Limit
	Horizontal	Vertical	Horizontal	Vertical	
Plastic enclosure near plug pin holder, outside	47.4	47.8	48.4	48.9	75
Plastic enclosure near plug pin holder, inside	50.5	49.7	51.6	50.1	130
Input lead wire	67.8	58.0	70.2	60.1	80
C5 body	87.1	74.9	87.7	73.9	105
C1 body	84.1	74.2	88.1	76.2	105
C2 body	84.8	72.7	86.9	73.0	105
L2 winding	76.9	66.9	80.9	68.9	120
CY1 body	78.6	73.5	81.4	75.2	125
T1 winding	87.5	81.9	89.0	82.0	110
T1 bobbin	88.8	83.5	90.7	83.1	110
PCB near T1	81.2	77.3	81.2	76.5	130
C11 body	74.4	71.3	74.9	71.0	105
Output lead wire	64.9	62.7	65.6	62.4	90
Tc point	70.1	66.4	68.1	63.8	81
Plastic enclosure near T1, inside	79.6	74.8	78.7	73.1	130
Plastic enclosure near T1, outside	54.4	51.8	57.9	54.2	85
Support	47.3	47.7	48.4	48.2	90
Ambient	40.0	40.0	40.0	40.0	
	Abnorm	nal condition		_	
temperature (K/°C) of part	0.014		normal		1.1.14
	907/	'60Hz	264V	/50Hz	Limit
-		 oad conditio	 on	-	
temperature (K/°C) of part	Oven		ormal		
		-	264V/50Hz	Limit	



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Clause Requirement + Test			Result - Re	mark		Verdict
						0.5
Internal input wire			62.3			85
Transformer (T1) winding				7.5	175-	10=165.0
Internal output wire			64	1.4		105
Plastic enclosure near T1 (external)(Tc)		-	6	5.7		105
Support			48	3.6		105
Ambient			40	0.0		
According to normal heating result, T Due to test result of clause 14, the he Due to test result of clause 15.3, unit abnormal condition.	eating result ca shut down, no	an be referred o output, so th	to the normal he heating res	condition. ult can be refe		
Type reference			RKP-UK2400			
Load used			Equivalent loa		dule	
Mounting position of lu			- 5			
Та			40°C			
- test : rated voltage		:	100V-240V			
- test : test voltage(no	- test : test voltage(normal):			 Input : 1.06UR =254.4 V; I=0.058 A; P=6.96W Output: U=24.0V; I=0.25A; 1.06UR =106 V; I=0.108A; P=7.22W Output: U=24.0V; I=0.25A 		
- test : test voltage(abnormal)			: 1. Double the LED modules or equivalent load (connected in parallel) 1.1U _R =264V; I= 0.017A; P=0.12W 2. Over load: 0.9U _R = 90V; I= 0.173A; P=10.07W; Output: U=23.256V; I= 0.359A; 1.1U _R = 264V; I= 0.073A; P=10.03W; Output: U=23.781V; I= 0.37A			
Normal operation		(00)		(50)		
temperature (K/°C) of part		/60Hz	√50Hz		Limit	
	Horizontal	Vertical	Horizontal	Vertical		



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Clause Requirement + Test			Result - Re	mark	Verdict
Plastic enclosure near plug pin	46.4	46.5	47.1	47.8	75
holder, outside	40.4	40.5	47.1	47.0	
Plastic enclosure near plug pin holder, inside	48.6	47.2	49.5	48.6	130
Input lead wire	67.8	58.0	69.4	60.1	80
C5 body	87.2	70.2	88.1	71.8	105
C1 body	84.7	69.5	87.1	72.3	105
C2 body	86.1	72.3	89.5	76.4	105
L2 winding	78.4	65.6	81.7	69.1	120
CY1 body	78.6	70.5	81.2	74.3	125
T1 winding	90.2	74.6	84.6	77.4	110
T1 bobbin	83.1	80.2	92.0	83.0	110
PCB near T1	78.5	71.1	78.6	72.9	130
C11 body	71.2	65.8	71.7	67.7	105
Output lead wire	64.6	60.2	65.0	61.8	90
Tc point	62.7	57.6	62.4	58.7	81
Plastic enclosure near T1, inside	81.2	71.7	78.4	71.2	130
Plastic enclosure near T1, outside	53.6	50.9	54.6	52.2	85
Support	45.0	45.2	46.0	46.4	90
Ambient	40.0	40.0	40.0	40.0	
	Abnorn	nal condition			
temperature (K/°C) of part		Abno	ormal		
	90V/	/60Hz	264\	/50Hz	Limit
	Over	oad conditio			
temperature (K/°C) of part			ormal	/ Horizoptal	Limit
Internel input wire			264V/50Hz/ Horizontal		85
Internal input wire			70.4		<u> </u>
Transformer (T1) winding			103.6		175-10=165.0
Internal output wire			70.7		105
Plastic enclosure near T1 (external)(Tc)			67.7		105
Support			48.0		105
Ambient			40	0.0	-

Г



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		IEC 61347-2-13		
Clause	Requirement + Test		Result - Remark	Verdict
<u></u>			•	

According to normal heating result, The overload heating performed at Horizontal condition will be worse. Due to test result of clause 14, the heating result can be referred to the normal condition. Due to test result of clause 15.3, unit shut down, no output, so the heating result can be referred to abnormal condition.



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Clause	Requirement + Test		Result - Remark	Verdict

ANNEX: Testing according to IEC 60598-1:2014, EN 60598-1:2015	

Р

4	CONSTRUCTION		Р
4.13	Mechanical strength		Р
4.13.1	Impact tests:		Р
	- fragile parts; energy (Nm)		N/A
	- other parts; energy (Nm)	0.5 Nm	Р
	1) live parts		Р
	2) linings		Р
	3) protection		Р
	4) covers		Р
4.14.6	Strain on socket-outlets	For models RKPO- zzxxxyyy: Max. 0.05N.m < 0.25N.m For model RKPO- zzxxxyyy-D2: Max.0.061 N.m < 0.25 N.m For models RKPO- zzxxxyyy-D1: Max.0.054 N.m < 0.25 N.m For models RKP- UKxxxyyyDP-5: Max. 0.05N.m < 0.25N.m For models RKPO- zzxxyyyDP-2: Max. 0.03 N.m < 0.25 N.m For model RKPO- zzxxxyyyDP-2A: Max.0.05 N.m < 0.25 N.m For models RKP- zzxxxyyyDP-2: Max. 0.04N.m < 0.25N.m For models RKP- zzxxxyyyDP-2: Max. 0.04N.m < 0.25N.m	Ρ

5	EXTERNAL AND INTERNAL WIRING	
5.2	Supply connection and external wiring	



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Clause	Requirement + Test	Result - Remark	Verdict	
5.2.1	Means of connection:	Direct plug-in type for models RKPO-zzxxxyyy, RKP-UKxxxyyyDP-5, RKPO-zzxxxyyyDP-2, RKPO-zzxxxyyyDP-2, RKPO-EUxxxyyyDP-2, RKPO-zzxxyyyDP-2, RKPO-zzxxyyyDP-2, RKPO-zzxxyyyDP-1. Desk top type with non- detachable power cord for models RKPO- zzxxxyyyCD-5, RKP- zzxxxyyyyCD-5, RKP0- zzxxxyyyyCD-2, RKP0- zzxxxyyyyCD-1.	Ρ	
	Outdoor luminaire has not PVC insulated external wiring if not class III or SELV ≤ 25 V a.c./60 V d.c. or protected from outdoor environment	For models RKPO-	Р	
	Connecting leads (EN)		N/A	
	- without a means for connection to the supply		N/A	
	- terminal block specified		N/A	
	- relevant information provided		N/A	
	- compliance with 4.6, 4.7.1, 4.7.2, 4.10.1, 11.2, 12 and 13.2 of Part 1		N/A	
5.2.2	Type of cable:	Type Z for output cord (for models RKP- UKxxxyyyyDP-5, RKP- zzxxxyyyyDP-5, RKP- zzxxxyyyyDP-2, RKP- zzxxxyyyyDP-1); Type Z for input power cord (for models RKPO- zzxxxyyyyCD-5, RKP- zzxxxyyyyCD-5, RKPO- zzxxxyyyyCD-2, RKPO- zzxxxyyyyCD-1)	Ρ	
	Nominal cross-sectional area (mm ²)	See Annex 1 for details.	Р	
	Cables equal to IEC 60227 or IEC 60245	See Annex 1 for details.	Р	
	Cables equal to EN 50525 (EN)	See Annex 1 for details.	Р	
	Replace table 5.1 – Supply cord (EN)	See Annex 1 for details.	Р	
5.2.3	Type of attachment, X, Y or Z		N/A	
5.2.5	Type Z not connected to screws		N/A	

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Clause	Requirement + Test	Result - Remark	Verdict
500			1
5.2.6	Cable entries:	1	
	- suitable for introduction		P
	- adequate degree of protection		Р
5.2.7	Cable entries through rigid material have rounded edges		Р
5.2.8	Insulating bushings:		—
	- suitably fixed		Р
	- material in bushings		Р
	- material not likely to deteriorate		Р
	- tubes or guards made of insulating material		Р
5.2.9	Locking of screwed bushings	No such bushings.	N/A
5.2.10	Cord anchorage:	·	
	- covering protected from abrasion		Р
	- clear how to be effective		Р
	- no mechanical or thermal stress		Р
	- no tying of cables into knots etc.		Р
	- insulating material or lining		Р
5.2.10.1	Cord anchorage for type X attachment:		
	a) at least one part fixed		N/A
	b) types of cable		N/A
	c) no damaging of the cable		N/A
	d) whole cable can be mounted		N/A
	e) no touching of clamping screws		N/A
	f) metal screw not directly on cable		N/A
	g) replacement without special tool		N/A
	Glands not used as anchorage		N/A
	Labyrinth type anchorages		N/A
5.2.10.2	Adequate cord anchorage for type Y and type Z attachment	See below	Р
5.2.10.3	Tests:	•	N/A
	- impossible to push cable; unsafe	Compliance checked.	Р
	- pull test: 25 times; pull (N)	Max. 60N for non- detachable output cable. Max. 60N for non- detachable input power cord.	P



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Clause	Requirement + Test	Result - Remark	Verdict		
	- torque test: torque (Nm):	Max. 0.15Nm for non- detachable output cable.	Р		
		Max. 0.25Nm for non- detachable input power cord.			
	- displacement \leq 2 mm	0mm for non-detachable output cable.	Р		
		0.2mm for non-detachable input power cord			
	- no movement of conductors	Compliance checked.	Р		
	- no damage of cable or cord	Compliance checked.	Р		
5.2.11	External wiring passing into luminaire		N/A		
5.2.12	Looping-in terminals		N/A		
5.2.13	Wire ends not tinned		N/A		
	Wire ends tinned: no cold flow		N/A		
5.2.14	Mains plug same protection		Р		
	Class III luminaire plug		N/A		
5.2.16	Appliance inlets (IEC 60320)		N/A		
	Appliance couplers of class II type		N/A		
5.2.17	No standardized interconnecting cables properly assembled		N/A		
5.2.18	Used plug in accordance with	•	Р		
	- IEC 60083		N/A		
	- other standard	See Annex 1.	Р		

8	PROTECTION AGAINST ELECTRIC SHOCK	Р
8.2.1	Live parts not accessible	Р
	Basic insulated parts not used on the outer surface without appropriate protection	Р
	Basic insulated parts not accessible with standard test finger on portable, settable and adjustable luminaires	Ρ
	Basic insulated parts not accessible with \emptyset 50 mm probe from outside, other types of luminaires	N/A
	Lamp and starterholders in portable and adjustable luminaires comply with double or reinforced insulation requirements	N/A
	Basic insulation only accessible under lamp or starter replacement	N/A



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Clause	Requirement + Test	Result - Remark	Verdict

	Protection in any position	Р	
	Double-ended tungsten filament lamp	N/A	
	Insulation lacquer not reliable	Р	
	Double-ended high pressure discharge lamp	N/A	
	Relevant warning according to 3.2.18 fitted to the luminaire	N/A	
8.2.2	Portable luminaire adjusted in most unfavourable position	Р	
8.2.3.a	Class II luminaire:	Р	
	- basic insulated metal parts not accessible during starter or lamp replacement	N/A	
	- basic insulation not accessible other than during starter or lamp replacement	Р	
	- glass protective shields not used as No such part supplementary insulation	N/A	
8.2.3.b	BC lampholder of metal in class I luminaires shall be earthed	N/A	
8.2.3.c	SELV circuits with exposed current carrying parts:	N/A	
	Ordinary luminaire:		
	- touch current	N/A	
	- no-load voltage	N/A	
	Other than ordinary luminaire:	N/A	
	- nominal voltage	N/A	
8.2.4	Portable luminaire have protection independent of supporting surface	Р	
8.2.5	Compliance with the standard test finger or relevant probe	Р	
8.2.6	Covers reliably secured	Р	
8.2.7	Discharging of capacitors $\geq 0,5~\mu F$	N/A	
	Portable plug connected luminaire with capacitor	N/A	
	Other plug connected luminaire with capacitor	N/A	
	Discharge device on or within capacitor	N/A	
	Discharge device mounted separately	N/A	

9	RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE		Р
9.2.0	Tests for ingress of dust, solid objects and moisture:		Р
	- classification according to IP	See Table A of page 13.	Р



Attachment 1 Report No.: 50226014 001 Page 1 of 6 IEC 60529:1989+A1:1999+A2:2013 Clause Requirement - Test Result - Remark Verdict 5 Degrees of protection against access to hazardous parts and against solid foreign Ρ objects indicated by the first characteristic numeral 5.1 Protection against access to hazardous parts Ρ Ρ First characteristic numeral: 4 for models RKPO-EUxxxyyyy, RKPO-EUxxxyyyy-D2, RKPO-EUxxxyyyy-DP-2, RKPO-EUxxxyyyy-DP-2A, RKPO-EUxxxyyyy-D1; 6 for models RKPOzzxxxyyyyCD-5, RKPOzzxxxyyyyCD-2, RKPOzzxxxyyyyCD-1 Ρ Test conditions according to sub-clause 12.2 Ρ Compliance checked 5.2 Protection against solid foreign objects Ρ Ρ First characteristic numeral: 4 for models RKPO-EUxxxyyyy, RKPO-EUxxxyyyy-D2, RKPO-EUxxxyyyy-DP-2, RKPO-EUxxxyyyy-DP-2A, RKPO-EUxxxyyyy-D1; 6 for models RKPOzzxxxyyyyCD-5, RKPOzzxxxyyyyCD-2, RKPOzzxxxyyyyCD-1 Ρ Test conditions according to sub-clause 13.2 or 13.4 or 13.5 Ρ Compliance checked

6	Degrees of protection against ingress of water indicated by the second characteristic numeral		Р
	Second characteristic numeral :	4 for models RKPO- EUxxxyyyy, RKPO-EUxxxyyy- D2, RKPO-EUxxxyyyy-DP-2, RKPO-EUxxxyyyy-DP-2A, RKPO-EUxxxyyyy-D1;	Ρ
		8 for models RKPO- zzxxxyyyyCD-5, RKPO- zzxxxyyyyCD-2, RKPO- zzxxxyyyyCD-1	
	Test conditions according to sub-clause 14.2.1 to 14.2.9 as applicable	Details see clause 14.2.4	Р
	Compliance checked	The water did not enter the inside of the equipment and Hi- pot test after the test is passed. No harmful effects.	Ρ

7	Degrees of protection against access to hazardous parts indicated by the additional letter		N/A
	Additional letter:	No Additional Protection Letter	N/A



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Clause	e Requirement – Test Result – Remark		Verdict	
	Test conditions according to s	ub-clause 15.2	No Additional Protection Letter	N/A
	Compliance checked		No Additional Protection Letter	N/A

8	Supplementary letters		N/A
	Additional supplementary letter : No Additional Protection Letter		N/A
	Test conditions according to sub-clause 15.2	No Additional Protection Letter	N/A
	Compliance checked	No Additional Protection Letter	N/A

9	IP code designations	IP44 for models RKPO- EUxxxyyyy, RKPO-EUxxxyyy- D2, RKPO-EUxxxyyyy-DP-2, RKPO-EUxxxyyyy-DP-2A, RKPO-EUxxxyyyy-D1;	Р
		IP68 for models RKPO- zzxxxyyyyCD-5, RKPO- zzxxxyyyyCD-2, RKPO- zzxxxyyyyCD-1	

10	Marking		Р
	Specified in relevant product standards	See copy of marking plate.	Р
	Such standard also specify the method of marking which is to be used when		N/A
	-one part of an enclosure has a different degree of protection to that of another part of the same enclosure		N/A
	-the mounting position has an influence on the degree of protection		N/A
	-the maximum immersion depth and time are indicated	1.2 meter for models RKPO- zzxxxyyyyCD-5, RKPO- zzxxxyyyyCD-2, RKPO- zzxxxyyyyCD-1	Р

11	General requirements for tests		Р
11.1	Atmospheric conditions for water or dust tests		Р
	-temperature	23°C	Р
	-relative humidity	52%	
	-air pressure	860mbar to 1060mbar	Р
11.2	Test samples		
	-number of samples tested	1 sample	Р
	-conditions for mounting, assembling and positioning of the samples	The sample was assembled as normal use.	Р
	-pre-conditioning, if any	None	N/A
	-tested energized or not	Not energized	Р
	-tested in motion or not	None	N/A



Attachment 1 Page 3 of 6 Report No.: 50226014 001 IEC 60529:1989+A1:1999+A2:2013 Clause Requirement - Test Result - Remark Verdict The manufacturer's instructions shall apply in the Enclosure will meet the Ρ absence of such specifications requirements of IP44 for models RKPO-EUxxxyyyy, RKPO-EUxxxyyyy-D2, RKPO-EUxxxyyyy-DP-2, RKPO-EUxxxyyyy-DP-2A, RKPO-EUxxxyyyy-D1; Enclosure will meet the requirements of IP68 for models RKPO-zzxxxyyyyCD-5, RKPO-zzxxxyyyyCD-2, RKPOzzxxxyyyyCD-1. 11.3 Application of test requirements and interpretation N/A of test results -responsibility of the relevant technical committee N/A Ρ -in the absence of such specification the requirement of this standard shall apply 11.4 Combination of test conditions for the first Ρ characteristic numeral First characteristic numeral 4 for models RKPO-Ρ EUxxxyyyy, RKPO-EUxxxyyyy-D2, RKPO-EUxxxyyyy-DP-2, RKPO-EUxxxyyyy-DP-2A, RKPO-EUxxxyyyy-D1; 6 for models RKPOzzxxxyyyyCD-5, RKPOzzxxxyyyyCD-2, RKPOzzxxxyyyyCD-1 11.5 N/A Empty enclosures Detailed requirements shall be indicated by the N/A enclosure manufacturer in his instructions for the arrangement and spacing of hazardous parts or parts which might be affected by the penetration of foreign objects or water The manufacturer of the final assembly shall N/A ensure that after the electrical equipment is enclosed the enclosure meets the declared degree of protection of the final product 12 Tests for protection against access to hazardous parts indicated by the first Ρ characteristic numeral 12.1 Access probes according to Table VI are used Ρ 12.2 Ρ Test conditions as specified 12.3 Acceptance conditions See below clause 12.3.1 Ρ Adequate clearance is kept between access Ρ probe and hazardous parts Ρ 12.3.1 For low-voltage equipment The probe can not touch hazardous live parts Ρ The access probe shall not touch hazardous live parts 12.3.2 For high-voltage equipment N/A No such equipment



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Clause	Requirement – Test	Result – Remark	Verdict
	The equipment shall be capable of withstanding the dielectric tests as specified in the relevant product standard applicable to the equipment	None	N/A
	Where an enclosure includes sections at different voltage levels the appropriate acceptance conditions for adequate clearance shall be applied for section	None	N/A
12.3.3	For equipment with hazardous mechanical parts	None	N/A
	The access probe shall not touch hazardous mechanical parts	None	N/A
13	Tests for protection against solid foreign objects in characteristic numeral	ndicated by the first	Р
13.1	Test means and the main test conditions according to table VII are used	Dust chamber	Р
13.2	Test conditions for first characteristic numerals 1,2,3,4	First numerals: 4 for models RKPO- EUxxxyyyy, RKPO-EUxxxyyy- D2, RKPO-EUxxxyyyy-DP-2, RKPO-EUxxxyyyy-DP-2A, RKPO-EUxxxyyyy-D1	Ρ
	Object probe is pushed against any openings of the enclosure with the force specified in table VII		Р
13.3	Acceptance conditions for first characteristic numerals 1,2,3,4		Р
	The protection is satisfactory if the full diameter of the probe does not pass through any opening		Р
13.4	Dust test for first characteristic numerals 5& 6	First numerals: 6 for models RKPO- zzxxxyyyyCD-5, RKPO- zzxxxyyyyCD-2, RKPO- zzxxxyyyyCD-1	Ρ
	Tests are conducted as specified and classified according to its category 1 or 2		Р
	If it is impractical to test the complete enclosure in the test chamber, one of the following procedures shall be applied:		Р
	-testing of individually enclosed sections of the enclosure		Р
	-testing of representative parts of the enclosure, comprising components such as doors, ventilation openings, joints, shaft seals, etc., in position during test		Ρ
	-testing of a smaller enclosure having the same full-scale design details		Р
13.5	Special conditions for first characteristic numeral 5		N/A
13.5.1	Test conditions as specified		N/A



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Clause	Requirement – Test		Result – Remark	Verdict
13.5.2	Acceptance conditions			N/A
	The protection is satisfactor has not accumulated in a qu such that, as with any other interfere with the correct ope equipment or impair safety	iantity or location kind of dust, it could		N/A
	No dust shall deposit where tracking along the creepage			N/A
13.6	Special conditions for first cl 6	haracteristic numeral	First numerals: 6 for models RKPO- zzxxxyyyyCD-5, RKPO- zzxxxyyyyCD-2, RKPO- zzxxxyyyyCD-1	Р
13.6.1	Test conditions as specified			Р
13.6.2	Acceptance conditions			Р
	The protection is satisfactor is observable inside the enc the test			Р

14	Tests for protection against water indicated by the	e second characteristic numeral	Р
14.1, 14.2	Test means and test conditions are performed according to table VIII	IP44 for models RKPO- EUxxxyyyy, RKPO-EUxxxyyy- D2, RKPO-EUxxxyyyy-DP-2, RKPO-EUxxxyyyy-DP-2A, RKPO-EUxxxyyyy-D1;	Ρ
		IP68 for models RKPO- zzxxxyyyyCD-5, RKPO- zzxxxyyyyCD-2, RKPO- zzxxxyyyyCD-1	
14.2.1	Test for second characteristic numeral 1 with drip box	None	N/A
14.2.2	Test for second characteristic numeral 1 with drip box	None	N/A
14.2.3	Test for second characteristic numeral 3 with oscillating tube or spray nozzle	None	N/A
14.2.4	Test for second characteristic numeral 4 with oscillating tube or spray nozzle	4 for models RKPO- EUxxxyyyy, RKPO-EUxxxyyy- D2, RKPO-EUxxxyyyy-DP-2, RKPO-EUxxxyyyy-DP-2A, RKPO-EUxxxyyyy-D1	Ρ
14.2.5	Test for second characteristic numeral 5 with the 6.3mm nozzle	None	N/A
14.2.6	Test for second characteristic numeral 6 with the 12.5mm nozzle	None	N/A
14.2.7	Test for second characteristic numeral 7: Temporary immersion between 0.15m and 1m	None	N/A



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15	Test for protection against access to hazardous parts indicated by the additional letter		N/A
15.1	Access probes to hazardous parts according to table VI	No additional letter	N/A
15.2	Test conditions as specified	No additional letter	N/A
15.3	Acceptance conditions	No additional letter	N/A
	The protection is satisfactory if adequate clearance is kept between the access probe and hazardous parts	No additional letter	N/A

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Clause Requirement – Test Result – Remark Verdict					
Clause	Requirement – Test	Result – Remark	Verdict		
12	Construction of Plugs For models: RKPO-UKxxxyyyy, RKPO-UKxxxyyyy-D2, RKPO-UKxxxyyyy-D1				
12.1	The disposition of the pins shall be shown as figure 4.	The dispositions of the pins were shown as specified.	Ρ		
12.2	Pin and sleeve dimensions, body outline were checked according to figure 4 of BS1363: part 1.	The outline of the plug did not exceed the specified dimensions at a distance of 6.5mm from the engagement surface. (limit: >6.35mm)	Ρ		
		The measured dimensions of item shown in fig. 4 were found within the specified limits.			
	The plug portion should enter the gauge fully with a force less than 10N was applied to the centre of the sample at right angle.	Sample was entered into the gauge completely.	Ρ		
12.3	No part of a line or neutral pin shall be less than 9,5mm from the periphery of the plug measured along the engagement surface.10.15mm		Ρ		
12.9	Plug pins were constructed of brass	Complied.	Р		
12.9.1	Exposed surface of plug pins were smooth and free from burrs or sharp edges and other irregularities, which could cause damage or excessive wear to sockets or shutters.		Ρ		
12.9.4	The adaptor plug pins were tested as specified in the standard.	Complied. After being subjected to a force of 1100N for L, N pin, 400N for ISOD pin, the pin portion could fit the relevant gauge.	Ρ		
12.9.6	Each pin of the adaptor was subjected to a torque of 1Nm for 60s as specified in the standard.	Complied. After the test, the pin portion could fit the relevant gauge.	Ρ		
12.11	The adaptors were tested as specified in the standard. After being placed in an oven at 70°C for 1 hour, each pin of the samples was subjected for 60 sec. to a pull of 100N in the oven.Complied. After the above test, no plug pin was detached and the plug pins could fit the relevant gauge.		Ρ		
12.12	The degree of flexibility of mounting of the plug pins was checked according to 12.12.1Measured value: Max. 1° 21' (test on each sources of enclosure, max. value measured) (limit: Max. 3° 30').		Ρ		
12.16	Line and neutral plug pin shall be fitted with insulating sleeves. The dimensions of the pin and sleeve shall fall within the specific limit.	Complied. Both line and neutral pins were fitted with insulating sleeves.	Ρ		
12.17.1	Plug pin sleeve shall be compliance with 12.17.2 to 12.17.4	Complied.	Р		

