INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) COMMISSION ELECTROTECHNIQUE

INTERNATIONALE (CEI)

IEC SYSTEM FOR CONFORMITY TESTING AND CERTIFICATION OF ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

Ref. Certif. No.

DK-12122

SYSTÈME CEI D'ESSAIS DE CONFORMITÉ ET DE CERTIFICATION DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE *CERTIFICAT D'ESSAI OC*

Product Produit

Name and address of the applicant *Nom et adresse du demandeur*

Name and address of the manufacturer *Nom et adresse du fabricant*

Name and address of the factory *Nom et adresse de l'usine*

Rating and principal characteristics Valeurs norminales et caractéristiques principales

Trade mark (if any) Marque de fabrique (si elle existe)

Model/type Ref. *Ref. de type*

Additional information (if necessary) Information complémentaire (si nécessaire)

A sample of the product was tested and found to be in conformity with Un échantillon de ce produit a été essayé et a été considéré conforme à la

as shown in the Test Report Ref. No. which form part of this certificate comme indiqué dans le Rapport d'essais numéro de référence qui constitue une partie de ce certificat DC/DC Converter

PULS GMBH ARABELLASTR 15 81925 MUENCHEN GERMANY

PULS GMBH ARABELLASTR 15 81925 MUENCHEN GERMANY

PULS INVESTICNI S R O PRAZSKA 5639 430 01 CHOMUTOV CZECH REPUBLIC

DC 24 V (-25% / +35%), 7 A, IP 20, Class III (supplied by SELV)

-NONE-

CD5.241 and CD5.241-S1

Output: DC 24 - 28 V / 5 - 4.3 A, -25 to +60°C, DC 24 - 28 V / 6 - 5.1 A, -25 to +45°C. Model designations may be followed by any character or number or blank, not safety relevant. Test done according to SMT. **PUBLICATION EDITION**

IEC 60950-1:2001

1st

E137006-A31-CB-1 dated 2007-11-27

This CB Test Certificate is issued by the National Certification Body Ce Certificate d'essai OC est établi par l'Organisme National de Certification

Date 2007-11-30

An Affiliate of Underwriters aboratories Inc.

Signat rgaard lan Cer n manager

UL International Demko A/S Lyskaer 8, P.O. Box 514 DK-2730 Herlev, Denmark Telephone: +45 44856565 Fax: +45 44856500

Internal Ref.:

INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) COMMISSION ELECTROTECHNIQUE

INTERNATIONALE (CEI)

IEC SYSTEM FOR CONFORMITY TESTING AND CERTIFICATION OF ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

Ref. Certif. No.

DK-12124

SYSTÈME CEI D'ESSAIS DE CONFORMITÉ ET DE CERTIFICATION DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE *CERTIFICAT D'ESSAI OC*

Product Produit

Name and address of the applicant *Nom et adresse du demandeur*

Name and address of the manufacturer *Nom et adresse du fabricant*

Name and address of the factory *Nom et adresse de l'usine*

Rating and principal characteristics Valeurs norminales et caractéristiques principales

Trade mark (if any) Marque de fabrique (si elle existe)

Model/type Ref. *Ref. de type*

Additional information (if necessary) Information complémentaire (si nécessaire)

A sample of the product was tested and found to be in conformity with Un échantillon de ce produit a été essayé et a été considéré conforme à la

as shown in the Test Report Ref. No. which form part of this certificate comme indiqué dans le Rapport d'essais numéro de référence qui constitue une partie de ce certificat **DC/DC** Converter

PULS GMBH ARABELLASTR 15 81925 MUENCHEN GERMANY

PULS GMBH ARABELLASTR 15 81925 MUENCHEN GERMANY

PULS INVESTICNI S R O PRAZSKA 5639 430 01 CHOMUTOV CZECH REPUBLIC

DC 24 V (-25% / +35%), 5.6 A, IP 20, Class III (supplied by SELV)

-NONE-

CD5.121

Output: DC 12 - 15 V / 8.0 - 6.4 A, -25 to +60°C, DC 12 - 15 V / 9.6 -7.7 A, -25 to +45°C. Model designations may be followed by any character or number or blank, not safety relevant. Test done according to SMT. **PUBLICATION** IEC 60950-1:2001 1st

E137006-A31-CB-1 dated 2007-11-27

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Date 2007-11-30

An Affiliate of Underwriters aboratories Inc.

Signature gard Jan-E/rik Certification manager

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Internal Ref .:

INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) COMMISSION ELECTROTECHNIQUE

INTERNATIONALE (CEI)

IEC SYSTEM FOR CONFORMITY TESTING AND CERTIFICATION OF ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

Ref. Certif. No.