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	Partially of BS 1363-1: part 1: 1995 + A4: 2012					
Clause	Requirement – Test	Result – Remark	Verdict			
12.17.2	Electric strength test applied between the metal part of plug pin and the sleeve $(1250\pm30V)$	Complied. No breakdown or flashover occurs.	Р			
12.17.3	Abrasion test for plug pin sleeve The plug pin sleeves were subjected to 20000 movements of abrasion as specified in the standard.	Complied. After the test, the sleeves showed no damage that impaired further use and could satisfy the electric strength test in 12.17. 2	Ρ			
12.17.4	The plug pins with sleeves were placed in a heating cabinet at 200°C and tested according to the standard for 120min. Arrange the test as Figure 10 of BS 1363-1.	After the test, the thickness of sleeves of plug pins (Line and neutral pins) remaining at the impression point reduced by max. 13.5% less than 50%.	Ρ			

Add	litional requirement for the solid insulated shutter	opening device (ISOD) accordi	ng to
	Clause 12 of BS 1363: part 1: 19	995 + A4: 2012	
12.2	Plug fitted with an ISOD shall comply with all the dimensions specified in Fig. 4a with exception of the width of the ISOD, which should be 4,05mm max. and 3,90mm min. and its height which should be 8,05mm max. and 7,75mm min.	See measured dimensions in Table 3	Ρ
12.9.4.3	Solid insulated opening device were tested as specified in the standard.	After being subjected to a forced of 400N, the pin could fit the relevant gauge.	Ρ
12.9.5.2	Plugs with ISOD shall not cause excessive wear to socket contacts or shutters of sockets-outlets The test use a separate sample of plug with ISOD for each type of socket-outlet, with each sample being inserted into and withdrawn from the socket-outlet at a rate of 6 insertions and 6 withdrawals per minute, the speed of travel of the plug being approximately 150mm/s	After 5000 insertions and withdrawals completed, socket outlets show no damage that would impair further use. Plugs show no damage and suit for the dimensional requirements according to clause 12.2. The shutters of the socket- outlets operate satisfactorily and socket contacts safety shielded.	Ρ
22.2	Resistance to heat		Р
	Ball pressure test according to BS EN 60695-10- 2:2003 on parts of insulation material necessary for the function or supporting parts of the plug.	Test performed on plug portion (including ISOD) for 125°C ball pressure test at the material of plug portion which maintains live part in position. Measured after 1 hour. max. 0.63mm measured after 1 hour. Limit: 2mm	Ρ

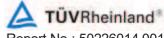
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	Partially of BS 1363-1: part 1: 1995 + A4: 2012					
Clause	Clause Requirement – Test Result – Remark					
23	23 Resistance of insulating material to abnormal heat and fire					
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on enclosure with: 650°C. All enclosure material have been considered.	Ρ			
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on plug portion (including ISOD) with: 750°C. All enclosure material have been considered.	Ρ			

Linear Dimens	ions (mm)	Measurement	Limit	
*A		24.85	25.370 max.	
*B		33.11	34.6 max.	
*C		Fit the testing gauge	15 min.	
D		10.15	9.5 min.	
*E	L -> E	11.13	11.05 - 11.18	
	N -> E	11.14		
*F	L-> E	22.34	22.10 - 22.36	
	N -> E	22.35		
G1		6.32	6.22 - 6.48	
G2		6.31	6.22 - 6.48	
Н		4.03	3.90 - 4.05	
*		22.61	22.23 - 23.23	
J		1.40	1.35 - 1.85	
К		7.97	7.80 - 8.05	7.75 - 8.05 For ISOD
	line	9.02	9.5 max.	
L	neutral	9.01		
N4	line	8.90	9.2 max.	
Μ	neutral	8.91		
	line	4.01	3.90 - 4.05	
N (sleeve)	neutral	4.02		
0	line	17.92	17.20 - 18.20	
0	neutral	17.93		
	Line	1.78	1.35 - 1.85	
Р	neutral	1.76		
	earth	1.41		
O(matal)	line	3.99	3.90 - 4.05	
Q (metal)	neutral	3.99		

BS 1363-1 a (Plug portion acceptance test)



Attachme	Attachment 2			Page 4 of 5		Report No	.: 50226014 001
	Partially of BS 1363-1: part 1: 1995 + A4: 2012						
Clause	Requ	iirement –	Test		Result – Rema	ırk	Verdict
		earth	4.02				
		Line	1.39		1.2 - 2	.0	
R	Γ	neutral	1.41				
	Γ	earth	1.85				
S		line	1.52		1.35 - 1	.85	
		neutral	1.73				

*Remark: all these dimensions were checked by the relevant gauge (based on BS1363: Part 1:1995 Figure 5)

<u>Angular Dimensions (°)</u>		Measu	<u>rement</u>	<u>Limits</u>	
θ1		61.0°		58° - 62°	
	line	65.0°		60° - 80°	
θ2	neutral	64.0°			
	earth	66.0°			
θ3	line	59°		58° - 62°	
	neutral	60°			

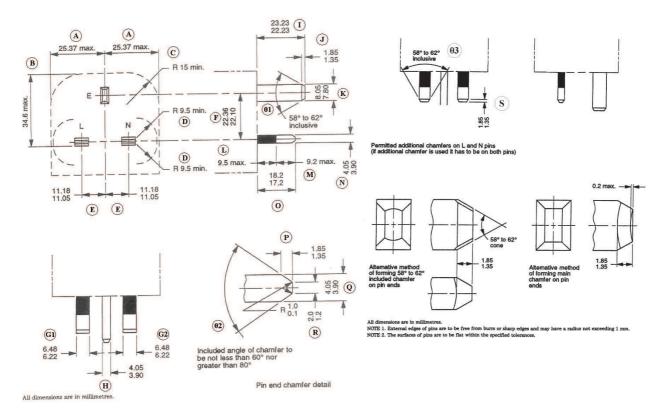


Figure 4a of BS 1363: Part 1

* Remark: all these dimensions were checked by the relevant gauge (based on BS1363: Part 1:1995 Figure 5)



Attachment	2 Page 5 of 5	Report No.	: 50226014 001
	Partially of BS 1363-1: part 1: 1	995 + A4: 2012	
Clause	Requirement – Test	Result – Remark	Verdict

Plug Portion Dimensions (Solid insulated shutter opening device ISOD)

Linear Dimensions (mm)		SAMPLE A	Limit
Т		8.00	7.75 - 8.05
U		4.01	3.90 - 4.05
V	E -> L	0.03	0.15 max
	E -> N	0.02	0.15 max
W	E -> top	0.03	0.15 max
	E -> L & N	0.03	0.15 max

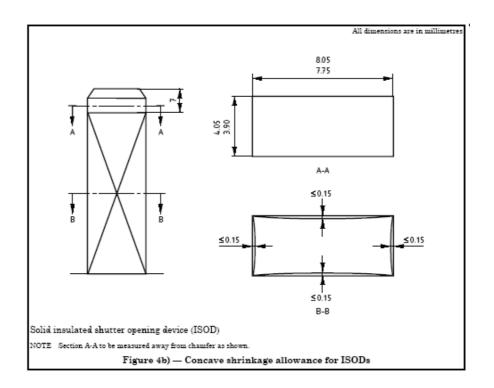


Figure 4b of BS 1363: Part 1



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TEST REPORT						
DIN VDE 0620-1						
Plugs and socket-o	Plugs and socket-outlets for household and similar purposes					
Pa	rt 1: General requirements					
Report reference No Tested by (printed name and signature) Approved by (printed name and	50226014 001 See cover page See cover page					
signature): Date of issue	See cover page					
Testing Laboratory Name:	See cover page					
Address:	See cover page					
Testing location	See cover page					
Applicant's Name:	See cover page					
Address	See cover page					
:						
Test specification						
Standard	DIN VDE 0620-2-1: 2013					
Test procedure	Bauartzeichen					
Procedure deviation:	N/A					
Non-standard test method:	N/A					
Test Report Form	Thistest-form is modified from DIN VDE 0620-1:2010 to DIN VDE 0620-2-1:2013					
Test Report Form No	-					
TRF originator:	-					
Master TRF	-					
Test item description:	-					
Type of accessory	DE plug of Adapter					
Trademark						
Model and/or type reference:						



Test item particulars		
Standard Sheet	DIN 49406 Teil 2 for Plug	
Rated current (A)	0.6	
Rated voltage (V)	250 a.c.	
Degree of protection against harmful ingress of water	ordinary / splash-proof (IPX4) / jet-proof (IPX5) (Plug portion)	
Provision for earthing	without earthing contact / with earting contact	
Method of connecting the cable	rewirable / non-rewirable	
Type of cable	N/A	
Nominal cross-sectional areas (mm ²):	N/A	
Type of terminals	N/A	
Type of connections	soldered / welded / crimped / other	
Socket-outlets:		
Degree of protection against electric shock:	normal protection / increased protection	
Existence of enclosures	unenclosed / enclosed	
Existence of shutters	without shuttors / with shuttors	
Method of application / mounting of the socket-outlet surface type / flush type / semi-flush type / panel architrave type / portable type / table-type (single floor recessed type / appliance type)		
Method of installation	Incorporated	
Plugs:		
Class of equipment:	Class II	
Test case verdicts		
Test case does not apply to the test object:	N/A	
Test item does meet the requirement	P(ass)	
Test item does not meet the requirement:	F(ail)	
Testing		
Date of receipt of test item	See cover page	
Date(s) of performance of test	See cover page	
General remarks This report shall not be reproduced except in full without the written approval of the testing laboratory. The test results presented in this report relate only to the item(s) tested. "(see remark #)" refers to a remark appended to the report. "(see Annex #)" refers to an annex appended to the report. Throughout this report a comma is used as the decimal separator.		



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DIN VDE 0620-2-1: 2013

CI.

Requirement – Test

Result

Verdict

8	MARKING		N/A	
	Requirements by law regarding marking of products	s have to be considered (GPSG)	N/A	
8.1	Accessories marked with:			
	- rated current (A):	0.6	N/A	
	- rated voltage (V):	250	N/A	
	- symbol for nature of supply:	AC	N/A	
	- manufacturer's or responsible vendor's name :		N/A	
	According to cl. 5 of GPSG		N/A	
	- type reference:		N/A	
	- symbol for degree of protection (first digit):		N/A	
	- symbol for degree of protection (second digit) :		N/A	
	- rated value and type of every replaceable fuse (if any)		N/A	
	- the length of insulation to be removed: :		N/A	
	- an indication of the suitability to accept rigid conductors only (if any):		N/A	
8.2	Symbols used: as required in the standard		N/A	
	Marking for the nature of supply placed next to the marking for rated current and rated voltage		N/A	
8.3	Marking of fixed socket-outlets placed on the main part:		N/A	
	- rated current, rated voltage and nature of supply		N/A	
	- identification mark of the manufacturer or of the responsible vendor		N/A	
	- length of insulation to be removed, if any		N/A	
	- type reference		N/A	
	Cover plates necessary for safety purposes and intended to be sold separately: marked with the manufacturer's or responsible vendor's name and type reference		N/A	
	Symbol for the degree of protection (second digit): marked on the outside of its associated enclosure so as to be easily discernible		N/A	
3.4	Plugs and portable socket-outlets: marking specified in 8.1, other than the type reference, easily discernible		N/A	
	Plugs and portable socket-outlets for equipment of class II not marked with the symbol for class II construction		N/A	
	Portable socket-outlets IPx4 marked with "Only IPX4"		N/A	
8.5	Neutral terminals: N:		N/A	
	Earthing terminals: [earth symbol]		N/A	



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CI.	Requirement – Test	Result	Verdict

9.1	Accessories and surface-type mounting boxes comply with the appropriate standard sheets	DIN 49406 Teli 2: 1981 Form R for plug part	Р
9	CHECKING OF DIMENSIONS	TRLP	P
8.10	For accessories to install the note acc. Annex E shall be marked on the smallest package unit		N/A
	d) Cord extension sets and multiple socket- outlets with power cord provided with information for which environment to be usable		N/A
	Do not plug in series		N/A
	c) Adaptors		N/A
	Only unplugged dead		N/A
	b) Portable multiple socket-outlets with switch		N/A
	Do not use covered		N/A
	Do not plug in series		N/A
	a) Portable multiple socket-outlets		N/A
3.9	Warnings:		N/A
	Not smaller then 3 mm and legible without magnification		N/A
3.8	Marking durable and easily legible. Test: 15 s with water and 15 s with petroleum spirit		N/A
	Additional indication for socket-outlets intended only for mounting on certain types of surface		N/A
3.7	Indication of which position or with which special provision the declared IP of flush-type and semi- flush type fixed socket-outlets is ensured		N/A
	Surface type socket-outlets with protection code IPX4 must be clearly marked to open the drain hole at the lowest position		N/A
3.6	Fixed socket-outlets other than ordinary: marked with the IP symbol visible when the accessory is installed		N/A
	- their physical dimension or relative location		N/A
	- their marking with graphical symbols according to IEC 147 or colours and/or alphanumeric system, or		N/A
	- indicated in a wiring diagram fixed to the accessory		N/A
	- clearly identified unless their purpose is self evident, or		N/A
	Terminals for conductors not forming part of the ma	in function of the socket-outlet:	N/A
	Markings not placed on screws or other easily removable parts		N/A



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CI.	Requirement – Test	Result	Verdict

	Insertion of plugs into fixed or portable socket- outlets ensured by their compliance with the relevant standard sheets		Ρ
	Compliance checked by measurement and by means of gauges with manufacturing tolerances as shown in table 2		Р
9.2	It shall not be possible to engage a plug with:		Р
	- a socket-outlet having a higher voltage rating or a lower current rating;		Р
	- a socket-outlet with a different number of live poles (exception admitted provided that no dangerous situation can arise);		Р
	- a socket-outlet with earthing contact (plug for class 0 equipment).		Р
	Engagement of a plug for class 0 or class I equipment with a socket-outlet designed to accept plugs for class II equipment, not possible		Р
	Impossibility of insertion checked by applying a gauge, for 1 min, with a force of:		
	- 150 N (rated current \leq 16A);		Р
	- 250 N (rated current > 16A)		N/A
	Accessories with elastomeric or thermoplastic material: test carried out at 35 $^\circ\text{C}\pm2^\circ\text{C}$		Р
9.3	Dimensions of plugs or socket-outlets as integral accessories (e.g. Timer, Plugs for Lawnmower, Adaptors,) must comply the dimension sheets and the requirements of this standard.		N/A
	Additionally parts affecting the dimensions are not allowed		N/A

10	PROTECTION AGAINST ELECTRIC SHOCK	VDE	Р
10.1	Socket-outlets: live parts not accessible		N/A
	Live parts of plugs: not accessible when the plug is in partial or complete engagement with a socket- outlet	Test on adaptor	Р
	Test with standard test finger shown in figure 2		Р
	Accessories with elastomeric or thermoplastic material: additional test carried out at 35 °C \pm 2 °C with a straight unjointed test finger (75 N for 1 min)		Р
	During the test: accessories not deform and no live parts accessible		Р
	Plugs and portable socket-outlets pressed with a force of 150 N for 5 min as shown in figure 22: specimens not show deformation		Р



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CI.	Requirement – Test	Result	Verdict
10.2	Accessible parts (with exception of small screws and the like for fixing bases and covers or cover plates): made of insulating material		Р
	Cover or cover plates of fixed socket-outlets: made of metal if the requirements of 10.2.1 or 10.2.2 are fulfilled		N/A
10.2.1	Metal covers or cover plates protected by supplementary insulation made by insulating linings or insulating barriers	No metal cover	N/A
	Insulating linings or insulating barriers cannot be removed without being permanently damaged		N/A
	Insulating linings or insulating barriers cannot be replaced in an incorrect position and, if they are omitted, accessories are rendered inoperable or manifestly incomplete		N/A
	There is no risk of accidental contact between live parts and metal covers or cover plates		N/A
10.2.2	Metal covers or cover plates automatically connected, through a low-resistance connection, to the earth during fixing		N/A
10.3	Connection between a pin of a plug and a live socket-contact of a socket-outlet not possible while any other pin is accessible		Р
	Compliance checked by manual test and by means of gauges with tolerances as specified in 9.1		Р
	Accessories with elastomeric or thermoplastic material: test carried out at 35 °C \pm 2 °C		Р
	Socket-outlets with enclosure or bodies of rubber or polyvinyl chloride: test carried out with a force of 75 N for 1 min		N/A
	Fixed socket-outlets provided with metal covers or cover plates: clearance of at least 2 mm required between a pin and a socket-contact when another pin(s) is(are) in contact with the metal covers or cover plates		N/A
10.4	External parts of plugs and portable socket-outlets made of insulating material		Р
	Overall dimensions of rings around pins not exceed 8 mm concentric with respect to the pin	No such rings	N/A
10.5	Shuttered socket-outlets: live parts not accessible, without a plug in engagement, with the gauge shown in figure 4		N/A
	Live contacts automatically screened when the plug is withdrawn		N/A



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DIN VDE 0620-2-1: 2013 Cl. Requirement – Test Result Verdict Means cannot easily be operated by anything N/A

	Means cannot easily be operated by anything other than a plug and not depend upon parts which are liable to be lost		N/A
	Gauge applied to the entry holes corresponding to live contacts with a force up to 1 N shall not touch live parts		N/A
	Accessories with elastomeric or thermoplastic material: test carried out at 35 °C \pm 2 °C		N/A
	Shutter do not constrain plugging. The force to open shutter do not exceed 30 N (tested by means of gauges 19a and 19b)		N/A
10.6	Earthing contacts of a socket-outlet designed that they cannot be deformed by the insertion of a plug		N/A
10.6.1	Gauge 14 inserted into the socket-outlet with a force of 150 N for 1 min.		—
	After this test: socket-outlet still comply with the requirements of clause 9		N/A
10.6.2	Sidely earthing contacts: Test acc. figure 43 at torque of 100 Ncm for 1 minute		N/A
	After this test it must be possible to insert gauge 4		N/A
10.7	Socket-outlet with increased protection: live parts not accessible		N/A
	Gauge of figure 4 applied with a force of 1 N on all accessible surfaces shall not touch live parts		N/A
	Accessories with elastomeric or thermoplastic material: test carried out at 35 °C \pm 2 °C		N/A

11	PROVISION FOR EARTHING	VDE	N/A
11.1	Earth connection made before the current-carrying contacts of the plug become live		N/A
	Current-carrying pins shall separate before the earth connection is broken		N/A
11.2	Earthing terminals of rewirable accessories comply with clause 12		N/A
	Earthing terminals of the same size as the corresponding terminals for the supply conductors		N/A
	Any additional external earthing terminals of fixed socket-outlets of size suitable for conductors of at least 6 mm ²		N/A
	Earthing terminals of rewirable accessories: internal		N/A
	Earthing terminals of fixed socket-outlets: fixed to the base or to a part reliably fixed to the base		N/A
	Earthing contacts of fixed socket-outlets:		N/A
	- fixed to the base, or		N/A



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CI. Requirement – Test Result Verdic	Verdict

	- fixed to the cover (reliably connected to the earthing terminals; contact pieces silver plated or with adequate protection)		N/A
	Parts of earthing circuit in one piece or reliably connected by riveting, welding, or the like		N/A
11.3	Accessible metal parts of fixed socket-outlets: permanently and reliably connected to the earthing terminal		N/A
11.4	Socket-outlets, other than ordinary, with enclosure of insulating material and more than one cable inlet, provided with an internal earthing terminal for the continuity of the earthing circuit, unless	No cable inlet	N/A
	earthing terminals allows the connection of an incoming and an outgoing earthing conductor together		N/A
11.5	Connection between earthing terminal and accessible metal parts: of low resistance		N/A
	Test:		N/A
	Test current equal to 1,5 times the rated current or 25 A (A):		—
	Resistance not exceed 0,05 Ω (Ω):		N/A

12	TERMINALS	TRLP	N/A
	All the test on terminals, with the exception of the test of 12.3 11, made after the test of clause 16		N/A
12.1	General		_
12.1.1	Rewirable fixed socket-outlets provided with screw-type terminals or with screwless terminals . :		N/A
	Rewirable plugs and portable socket-outlets provided with terminals with screw clamping :		N/A
	Pre-soldered flexible conductors used: pre- soldered area outside the squeezed area of screw- type terminals		N/A
	Clamping means of terminals: not serve to fix any other components		N/A
12.1.2	Non-rewirable accessories provided with soldered, welded, crimped or equally effective permanent connections	Depend on end appliance	N/A
	Screwed or snap-on connections not used	Not used	N/A
	Connections made by crimping a pre-soldered flexible conductor not permitted	No such conductor	N/A
12.2	Terminals with screw clamping for external copper	conductors	N/A
12.2.1	Accessories provided with terminals which allows the proper connection of copper conductors as shows in table 3		N/A



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DIN VDE 0620-2-1: 2013

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Requirement – Test

Result

Verdict

		1	
	Rated current (A); Type of accessories:		
	Type of conductor (rigid / flexible):		
	Smallest / largest cross-sectional area (mm ²):		
	Diameter of the largest conductor (mm) :		
	Figure of terminal		
	Minimum diameter D (minimum dimensions) of conductor space: required (mm); measured (mm) :		N/A
12.2.2	Terminals allow the conductor to be connected without special preparation		N/A
12.2.3	Terminals have adequate mechanical strength		N/A
	Screws and nut for clamping the conductors have metric ISO thread or a comparable thread		N/A
	Screws not of soft metal such as zinc or aluminium		N/A
12.2.4	Terminals resistant to corrosion		N/A
12.2.5	Screw-type terminals clamp the conductor(s) without undue damage		N/A
	Test with apparatus shown in figure 32:		—
	- type of conductors:	rigid solid / rigid stranded / flexible	—
	- number of conductors:		
	- smallest cross-sectional area (mm²) (table 3); diameter of bushing hole (mm); height H (mm); mass (kg):		N/A
	- largest cross-sectional area (mm²) (table 3); diameter of bushing hole (mm); height H (mm); mass (kg):		N/A
	- nominal diameter of thread (mm); torque according to table 6 (Nm):		—
	During the test: conductor not slip out, no break near clamping unit and no damage		N/A
12.2.6	Terminals clamp the conductor reliably between metal surfaces		N/A
	Pull test (1 min):		
	- type of conductors:		
	- number of conductors:		
	- smallest cross-sectional area (mm²) (table 3); pull (N):		N/A
	- largest cross-sectional area (mm²) (table 3); pull (N)		N/A
	- torque (Nm) (2/3 table 6) :		
	During the test: conductor not move noticeably		N/A



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DIN VDE 0620-2-1: 2013 CI. Requirement – Test Verdict Result Terminals designed or placed that the conductor 12.2.7 N/A cannot slip out while the clamping screws or nuts are tightened - largest cross-sectional area (mm²) (table 3) - number of wires and nominal diameter of wires (table 5): fixed socket-outlets: rigid solid conductors / rigid stranded conductors: plugs and portable socket-outlets: flexible conductors: - terminals intended for looping-in 2 or 3 conductors: permissible number of conductors : - torque (Nm) (2/3 table 6) After the test: no wire of the conductor escaped N/A outside the clamping unit Terminals not work loose from their fixing to 12.2.8 N/A accessories Torque test: - rigid solid copper conductor of the largest crosssectional area (mm²) (table 3): - torque (Nm) (table 6 or appropriate figures 34, 35, 36)..... Screws and nuts tightened and loosened 5 times. N/A During the test: terminals not work loose and show no damage Clamping screws or nuts of earthing terminals: 12.2.9 N/A adequately locked against accidental loosening, not possible to loosen them without the aid of a tool 12.2.10 Earthing terminals: no risk of corrosion N/A Body of brass or other metal no less resistant to N/A corrosion If the body is a part of a frame or enclosure of N/A aluminium alloy, precautions shall be taken to avoid the risk of corrosion Pillar terminals: distance *g* no less than the value 12.2.11 N/A specified in figure 34: required (mm); measured (mm) : Mantle terminals: distance q no less than the value N/A specified in figure 37: required (mm); measured (mm) 12.3 Screwless terminals for external copper conductors 12.3.1 Screwless terminals of the type suitable for: - for rigid copper conductors only, or N/A