DK-12123

SYSTÈME CEI D'ESSAIS DE CONFORMITÉ ET DE CERTIFICATION DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE *CERTIFICAT D'ESSAI OC*

Product Produit

Name and address of the applicant *Nom et adresse du demandeur*

Name and address of the manufacturer *Nom et adresse du fabricant*

Name and address of the factory Nom et adresse de l'usine

Rating and principal characteristics Valeurs norminales et caractéristiques principales

Trade mark (if any) Marque de fabrique (si elle existe)

Model/type Ref. *Ref. de type*

Additional information (if necessary) Information complémentaire (si nécessaire)

A sample of the product was tested and found to be in conformity with Un échantillon de ce produit a été essayé et a été considéré conforme à la

as shown in the Test Report Ref. No. which form part of this certificate comme indiqué dans le Rapport d'essais numéro de référence qui constitue une partie de ce certificat DC/DC Converter

PULS GMBH ARABELLASTR 15 81925 MUENCHEN GERMANY

PULS GMBH ARABELLASTR 15 81925 MUENCHEN GERMANY

PULS INVESTICNI S R O PRAZSKA 5639 430 01 CHOMUTOV CZECH REPUBLIC

DC 48 V (-25% / +25%), 3.5 A, IP 20, Class III (supplied by SELV)

-NONE-

CD5.242

Output: DC 24 - 28 V / 5 - 4.3 A, -25 to +60°C, DC 24 - 28 V / 6 - 5.1 A, -25 to +45°C. Model designations may be followed by any character or number or blank, not safety relevant. Test done according to SMT. **PUBLICATION EDITION**

IEC 60950-1:2001

1"

E137006-A31-CB-1 dated 2007-11-27

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Date 2007-11-30

An Affiliate of Underwriters Laboratories Inc..

Signature Jan-Erik rgaard Certific on manager

UL International Demko A/S Lyskaer 8, P.O. Box 514 DK-2730 Herlev, Denmark Telephone: +45 44856565 Fax: +45 44856500

Internal Ref .:

INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) COMMISSION ELECTROTECHNIQUE INTERNATIONALE (CEI)

IEC SYSTEM FOR CONFORMITY TESTING AND CERTIFICATION OF ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

Ref. Certif. No.

DK-12125

SYSTÈME CEI D'ESSAIS DE CONFORMITÉ ET DE CERTIFICATION DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE *CERTIFICAT D'ESSAI OC*

Product Produit

Name and address of the applicant *Nom et adresse du demandeur*

Name and address of the manufacturer *Nom et adresse du fabricant*

Name and address of the factory Nom et adresse de l'usine

Rating and principal characteristics Valeurs norminales et caractéristiques principales

Trade mark (if any) Marque de fabrique (si elle existe)

Model/type Ref. *Ref. de type*

Additional information (if necessary) Information complémentaire (si nécessaire)

A sample of the product was tested and found to be in conformity with Un échantillon de ce produit a été essayé et a été considéré conforme à la

as shown in the Test Report Ref. No. which form part of this certificate comme indiqué dans le Rapport d'essais numéro de référence qui constitue une partie de ce certificat DC/DC Converter

PULS GMBH ARABELLASTR 15 81925 MUENCHEN GERMANY

PULS GMBH ARABELLASTR 15 81925 MUENCHEN GERMANY

PULS INVESTICNI S R O PRAZSKA 5639 430 01 CHOMUTOV CZECH REPUBLIC

DC 24 V (-25% / +35%), 7 A, IP 20, Class III (supplied by SELV)

-NONE-

SLAD4.100

Output: DC-AS 30.5 V/ 4 A, -25 to +60°C, Use on AS-interface net only. Model designations may be followed by any character or number or blank, not safety relevant. Test done according to SMT. **PUBLICATION EDITION**

IEC 60950-1:2001

E137006-A31-CB-1 dated 2007-11-27

This CB Test Certificate is issued by the National Certification Body Ce Certificate d'essai OC est établi par l'Organisme National de Certification

Date 2007-11-30

An Affiliate of Underwriters aboratories Inc.