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CI.	Requirement – Test	Result	Verdict
	- for both rigid and flexible copper conductors (tests carried out with rigid and then repeated with flexible conductors)		N/A
12.3.2	Screwless terminals provided with two clamping units each allowing the proper connection of rigid or of rigid and flexible conductors having nominal cross-sectional areas from 1,5 up to 2,5 mm ² (table 7)		N/A
	Two conductors to be connected: each conductor introduced in a separate clamping unit		N/A
12.3.3	Screwless terminals allow the conductor to be connected without special preparation		N/A
12.3.4	Parts of screwless terminals intended for carrying current of materials as specified in 26.5		N/A
12.3.5	Screwless terminals clamp specified conductors with sufficient contact pressure without undue damage to the conductor		N/A
	Conductor clamped between metal surfaces		N/A
12.3.6	It shall be clear how the connection and disconnection of the conductors is to be made		N/A
	Disconnection of a conductor require an operation, other than a pull, so that can be made manually with or without a general-purpose tool		N/A
	It shall not be possible to confuse the opening for the use of a tool with the opening intended for the conductor		N/A
12.3.7	Screwless terminals intended for the interconnection	n of two or more conductors:	
	- during insertion, operation of clamping means of one of the conductors is independent of operation of that for the other conductor(s);		N/A
	- during disconnection, conductors can be disconnected either at the same time or separately;		N/A
	- each conductor introduced in a separate clamping unit.		N/A
	It shall be possible clamp securely any number of conductors up to the maximum as designed. Number of conductors; Nominal cross-sectional area (mm ²)		N/A
12.3.8	Screwless terminals of fixed socket-outlets: adequate insertion obvious and over-insertion prevented		N/A
12.3.9	Screwless terminals properly fixed to the socket- outlets		N/A
	Not work loose when conductors are connected or disconnected		N/A



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CI. F	Requirement – Test	Result	Verdict

	Self-hardening resins used to fix terminals not subject to mechanical stress	N/.	A
12.3.10	Screwless terminals withstand mechanical stresses occurring in normal use	N/.	A
	Test:	_	_
	Connection / disconnection 5 times: rigid solid conductor 2,5 mm ²	N/.	A
	Connection / disconnection 5 times: rigid solid conductor 1,5 mm ²	N/.	A
	Conductor subjected to a pull of 30 N for 1 min after each connection. During application of the pull conductor not come out of the terminal	N/.	A
	Connection / disconnection 1 time: rigid stranded conductor 2,5 mm ²	N/.	A
	Connection / disconnection 1 time: rigid stranded conductor 1,5 mm ²	N/.	A
	Conductor subjected to a pull of 30 N for 1 min after connection. During application of the pull conductor not come out of the terminal	N/.	A
	Additional test on terminals intended for both rigid an	nd flexible conductors:	_
	Connection / disconnection 5 times: flexible conductor 2,5 mm ²	N/.	A
	Connection / disconnection 5 times: flexible conductor 1,5 mm ²	N/.	A
	Conductor subjected to a pull of 30 N for 1 min after each connection. During application of the pull conductor not come out of the terminal	N/.	A
	Additional test with apparatus shown in figure 32:		_
	- type of conductors:	_	
	- number of conductors :	_	_
	- 1,5 mm²; diameter of bushing hole 6,5 mm; height H 260 mm; mass 0,4 kg	N/.	A
	- 2,5 mm²; diameter of bushing hole 9,5 mm; height H 280 mm; mass 0,7 kg	N/.	A
	During the test: conductors not move noticeably in the clamping unit	N/.	A
	After these tests: neither terminals nor clamping means have worked loose and conductors show no deterioration	N/.	A
12.3.11	Screwless terminals withstand electrical and thermal stresses occurring in normal use	N/.	A
	Test a) carried out for 1 h connecting rigid solid cond	luctors:	_
	- test current (A) (table 10):		_



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Result

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- nominal cross-sectional area (mm²):						
- screwless terminal number	1	2	3	4	5	
- voltage drop measured (mV) (requirement: ≤ 15 mV)			0			N/A
Test b) (temperature cycles test) carried out on tern	ninals	subjec	ted to 7	resta)	:	_
- test current (A) (table 10):						
- cross-sectional area (mm²):						
- screwless terminal number::	1	2	3	4	5	
- voltage drop measured after the 24 cycle (requirement: \leq 22,5 mV)						N/A
- voltage drop measured (mV) after 48 th cycle :						N/A
- voltage drop measured (mV) after 72^{th} cycle :						N/A
- voltage drop measured (mV) after 96th cycle :						N/A
- voltage drop measured (mV) after 120 th cycle :						N/A
- voltage drop measured (mV) after 144 th cycle :						N/A
- voltage drop measured (mV) after 168 th cycle :						N/A
- voltage drop measured (mV) after 192 th cycle :						N/A
- requirement: \leq 22,5 mV or 2 times 24 $^{\text{th}}$ cycle value (mV)						N/A
After this test: inspection show no changes						N/A
Mechanical strength test according 12.3.10:						_
Connection / disconnection 5 times: rigid solid conductor 2,5 mm ²						N/A
Connection / disconnection 5 times: rigid solid conductor 1,5 mm ²						N/A
Conductor subjected to a pull of 30 N for 1 min after each connection. During application of the pull conductor not come out of the terminal						N/A
Connection / disconnection 1 time: rigid stranded conductor 2,5 mm ²						N/A
Connection / disconnection 1 time: rigid stranded conductor 1,5 mm ²						N/A
Conductor subjected to a pull of 30 N for 1 min after connection. During application of the pull conductor not come out of the terminal						N/A
Additional test on terminals intended for both rigid a	nd flex	cible co	onducto	ors:		
Connection / disconnection 5 times: flexible conductor 2,5 mm ²						N/A
Connection / disconnection 5 times: flexible conductor 1,5 mm ²						N/A



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CI.	Requirement – Test	Result	Verdict

	Conductor subjected to a pull of 30 N for 1 min after each connection. During application of the pull conductor not come out of the terminal				N/A
	Additional test with apparatus shown in figure 32:				
	- type of conductors:	rigid solid /	rigid stranded	/flexible	_
	- number of conductors:				
	- 1,5 mm²; diameter of bushing hole 6,5 mm; height H 260 mm; mass 0,4 kg				N/A
	- 2,5 mm²; diameter of bushing hole 9,5 mm; height H 280 mm; mass 0,7 kg				N/A
	During the test: conductors not move noticeably in the clamping unit				N/A
	After these tests: neither terminals nor clamping means have worked loose and conductors show no deterioration				N/A
12.3.12	Screwless terminals: connected rigid solid conductor remains clamped, even when deflected during normal installation				N/A
	Deflection test (principle of test apparatus shown in	figure 33 a	a)):		_
	- test current (A) (equal rated current):				
	Smallest cross-sectional area (mm ²) (table 11) :				
	Force (N) (table 12):				
	- screwless terminal number:	1	2	3	
	- starting point (X= deflection original point):	Х	X+10°	X+20°	
	- voltage drop measured (mV) (1 st deflection):				N/A
	- voltage drop measured (mV) (2 nd deflection):				N/A
	- voltage drop measured (mV) (3 rd deflection):				N/A
	- voltage drop measured (mV) (4 th deflection):				N/A
	- voltage drop measured (mV) (5 th deflection):				N/A
	- voltage drop measured (mV) (6 th deflection):				N/A
	- voltage drop measured (mV) (7 th deflection):				N/A
	- voltage drop measured (mV) (8 th deflection):				N/A
	- voltage drop measured (mV) (9 th deflection):				N/A
	- voltage drop measured (mV) (10 th deflection) :				N/A
	- voltage drop measured (mV) (11 th deflection):				N/A
	- voltage drop measured (mV) (12 th deflection):				N/A
	- requirement: ≤ 25 mV				N/A
	Largest cross-sectional area (mm ²) (table 11) :				
	Force (N) (table 12)				_
	- screwless terminal number	1	2	3	



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			<u>т</u>		
	- starting point (X= deflection original point):	Х	X+10°	X+20°	
	- voltage drop measured (mV) (1 st deflection):				N/A
	- voltage drop measured (mV) (2 nd deflection):				N/A
	- voltage drop measured (mV) (3 rd deflection):				N/A
	- voltage drop measured (mV) (4 th deflection):				N/A
	- voltage drop measured (mV) (5 th deflection):				N/A
	- voltage drop measured (mV) (6 th deflection):				N/A
	- voltage drop measured (mV) (7 th deflection):				N/A
	- voltage drop measured (mV) (8 th deflection):				N/A
	- voltage drop measured (mV) (9 th deflection):				N/A
	- voltage drop measured (mV) (10 th deflection) :				N/A
	- voltage drop measured (mV) (11 th deflection) :				N/A
	- voltage drop measured (mV) (12 th deflection):				N/A
	- requirement: ≤ 25 mV		-		N/A
12.4	Crimped connections			TRLP	N/A
	Crimped connections of non-rewirable plugs and portable socket-outlets shall have reliable electrical and mechanical properties.				N/A
	Photo documentation of 3 connections showing 3 sides				N/A
	Values of height, force or voltage drop (lower and upper limit) are evaluated and documented by manufacturer for PVT				N/A

13	CONSTRUCTION OF FIXED SOCKET-OTLETS	VDE	N/A
13.1	Socket-contact assembly: sufficient resiliency		N/A
13.2	Socket-contact and pins of socket-outlets: resistant to corrosion		N/A
13.3	Insulating linings, barriers and the like: adequate mechanical strength		N/A
13.4	Socket-outlets constructed as to permit		
	- easy fixing of the base to a 15ail or in a mounting box		N/A
	- easy introduction and connection of the conductors in the terminals		N/A
	- easy fixing of the base to a wall or in a mounting box;		N/A
	- easy fixing of the base to a wall or in a mounting box		N/A
	- correct positioning of the conductors		N/A



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CI.	Requirement – Test	Result	Verdict

		I
	- adequate space between the underside of the base and the surface on which the base is mounted – surface mounted	N/A
	- adequate space between the underside of the base and the sides of the base and the enclosure (cover or box) – flush mounted	N/A
	Socket-outlets classified as design A: permit easy positioning and removal of the cover or cover plate, without displacing the conductors	N/A
13.5	Socket-outlets designed that full engagement of associated plugs is not prevented by any projection from their engagement face	N/A
	Gap between the engagement face of the socket- outlet and the plug: not exceed 1 mm	N/A
13.6	Covers provided with bushings for the entry holes for the pins: not possible to remove them from the outside or for them to become detached inadvertently from the inside when the cover is removed	N/A
13.7	Covers, cover-plates or parts of them intended to ensure protection against electric shock:	t
	- held in place at two or more points by effective fixings	N/A
	- fixed by means of a single fixing, e.g. by a screw, provided that they are located by another means (e.g. by a shoulder)	N/A
	Means to fix covers or cover plates must be captive	N/A
	Means of covers or cover-plates of socket-outlets of design A serve to fix the base shall be maintain the base in position, even after removal of the covers or cover-plates	N/A
13.7.1	Covers or cover-plates whose fixings are of the screw-type:	
	Compliance checked by inspection only	N/A
13.7.2	Covers or cover-plates whose fixing is not dependent on screws and whose removal is obtained by applying a force in a direction approximately perpent to the mounting/supporting surface:	
	Compliance checked, when their removal may give access, with the standa finger:	ard test
	to live parts: by the test of 24.14 (verification of the non-removal and the removal)	N/A
	to non-earthed metal parts separated from live parts in such a way that creepage distances and clearances have the values shown in table 23: by the test of 24.15 (verification of the non-removal and the removal)	N/A



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CI.	Requirement – Test	Result	Verdict

	only to insulating parts, or earthed metal parts, or metal parts separated from live parts in such a way that creepage distances and clearances have twice the values shown in table 23, or live parts of SEL V circuits not greater than 25 V a.c.: by the test of 24.16 (verification of the non- removal and the removal)	N/A
13.7.3	Covers or cover-plates whose fixing is not dependent on screws and whose removal is obtained by using a tool, in accordance with the manufacturer's information given in an instruction sheet or in a catalogue:	
	Compliance checked, when their removal may give access, with the standard test finger:	
	to live parts: by the test of 24.14 (verification of the non-removal only)	N/A
	to non-earthed metal parts separated from live parts in such a way that creepage distances and clearances have the values shown in table 23: by the test of 24.15 (verification of the non-removal only)	N/A
	only to insulating parts, or earthed metal parts, or metal parts separated from live parts in such a way that creepage distances and clearances have twice the values shown in table 23, or live parts of SEL V circuits not greater than 25 V a.c.: by the test of 24.16 (verification of the non- removal only)	N/A
13.8	void	N/A
13.9	Ordinary surface-type socket-outlets: no free openings in the enclosure	N/A
13.10	Screws or other means for mounting the socket- outlet on a surface in a box or enclosure: easily accessible from the front.	N/A
	Fixing means not serve any other fixing purpose	N/A
13.11	Multiple socket-outlets with a common base: provided with fixed links for the interconnection of the contacts in parallel	N/A
	Fixing of the links independent of the connection of the supply wires	N/A
13.12	Multiple socket-outlets, comprising separate bases: correct position of each base ensured	N/A
	Fixing of each base independent of the fixing of the combination to the mounting surface	N/A
13.13	Mounting plate of surface-type socket-outlets: adequate mechanical strength	N/A
13.14	Socket-outlets withstand the lateral strain imposed by equipment likely to be introduced into them	N/A



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CI.	Requirement – Test	Result

	Socket-outlets 16A 250V: test made 4 times with the socket-outlet turned through 90°, 15 N for 1 min (device shown in fig. 6)		N/A
	During the test: device not come out		N/A
	After the test:	•	
	- no damage		N/A
	- socket-outlets comply with clause 22		N/A
13.15	Socket-outlets shall not be an integral part of lampholders		N/A
13.16	Socket-outlets other than ordinary: totally enclosed when fitted with screwed conduits or with polyvinyl chloride (p.v.c.) sheathed or similar type cables and without a plug in position		N/A
	Surface-type socket-outlets other than ordinary shall have provision for opening a drain hole of at least 5 mm in diameter, or 20 mm ² in area with a width and a length of at least 3mm	Ømm / mm²	N/A
	Drain hole: effective		N/A
	Lid springs (if any): of corrosion resistant material (bronze or stainless steel)		N/A
13.17	void		N/A
13.18	Earthing pins: adequate mechanical strength		N/A
	Not solid pins: compliance checked by inspection and by the test of 14.2 made after the tests of clause 21		N/A
	Earthing contacts and neutral contacts: locked against rotation and removable only with the aid of a tool, after dismantling the socket-outlet		N/A
13.19	Metal strips of the earthing circuit: no burrs which might damage the insulation of the supply conductors		N/A
13.20	Socket-outlets to be installed in a box: designed that the conductor ends can be prepared after the box is mounted in position, but before the socket- outlet is fitted in the box		N/A
13.21	Inlet openings: allow the introduction of the conduit or the sheath of the cable		N/A
	Surface-type socket-outlets:		
	the conduit or sheath of the cable can enter at least I mm into the enclosure		N/A
	inlet opening for conduit entries, or at least two of them if there are more than one, capable of accepting conduit sizes of 16, 20, 25 or 32 or a combination of at least two of any of these sizes		N/A



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DIN VDE 0620-2-1: 2013 Cl. Requirement – Test Result Verdict inlet opening for cable entries capable of accepting cables having the dimensions specified in table 14 or be as specified by the manufacturer: rated current (A); Limits of external N/A

	manufacturer: rated current (A); Limits of external dimensions of cable min/max (mm)	
13.22	Membranes (grommets) in inlet openings: reliably fixed and not displaced by the mechanical and thermal stresses occurring in normal use	N/A
	Test on membranes subjected to the ageing treatment specified in 16.1 and assembled in the accessories	—
	Accessories placed at 40 °C for 2 h. Force of 30 N applied for 5 s by test finger. During the test: no deformation	N/A
	Membranes likely to be subjected to an axial pull: axial pull of 30 N applied for 5 s. During the test: membranes not come out	N/A
	After the test: no harmful deformation, cracks or similar damage	N/A
	Test repeated with membranes not subjected to any treatment	N/A
13.23	Membranes in inlet openings: introduction of the cables into the accessory permitted when the ambient temperature is low	N/A
	Test on membranes not subjected to the ageing treatment specified in 16.1 and assembled in the accessories	
	Accessories kept at -15 °C for 2 h: possibility to introduce cables of the largest diameter through membranes	N/A
	After the test: no harmful deformation, cracks or similar damage	N/A
13.24	Hinged covers to provide protection class ≥IPx4 of socket-outlets: reliable working ensured	N/A

14	CONSTRUCTION OF PLUGS AND PORTABLE SOCKET-OTLETS VDE/TRLF	
14.1	Non-rewirable plug or non-rewirable portable socket-outlet:	
	flexible cable cannot be separated from the accessory without making it permanently useless	N/A
	Accessory cannot be opened by hand or by using a general purpose tool, for example a screwdriver used as such	N/A
14.2	Pins of plugs and portable socket-outlets: adequate mechanical strength	Р
	Test for pins not solid (made after clause 21): force of 100 N exerted on the pin for 1 min by means of a steel rod \emptyset 4,8 mm	N/A
	During the application of the force: reduction of the dimension of the pin not exceed 0,15 mm	N/A



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DIN VDE 0620-2-1: 2013 Cl. Requirement – Test Result Verdict After removal of the rod: dimensions of the pin not changed by more than 0,06 mm N/A

	not changed by more than 0,06 mm	
14.3	Pins of plugs:	Р
	- locked against rotation	Р
	- not removable without dismantling the plug	Р
	- adequately fixed in the body of the plug when the plug is wired and assembled as in normal use	Р
	Earthing contacts and neutral pin: not possible to replace in an incorrect position	Р
14.4	Earthing contacts and neutral contacts of portable socket-outlets:	N/A
	- locked against rotation	N/A
	- removable only with the aid of a tool, after dismantling the socket-outlet	N/A
14.5	Socket-contact assemblies: sufficient resiliency	N/A
	Contact pressure not alone depending by soldered connections	N/A
14.6	Pins and socket-contacts: resistant to corrosion and abrasion	N/A
14.7	Enclosures of rewirable accessories: completely enclose terminals and ends of flexible cable.	N/A
	Construction of rewirable accessories:	N/A
	- conductors can be properly connected	N/A
	- cores not pressed against each other	N/A
	- cores of live conductor not in contact with accessible metal parts	N/A
	- core of earthing conductor not in contact with live parts	N/A
14.8	Rewirable accessories: terminal screws or nuts cannot become loose and fall out of position and establish an electrical connection between live parts and earthing terminal or metal parts	N/A
14.9	Rewirable accessories with earthing contact: ample space for slack of earthing (test)	N/A
	Non-rewirable non-moulded-on accessories with earthing contact: current-carrying conductors stressed before the earthing conductor if the flexible cable slips in its anchorage	N/A
14.10	Terminals of rewirable accessories and terminations of non-rewirable accessories: located and shielded that loose wires not present a risk of electric shock	N/A
14.10.1	Rewirable accessories: test with 6 mm free wire	N/A



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CI.	Requirement – Test	Result	Verdict

	free wire of a conductor connected to a live terminal not touch any accessible metal part or able to emerge from the enclosure		N/A
	free wire of a conductor connected to an earthing terminal not touch a live part		N/A
14.10.2	Non-rewirable, non-moulded-on accessories: test equivalent to the maximum designed stripping leng manufacturer plus 2 mm		N/A
	free wire of a conductor connected to a live termination not touch any accessible metal part or reduce creepage and clearance below 1,5 mm to the external surface	No such free wire	N/A
	free wire of a conductor connected to an earth termination not touch any live part		N/A
14.10.3	Non-rewirable, moulded-on accessories:	•	N/A
	Verification of means to prevent stray wires reducing the minimum distance through insulation to external accessible surface below 1,5 mm		N/A
14.11	Rewirable plugs and rewirable portable socket-out	tlets:	N/A
	- clear how relief from strain and prevention of twisting is intended to be effected		N/A
	- cord anchorage, or at least part of it, integral with or permanently fixed to one of the component parts of the plug or portable socket- outlet		N/A
	- makeshift methods not used		N/A
	- cord anchorage suitable for the different types of flexible cable which may be connected; screws, if any: not serve to fix any other component		N/A
	- cord anchorages: of insulating material or provided with an insulating lining fixed to the metal parts		N/A
	- metal parts of cord anchorages, including clamping screws: insulated from the earthing circuit		N/A
14.12	Rewirable plugs and portable socket-outlets : It is not possible to remove covers, cover-plates or parts of them intended to ensure protection against electric shock without the use of a tool		N/A
14.13	Covers of portable socket-outlets: bushings for entry holes for the pins not removable from the outside or detachable inadvertently from the inside		N/A
14.14	Screws intended to allow access to interior of the accessory: captive		N/A
14.15	Engagement face of plugs: no projections		Р



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CI. Requirement – Test Verdict Result Engagement face of portable socket-outlets: no 14.16 N/A projection Accessories other than ordinary: provided with 14.17 N/A gland(s) or the like Plugs other than ordinary: adequately enclosed N/A Portable socket-outlets other than ordinary: N/A adequately enclosed without a plug in engagement Lid springs (if any): of corrosion resistant material N/A (bronze or stainless steel) Portable socket-outlets: means for suspension 14.18 N/A from a wall or other mounting surfaces not allow access to live parts No free openings between space intended for N/A suspension means fixed to the wall and live parts Combinations of plugs and socket-outlets with 14.19 N/A circuit-breakers or other protective devices comply with relevant standards, if any: Portable accessories: not integral part of Р 14.20 lampholders TRLP Adaptors must meet requirements to DIN 49437 N/A Multiple socket outlets with earthing contacts and N/A rigid fixed plug are not permissible 14.21 Plugs for equipment of class II: N/A - non-rewirable N/A - if incorporated in a cord set: provided with a N/A connector for equipment of class II - if incorporated in a cord extension set: provided N/A with a portable socket-outlet for equipment of class II Components (switches and fuses) incorporated in 14.22 No such component N/A accessories: comply with the relevant IEC standard 14.23 Plug-in equipment: not cause overheating of the N/A pins or impose undue strain Plugs with rating above 16 A and 250 V: not N/A integral part of other equipment Tests for two-pole plugs, with or without earthing contact, with rating up to and N/A including 16 A and 250 V (plug of equipment inserted into a fixed socket-outlet complying with this standard): Socket-outlet connected to a supply voltage equal 14.23.1 to 1,1 times the highest rated voltage of the equipment (V)

Temperature rise of the pins after 1 h not exceed

45 K (K)

Shall be tested in end product.

N/A



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Cl.	Requirement – Test	Result	Verdict
14.23.2	Additional torque applied to the socket-outlet to maintain the engagement face in the vertical plane not exceed 0,25 Nm (Nm)		N/A
14.24	Plugs: can easily withdrawn by hand from the relevant socket-outlet		Р
	Gripping surfaces: so designed that the plug can be withdrawn without pull on the flexible cable		Р
14.25	Membranes in inlet openings: meet the requirements of 13.23 and 13.24		N/A
14.26	Adaptor socket outlets: Min. length of power cord 1.4m		N/A
14.27	Table type socket-outlets: Min. length of power cord 1.4m		N/A
14.28	Hinged covers to provide protection class ≥IPx4 of portable socket-outlets: reliable working ensured		N/A
	Cover-plates fixed reliable		N/A

15	INTERLOCKED SOCKET-OUTLETS	VDE	N/A
	Socket-outlet interlocked with a switch:		N/A
	plug cannot be inserted into or completely withdrawn from the socket-outlet while the socket- contacts are live		N/A
	Socket-contacts cannot be made live until a plug is almost completely in engagement		N/A

16	RESISTANCE TO AGEING, PROTECTION PROVIDES BY ENCLOSURE AND RESISTANCE TO HUMIDITY VDE		Р
16.1	Resistance to ageing		Р
	Accessories shall be resistant to ageing		Р
	Accessories subjected to a test in a heating cabinet at 70 $^\circ\text{C}\pm2$ $^\circ\text{C}$ for seven days (168 h)		Р
	After the tests, samples shall show:		
	- no crack visible with normal or corrected vision without additional magnification		Р
	- no sticky or greasy material		Р
	- no trace of cloth (forefinger pressed with 5 N)		Р
	- no damage		Р
16.2	Protection provided by enclosure		Р
	Enclosures provide a degree of protection in accordance with the IP designation of the accessory:	Plug portion	Р
	Flush-type and semi flush-type socket-outlets fixe	ed:	N/A



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CI.	Requirement – Test	Result	Verdict

	- in a test wall using an appropriate box in accordance with the manufacturer's instructions	N/A
	- in a test wall according to figure 41	N/A
	Fixed socket-outlets: Test while plugged with plug of same protection class	N/A
	Fixed socket-outlets: Test while unplugged	N/A
	Portable socket-outlets tested on a plain, horizontal surface in a position as in normal use	N/A
	Portable socket-outlets: Test while plugged with plug of same protection class or gauge acc. DIN 49440-4	N/A
	Portable socket-outlets: Test while unplugged	N/A
	Plugs: Test while plugged into portable socket- outlet with same protection class	N/A
	Accessories fitted with flexible cables according to table 17 having the largest and smallest cross-sectional area given in table 3:	N/A
	- largest cross-sectional area (mm ²); type of cable (table 27):	N/A
	- smallest cross-sectional area (mm ²); type of cable (table 27)	N/A
	Mounting screws tightened with a torque equal to 2/3 of the torque given in table 6 (Nm)	N/A
	Glands tightened with a torque equal to 2/3 of the torque applied during the test of 24.6 (Nm):	N/A
16.2.1	Protection against access to hazardous parts and against harmful effects due to ingress of solid foreign objects	Р
16.2.1.1	Protection against access to hazardous parts	Р
	Accessories and their enclosure provide a degree of protection against access to hazardous parts	Р
16.2.1.2	Protection against harmful effects due to ingress of solid foreign objects	Р
	Accessories and their enclosure provide a degree of protection against harmful effects due to ingress of solid foreign objects	Ρ
16.2.2	Protection against harmful effects due to ingress of water	Р
	Enclosure of accessories other than ordinary shall provide a degree of protection against harmful ingress of water in accordance with the classification	Р
	Splash-proof accessories subjected to the test IPX4 according to IEC 529	Р
	Jet-proof accessories subjected to the test IPX5 according to IEC 529	N/A



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CI.	Requirement – Test	Result	Verdict
	Chapting and withstand an algorith strength toot		D

	Specimens withstand an electric strength test specified in 17.2 which is started within 5 min after the IP test		Р
16.3	Resistance to humidity		Р
	Accessories proof against humidity which may occur in normal use		Р
	Compliance checked by a humidity treatment carried out in a humidity cabinet containing air with relative humidity maintained between 91 % and 95 %	93%	P
	Specimens kept in the cabinet for:	·	
	- two days (48 h) for ordinary accessories		N/A
	- seven days (168 h) for accessories other than ordinary		Р
	After this treatment the specimens show no damage		Р

17	INSULATION RESISTANCE AND ELECTRIC STRENGTH VDE	Р
17.1.1	For socket-outlets: insulation resistance (500 V d.c. for 1 min):	N/A
	a) between all poles connected together and the body, with a plug in engagement $\geq 5~M\Omega$	N/A
	b) between each pole in turn and all others connected to the body, with a plug in engagement $\geq 5 \text{ M}\Omega$:	N/A
	c) between any metal enclosures and metal foil in contact with the inner surface of its insulating linings, if any $\geq 5M\Omega$	N/A
	d) between any metal part of the cord anchorage, including clamping screws, and earthing terminal or earthing contact, if any, of portable socket-outlets \geq 5 M Ω	N/A
	e) between any metal part of the cord anchorage of portable socket-outlets and a metal rod of the maximum diameter of the flexible cable inserted in its place $\ge 5 \text{ M}\Omega$	N/A
17.1.2	For plugs: insulation resistance (500 V d.c. for 1 min):	Р
	a) between all poles connected together and the body $\geq 5M\Omega$	Ρ
	b) between each pole in turn and all others connected to the body $\ge 5 M\Omega$	Ρ
	c) between any metal part of the cord anchorage, including clamping screws, and earthing terminal or earthing contact, if any \geq 5 M Ω	N/A



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С	Я.	Requirement – Test	Result	Verdict

	d) between any metal part of the cord anchorage and a metal rod of the maximum diameter of the flexible cable inserted in its place $\geq 5 \text{ M}\Omega$:		N/A
17.2	Socket-outlets: electric strength, test voltage (a.c.,	for 1 min):	N/A
	a) test voltage (V):		N/A
	b) test voltage (V):		N/A
	c) test voltage (V):		N/A
	d) test voltage (V):		N/A
	e) test voltage (V):		N/A
	Plugs: electric strength, test voltage (a.c., for 1 min):	Р
	a) test voltage (V):	2000V	Р
	b) test voltage (V):	2000V	Р
	c) test voltage (V):		N/A
	d) test voltage (V):		N/A
	During the test no flashover or breakdown		Р

18	OPERATION OF EARTHING CONTACTS	N/A
	Earthing contacts provide adequate contact pressure and not deteriorate in normal use	N/A
18.1	Fixed socket-outlets and portable socket-outlets	N/A
	Force exerted measured in side earthing contacts not less than 5 N (CEE 7 clause 18):	N/A
	Compliance for other than side earthing contacts checked by the tests of clauses 19 and 21	N/A
18.2	Plugs	N/A
	Dimensions not changed for more than 1mm	N/A

19	TEMPERATURE RISE	TRLP	N/A
	Rated cross section assigned by table 15:	Shall be tested in end product.	
	Rated current: 16 A	<u>1.5 mm²</u> / 2.5 mm² <u>flexible</u> / rigide	N/A
	Rated current >16 A		N/A
	Non-rewirable accessories tested as delivered:		N/A
	- type of flexible cable; number of conductors and nominal cross-sectional area (mm ²):		
	Rewirable accessories fitted with polyvinyl chloride nominal cross-sectional area as show in table 15:	e insulated conductors having a	N/A
	- rated current of accessory: (A)		
	- nominal cross-sectional area: (mm ²)		
	- type of conductors:		



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CI. Requirement – Test Re	Result	Verdict

	Terminal screws or nuts tightened with a torque equal to 2/3 of that specified in 12.2.8 (Nm):	—
	Socket-outlets and adaptors tested by using a test plug according to figure 16	Р
19.1	Fixed socket-outlets	N/A
19.1.1	Fixed socket-outlets without integrated supplementary functions	N/A
	Test current as specified by table 20 passed for 1h: (A)	
	- Temperature rise of terminals and connections less than 45 K: (K)	N/A
	Separate tests made passing the current through:	
	- the neutral contact, if any, and the adjacent phase contact (K):	N/A
	- the earthing contact, if any, and the nearest phase contact (K):	N/A
	Touchable metal parts: max. 40 K: (K)	N/A
	Touchable non-metallic parts: max. 45 K : (K)	N/A
	Temperature rise of external parts of insulating material not necessary to retain current-carrying parts and parts of earthing circuits in position: (K)	N/A
19.1.2	Fixed socket-outlets with integrated supplementary function	N/A
	Rated current passed for 1 h (A) or:	N/A
	Rated current passed until the integrated protection device operates: (minutes)	N/A
	- Temperature rise of terminals and connections of supplementary functions do not exceed the limits of their standards	N/A
	- All other terminals , connections, contacts and terminals for mains do not exceed 45 K: (K)	N/A
	Separate tests made passing the current through:	
	- the neutral contact, if any, and the adjacent phase contact (K):	N/A
	- the earthing contact, if any, and the nearest phase contact (K):	N/A
	Touchable metal parts: max. 40 K: (K)	N/A
	Touchable non-metallic parts: max. 45 K : (K)	N/A
	Temperature rise of external parts of insulating material not necessary to retain current-carrying parts and parts of earthing circuits in position: (K)	 N/A
	Test current as specified by table 20 passed for 1h (A) or:	N/A



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CI.	Requirement – Test	Result	Verdict

	Test current passed until the integrated protection device operates: (minutes):	N/A
	repeated with 0.95% of current: (A)	N/A
	Repeated with 150% of rated fuse current for 30/60 minutes: (fuse (A) / current (A) / time (minutes)	N/A
	- Temperature rise of terminals and connections do not exceed 70 K and: (K)	N/A
	- Temperature rise of contacts do not exceed 45 K: (K)	N/A
	Separate tests made passing the current through:	
	- the neutral contact, if any, and the adjacent phase contact (K)	N/A
	- the earthing contact, if any, and the nearest phase contact (K)	N/A
	Touchable metal parts: max. 40 K: (K)	N/A
	Touchable non-metallic parts: max. 45 K : (K)	N/A
	Temperature rise of external parts of insulating material not necessary to retain current-carrying parts and parts of earthing circuits in position: (K)	N/A
19.2	Portable Socket-outlets	N/A
	Non-rewirable plugs of extension cords and socket-outlets (multiple-portable and table-type) passed by the test current acc. table 20 as intended for non-rewirable portable socket-outlets / rewirable portable accessories: (A)	N/A
19.2.1	Portable socket-outlets without integrated supplementary function	N/A
	Test current as specified by table 20 passed for 1h: (A)	
	- Temperature rise of terminals and connections less than 45 K: (K)	N/A
	Separate tests made passing the current through:	
	- the neutral contact, if any, and the adjacent phase contact (K)	N/A
	- the earthing contact, if any, and the nearest phase contact (K)	N/A
	Touchable metal parts: max. 40 K: (K)	N/A
	Touchable non-metallic parts: max. 45 K : (K)	N/A
	Temperature rise of external parts of insulating material not necessary to retain current-carrying parts and parts of earthing circuits in position: (K)	N/A
19.2.2	Portable socket-outlets with integrated supplementary function	N/A



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CI.	Requirement – Test	Result	Verdict

	Rated current passed for 1 h (A) or:		N/A
	Rated current passed until the integrated protection device operates: (minutes):	1	N/A
	- Temperature rise of terminals and connections of supplementary functions do not exceed the limits of their standards	1	N/A
	- All other terminals , connections, contacts and terminals for mains do not exceed 45 K: (K)	1	N/A
	Separate tests made passing the current through:		
	- the neutral contact, if any, and the adjacent phase contact (K):		N/A
	- the earthing contact, if any, and the nearest phase contact (K):	1	N/A
	Touchable metal parts: max. 40 K: (K)	1	N/A
	Touchable non-metallic parts: max. 45 K : (K)		N/A
	Temperature rise of external parts of insulating material not necessary to retain current-carrying parts and parts of earthing circuits in position: (K)	1	N/A
	Test current as specified by table 20 passed for 1h (A) or:	1	N/A
	Test current passed until the integrated protection device operates: (minutes):	1	N/A
	repeated with 0.95% of current: (A)	1	N/A
	Repeated with 150% of rated fuse current for 30/60 minutes: (fuse (A) / current (A) / time (minutes)	1	N/A
	- Temperature rise of terminals and connections do not exceed 70 K and: (K)	1	N/A
	- Temperature rise of contacts do not exceed 45 K: (K)	1	N/A
	Separate tests made passing the current through:		
	- the neutral contact, if any, and the adjacent phase contact (K):	1	N/A
	- the earthing contact, if any, and the nearest phase contact (K):	1	N/A
	Touchable metal parts: max. 40 K: (K)	1	N/A
	Touchable non-metallic parts: max. 45 K : (K)	1	N/A
	Temperature rise of external parts of insulating material not necessary to retain current-carrying parts and parts of earthing circuits in position: (K)		N/A
9.3	Plugs tested using a test apparatus with thermo- couple on every live pin or PE-contact	Class II	N/A
19.3.1	Plugs without integrated supplementary function	1	N/A



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N/A

CI. Requirement – Test Verdict Result Test current as specified in table 20 passed for 1 h: (A) - Temperature rise of terminals and connections 13,2 K Ρ do not exceed 45 K: (K) Separate tests made passing the current through: - the neutral contact, if any, and the adjacent N/A phase contact (K): - the earthing contact, if any, and the nearest N/A phase contact (K): Touchable metal parts: max. 40 K: (K) N/A Touchable non-metallic parts: max. 45 K : (K) N/A Temperature rise of external parts of insulating N/A material not necessary to retain current-carrying parts and parts of earthing circuits in position: (K) Rewirable plugs with integrated supplementary 19.3.2 N/A functions: Rated current passed for 1 h (A) or: N/A Rated current passed until the integrated N/A protection device operates: (minutes): Non-rewirable plugs with integrated N/A supplementary functions: Test current as specified by table 20 passed for 1h: (A) - Temperature rise of terminals and connections N/A of supplementary functions do not exceed the limits of their standards - All other terminals, connections, contacts and N/A terminals for mains do not exceed 45 K: (K) Separate tests made passing the current through: - the neutral contact, if any, and the adjacent N/A phase contact (K): - the earthing contact, if any, and the nearest N/A phase contact (K).....: Touchable metal parts: max. 40 K: (K) N/A Touchable non-metallic parts: max. 45 K : (K) N/A Temperature rise of external parts of insulating N/A material not necessary to retain current-carrying parts and parts of earthing circuits in position: (K) Test current as specified by table 20 passed for N/A 1h (A) or: Test current passed until the integrated protection N/A device operates: (minutes):

repeated with 0.95% of current: (A)



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CI.	Requirement – Test	Result	Verdict
	Repeated with 150% of rated fuse current for 30/60 minutes: (fuse (A) / current (A) / time (minutes)		N/A
	- Temperature rise of terminals and connections do not exceed 70 K and: (K)		N/A
	- Temperature rise of contacts do not exceed 45 K: (K)		N/A
	Separate tests made passing the current through:		
	- the neutral contact, if any, and the adjacent phase contact (K):		N/A
	- the earthing contact, if any, and the nearest phase contact (K):		N/A
	Touchable metal parts: max. 40 K: (K)		N/A
	Touchable non-metallic parts: max. 45 K : (K)		N/A
	Temperature rise of external parts of insulating material not necessary to retain current-carrying parts and parts of earthing circuits in position: (K)		N/A
19.4	Adaptors		N/A
	Adaptors tested using a test apparatus with thermo-couple on every live pin or PE-contact		N/A
19.4.1	Adaptors without interconnected supplementary functions (DIN 49437)		N/A
	Test current as specified in table 20 passed for 1 h: (A)		—
	- Temperature rise of terminals and connections do not exceed 45 K: (K)		N/A
	Separate tests made passing the current through:		
	- the neutral contact, if any, and the adjacent phase contact (K):		N/A
	- the earthing contact, if any, and the nearest phase contact (K):		N/A
	Touchable metal parts: max. 40 K: (K)		N/A
	Touchable non-metallic parts: max. 45 K : (K)		N/A
	Temperature rise of external parts of insulating material not necessary to retain current-carrying parts and parts of earthing circuits in position: (K)		N/A
19.4.2	Adaptors with interconnected supplementary functions		N/A
	Rated current passed for 1 h (A) or:		N/A
	Rated current passed until the integrated protection device operates: (minutes):		N/A
	- Temperature rise of terminals and connections of supplementary functions do not exceed the limits of their standards		N/A



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DIN VDE 0620-2-1: 2013 CI. Requirement – Test Verdict Result - All other terminals, connections, contacts and N/A terminals for mains do not exceed 45 K: (K) Separate tests made passing the current through: - the neutral contact, if any, and the adjacent N/A phase contact (K): - the earthing contact, if any, and the nearest N/A phase contact (K): Touchable metal parts: max. 40 K: (K) N/A Touchable non-metallic parts: max. 45 K : (K) N/A Temperature rise of external parts of insulating N/A material not necessary to retain current-carrying parts and parts of earthing circuits in position: (K) Test current as specified by table 20 passed for N/A 1h (A) or: Test current passed until the integrated protection N/A device operates: (minutes): repeated with 0.95% of current: (A) N/A Repeated with 150% of rated fuse current for N/A 30/60 minutes: (fuse (A) / current (A) / time (minutes) - Temperature rise of terminals and connections N/A do not exceed 70 K and: (K) - Temperature rise of contacts do not exceed 45 N/A K: (K) Separate tests made passing the current through: - the neutral contact, if any, and the adjacent N/A phase contact (K): - the earthing contact, if any, and the nearest N/A phase contact (K)..... Touchable metal parts: max. 40 K: (K) N/A Touchable non-metallic parts: max. 45 K : (K) N/A Temperature rise of external parts of insulating N/A material not necessary to retain current-carrying parts and parts of earthing circuits in position: (K) 19.5 Plug-in adaptors N/A To be tested regarding their own product N/A standards For tests of the attached plug part see clause N/A 14.23

20	BREAKING CAPACITY	VDE	N/A
	Accessories shall have adequate breaking capacity		N/A



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Cl. Requirement – Test

Result

Verdict

Compliance checked by testing:	N/A
- socket-outlets;	N/A
- plugs with pins which are not solid	N/A
Test conditions:	
- 100 strokes; rate of operation:	_
- test voltage (1,1Vn):	
- test current (1,25 ln) (power factor 0,6):	
Multiple socket-outlets: test carried out on one socket-outlet of each type and current rating	N/A
During the test: no sustained arcing occur	N/A
After the test:	_
- specimens show no damage impairing their further use;	N/A
- entry holes for the pins not show any damage which may impair the safety	N/A

21	NORMAL OPERATION	VDE/TRLP	N/A
	Accessories shall withstand without excessive wear or other harmful effect, the mechanical, electrical and thermal stresses occurring in normal use		N/A
	Compliance checked by testing:		
	- socket-outlets;		N/A
	- plugs with resilient earthing socket-contacts;		N/A
	- plugs with pins which are not solid		N/A
	Test performed on:		
	- complete shuttered socket-outlets with operations made by apparatus		N/A
	- complete shuttered socket-outlets with operations made by hand as in normal use		N/A
	Test conditions:		
	- 10000 strokes; rate of operation:		
	- test voltage Vn (V):		
	- test current (as specified in table 20) (A) (power factor 0,8)		
	Test current passed:		
	- during each insertion and withdrawal of the plug (In \leq 16A)		N/A
	- during alternate insertion and withdrawal, the other insertion and withdrawal being made without current flowing (In > 16A)		N/A



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CI.	Requirement – Test Result	Verdict
	Multiple socket-outlets: test carried out on one socket-outlet of each type and current rating	N/A
	During the test: no sustained arcing occur	N/A
	After the test the specimens shall not show:	
	- wear impairing their further use;	N/A
	- deterioration of enclosures, insulating lining or barriers;	N/A
	- damage to the entry holes for the pins, that might impair proper working;	N/A
	- loosening of electrical or mechanical connections;	N/A
	- seepage of sealing compound	N/A
	Shuttered socket-outlets: the following gauges not touch live parts when they remain under the relevant forces:	N/A
	- gauges of figure 3 applied with a force up to 20 N	N/A
	- steel gauge of figure 4 applied with a force up to 1 N	N/A
	Temperature-rise test (requirements of clause 19):	
	Test current as required for the normal operation 1 test, given in table 20, passed for 1 h (A)	—
	Temperature rise of terminals not exceed 45 K (K)	N/A
	Separate tests made passing the current through:	
	- the neutral contact, if any, and the adjacent phase contact (K)	N/A
	- the earthing contact, if any, and the nearest phase contact (K)	N/A
	Force for opening shuitters not exceeding 50 N: (N)	N/A
	Socket-outlets: electric strength (sub-clause 17.2), test voltage (a.c., for 1 min):	N/A
	a) test voltage (V)	N/A
	b) test voltage (V)	N/A
	c) test voltage (V)	N/A
	d) test voltage (V)	N/A
	e) test voltage (V)	N/A
	Plugs: electric strength (sub-clause 17.2), test voltage (a.c., for 1 min):	N/A
	a) test voltage (V) 1500 V	N/A
	b) test voltage (V) 1500 V	N/A
	c) test voltage (V)	N/A
	d) test voltage (V)	N/A



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Attachment 3

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CI.	Requirement – Test	Result	Verdict

During the test: no flashover or bro	
Force exerted measured in side e not less than 60 % or 5 N (CEE 7 spreading for 48h	arthing contacts See appendix table on page 52 N/A clause 18) after
Fixed socket-outlets: test accordi	g to 13.2 N/A
Pins of plugs and portable socke according to 14.2	outlets: test N/A

22	FORCE NECESSARY TO WITHDRAW THE PLUG	TRLP	N/A
	Construction of accessory shall allow the easy insertion and withdrawal of the plug, and prevent the plug from working out of the socket-outlet in normal use		N/A
	Rated current (A)		
	Number of poles:		
22.1	Verification of the maximum withdrawal force		N/A
22.1.1	Socket-outlets (multi-pin gauge):		N/A
	Maximum withdrawal force (table 16): (N) :		—
	The plug not remain in the socket-outlet		N/A
22.1.2	Plugs with resilient earthing contacts (single-pin gauge):		N/A
	Maximum withdrawal force (table 16): (N)		
	The gauge not remain in the socket-outlet		N/A
22.2	Verification of the minimum withdrawal force (single-pin gauge)		N/A
	Minimum withdrawal force (table 16): (N)		
	The gauge remain in the socket-outlet at least 30 seconds		N/A

23	FLEXIBLE CABLES AND THEIR CONNECTION	VDE	N/A
23.1	Plugs and portable socket-outlets provided with a cord anchorage such that the conductors are relieved from strain and that their covering is protected from abrasion	1	N/A
	Sheath of flexible cable clamped within the cord anchorage		N/A
23.2	Pull and torque test		N/A
	Storage for 1h at 45°C. Cord anchorage works properly after pull with 50 30s) N for	N/A
	Non-rewirable accessories:		N/A
	- rating of accessory		



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CI.	Requirement – Test	Result	Verdict
		1	
	- type of flexible cable; number of conductors and nominal cross-sectional area (mm ²)		—
	- pull (100 times) (N):		N/A
	- torque (1 min) as specified in table 18 (Nm) :		N/A
	After the test:		
	Displacement ≤ 2 mm:		N/A
	No break in the electrical connections		N/A
	Rewirable accessories:	•	N/A
	- rating of accessory:		
	- clamping screws, if any, tightened with a torque equal to 2/3 of that specified in 12.2.8 (Nm) :		
	- type of flexible cable; number of conductors and smallest nominal cross-sectional area (mm²) as show in table 17:		
	- pull (100 times) (N):		
	- torque (1 min) as specified in table 18 (Nm) :		
	After the test:		
	Displacement ≤ 2 mm:		N/A
	End of conductors not have moved noticeably in the terminals		N/A
	- type of flexible cable; number of conductors and largest nominal cross-sectional area (mm ²) as show in table 17:		_
	- pull (100 times) (N):		
	- torque (1 min) as specified in table 18 (Nm) :		
	After the test:		
	Displacement ≤ 2 mm:		N/A
	End of conductors not have moved noticeably in the terminals		N/A
	Rewirable accessories having rated current up to	and including 16 A:	
	Suitable for fitting with the appropriate cable as shown in table 19		N/A
	Type of flexible cable; number of conductors and nominal cross-sectional area (mm ²):		
23.3	Non-rewirable plugs and non-rewirable portable socket-outlets: provided with a flexible cable complying with IEC 227 or IEC 245		N/A
	A power cord provided with rewirable plug or rewirable portable socket-outlet must meet the same requirements		N/A



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CI.	Requirement – Test	Result	Verdict
	Flexible cables have the same number of conductors as there are poles in the plug or socket-outlet		N/A
	Conductor connected to the earthing contact: identified by the colour combination green/yellow		N/A
23.4	Plugs and portable socket-outlets: designed that the flexible cable is protected against excessive bending		N/A
	Guards shall be of insulating material and fixed in reliable manner		N/A
	Flexing test (10.000 flexings):		N/A
	- type of flexible cable and nominal cross- sectional area (mm ²):		—
	- test current (A):		
	- mass (N):		
	During the test: no interruption of the test current and no short-circuit between conductors		N/A
	Voltage drop test: test current (A); voltage drop (< 10 mV):		N/A
	After the test: guard no separated from the body, insulation shows no sign of abrasion or wear, broken strands become no accessible		N/A

24	MECHANICAL STRENGTH		Р
	Accessories, surface mounting boxes, screwed glands and flanges have adequate mechanical strength	No such accessories	N/A
24.1	Fixed socket-outlets, portable multiple socket- outlets and surface mounting boxes: impact test (apparatus shown in fig. 16, 17, 18 and 19)		N/A
	After the test: no damage, live parts no become accessible		N/A
24.2	Portable single socket-outlets and plugs: tumbling barrel test; number of falls:	Test on the whole adaptor	Р
	After the test:	•	_
	No part become detached or loosened;	113g, 500 falls	Р
	Pins no become so deformed that the plug cannot be introduced into a socket-outlet and also fails to comply with the requirements of 9.1 and 10.3;		Р
	Pins no turn when a torque of 0,4 Nm is applied for 1 min in each direction	Pins do not turn or loosen.	Р
	Socket-outlets with shutter must be tested to cl. 21 again		Р



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CI.	Requirement – Test Result	Verdict
24.3	Ordinary surface type socket-outlets: first fixed to a cylinder of rigid steel sheet and then fixed to a flat steel sheet	N/A
	During and after the test: no damage	N/A
24.4	Portable single socket-outlets, multiple socket- outlets and plugs (elastomeric or thermoplastic material): impact test, weight 1000 g, height 100 mm (apparatus shown in fig. 28)	Р
	Specimens placed in a refrigerator at -15 °C ± 2 °C for at least 16 h	Р
	After the test: no damage	Р
24.5	Portable single socket-outlets and plugsTRLP(elastomeric or thermoplastic material): compression test, 300 N for 1 min, position a) and b) (apparatus shown in fig. 22)TRLP	P
	After the test: no damage	Р
24.6	Screwed glands of accessories other than ordinary: torque test (1 min)	N/A
	- diameter of test rod (mm)	
	- type of material	
	- torque (Nm):	
	- type of material	
	After the test: no damage of glands and enclosure of the specimens	N/A
24.7	Plug pins provided with insulating sleeves: 20000 movements, 4 N (apparatus shown in fig. 23)	N/A
	After the test: no damage of pins, insulating sleeve not have punctured or rucked up	N/A
24.8	Shuttered socket-outlets: mechanical test carried out on specimens submitted to the normal operation test according to clause 21	
	Force applied for 1 min against the shutter of an entry hole by means of one pin	—
	Pin not come in contact with live parts	N/A
	After the test: no damage	N/A
24.9	Multiple portable socket-outlet: mechanical test	
	Rewirable multiple socket-outlets: flexible cable of the smallest cross-sectional area specified in table 3	
	8 falls on concrete floor with the specimens arranged as shown in figure 24	N/A
	After the test: no damage, no part have become detached or loosened	N/A
	Accessories other than ordinary submitted again to the test as specified in 16.2	N/A