Signatu gaard Ian-Bril Certificat manager

UL International Demko A/S Lyskaer 8, P.O. Box 514 DK-2730 Herlev, Denmark Telephone: +45 44856565 Fax: +45 44856500

Internal Ref.:

COVER PAGE FOR TEST REPORT

Test Item Description:	DC/DC Converter
Model/Type Reference:	CD5.241, CD5.241-S1, CD5.242, CD5.121, SLAD4.100, all model designations may be followed by any character or number or blank, not safety relevant.
Rating(s):	CD5.241, CD5.241-S1: Input:
	DC 24 V (-25% / +35%), 7 A ,
	Output: DC 24 - 28 V / 5 - 4.3 A, -25 to +60°C,
	DC 24 - 28 V / 6 - 5.1 A, -25 to +45°C
	CD5.242:
	Input: DC 48 V (-25% / +25%), 3.5 A
	DC 24 - 28 V / 5 - 4.3 A, -25 to +60°C DC 24 - 28 V / 6 - 5.1 A, -25 to +45°C
	CD5.121:
	Input: DC 24 V (-25% / +35%), 5.6 A
	Output:
	DC 12 - 15 V / 8.0 - 6.4 A, -25 to +60°C DC 12 - 15 V / 9.6 - 7.7 A, -25 to +45°C
	SLAD4.100:
	Input: DC 24 V (-25% / +35%), 7 A
	Output:
	DC-AS $30.5 \text{ V}/4 \text{ A}$, -25 to +60°C, Use on AS-interface net only.
Standards:	IEC 60950-1:2001, First Edition
Applicant Name and Address:	PULS GMBH ARABELLASTR 15
	81925 MUENCHEN GERMANY
Factory Location(s):	PULS INVESTICNI S R O
	PRAZSKA 5639 430 01 CHOMUTOV CZECH REPUBLIC

This Report includes the following parts, in addition to this cover page:
1. Specific Technical Criteria
2. Clause Verdicts
3. Critical Components
4. Test Results
5. Enclosures
a. National Differences
b. Marking Plate
c. Photographs
d. Schematics + PWB
e. Miscellaneous
f. Licenses
All applicable tests according to the above standard(s) have been carried out.
Test results are valid only for the tested equipment.
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IEC IECEE	Test Report issued under the responsibility of:	Underwriters Laboratories		
UL In	ternational Demko A/S	•		
TEST REPORT IEC 60950-1,First Edition Information technology equipment-Safety Part 1:General Requirements				
Report Reference No	E137006-A31-CB-1			
Date of issue:	2007-11-27			
Total number of pages:	63			
CB Testing Laboratory	UL International Germany GmbH			
Address Prüflabor, Hugenottenallee 175, 63263 Neu-Isenburg, Germany				
Applicant's name	PULS GMBH ARABELLASTR 15			
Address:	81925 MUENCHEN GERMANY			
Test specification:				
Standard	IEC 60950-1:2001, First Edition			
Test procedure:	CB Scheme			
Non-standard test method:	N/A			
Test Report Form No.	IEC60950_1B			
Test Report Form originator:	SGS Fimko Ltd			
Master TRF	dated 2003-03			
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This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

Test item description	DC/DC Converter
Trade Mark:	None
Model/Type reference:	CD5.241, CD5.241-S1, CD5.242, CD5.121, SLAD4.100, all model designations may be followed by any character or number or blank, not safety relevant.
Manufacturer:	PULS GMBH ARABELLASTR 15 81925 MUENCHEN GERMANY
Rating:	CD5.241, CD5.241-S1: Input: DC 24 V (-25% / +35%), 7 A , Output: DC 24 - 28 V / 5 - 4.3 A, -25 to +60°C, DC 24 - 28 V / 6 - 5.1 A, -25 to +45°C
	CD5.242: Input: DC 48 V (-25% / +25%), 3.5 A Output: DC 24 - 28 V / 5 - 4.3 A, -25 to +60°C DC 24 - 28 V / 6 - 5.1 A, -25 to +45°C
	CD5.121: Input: DC 24 V (-25% / +35%), 5.6 A Output: DC 12 - 15 V / 8.0 - 6.4 A, -25 to +60°C DC 12 - 15 V / 9.6 - 7.7 A, -25 to +45°C
	SLAD4.100: Input: DC 24 V (-25% / +35%), 7 A Output: DC-AS 30.5 V/ 4 A, -25 to +60°C, Use on AS-interface net only.