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		1	1
CI.	Requirement – Test	Result	Verdict

	Socket-outlets with shutter must be tested to cl. 21 again	N/A
24.10	Plugs: pull test to verify the fixation of pins in the body of the plug (new specimens)	Р
	Maximum withdrawal force (table 16) applied for 1 min on each pin in turn, after the specimen has been placed at 70 °C for 1 h	
	After the test: displacement of pins in the body of the plug \leq 1 mm	Р
24.11	Barriers of portable socket-outlets having means for suspension on a wall:	N/A
	Force applied for 10 s against the barrier by means of a cylindrical steel rod (1,5 times the maximum plug withdrawal force specified in table 16) (N)	—
	Rod not pierce the barrier	N/A
24.12	Portable socket-outlets having means for suspension on a wall (pull test):	N/A
	Pull applied to the supply flexible cable for 10 s (force prescribed in 23.2 for checking the flexible cable anchorage) (N)	
	During the test: no break of the means for suspension on a wall	N/A
24.13	Portable socket-outlets having means for suspension on a wall (pull test):	N/A
	Pull applied to the engagement face of the socket-outlet for 10 s (maximum withdrawal force specified, for the corresponding plug, in table 16) (N)	—
	During the test: no break of the means for suspension on a wall	N/A
24.14	Force necessary for covers or cover-plates to come off or not to come off (accessibility with the test finger to live parts)	N/A
24.14.1	Verification of the non-removal of covers or cover-plates	N/A
	Force applied for 1 min in direction perpendicular to the mounting surface	—
	Covers or cover-plates not come off	N/A
	Test repeated on new specimens with a sheet of hard material, $1 \text{ mm} \pm 0, 1 \text{ mm}$ thick, fitted around the supporting frame (fig. 8)	N/A
	Covers or cover-plates not come off	N/A
	After the test: no damage	N/A
24.14.2	Verification of the removal of covers or cover-plates	N/A
	Force not exceeding 120 N applied 10 times in direction perpendicular to the mounting / supporting surface: covers or cover-plates come off	N/A



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CI.	Requirement – Test	Result	Verdict

	Test repeated on new specimens with a sheet of hard material, $1 \text{ mm} \pm 0, 1 \text{ mm}$ thick, fitted around the supporting frame (fig. 8)		N/A
	Covers or cover-plates come off		N/A
	After the test: no damage		N/A
24.15	Force necessary for covers or cover-plates to come (accessibility with the test finger to non-earthed me parts by creepage distances and clearances accord	etal parts separated from live	N/A
24.15.1	Verification of the non-removal of covers or cover-p	olates	N/A
	Force applied for 1 min in direction perpendicular to the mounting surface		
	Covers or cover-plates not come off		N/A
	Test repeated on new specimens with a sheet of hard material, $1 \text{ mm} \pm 0, 1 \text{ mm}$ thick, fitted around the supporting frame (fig. 8)		N/A
	Covers or cover-plates not come off		N/A
	After the test: no damage		N/A
24.15.2	Verification of the removal of covers or cover-plates	S	N/A
	Force not exceeding 120 N applied 10 times in direction perpendicular to the mounting / supporting surface: covers or cover-plates come off		N/A
	Test repeated on new specimens with a sheet of hard material, $1 \text{ mm} \pm 0, 1 \text{ mm}$ thick, fitted around the supporting frame (fig. 8)		N/A
	Covers or cover-plates come off		N/A
	After the test: no damage		N/A
24.16	Force necessary for covers or cover-plates to come (accessibility to insulating parts, earthed metal part a.c. or metal parts separated from live parts by cree according to table 23)	ts, live parts of SELV \leq 25 V	N/A
24.16.1	Verification of the non-removal of covers or cover-p	olates	N/A
	Force 10 N applied for 1 min in direction perpendicular to the mounting surface: covers or cover-plates not come off		N/A
	Test repeated on new specimens with a sheet of hard material, $1 \text{ mm} \pm 0, 1 \text{ mm}$ thick, fitted around the supporting frame (fig. 8)		N/A
	Covers or cover-plates not come off		N/A
	After the test: no damage		N/A
24.16.2	Verification of the removal of covers or cover-plates	S	N/A



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Attachment 3
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CI.	Requirement – Test	Result	Verdict

	Force not exceeding 120 N applied 10 times in direction perpendicular to the mounting / supporting surface: covers or cover-plates come off	N/.	A
	Test repeated on new specimens with a sheet of hard material, $1 \text{ mm} \pm 0, 1 \text{ mm}$ thick, fitted around the supporting frame (fig. 8)	N/.	A
	Covers or cover-plates come off	N/.	A
	After the test: no damage	N/.	A
24.17	Test with gauge of figure 7 applied according to figure 9 for verification of the outline of covers or cover-plates: distances between face C of gauge and outline of side under test, not decrease:	N/.	A
24.18	Test with gauge according to figure 5 applied as shown in figure 11 (1 N): gauge not enter more than 1mm:	N/.	A
24.19	While pressure test on flange with apparatus according to figure 37b (20N, 1 min., 25°C) the portable socket-outlet meet requirements of its dimension-sheet	N/.	A
24.20	Springs or other mechanism of hinged covers of socket-outlets having protection class ≥IP44 are not loosened or fail after hinge opened 5000 for times	N/.	A
24.21	Cover plates of socket-outlets do not work loose or impair further use after pull test (30s, 50N)	N/.	A

25	RESISTANCE TO HEAT	Р
25.1	Fixed and portable accessories: heating cabinet 100 °C for 1 h	
	During the test: no change impairing their further use and sealing compound, if any, not flow	Р
	After the test: markings still legible	Р
25.2	Parts of insulating material of fixed socket-outlets necessary to retain current- carrying parts and parts of the earthing circuit in position, and parts of the front surface zone of 2 mm width surrounding the phase and neutral pin entry holes: ball- pressure test (1 h, 125 °C)	
	After the test: diameter of impression $\leq 2 \text{ mm} \dots$: Pin holder: 1,0mm	Р
25.3	For parts not necessary to retain current-carrying parts and parts of the earthing circuit in position, even though in contact with them: ball-pressure test (1 h)	
	Test temperature (°C) 70	
	After the test: diameter of impression $\leq 2 \text{ mm} \dots$: Enclosure: 0,5 mm	Р
25.4	Portable accessories: compression test (20 N, 1 h, 80 °C) by means of the apparatus shown in figure 28	
	After the test: no damage	Р



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CI.	Requirement – Test	Result	Verdict

26	SCREWS, CURRENT-CARRYING PARTS AND C	CONNECTIONS	Р
26.1	Connections withstand mechanical stresses		Р
	Thread-forming or thread-cutting screws used only if supplied together with the piece in which they are intended to be inserted	No such part	N/A
	Thread-cutting screws intended to be used during installation: captive		N/A
	Screws and nuts which transmit contact pressure: in engagement with a metal thread		N/A
	Test:		
	- 10 times for screws in engagement with a thread of insulating material and for screws of insulating material		N/A
	- 5 times for all other cases		N/A
	- terminals: screw diameter (mm); torque (Nm); times		
	- earthing terminals: screw diameter (mm); torque (Nm); times		
	- assembly screws: screw diameter (mm); torque (Nm); times		
	- cord anchorage: screw diameter (mm); torque (Nm); times:		
	- other screws or nuts: diameter (mm); torque (Nm); times		
	During the test: no damage impairing the further use of the screwed connectons		N/A
26.2	Screws in engagement with a thread of insulating material: correct introduction into the screw hole or nut ensured		N/A
26.3	Contact pressure: not transmitted through insulating material other than ceramic, pure mica or other material no less suitable unless there is sufficient resiliency in metallic parts		Ρ
	Connections made by insulation piercing of tinsel cord reliable		N/A
26.4	Screws and rivets locked against loosening and/or turning		Р
26.5	Current-carrying parts of metal having mechanical s and resistance to corrosion adequate:	strength, electrical conductivity	Р
	- copper;		N/A
	- alloy with at least 58 % copper for parts made from cold-rolled sheet or with at least 50 % copper for other parts;	>64.5 %	Ρ
	- stainless steel with at least 13 % chromium and not more than 0,09 % carbon		N/A



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Cl. Requirement – T	est
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Result

Verdict

	- steel with electroplated coating of zinc (ISO 2081), with thickness of at least:	N/A
	5 μm, service condition ISO no. 1, for ordinary equipment	N/A
	12 μm, service condition ISO no. 2, for splash- proof equipment	N/A
	25 μm, service condition ISO no. 3, for jet-proof equipment	N/A
	- steel with electroplated coating of nickel and chromium (ISO 1456), with thickness of at least:	S N/A
	20 μm, service condition ISO no. 2, for ordinary equipment	N/A
	30 μm, service condition ISO no. 3, for splash- proof equipment	N/A
	40 μm, service condition ISO no. 4, for jet-proof equipment	N/A
	- steel with electroplated coating of tin (ISO 2093), with thickness of at least:	N/A
	12 μm, service condition ISO no. 2, for ordinary equipment	N/A
	20 μm, service condition ISO no. 3, for splash- proof equipment	N/A
	30 μm, service condition ISO no. 4, for jet-proof equipment	N/A
	Current-carrying parts subjected to mechanical wear: not of steel with electroplated coating	Р
	Metals having a great difference of electrochemical potential: not used in contact with each other	N/A
26.6	Contacts subjected to a sliding action: of metal resistant to corrosion	Р
26.7	Thread-forming screws and thread-cutting screws not used for the connection of current-carrying parts	N/A
	Thread-forming screws and thread-cutting screws used to provide earthing connection: not necessary to disturb the connection and at least two screws are used for each connection	N/A
26.8	For internal connection other than screw terminal and screwless terminal used in fixed and portable accessories, these connections must be welded, soldered, crimped or other reliable connection method.	N/A

27	CREEPAGE DISTANCES, CLEARANCES AND DISTANCES THROUGH SEALING COMPOUND TRLP		Ρ
27.1	Creepage distances, clearances and distances through sealing compound no less than the values shown in table 23		Ρ



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CI.

Requirement – Test

Result

Verdict

Creepage distances (cr):	P
1) between live parts of different polarity \ge 4(3) mm Measured: 13,6mm	Р
2) between live parts and:	
- accessible insulating and earthed metal parts $\geq 3 \text{ mm}$	N/A
- parts of earthing circuit \ge 3 mm	N/A
- metal frames supporting the base of flush-type socket-outlets $\geq 3mm$	N/A
- screws or devices for fixing bases, covers or cover-plates of fixed socket-outlets ≥ 3 mm :	N/A
- external assembly screws, other than screws which are on the engagement face of plugs and are isolated from the earthing circuit ≥ 3 mm :	N/A
3) between pins of plugs and metal parts connected to them, when fully engaged, and a socket-outlet of the same system having accessible unearthed metal parts $\geq 6(4,5)$ mm :	N/A
4) between the accessible unearthed metal parts of a socket-outlet and a fully engaged plug of the same system having pins and metal parts connected to them $\ge 6(4,5)$ mm	N/A
5) between live parts of a socket-outlet (without a plug) and its accessible unearthed metal parts $\ge 6(4,5)$ mm	N/A
Clearances (cl):	Р
6) between live parts of different polarity $\geq 3 \text{ mm}$. : Measured: 13,6mm	Р
7) between live parts and:	
- accessible insulating and earthed metal parts not mentioned under 8 and 9 \geq 3 mm	N/A
- parts of earthing circuit \geq 3 mm:	N/A
- metal frames supporting the base of flush-type socket-outlets $\geq 3mm$	N/A
- screws or devices for fixing bases, covers or cover-plates of fixed socket-outlets ≥ 3 mm :	N/A
- external assembly screws, other than screws which are on the engagement face of plugs and are isolated from the earthing circuit $\geq 3 \text{ mm} \dots$:	N/A
8) between live parts and:	
- exclusively earthed metal boxes \geq 3 mm:	N/A
- unearthed metal boxes, without insulating lining \geq 4,5 mm	N/A
accessible unearthed or functional earthed metal parts of socket-outlet and plugs	N/A



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CI. Requirement – Test Result	
Ci. Requirement – rest Result	Verdict

	9) between live parts and the surfaces on which the base of a socket-outlet for surface mounting is mounted \geq 6 mm	N/A
	10) between live parts and the bottom of any conductor recess, if any, in the base of a socket-outlet for surface mounting \geq 3 mm:	N/A
	Distance through insulating sealing compound:	N/A
	11) between live parts covered with at least 2 mm of sealing compound and the surfaces on which the base of a socket-outlet for surface mounting is mounted $\ge 4(3)$ mm	N/A
	12) between live parts covered with at least 2 mm of sealing compound and the bottom of any conductor recess, if any, in the base of a socket-outlet for surface mounting \geq 2,5 mm	N/A
27.2	Insulating sealing compound: not protrude above the edge of the cavity in which it is contained	N/A
27.3	Ordinary surface-type socket-outlets: no bare current-carrying strips at the back	N/A

28	RESISTANCE OF INSULATING MATERIAL TO ABNORMAL HEAT, TO FIRE AND TO TRACKING	Р
28.1	Resistance to abnormal heat and to fire	Р
28.1.1	Glow-wire test	Р
	For parts of fixed accessories necessary to retain current-carrying parts and parts of the earthing circuit in position: test temperature 850 °C	N/A
	No visible flame and no sustained glowing	N/A
	Flame and glowing extinguish within 30 s:	N/A
	No ignition of the tissue paper	N/A
	For parts of fixed accessories needed to retain the earth terminal in position in a box: test temperature 650 °C	N/A
	No visible flame and no sustained glowing	N/A
	Flame and glowing extinguish within 30 s:	N/A
	No ignition of the tissue paper	N/A
	For parts of portable accessories necessary to retain current-carrying parts and parts of the earthing circuit in position: test temperature 750 °C	Р
	No visible flame and no sustained glowing Pin holder	Р
	Flame and glowing extinguish within 30 s:	Р
	No ignition of the tissue paper	Р
	For parts not necessary to retain current-carrying parts and parts of the earthing circuit in position, even though in contact with them: test temperature 650 °C	Р
	No visible flame and no sustained glowing Enclosure	Р



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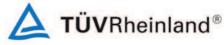
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CI.	Requirement – Test	Result	Verdict

	Flame and glowing extinguish within 30 s:		Р
	No ignition of the tissue paper	No ignition	Р
28.1.2	Plugs with pins provided with insulating sleeves:	•	N/A
	Test temperature maintained for 3 h by means of the apparatus shown in figure 26		—
	Impact test according to sub-clause 30.4 (mass 100 g, height 100 mm, 4 impacts): no cracks of the insulating sleeves		N/A
28.2	Resistance to tracking		Р
	Parts of insulating material retaining live parts in position of accessories other than ordinary: test voltage 175 V, 50 drops, solution A of IEC 112		Р
	No flashover or breakdown		Р

29	RESISTANCE TO RUSTING		N/A
	Ferrous parts protected against rusting	No such parts	N/A
	No signs of rust after 10 min in carbon tetrachloride, trichloroethane or equivalent degreasing agent, 10 min 10 % solution of ammonium chloride, 10 min in a box with air saturated with moisture and 10 min at 100 °C		N/A

30	ADDITIONAL TESTS ON PINS PROVIDED WITH INSULATING SLEEVES	
30.1	Pressure test at high temperature	
	Apparatus shown in figure 29, with the test specimen in position, maintained for 2 h at 200 °C. Force applied through the blade: 2,5 N	N/A
	Thickness of insulation measured: before the test (mm); after the test (mm)	
	Thickness within the area of impression ≥ 50 % of the thickness measured before the test: percent value (%)	N/A
30.2	Static damp heat test	N/A
	Set of 3 specimens submitted to two damp heat cycles in accordance with IEC 68-2-30	N/A
	After the test:	N/A
	Insulation resistance and electric strength test (clause 17)	N/A
	Abrasion test (sub-clause 24.7)	N/A
30.3	Test at low temperature	N/A
	Set of 3 specimens maintained at –15 °C ± 2 °C for 24 h	N/A
	After the test:	



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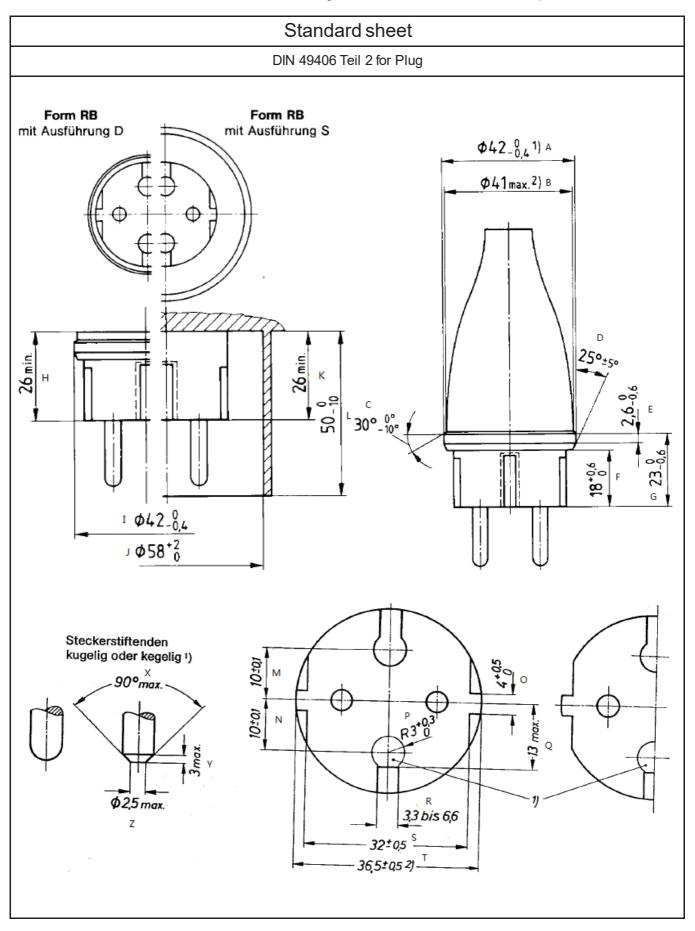
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CI.	Requirement – Test	Result	Verdict
	Insulation resistance and electric strength test (clause 17)		N/A
	Abrasion test (sub-clause 24.7)		N/A
30.4	Impact test at low temperature		N/A
	Specimens maintained at –15 °C ± 2 °C for 24 h subjected to 4 impacts (mass 100 g, height 100 mm) by means of the apparatus shown in figure 30 rotating the specimen through 90° between impacts		N/A
	After the test: no crack of the insulating sleeves		N/A

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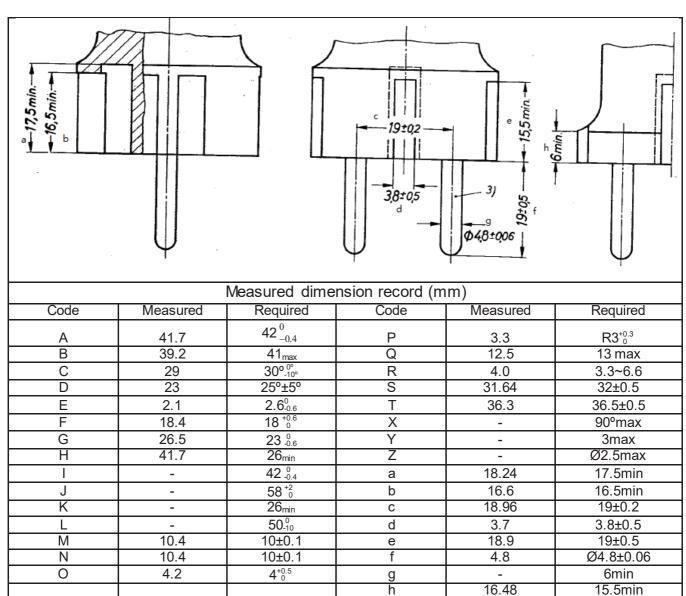






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	Partially of BS 1363-1: part 1: 1	995 + A4: 2012	
Clause	Requirement – Test	Result – Remark	Verdict
12	Construction of Plugs For UK plug	UK plug models: RKP-UKxxxyyyyDP-5	
12.1	The disposition of the pins shall be shown as figure 4.	The dispositions of the pins were shown as specified.	Р
12.2	Pin and sleeve dimensions, body outline were checked according to figure 4 of BS1363: part 1.	The outline of the plug did not exceed the specified dimensions at a distance of 8.0mm from the engagement surface. (limit: >6.35mm)	Ρ
		The measured dimensions of item shown in fig. 4 were found within the specified limits.	
	The plug portion should enter the gauge fully with a force less than 10N was applied to the centre of the sample at right angle.	Sample was entered into the gauge completely.	Ρ
12.3	No part of a line or neutral pin shall be less than 9,5mm from the periphery of the plug measured along the engagement surface.	10.0mm	Ρ
12.9	Plug pins were constructed of brass	Complied.	Р
12.9.1	Exposed surface of plug pins were smooth and free from burrs or sharp edges and other irregularities, which could cause damage or excessive wear to sockets or shutters.	Complied.	Ρ
12.9.4	The adaptor plug pins were tested as specified in the standard.	Complied. After being subjected to a force of 1100N for L, N pin, 400N for ISOD pin, the pin portion could fit the relevant gauge.	Ρ
12.9.6	Each pin of the adaptor was subjected to a torque of 1Nm for 60s as specified in the standard.	Complied. After the test, the pin portion could fit the relevant gauge.	Ρ
12.11	The adaptors were tested as specified in the standard. After being placed in an oven at 70°C for 1 hour, each pin of the samples was subjected for 60 sec. to a pull of 100N in the oven.	Complied. After the above test, no plug pin was detached and the plug pins could fit the relevant gauge.	Ρ
12.12	The degree of flexibility of mounting of the plug pins was checked according to 12.12.1	Measured value: Max. 1° (test on each sources of enclosure, max. value measured) (limit: Max. 3° 30').	Ρ
12.16	Line and neutral plug pin shall be fitted with insulating sleeves. The dimensions of the pin and sleeve shall fall within the specific limit.	Complied. Both line and neutral pins were fitted with insulating sleeves.	Ρ
12.17.1	Plug pin sleeve shall be compliance with 12.17.2 to 12.17.4	Complied.	Р
12.17.2	Electric strength test applied between the metal part of plug pin and the sleeve (1250±30V)	Complied. No breakdown or flashover occurs.	Р

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	Partially of BS 1363-1: part 1: 1995 + A4: 2012			
Clause	Requirement – Test	Result – Remark	Verdict	
12.17.3	Abrasion test for plug pin sleeve The plug pin sleeves were subjected to 20000 movements of abrasion as specified in the standard.	Complied. After the test, the sleeves showed no damage that impaired further use and could satisfy the electric strength test in 12.17. 2	Ρ	
12.17.4	The plug pins with sleeves were placed in a heating cabinet at 200°C and tested according to the standard for 120min. Arrange the test as Figure 10 of BS 1363-1.	After the test, the thickness of sleeves of plug pins (Line and neutral pins) remaining at the impression point reduced by max. 2.5% less than 50%.	Ρ	

Add	litional requirement for the solid insulated shutter	opening device (ISOD) accordi	ng to
	Clause 12 of BS 1363: part 1: 1995 + A4: 2012		
12.2	Plug fitted with an ISOD shall comply with all the dimensions specified in Fig. 4a with exception of the width of the ISOD, which should be 4,05mm max. and 3,90mm min. and its height which should be 8,05mm max. and 7,75mm min.	See measured dimensions in Table 3	Ρ
12.9.4.3	Solid insulated opening device were tested as specified in the standard.	After being subjected to a forced of 400N, the pin could fit the relevant gauge.	Ρ
12.9.5.2	Plugs with ISOD shall not cause excessive wear to socket contacts or shutters of sockets-outlets The test use a separate sample of plug with ISOD for each type of socket-outlet, with each sample being inserted into and withdrawn from the socket-outlet at a rate of 6 insertions and 6 withdrawals per minute, the speed of travel of the plug being approximately 150mm/s	After 5000 insertions and withdrawals completed, socket outlets show no damage that would impair further use. Plugs show no damage and suit for the dimensional requirements according to clause 12.2. The shutters of the socket- outlets operate satisfactorily and socket contacts safety shielded.	Ρ
22.2	Resistance to heat		Р
	Ball pressure test according to BS EN 60695-10- 2:2003 on parts of insulation material necessary for the function or supporting parts of the plug.	Test performed on plug portion (including ISOD) for 125°C ball pressure test at the material of plug portion which maintains live part in position. Measured after 1 hour.	Ρ
		Max. 1.4mm measured after 1 hour. Limit: 2mm	
23	Resistance of insulating material to abnormal heat and fire		Р
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on enclosure with: 650°C. All enclosure material have been considered.	Ρ

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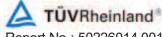


Partially of BS 1363-1: part 1: 1995 + A4: 2012

Clause	Requirement – Test	Result – Remark	Verdict
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on plug portion (including ISOD) with: 750°C. All enclosure material have been considered.	Ρ

Plug portion dim	ensions				
Linear Dimensions (mm)		Measurement		<u>Limit</u>	
*A		24.45		25.370 max.	
*В		32.19		34.6 max.	
*C		Fit the testing gauge		15 min.	
D		10.0		9.5 min.	
*E	L-> E	11.06		11.05 - 11.18	
	N -> E	11.06			
*F	L-> E	22.30		22.10 - 22.36	
	N -> E	22.30			
G1		6.25		6.22 - 6.48	
G2		6.25		6.22 - 6.48	
Н		3.95		3.90 - 4.05	
*		22.63		22.23 - 23.23	
J		1.56		1.35 - 1.85	
К		7.98		7.80 - 8.05	7.75 - 8.05 For ISOD
	line	9.26		9.5 max.	
L	neutral	9.28			
М	line	8.61		9.2 max.	
IVI	neutral	8.57			
	line	4.00		3.90 - 4.05	
N (sleeve)	neutral	4.00			
0	line	17.87		17.20 - 18.20	
0	neutral	17.85			
	Line	1.46		1.35 - 1.85	
Р	neutral	1.48			
	earth	1.51			
	line	3.95		3.90 - 4.05	
Q (metal)	neutral	3.95			
	earth	3.95			
	Line	1.6		1.2 - 2.0	
R	neutral	1.6			
	earth	1.70			
S	line	1.71		1.35 - 1.85	

BS 1363-1 a (Plug portion acceptance test)



Attachment 4		Page 4 of 5			Report No.: 50226014 001			
		Partially of B	S 1363-	1: part 1: 19	995 + A4: 2012			
Clause	Requirement – Test				Result – Remark			Verdict
	neutral	1.71						

*Remark: all these dimensions were checked by the relevant gauge (based on BS1363: Part 1:1995 Figure 5)

<u>Angular Dimensions (°)</u>		<u>Measurement</u>		<u>Limits</u>	
θ1		58.0°		58° - 62°	
	line	68.0°		60° - 80°	
θ2	neutral	68.0°			
	earth	74.0°			
θ3	line	61.0°		58° - 62°	
	neutral	61.0°			

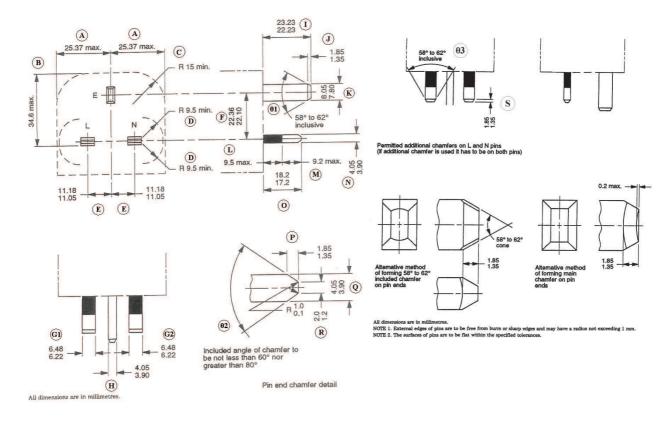


Figure 4a of BS 1363: Part 1

* Remark: all these dimensions were checked by the relevant gauge (based on BS1363: Part 1:1995 Figure 5)



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Partially of BS 1363-1: part 1: 1995 + A4: 2012

Clause Requirement – Test Result – Remark

Verdict

Plug Portion Dimensions (Solid insulated shutter opening device ISOD)

Linear Dimens	ions (mm)	SAMPLE A	Limit
Т		7.98	7.75 - 8.05
U		3.95	3.90 - 4.05
V	E -> L	0.01	0.15 max
	E -> N	0.01	0.15 max
W	E -> top	0.01	0.15 max
	E -> L & N	0.01	0.15 max

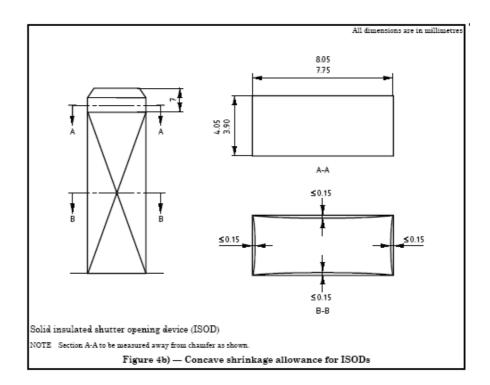
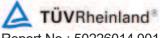


Figure 4b of BS 1363: Part 1

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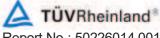
Report No.: 50226014 001

Partially of BS 1363-1: part 1: 1995 + A4: 2012

Clause	Requirement – Test	Result – Remark	Verdict	

12	Construction of Plugs For UK plug m 2	odels: RKPO-UKxxxyyyyDP-	Р
12.1	The disposition of the pins shall be shown as figure 4.	The dispositions of the pins were shown as specified.	Р
12.2	Pin and sleeve dimensions, body outline were checked according to figure 4 of BS1363: part 1.	The outline of the plug did not exceed the specified dimensions at a distance of 6.9mm from the engagement surface. (limit: >6.35mm)	Ρ
		The measured dimensions of item shown in fig. 4 were found within the specified limits.	
	The plug portion should enter the gauge fully with a force less than 10N was applied to the centre of the sample at right angle.	Sample was entered into the gauge completely.	Р
12.3	No part of a line or neutral pin shall be less than 9,5mm from the periphery of the plug measured along the engagement surface.	10.0mm	Р
12.9	Plug pins were constructed of brass	Complied.	Р
12.9.1	Exposed surface of plug pins were smooth and free from burrs or sharp edges and other irregularities, which could cause damage or excessive wear to sockets or shutters.	Complied.	Ρ
12.9.4	The adaptor plug pins were tested as specified in the standard.	Complied. After being subjected to a force of 1100N for L, N pin, 400N for ISOD pin, the pin portion could fit the relevant gauge.	Ρ
12.9.6	Each pin of the adaptor was subjected to a torque of 1Nm for 60s as specified in the standard.	Complied. After the test, the pin portion could fit the relevant gauge.	Р
12.11	The adaptors were tested as specified in the standard. After being placed in an oven at 70°C for 1 hour, each pin of the samples was subjected for 60 sec. to a pull of 100N in the oven.	Complied. After the above test, no plug pin was detached and the plug pins could fit the relevant gauge.	Ρ
12.12	The degree of flexibility of mounting of the plug pins was checked according to 12.12.1	Measured value: Max. 1° (test on each sources of enclosure, max. value measured) (limit: Max. 3° 30').	Ρ
12.16	Line and neutral plug pin shall be fitted with insulating sleeves. The dimensions of the pin and sleeve shall fall within the specific limit.	Complied. Both line and neutral pins were fitted with insulating sleeves.	Ρ
12.17.1	Plug pin sleeve shall be compliance with 12.17.2 to 12.17.4	Complied.	Р

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	Partially of BS 1363-1: part 1: 1995 + A4: 2012					
Clause	Requirement – Test	Result – Remark	Verdict			
12.17.2	12.17.2Electric strength test applied between the metal part of plug pin and the sleeve (1250±30V)Complied. No breakdown or flashover occurs.					
12.17.3	Abrasion test for plug pin sleeve The plug pin sleeves were subjected to 20000 movements of abrasion as specified in the standard.	Complied. After the test, the sleeves showed no damage that impaired further use and could satisfy the electric strength test in 12.17. 2	Ρ			
12.17.4	The plug pins with sleeves were placed in a heating cabinet at 200°C and tested according to the standard for 120min. Arrange the test as Figure 10 of BS 1363-1.	After the test, the thickness of sleeves of plug pins (Line and neutral pins) remaining at the impression point reduced by max. 2.5% less than 50%.	Ρ			

Ado	Additional requirement for the solid insulated shutter opening device (ISOD) according to					
Clause 12 of BS 1363: part 1: 1995 + A4: 2012						
12.2	 Plug fitted with an ISOD shall comply with all the dimensions specified in Fig. 4a with exception of the width of the ISOD, which should be 4,05mm max. and 3,90mm min. and its height which should be 8,05mm max. and 7,75mm min. 		Ρ			
12.9.4.3	Solid insulated opening device were tested as specified in the standard.	After being subjected to a forced of 400N, the pin could fit the relevant gauge.	Ρ			
12.9.5.2	Plugs with ISOD shall not cause excessive wear to socket contacts or shutters of sockets-outlets The test use a separate sample of plug with ISOD for each type of socket-outlet, with each sample being inserted into and withdrawn from the socket-outlet at a rate of 6 insertions and 6 withdrawals per minute, the speed of travel of the plug being approximately 150mm/s	After 5000 insertions and withdrawals completed, socket outlets show no damage that would impair further use. Plugs show no damage and suit for the dimensional requirements according to clause 12.2. The shutters of the socket- outlets operate satisfactorily and socket contacts safety shielded.	Ρ			
22.2	Resistance to heat		Р			
	Ball pressure test according to BS EN 60695-10- 2:2003 on parts of insulation material necessary for the function or supporting parts of the plug.	Test performed on plug portion (including ISOD) for 125°C ball pressure test at the material of plug portion which maintains live part in position. Measured after 1 hour. Max. 1.1mm measured after 1 hour. Limit: 2mm	Ρ			

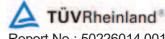
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	Partially of BS 1363-1: part 1: 1995 + A4: 2012				
Clause	Requirement – Test	Result – Remark	Verdict		
23	3 Resistance of insulating material to abnormal heat and fire				
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on enclosure with: 650°C. All enclosure material have been considered.	Ρ		
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on plug portion (including ISOD) with: 750°C. All enclosure material have been considered.	Ρ		

Linear Dimens	ions (mm)	<u>Measurement</u>	<u>Limit</u>	
*A		25.3	25.370 max.	
*B		33.2	34.6 max.	
*C		Fit the testing gauge	15 min.	
D	1	10.3	9.5 min.	
*E	L -> E	11.18	11.05 - 11.18	
	N -> E	11.18		
*F	L-> E	22.15	22.10 - 22.36	
	N -> E	22.17		
G1		6.25	6.22 - 6.48	
G2		6.26	6.22 - 6.48	
Н		3.98	3.90 - 4.05	
*		22.72	22.23 - 23.23	
J		1.75	1.35 - 1.85	
К		7.91	7.80 - 8.05	7.75 - 8.05 For ISOD
I	line	9.43	9.5 max.	
L	neutral	9.38		
14	line	8.3	9.2 max.	
М	neutral	8.3		
	line	3.98	3.90 - 4.05	
N (sleeve)	neutral	3.97		
0	line	17.74	17.20 - 18.20	
0	neutral	17.75		
	Line	1.59	1.35 - 1.85	
Р	neutral	1.61		
	earth	1.73		
$O(mc^{4}-1)$	line	3.96	3.90 - 4.05	
Q (metal)	neutral	3.95		

BS 1363-1 a (Plug portion acceptance test)



Attachme	Attachment 5			Page 4 of 5		Report No.: 5	0226014 001
			Partially of BS	1363-1: part 1: 1	995 + A4: 2012		
Clause	Requir	rement –	Test		Result – Remar	ĸ	Verdict
		earth	3.97				
		Line	1.55		1.2 - 2.0)	
R		neutral	1.58				
		earth	1.79				
S		line	1.56		1.35 - 1.8	35	
3		neutral	1.61				

*Remark: all these dimensions were checked by the relevant gauge (based on BS1363: Part 1:1995 Figure 5)

<u>Angular Dimensions (°)</u>		<u>Measu</u>	<u>rement</u>	<u>Limits</u>	
θ1		61.0°		58° - 62°	
	line	70.0°		60° - 80°	
θ2	neutral	70.0°			
	earth	60.0°			
θ3	line	59.0°		58° - 62°	
	neutral	59.0°			

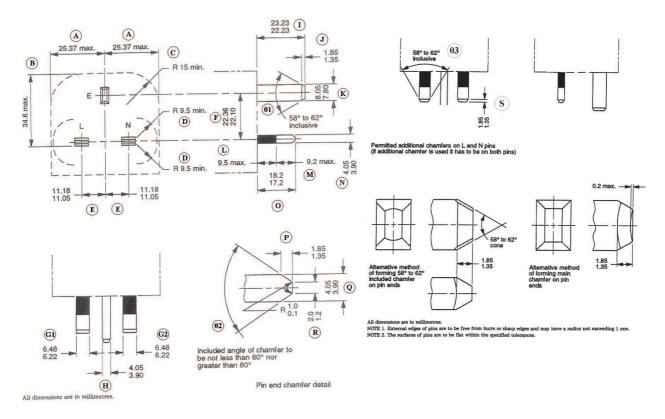


Figure 4a of BS 1363: Part 1

* Remark: all these dimensions were checked by the relevant gauge (based on BS1363: Part 1:1995 Figure 5)



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Result - Remark

Partially of BS 1363-1: part 1: 1995 + A4: 2012

Clause Requirement – Test

Verdict

Plug Portion Dimensions (Solid insulated shutter opening device ISOD)

Linear Dimens	ions (mm)	SAMPLE A	Limit
Т		7.91	7.75 - 8.05
U		3.98	3.90 - 4.05
V	E -> L	0.02	0.15 max
	E -> N	0.02	0.15 max
W	E -> top	0.01	0.15 max
	E -> L & N	0.02	0.15 max

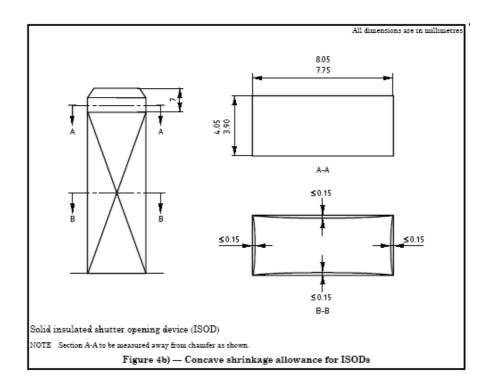
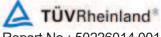


Figure 4b of BS 1363: Part 1

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Report No.: 50226014 001

Partially of BS 1363-1: part 1: 1995 + A4: 2012

Clause	Requirement – Test

Result - Remark

Verdict

12	Construction of Plugs For UK plug m	odels: RKP-UKxxxyyyyDP-2	Р
12.1	The disposition of the pins shall be shown as figure 4.	The dispositions of the pins were shown as specified.	Ρ
12.2	Pin and sleeve dimensions, body outline were checked according to figure 4 of BS1363: part 1.	The outline of the plug did not exceed the specified dimensions at a distance of 6.8mm from the engagement surface. (limit: >6.35mm)	Ρ
		The measured dimensions of item shown in fig. 4 were found within the specified limits.	
	The plug portion should enter the gauge fully with a force less than 10N was applied to the centre of the sample at right angle.	Sample was entered into the gauge completely.	Р
12.3	No part of a line or neutral pin shall be less than 9,5mm from the periphery of the plug measured along the engagement surface.	10.0mm	Р
12.9	Plug pins were constructed of brass	Complied.	Р
12.9.1	Exposed surface of plug pins were smooth and free from burrs or sharp edges and other irregularities, which could cause damage or excessive wear to sockets or shutters.	Complied.	Ρ
12.9.4	The adaptor plug pins were tested as specified in the standard.	Complied. After being subjected to a force of 1100N for L, N pin, 400N for ISOD pin, the pin portion could fit the relevant gauge.	Ρ
12.9.6	Each pin of the adaptor was subjected to a torque of 1Nm for 60s as specified in the standard.	Complied. After the test, the pin portion could fit the relevant gauge.	Р
12.11	The adaptors were tested as specified in the standard. After being placed in an oven at 70°C for 1 hour, each pin of the samples was subjected for 60 sec. to a pull of 100N in the oven.	Complied. After the above test, no plug pin was detached and the plug pins could fit the relevant gauge.	Ρ
12.12	The degree of flexibility of mounting of the plug pins was checked according to 12.12.1	Measured value: Max. 1° (test on each sources of enclosure, max. value measured) (limit: Max. 3° 30').	Ρ
12.16	Line and neutral plug pin shall be fitted with insulating sleeves. The dimensions of the pin and sleeve shall fall within the specific limit.	Complied. Both line and neutral pins were fitted with insulating sleeves.	Ρ
12.17.1	Plug pin sleeve shall be compliance with 12.17.2 to 12.17.4	Complied.	Р
12.17.2	Electric strength test applied between the metal part of plug pin and the sleeve $(1250\pm30V)$	Complied. No breakdown or flashover occurs.	Ρ

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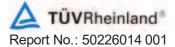


	Partially of BS 1363-1: part 1: 1995 + A4: 2012					
Clause	Requirement – Test	Result – Remark	Verdict			
12.17.3	Abrasion test for plug pin sleeve The plug pin sleeves were subjected to 20000 movements of abrasion as specified in the standard.	Complied. After the test, the sleeves showed no damage that impaired further use and could satisfy the electric strength test in 12.17. 2	Ρ			
12.17.4	The plug pins with sleeves were placed in a heating cabinet at 200°C and tested according to the standard for 120min. Arrange the test as Figure 10 of BS 1363-1.	After the test, the thickness of sleeves of plug pins (Line and neutral pins) remaining at the impression point reduced by max. 2.5% less than 50%.	Ρ			

Add	litional requirement for the solid insulated shutter	opening device (ISOD) accordi	ng to			
	Clause 12 of BS 1363: part 1: 1995 + A4: 2012					
12.2	Plug fitted with an ISOD shall comply with all the dimensions specified in Fig. 4a with exception of the width of the ISOD, which should be 4,05mm max. and 3,90mm min. and its height which should be 8,05mm max. and 7,75mm min.	See measured dimensions in Table 3	Ρ			
12.9.4.3	Solid insulated opening device were tested as specified in the standard.	After being subjected to a forced of 400N, the pin could fit the relevant gauge.	Ρ			
12.9.5.2	Plugs with ISOD shall not cause excessive wear to socket contacts or shutters of sockets-outlets The test use a separate sample of plug with ISOD for each type of socket-outlet, with each sample being inserted into and withdrawn from the socket-outlet at a rate of 6 insertions and 6 withdrawals per minute, the speed of travel of the plug being approximately 150mm/s	After 5000 insertions and withdrawals completed, socket outlets show no damage that would impair further use. Plugs show no damage and suit for the dimensional requirements according to clause 12.2. The shutters of the socket- outlets operate satisfactorily and socket contacts safety shielded.	Ρ			
22.2	Resistance to heat					
	Ball pressure test according to BS EN 60695-10- 2:2003 on parts of insulation material necessary for the function or supporting parts of the plug.	Test performed on plug portion (including ISOD) for 125°C ball pressure test at the material of plug portion which maintains live part in position. Measured after 1 hour.	Ρ			
		Max. 0.6mm measured after 1 hour. Limit: 2mm				
23	Resistance of insulating material to abnormal h	eat and fire	Р			
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on enclosure with: 650°C. All enclosure material have been considered.	Р			

I

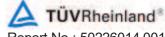
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Partially of BS 1363-1: part 1: 1995 + A4: 2012

	, ,		
Clause	Requirement – Test	Result – Remark	Verdict
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on plug portion (including ISOD) with: 750°C. All enclosure material have been considered.	Р

Plug portion dir	nensions			
Linear Dimens	ions (mm)	<u>Measurement</u>	<u>Limit</u>	
*A		24.46	25.370 max.	
*B		31.1	34.6 max.	
*C		15.0	15 min.	
D		10.0	9.5 min.	
*E	L -> E	11.11	11.05 - 11.18	
	N -> E	11.10		
*F	L -> E	22.20	22.10 - 22.36	
	N -> E	22.19		
G1		6.29	6.22 - 6.48	
G2		6.30	6.22 - 6.48	
Н		4.01	3.90 - 4.05	
*		22.85	22.23 - 23.23	
J		1.50	1.35 - 1.85	
К		8.00	7.80 - 8.05	7.75 - 8.05 For ISOD
L	line	8.74	9.5 max.	
L	neutral	8.78		
М	line	8.72	9.2 max.	
IVI	neutral	8.76		
	line	3.98	3.90 - 4.05	
N (sleeve)	neutral	3.98		
0	line	17.46	17.20 - 18.20	
0	neutral	17.48		
	Line	1.40	1.35 - 1.85	
Р	neutral	1.40		
	earth	1.43		
	line	3.96	3.90 - 4.05	
Q (metal)	neutral	3.96		
	earth	4.00		
	Line	1.60	1.2 - 2.0	
R	neutral	1.60		
	earth	1.80		
S	line	1.60	1.35 - 1.85	



Attachme	ent 6	Page 4 of 5		Report No.: 50226014 001		
		Partially of B	6 1363-1: part 1: 1	995 + A4: 2012		
Clause	Clause Requirement – Test			Result – Remar	k	Verdict
	neutral	1.60				

*Remark: all these dimensions were checked by the relevant gauge (based on BS1363: Part 1:1995 Figure 5)

<u>Angular Dimensions (°)</u>		Measurement		<u>Limits</u>	
θ1		60.0°		58° - 62°	
	line	69.0°		60° - 80°	
θ2	neutral	69.0°			
	earth	69.0°			
θ3	line	59.0°		58° - 62°	
	neutral	59.0°			

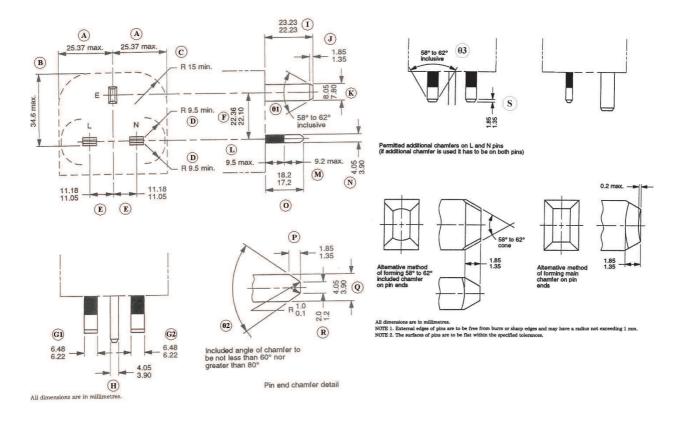


Figure 4a of BS 1363: Part 1

* Remark: all these dimensions were checked by the relevant gauge (based on BS1363: Part 1:1995 Figure 5)



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Partially of BS 1363-1: part 1: 1995 + A4: 2012

Clause Requirement – Test

Result – Remark

Verdict

Plug Portion Dimensions (Solid insulated shutter opening device ISOD)

Linear Dimensions (mm)		SAMPLE A	Limit
Т		8.00	7.75 - 8.05
U		4.00	3.90 - 4.05
V	E -> L	0.04	0.15 max
	E -> N	0.04	0.15 max
W	E -> top	0.04	0.15 max
	E -> L & N	0.04	0.15 max

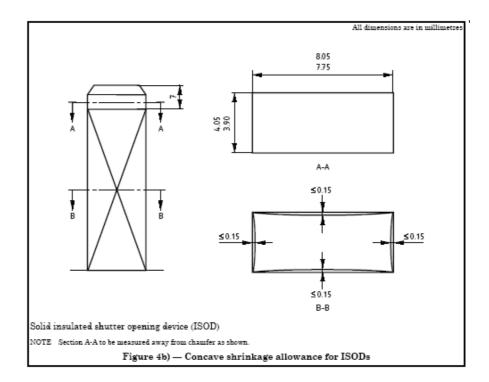
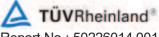


Figure 4b of BS 1363: Part 1

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Partially of BS 1363-1: part 1: 1995 + A4: 2012

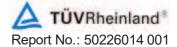
Clause Requirement – Test

Result - Remark

Verdict

12	Construction of Plugs For UK plug models: RKP-UKxxxyyyyDP-1				
12.1	The disposition of the pins shall be shown as figure 4.	The dispositions of the pins were shown as specified.	Р		
12.2	Pin and sleeve dimensions, body outline were checked according to figure 4 of BS1363: part 1.	The outline of the plug did not exceed the specified dimensions at a distance of 7.2mm from the engagement surface. (limit: >6.35mm)	Ρ		
		The measured dimensions of item shown in fig. 4 were found within the specified limits.			
	The plug portion should enter the gauge fully with a force less than 10N was applied to the centre of the sample at right angle.	Sample was entered into the gauge completely.	Р		
12.3	No part of a line or neutral pin shall be less than 9,5mm from the periphery of the plug measured along the engagement surface.	10.0mm	Р		
12.9	Plug pins were constructed of brass	Complied.	Р		
12.9.1	Exposed surface of plug pins were smooth and free from burrs or sharp edges and other irregularities, which could cause damage or excessive wear to sockets or shutters.	Complied.	Ρ		
12.9.4	The adaptor plug pins were tested as specified in the standard.	Complied. After being subjected to a force of 1100N for L, N pin, 400N for ISOD pin, the pin portion could fit the relevant gauge.	Ρ		
12.9.6	Each pin of the adaptor was subjected to a torque of 1Nm for 60s as specified in the standard.	Complied. After the test, the pin portion could fit the relevant gauge.	Ρ		
12.11	The adaptors were tested as specified in the standard. After being placed in an oven at 70°C for 1 hour, each pin of the samples was subjected for 60 sec. to a pull of 100N in the oven.	Complied. After the above test, no plug pin was detached and the plug pins could fit the relevant gauge.	Ρ		
12.12	The degree of flexibility of mounting of the plug pins was checked according to 12.12.1	Measured value: Max. 1° (test on each sources of enclosure, max. value measured) (limit: Max. 3° 30').	Ρ		
12.16	Line and neutral plug pin shall be fitted with insulating sleeves. The dimensions of the pin and sleeve shall fall within the specific limit.	Complied. Both line and neutral pins were fitted with insulating sleeves.	Ρ		
12.17.1	Plug pin sleeve shall be compliance with 12.17.2 to 12.17.4	Complied.	Ρ		
12.17.2	Electric strength test applied between the metal part of plug pin and the sleeve $(1250\pm30V)$	Complied. No breakdown or flashover occurs.	Ρ		

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	Partially of BS 1363-1: part 1: 1995 + A4: 2012					
Clause	Requirement – Test	Result – Remark	Verdict			
12.17.3	Abrasion test for plug pin sleeve The plug pin sleeves were subjected to 20000 movements of abrasion as specified in the standard.	Complied. After the test, the sleeves showed no damage that impaired further use and could satisfy the electric strength test in 12.17. 2	Ρ			
12.17.4	The plug pins with sleeves were placed in a heating cabinet at 200°C and tested according to the standard for 120min. Arrange the test as Figure 10 of BS 1363-1.	After the test, the thickness of sleeves of plug pins (Line and neutral pins) remaining at the impression point reduced by max. 2.5% less than 50%.	Ρ			

Ado	litional requirement for the solid insulated shutter	opening device (ISOD) accordi	ng to			
	Clause 12 of BS 1363: part 1: 1995 + A4: 2012					
12.2	Plug fitted with an ISOD shall comply with all the dimensions specified in Fig. 4a with exception of the width of the ISOD, which should be 4,05mm max. and 3,90mm min. and its height which should be 8,05mm max. and 7,75mm min.	See measured dimensions in Table 3	Ρ			
12.9.4.3	Solid insulated opening device were tested as specified in the standard.	After being subjected to a forced of 400N, the pin could fit the relevant gauge.	Ρ			
12.9.5.2	Plugs with ISOD shall not cause excessive wear to socket contacts or shutters of sockets-outlets The test use a separate sample of plug with ISOD for each type of socket-outlet, with each sample being inserted into and withdrawn from the socket-outlet at a rate of 6 insertions and 6 withdrawals per minute, the speed of travel of the plug being approximately 150mm/s	After 5000 insertions and withdrawals completed, socket outlets show no damage that would impair further use. Plugs show no damage and suit for the dimensional requirements according to clause 12.2. The shutters of the socket- outlets operate satisfactorily and socket contacts safety shielded.	Ρ			
22.2	Resistance to heat		Р			
	Ball pressure test according to BS EN 60695-10- 2:2003 on parts of insulation material necessary for the function or supporting parts of the plug.	Test performed on plug portion (including ISOD) for 125°C ball pressure test at the material of plug portion which maintains live part in position. Measured after 1 hour.	Ρ			
		Max. 1.2mm measured after 1 hour. Limit: 2mm				
23	Resistance of insulating material to abnormal heat and fire					
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on enclosure with: 650°C. All enclosure material have been considered.	Ρ			

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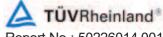


Partially of BS 1363-1: part 1: 1995 + A4: 2012

Clause	Requirement – Test	Result – Remark	Verdict
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on plug portion (including ISOD) with: 750°C. All enclosure material have been considered.	Ρ

Plug portion dim	nensions				
Linear Dimensi	ons (mm)	Measur	ement	<u>Limit</u>	
*A		24.9		25.370 max.	
*B		32.9		34.6 max.	
*C		Fit the testing gauge		15 min.	
D		10.0		9.5 min.	
*E	L->E	11.15		11.05 - 11.18	
	N -> E	11.15			
*F	L -> E	22.24		22.10 - 22.36	
	N -> E	22.21			
G1		6.23		6.22 - 6.48	
G2		6.24		6.22 - 6.48	
Н		3.98		3.90 - 4.05	
*		22.72		22.23 - 23.23	
J		1.75		1.35 - 1.85	
К		7.92		7.80 - 8.05	7.75 - 8.05 For ISOD
	line	9.45		9.5 max.	
L	neutral	9.43			
М	line	8.30		9.2 max.	
IVI	neutral	8.30			
	line	3.95		3.90 - 4.05	
N (sleeve)	neutral	3.96			
0	line	17.74		17.20 - 18.20	
0	neutral	17.71			
	Line	1.56		1.35 - 1.85	
Р	neutral	1.53			
	earth	1.72			
	line	3.94		3.90 - 4.05	
Q (metal)	neutral	3.95			
	earth	3.97			
	Line	1.57		1.2 - 2.0	
R	neutral	1.54		1	
	earth	1.79			
S	line	1.60		1.35 - 1.85	

BS 1363-1 a (Plug portion acceptance test)



Attachme	Attachment 7			Page 4 of 5			Repo	Report No.: 50226014 001		
			Partially of B	S 1	363-1: part 1: 1	995	+ A4: 2012			
Clause	Re	quirement –	Test			Re	esult – Remark		Verdict	
		neutral	1.58							

*Remark: all these dimensions were checked by the relevant gauge (based on BS1363: Part 1:1995 Figure 5)

<u>Angular Dimensions (°)</u>		<u>Measu</u>	<u>rement</u>	<u>Limits</u>	
θ1		63.0°		58° - 62°	
	line	70.0°		60° - 80°	
θ2	neutral	71.0°			
	earth	75.0°			
θ3	line	58.0°		58° - 62°	
	neutral	58.0°			

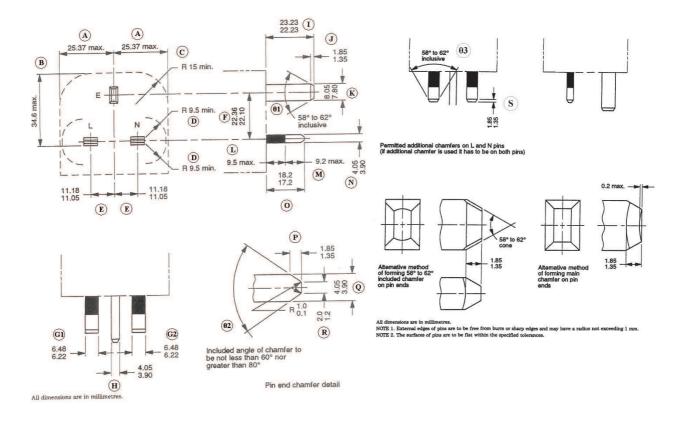


Figure 4a of BS 1363: Part 1

* Remark: all these dimensions were checked by the relevant gauge (based on BS1363: Part 1:1995 Figure 5)



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Partially of BS 1363-1: part 1: 1995 + A4: 2012

Clause Requirement – Test Result – Remark

Verdict

Plug Portion Dimensions (Solid insulated shutter opening device ISOD)

Linear Dimensions (mm)		SAMPLE A	Limit
Т		7.92	7.75 - 8.05
U		3.98	3.90 - 4.05
V	E -> L	0.01	0.15 max
	E -> N	0.02	0.15 max
W	E -> top	0.02	0.15 max
	E -> L & N	0.02	0.15 max

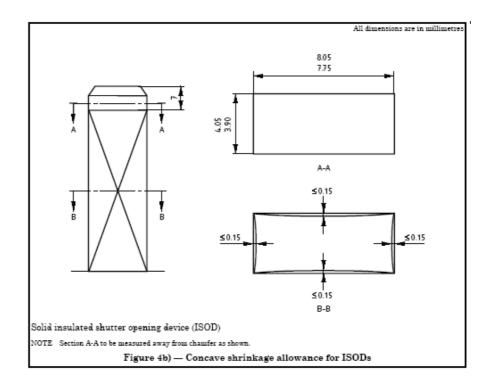
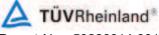


Figure 4b of BS 1363: Part 1



Attachment	Q
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EN 50075 (partially)

Clause

Requirement – Test

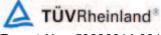
Result – Remark

Verdict

6	Marking			
	Appliances shall be marked as follows:			
	Rated current in amperes (A)	Refer to marking label of final appliance.	N/A	
	Rated Voltage in volts (V)	As above	N/A	
	Symbol for nature of supply (~)	As above	N/A	
	Name, trade mark or identification mark of manufacturer or responsible vendor	Dongguan Rico Electronic Co., Ltd.	Ρ	
	Type reference	Model: RKP-EUxxxyyyyDP-2	Р	

7	Dimensions				Р
	Plugs shall comply with Standard	Sheet 1	(see attached drawing	g)	Р
	Between two pins (pin base)	18.0 - 19.2 mm	18.2	mm	Р
	Between two pins (pin top)	17.0 - 18.0 mm	17.5	mm	Р
	Diameter of pin (metallic part)	4 ^{±0.06} mm	3.97	mm	Р
	Diameter of pin (pin base)	max. 4.0 mm	3.90	mm	Р
	Diameter of pin (middle part)	max. 3.8 mm	3.50	mm	Р
	Pin length	19 ^{±0.5} mm	19.30	mm	Р
	Length of pin except metal part	10 ^{+1/-0} mm	10.30	mm	Р
	Shape of pin top	• •	Round shape		Р
	Length of plug base	35.3 ^{±0.7} mm	35.7	mm	Р
	Width of plug base	13.7 ^{±0.7} mm	14.1	mm	Р
	Diagonal dimension of plug base	26.1 ^{±0.5} mm	26.3	mm	Р
	within a distance of 18mm	≥18 mm	18.3	mm	Р
	Angle	45°	45	0	Р
	Radius	R 5 -0, +1 mm	5.5	mm	Р

8.	Protection against electric shock		
8.1	Live parts of the plug not accessible (standard test finger)	Protected by enclosure of the equipment	Р
8.2	No connection between one plug-pin and socket outlet	Checked by gauge of Fig.4	Р
8.3	External parts of insulating material	External parts except pins are insulating material.	Ρ



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Attachment	8

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EN 50075 (partially)

Clause Requirement – Test

Result – Remark

Verdict

9	Construction		Р
9.1	Plugs not replaceable	Not replaceable	Р
9.2	Switches, fuses, lampholders not incorporated	Not incorporated	Р
9.3	Solid pins	See clause 13	Р
	Adequate mechanical strength	As above	Р
9.4	Pins locked against rotation	See clause 13.1 and 13.4	Р
	Adequate fixed into the body	Each pin shaft is designed with ridges to lock into the pin holder	Ρ
9.5	Kind of connection	Connected by springy metal sheet.	Р
9.6	Easily to be withdrawn from socket-outlet	The equipment provides sufficient gripping surface	Р

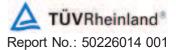
10	Resistance to humidity		Р
	-Humidity treatment for 48 hours	Tested with the equipment for 120h at 40°C and 95%RH (All material have been considered)	Ρ

11	Insulation resistance and electric strengt	th	Р
11.1	Insulation resistance (500 V, min 5 M Ω)	Pins against body: 100MΩ Each pin against body: 100MΩ Required: 7MΩ Pin against Pin: 100MΩ Required: 2MΩ	Ρ
11.2	Electric strength (2,000 V)	Pins against body: 2000V Each pin against body: 2000V Pin against Pin: 2000V	Р

13	Mechanical strength		Р
13.1		No deformation or deviation from the dimensions for all material of plug portion	Ρ

Γ

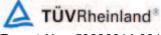
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EN 50075 (partially)				
Clause	Requirement – Test	Result – Remark	Verdict	
13.2	Tumbling barrel according to Figure 8	Weight of product with output cable cut to 100mm: 77g	Ρ	
		1000 falls was conducted on the plug portion mated with AC Adapter according to DIN VDE 0620-2-1:2013, item 24.2.		
		Three samples tested.		
		After the test, it was fulfilled the requirements of DIN VDE 0620-101:1992 item 7 figure 2 "gauge for interchangeability" and no damage.		
	No damages after the test		Р	
	Requirements of clause 7 and 8.2 still fulfilled	Deformations allowed according to the equipment standard.	Ρ	
13.3	Rubbing test of plug-pins: 10,000 cycles, 4 N	See test below	Р	
	No damage of the pins	No visible damage	Р	
13.4	Pull test at 70°C with 40 N	See test below	Р	
	Pins not more than 1 mm displaced	Displacement: 0.01mm	Р	

14	Resistance to heat and to ageing		Р
14.1	Sufficient resistant to heat	See test below	Р
14.1.1	After 1 h in heating cabinet at 100°C no damage shown	No visible damage	Ρ
14.1.2	After 1h in heating cabinet at 80°C and a force of 20 N through the jaws no damage shown	Performed a 125°C ball pressure test at the material of plug portion which maintains live part in position. Measured after 1 hour: 1.1mm	Ρ
14.2	Aging test	See test below, all enclosure material have been considered.	Ρ
	- at 70°C for 168h	70°C for 168h applied.	Р
	- at room temperature for 96h		N/A
	No traces of cloth at a force of 5N	Material does not soften	Р
	No damage leads to non-compliance	No visible damage	Р



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EN	50075	(partially)

Clause	Requirement – Test
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Result – Remark

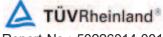
Verdict

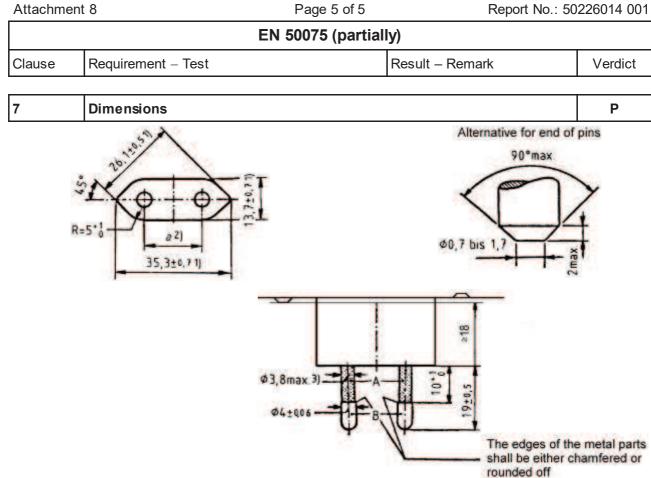
15	Current-carrying parts and connections resistance to heat and to ageing		P P
15.1	Connections withstand the mechanical See below stresses occurring in normal use		
15.2	Contact pressure not through isolating material Complied		Р
15.3	Current carrying parts of copper	Copper content 64.5%. No rolled sheet used	Р
	No electroplated coating when part is subjected to mechanical wear	No electroplated coating	Р
	Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion	No such materials used.	N/A

16	Creepage distances , clearances and distances through insulation		
	Live parts of different polarity: 3 mm >3 mm		Р
	Through insulation between live parts and accessible surfaces: 1.5 mm	>1.5 mm	Р

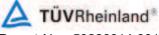
17	Resistance of insulating material to abno	Resistance of insulating material to abnormal heat and fire	
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on plug pin holder with: 750°C. Test was performed for all sources of enclosure material.	Ρ
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on plug portion with: 650°C. Test was performed for all sources of enclosure material.	Ρ

Attachment 8





- A = Insulating collar
- B = metal pin
- 1) These dimensions shall not be exceeded within a distance of 18mm from the engagement face of the plug.
- 2) Dimension a is:18mm to 19.2mm in the plane of the engagement face17mm to 18mm at the ends of the pins
- 3) This dimension may be increased to 4mm within a distance of 4mm from the engagement face of the plug.



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EN 50075 (partially)

Clause

Requirement – Test

Result – Remark

Verdict

6	Marking	Marking		
	Appliances shall be marked as follows:			
	Rated current in amperes (A)Refer to marking label of final appliance.		N/A	
	Rated Voltage in volts (V)	As above	N/A	
	Symbol for nature of supply (~)	As above	N/A	
	Name, trade mark or identification mark of manufacturer or responsible vendor	Dongguan Rico Electronic Co., Ltd.	Ρ	
	Type reference	Model: RKP-EUxxxyyyyDP-1	Р	

7	Dimensions			Р	
	Plugs shall comply with Standard Sheet 1 (see attached of		(see attached drawin	g)	Р
	Between two pins (pin base)	18.0 - 19.2 mm	18.4	mm	Р
	Between two pins (pin top)	17.0 - 18.0 mm	17.7	mm	Р
	Diameter of pin (metallic part)	4 ^{±0.06} mm	3.98	mm	Р
	Diameter of pin (pin base)	max. 4.0 mm	3.90	mm	Р
	Diameter of pin (middle part)	max. 3.8 mm	3.40	mm	Р
	Pin length	19 ^{±0.5} mm	19.10	mm	Р
	Length of pin except metal part	10 ^{+ 1/-0} mm	10.30	mm	Р
	Shape of pin top		Round shape		Р
	Length of plug base	35.3 ^{±0.7} mm	35.6	mm	Р
	Width of plug base	13.7 ^{±0.7} mm	14.1	mm	Р
	Diagonal dimension of plug base	26.1 ^{±0.5} mm	26.2	mm	Р
	within a distance of 18mm	≥18 mm	18.0	mm	Р
	Angle	45°	45	0	Р
	Radius	R 5 -0, +1 mm	5.0	mm	Р

8.	Protection against electric shock		Р
8.1	Live parts of the plug not accessible (standard test finger)	Protected by enclosure of the equipment	Р
8.2	No connection between one plug-pin and socket outlet	Checked by gauge of Fig.4	Р
8.3	External parts of insulating material	External parts except pins are insulating material.	Р

Attachment	9

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EN 50075 (partially)					
	Clause	Requirement – Test		Result – Remark	Verdict

9	Construction		Р
9.1	Plugs not replaceable	Not replaceable	Р
9.2	Switches, fuses, lampholders not incorporated	Not incorporated	Р
9.3	Solid pins	See clause 13	Р
	Adequate mechanical strength	As above	Р
9.4	Pins locked against rotation	See clause 13.1 and 13.4	Р
	Adequate fixed into the body	Each pin shaft is designed with ridges to lock into the pin holder.	Р
9.5	Kind of connection	Connected by hooking-in before soldering.	Р
9.6	Easily to be withdrawn from socket-outlet	The equipment provides sufficient gripping surface	Р

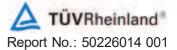
10	Resistance to humidity		Р
	-Humidity treatment for 48 hours	Tested with the equipment for 120h at 40°C and 95%RH (All material have been considered)	Ρ

11	Insulation resistance and electric strengt	th	Р
11.1	Insulation resistance (500 V, min 5 MΩ)	Pins against body: 100MΩ Each pin against body: 100MΩ Required: 7MΩ Pin against Pin: 100MΩ Required: 2MΩ	Ρ
11.2	Electric strength (2,000 V)	Pins against body: 2000V Each pin against body: 2000V Pin against Pin: 2000V	Ρ

13	Mechanical strength	Mechanical strength	
13.1	Pressed with 150 N for 5 min	No deformation or deviation from the dimensions for all material of plug portion	Ρ

Γ

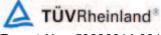
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EN 50075 (partially)

EN 50075 (partially)			
Clause	Requirement – Test	Result – Remark	Verdict
13.2	Tumbling barrel according to Figure 8	Weight of product with output cable cut to 100mm: 54g	Р
		1000 falls was conducted on the plug portion mated with AC Adapter according to DIN VDE 0620-2-1:2013, item 24.2.	
		Three samples tested.	
		After the test, it was fulfilled the requirements of DIN VDE 0620-101:1992 item 7 figure 2 "gauge for interchangeability" and no damage.	
	No damages after the test		Р
	Requirements of clause 7 and 8.2 still fulfilled	Deformations allowed according to the equipment standard	Ρ
13.3	Rubbing test of plug-pins: 10,000 cycles, 4 N	See test below	Р
	No damage of the pins	No visible damage	Р
13.4	Pull test at 70 ℃ with 40 N	See test below	Р
	Pins not more than 1 mm displaced	Displacement: 0.01mm	Р

14	Resistance to heat and to ageing		Р
14.1	Sufficient resistant to heat	See test below	Р
14.1.1	After 1 h in heating cabinet at 100 °C no damage shown	No visible damage	Ρ
14.1.2	After 1h in heating cabinet at 80 °C and a force of 20 N through the jaws no damage shown	Performed a 125°C ball pressure test at the material of plug portion which maintains live part in position. Measured after 1 hour: 1.2mm	Ρ
14.2	Aging test	See test below, all enclosure material have been considered.	Ρ
	- at 70 ℃ for 168h	70 °C for 168h applied.	Р
	- at room temperature for 96h		N/A
	No traces of cloth at a force of 5N	Material does not soften	Р
	No damage leads to non-compliance	No visible damage	Р



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EN	50075	(partially)

Clause	Requirement – Test

Result – Remark

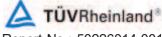
Verdict

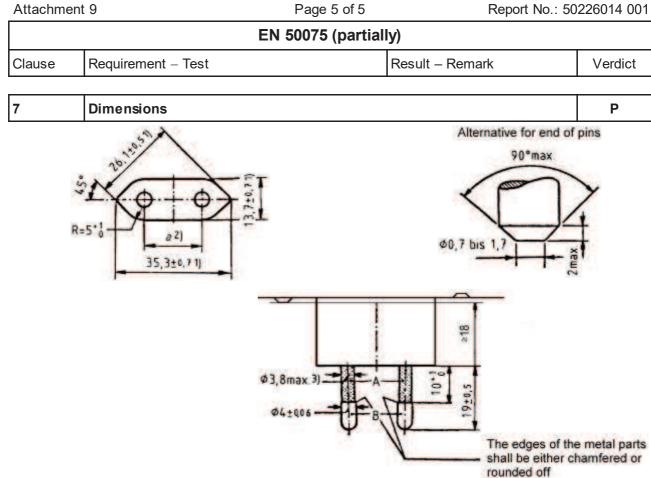
15	5 Current-carrying parts and connections resistance to heat and to ageing		Р
15.1	Connections withstand the mechanical stresses occurring in normal use	See below	Р
15.2	Contact pressure not through isolating material	Complied	Р
15.3	Current carrying parts of copper	Copper content 64.5%. No rolled sheet used	Р
	No electroplated coating when part is subjected to mechanical wear	No electroplated coating	Р
	Other metals having a mechanical strength, an electrical conductivity and a resistance to corrosion	No such materials used.	N/A

16	Creepage distances, clearances and distances through insulation		Р
	Live parts of different polarity: 3 mm	>3 mm	Р
	Through insulation between live parts and accessible surfaces: 1.5 mm	>1.5 mm	Р

17	Resistance of insulating material to abnormal heat and fire		Р
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on plug pin holder with: 750°C. Test was performed for all sources of enclosure material.	Ρ
	Insulating material not unduly affected by abnormal heat and by fire	Glow wire test performed on plug portion with: 650°C. Test was performed for all sources of enclosure material.	Ρ

Attachment 9





- A = Insulating collar
- B = metal pin
- 1) These dimensions shall not be exceeded within a distance of 18mm from the engagement face of the plug.
- 2) Dimension a is:18mm to 19.2mm in the plane of the engagement face17mm to 18mm at the ends of the pins
- 3) This dimension may be increased to 4mm within a distance of 4mm from the engagement face of the plug.



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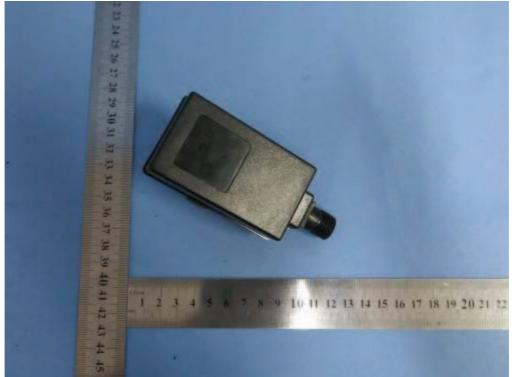


Figure 1. External view of RKPO-UKxxxyyyy, RKPO-UKxxxyyyy-D1, RKPO-UKxxxyyyy-D2



Figure 2. External view of RKPO-UKxxxyyyy, RKPO-UKxxxyyyy-D1, RKPO-UKxxxyyyy-D2



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Figure 3. External view of RKPO-EUxxxyyyy, RKPO-EUxxxyyyy-D1, RKPO-EUxxxyyyy-D2



Figure 4. External view of RKPO-EUxxxyyyy, RKPO-EUxxxyyyy-D1, RKPO-EUxxxyyyy-D2



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Figure 5. External view of RKPO-EUxxxyyyyCD-5



Figure 6. External view of RKPO-EUxxxyyyyCD-5



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Figure 7. External view of RKPO-UKxxxyyyyCD-5



Figure 8. External view of RKPO-UKxxxyyyyCD-5



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Figure 9. External view of RKPO-UKxxxyyyyCD-5



Figure 10. External view of RKP-UKxxxyyyyDP-5



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Figure 11. External view of RKP-UKxxxyyyyDP-5



Figure 12. External view of RKP-EUxxxyyyyCD-5



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Figure 13. External view of RKP-UKxxxyyyyCD-5



Figure 14. External view of RKP-UKxxxyyyyCD-5

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Figure 15. External view of RKPO-EUxxxyyyyDP-2

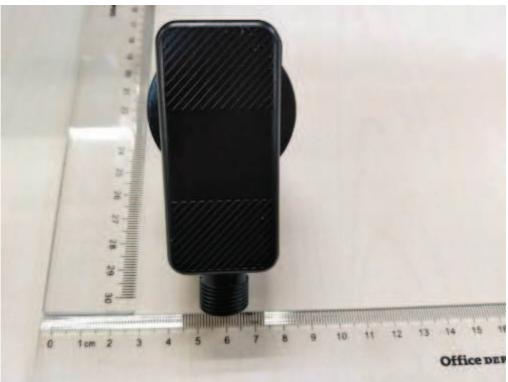


Figure 16. External view of RKPO-EUxxxyyyyDP-2



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Figure 17. External view of RKPO-UKxxxyyyyDP-2



Figure 18. External view of RKPO-UKxxxyyyyDP-2



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Figure 19. External view of RKPO-EUxxxyyyyDP-2A



Figure 20. External view of RKPO-EUxxxyyyyDP-2A



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Figure 21. External view of RKPO-EUxxxyyyyCD-2, RKPO-EUxxxyyyyCD-1



Figure 22. External view of RKPO-EUxxxyyyyCD-2, RKPO-EUxxxyyyyCD-1



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Figure 23. External view of RKPO-UKxxxyyyyCD-2, RKPO-UKxxxyyyyCD-1



Figure 24. External view of RKPO-UKxxxyyyyCD-2, RKPO-UKxxxyyyyCD-1



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Figure 25. External view of RKP-EUxxxyyyyDP-2



Figure 26. External view of RKP-EUxxxyyyyDP-2



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Figure 27. External view of RKP-UKxxxyyyyDP-2



Figure 28. External view of RKP-UKxxxyyyyDP-2



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Figure 29. External view of RKP-EUxxxyyyyDP-1



Figure 30. External view of RKP-EUxxxyyyyDP-1



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Figure 31. External view of RKP-UKxxxyyyyDP-1



Figure 32. External view of RKP-UKxxxyyyyDP-1

Photo Documentation



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Figure 33. Output connector view of RKPO-zzxxxyyyy, RKPO-zzxxxyyyy-D1, RKPOzzxxxyyyy-D2



Figure 34. Output connector view of RKPO-zzxxxyyyyCD-5

Photo Documentation



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Product:LED Power SupplyType Designation:See test report



Figure 35. Output connector view of RKPO-zzxxxyyyyCD-2, RKPO-zzxxxyyyyCD-1



Figure 36. Output connector view of RKPO-zzxxxyyyyDP-2

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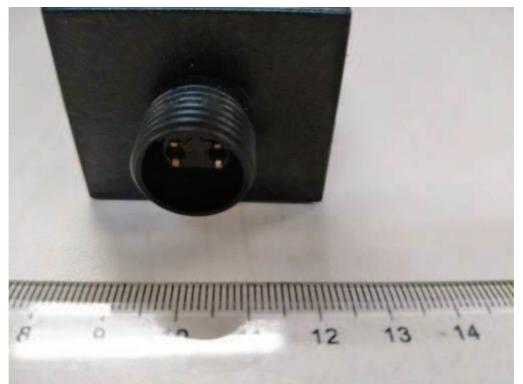


Figure 37. Output connector view of RKPO-zzxxxyyyyDP-2A



Figure 38. Internal view of RKPO-zzxxxyyyy, RKPO-zzxxxyyyy-D1, RKPO-zzxxxyyyy-D2

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Figure 39. Internal view of RKPO-EUxxxyyyy



Figure 40. Internal view of RKPO-UKxxxyyyy

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Figure 41. Internal view of RKPO-UKxxxyyyy-D2



Figure 42. Internal view of RKPO-UKxxxyyyy-D1

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Figure 43. Internal view of RKPO-zzxxxyyyyCD-5 (with glue)

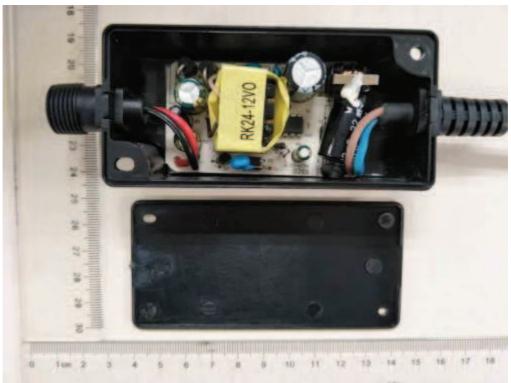


Figure 44. Internal view of RKPO-zzxxxyyyyCD-5 (without glue)



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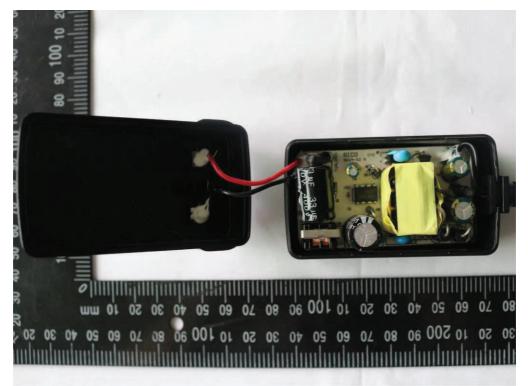


Figure 45. Internal view of RKP-UKxxxyyyyDP-5

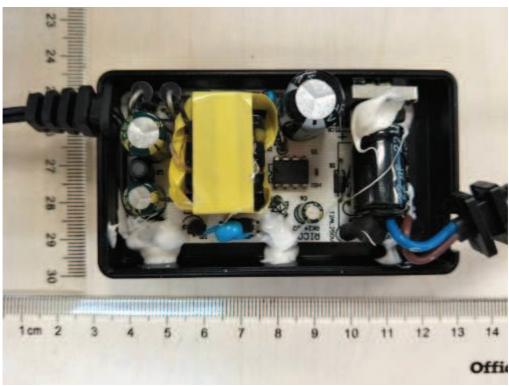


Figure 46. Internal view of RKP-zzxxxyyyyCD-5



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Figure 47. Internal view of RKPO-EUxxxyyyyDP-2



Figure 48. Internal view of RKPO-UKxxxyyyyDP-2



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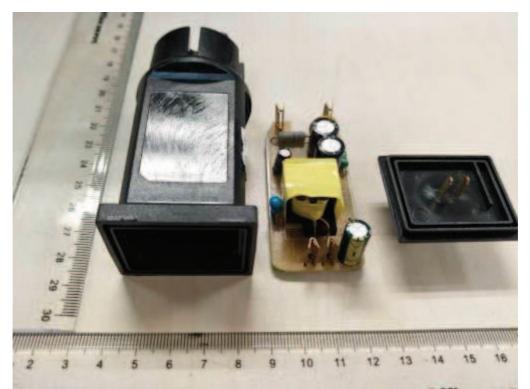


Figure 49. Internal view of RKPO-EUxxxyyyyDP-2A



Figure 50. Internal view of RKPO-zzxxxyyyyCD-2 (with glue)



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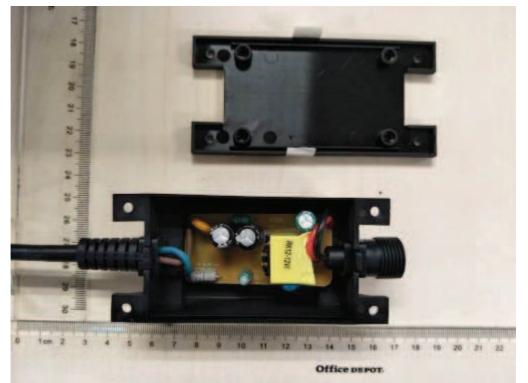


Figure 51. Internal view of RKPO-zzxxxyyyyCD-2 (without glue)



Figure 52. Internal view of RKP-EUxxxyyyyDP-2



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Product:LED Power SupplyType Designation:See test report





Figure 54. Internal view of RKPO-zzxxxyyyyCD-1 (with glue)

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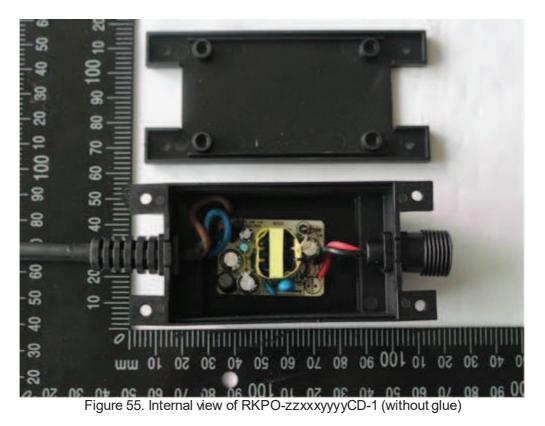




Figure 56. Internal view of RKP-EUxxxyyyyDP-1



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Product:	LED Power Supply
Type Designation:	See test report



Figure 57. Internal view of RKP-UKxxxyyyyDP-1

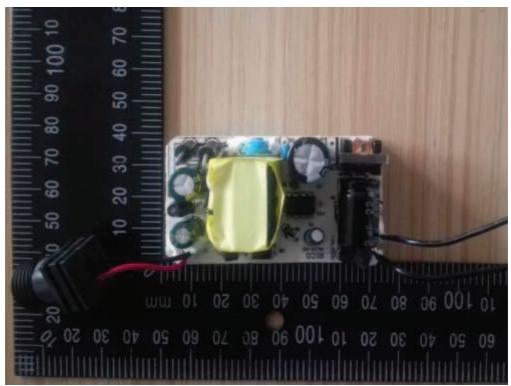


Figure 58. Component side view of RKPO-zzxxxyyyy



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Product:	LED Power Supply
Type Designation:	See test report

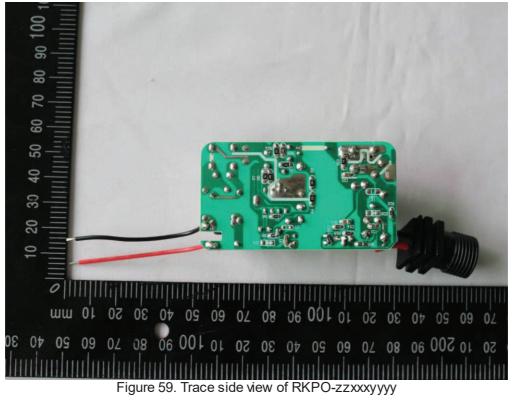




Figure 60. Component side view of RKPO-zzxxxyyyy-D2 (after removed glue)

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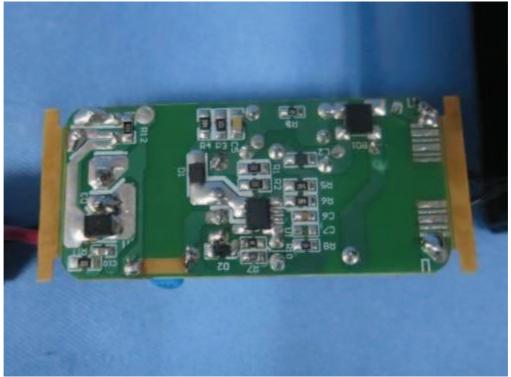


Figure 61. Trace side view of RKPO-zzxxxyyyy-D2

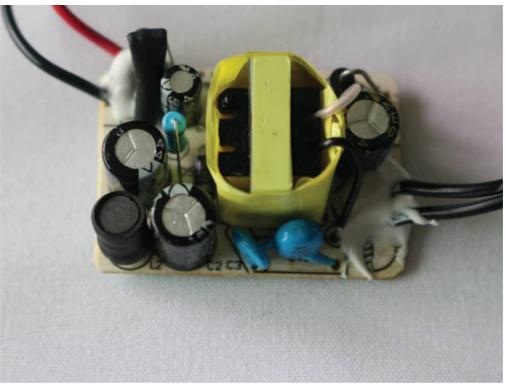


Figure 62. Component side view of RKPO-zzxxxyyyy-D1 (after removed glue)

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Figure 63. Trace side view of RKPO-zzxxxyyyy-D1

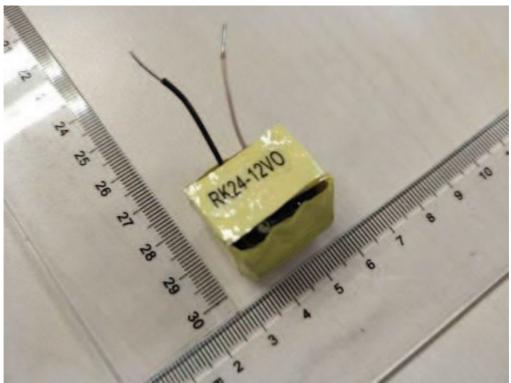


Figure 64. Transformer T1 view which used in model RKPO-zzxxxyyyy



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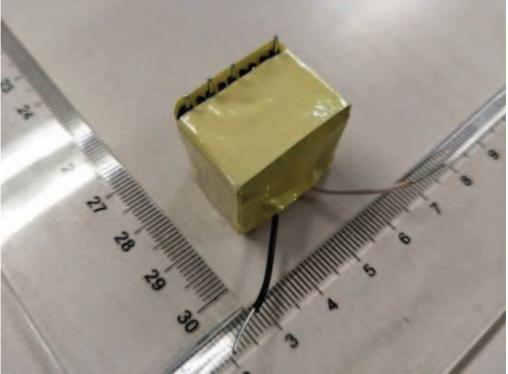


Figure 65. Transformer T1 view which used in model RKPO-zzxxxyyyy

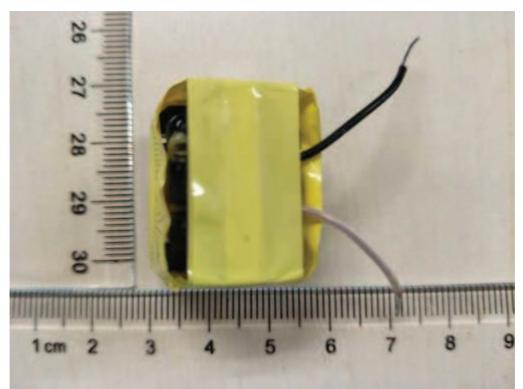


Figure 66. Transformer T1 view which used in model RKPO-zzxxxyyyy

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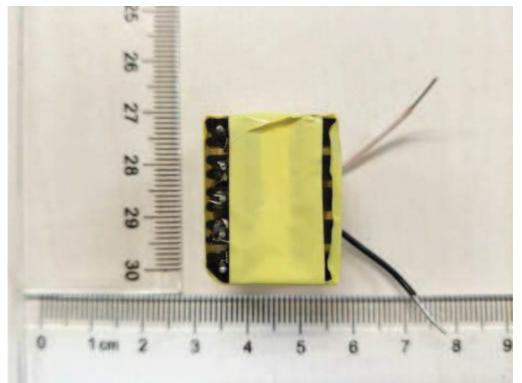


Figure 67. Transformer T1 view which used in model RKPO-zzxxxyyyy

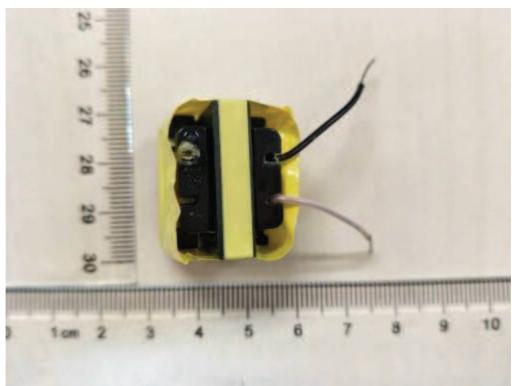


Figure 68. Transformer T1 view which used in model RKPO-zzxxxyyyy



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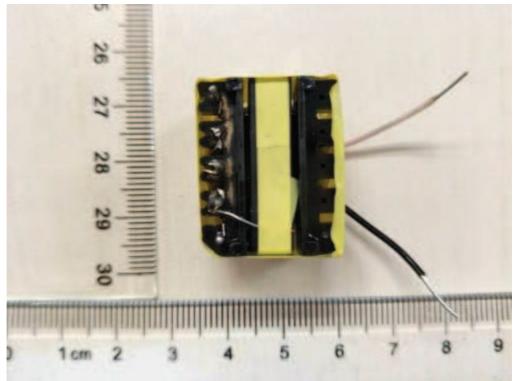


Figure 69. Transformer T1 view which used in model RKPO-zzxxxyyyy

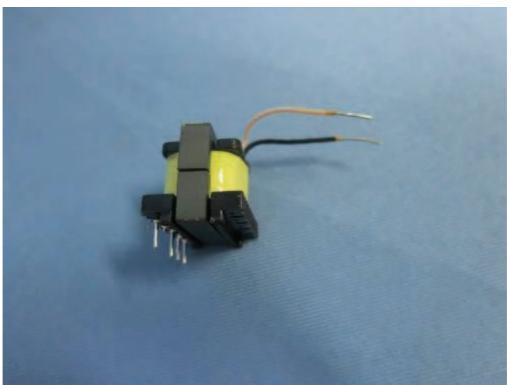


Figure 70. Transformer T1 view which used in model RKPO-zzxxxyyyy

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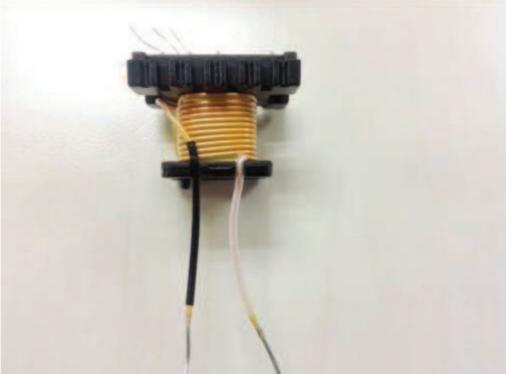


Figure 71. Transformer T1 view which used in model RKPO-zzxxxyyyy

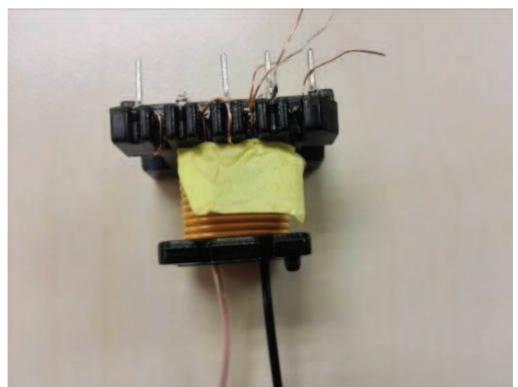


Figure 72. Transformer T1 view which used in model RKPO-zzxxxyyyy

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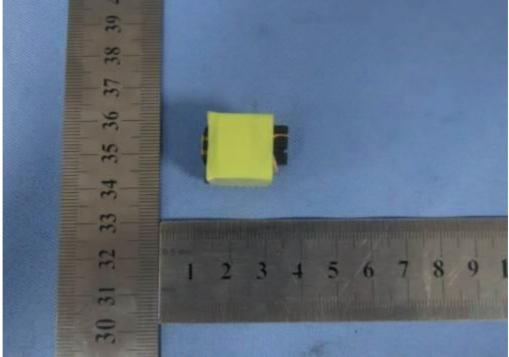


Figure 73. Transformer T1 view which used in model RKPO-zzxxxyyyy-D2

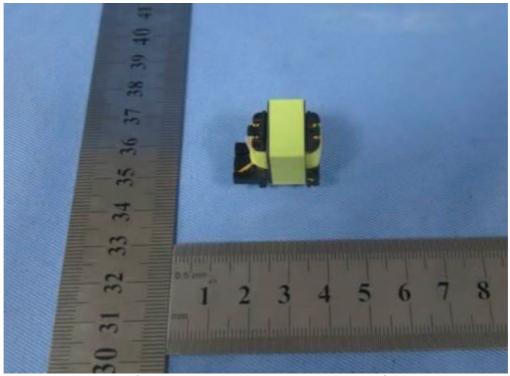


Figure 74. Transformer T1 view which used in model RKPO-zzxxxyyyy-D2

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Figure 75. Transformer T1 view which used in model RKPO-zzxxxyyyy-D2



Figure 76. Transformer T1 view which used in model RKPO-zzxxxyyyy-D2 (Insulation tape fold back used between primary winding and secondary TIW where can contact at angle 45-90



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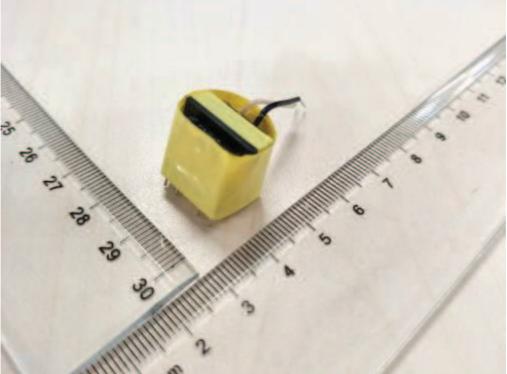


Figure 77. Transformer T1 view which used in model RKPO-zzxxxyyyy-D1

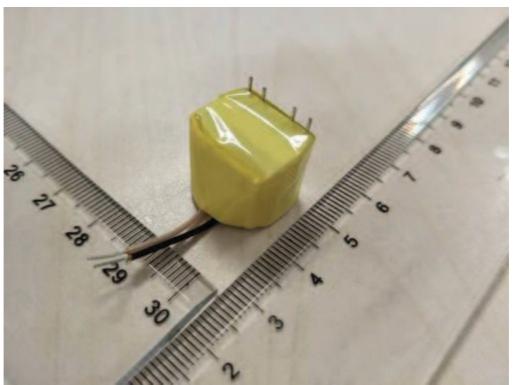


Figure 78. Transformer T1 view which used in model RKPO-zzxxxyyyy-D1



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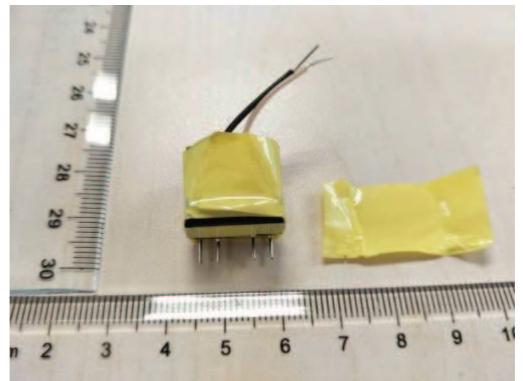


Figure 79. Transformer T1 view which used in model RKPO-zzxxxyyyy-D1

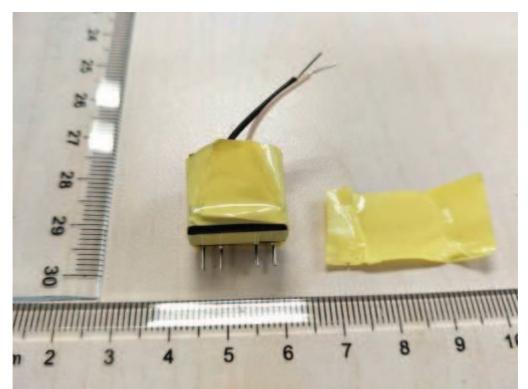


Figure 80. Transformer T1 view which used in model RKPO-zzxxxyyyy-D1

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Figure 81. Transformer T1 view which used in model RKPO-zzxxxyyyy-D1



Figure 82. Transformer T1 view which used in model RKPO-zzxxxyyyy-D1

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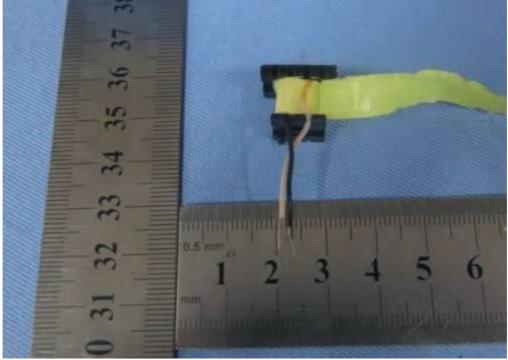


Figure 83. Transformer T1 view which used in model RKPO-zzxxxyyyy-D1

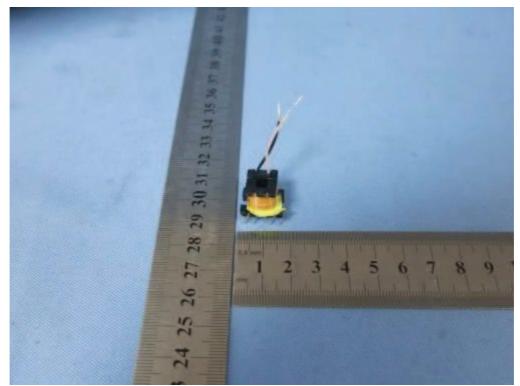


Figure 84. Transformer T1 view which used in model RKPO-zzxxxyyyy-D1 (Insulation tape fold back used between primary winding and secondary TIW where can contact at angle 45-90)