Testing	g procedure and testing location:		
[]	CB Testing Laboratory		
	Testing location / address		
[]	Associated CB Test Laboratory		
	Testing location / address:		
	Tested by (name + signature) :		
	Approved by (+ signature):		
[]	Testing Procedure: TMP		
	Tested by (name + signature) :		
	Approved by (+ signature):		
	Testing location / address:		
[]	Testing Procedure: WMT		
	Tested by (name + signature) :		
	Witnessed by (+ signature):		
	Approved by (+ signature):		
	Testing location / address:		
[x]	Testing Procedure: SMT		
	Tested by (name + signature) :	Thomas Weißbach	Weißbach
	Approved by (+ signature): :	Michaela Zielke	Mittigsbach Mi Eik M. Müll
	Supervised by (+ signature)::	Manfred Mueller	M. Müll
	Testing location / address::	PULSGmbH,Niederwalds	traße3,D-09123Chemnitz
[]	Testing Procedure: RMT		
	Tested by (name + signature) :		
	Approved by (+ signature):		
	Supervised by (+ signature):		
	Testing location / address::		

Summary of Testing: Unless otherwise indicated, all tests were conducted at PULS GmbH, Niederwaldstraße 3, D-09123, Denmark.			
Т	ests performed (name of test and test clause)	Testing location / Comments	
E	nd Product Reference Page		
Р	Power Supply Reference Page		
	Aaximum Output Voltage, Current, and Volt-Ampere Aeasurement (1.2.2.1)		
Ir	nput: Single-Phase (1.6.2)		
D	Durability of Marking (1.7.13)		
S	SELV Reliability (2.2.2, 2.2.3, 2.2.4)		
D	DC Circuit Fuse (2.7)		
н	łumidity (2.9.1, 2.9.2, 5.2.2)		
	Determination of Working Voltage; Voltage Measurement 2.10.2)		
	Determination of Working Voltage; Hazardous Voltage Circuit) Measurement (2.10.2)		
Т	ransformer/Insulation Electric Strength (2.10.5.2, 2.9.5)		
Н	leating (4.5.1, 1.4.12, 1.4.13)		
E	Electric Strength (5.2.2)		
С	Component Failure (5.3.1, 5.3.4, 5.3.6)		
A	bnormal Operation (5.3.1 - 5.3.8.2)		
	ransformer Abnormal Operation (5.3.3, 5.3.6b, Annex 2.1)		
Summary	y of Compliance with National Differences:		
	NR, AT, AU, BE, CA, CH, CN, CZ, DE, DK, ES, EU, FI, FR MY, NL, NO, NZ, PL, PT, SE, SG, SI, SK, US	, GB, GR, HU, IE, IL, IN, IT, JP, KE, KR,	

Copy of Marking Plate - Refer to Enclosure titled Marking Plate for copy.

Test item particulars :	
Equipment mobility	for building-in
Operating condition	continuous
Mains supply tolerance (%)	As specified by the manufacturer. Refer to the rating section at beginning of the report.
Tested for IT power systems	No
IT testing, phase-phase voltage (V)	-
Class of equipment	Class III (supplied by SELV)
Mass of equipment (kg)	< 18
Protection against ingress of water	IP 20
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:	
Date(s) of receipt of test item	2007-09-10, 2007-09-11, 2007-09-12, 2007-09-13, 2007-09-17, 2007-09-25, 2007-10-18
Date(s) of Performance of tests	2007-09-11, 2007-09-12, 2007-09-13, 2007-09-14, 2007-09-17, 2007-09-19, 2007-09-24, 2007-09-25, 2007-09-27, 2007-10-01, 2007-10-13, 2007-10-15, 2007-10-16, 2007-10-17, 2007-10-18, 2007-10-23, 2007-11-16, 2007-11-22

General remarks:

The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

"(see Enclosure #)" refers to additional information appended to the report. "(see appended table)" refers to a table appended to the report.

Throughout this report a point is used as the decimal separator.

Refer to the Cover Page For Test Report for a list of all Factory Locations.

GENERAL PRODUCT INFORMATION:

Report Summary

All applicable tests according to the referenced standard(s) have been carried out.

Product Description

The units are for DIN Rail mounting and therefore are considered for building-in. All units are supplied by secondarv circuits within the limits of SELV and are not considered for direct connection to mains supply.

Some models may be provided with signal outputs showing the status of the unit.

Model Differences

All models use the same circuits design and layout with some diferences in the provided components as noted in the table 1.5.1.

Additional Information

Output Test Load: for models CD5.241, CD5.241-S1, CD5.242

Condition A Tamb <45°C 24 V 6 A Condition B Tamb >45 - 60°C

24 V 5 A

Output Test Load: for model CD5.121

Condition C Tamb <45°C 12 V 9.6 A

Condition D Tamb >45 - 60°C 12 V 8 A

Output Test Load: for model SLAD4.100

Condition E Tamb <60°C 30.5 V 4 A

Maximum Output Power:

for models CD5.241, CD5.241-S1, CD5.242 144 W Tamb <45°C 120 W Tamb >45 - 60°C for model CD5.121 115.5 W Tamb <45°C 96 W Tamb >45 - 60°C for model SLAD4.100 122 W Tamb <60°C Maximum Ambient: 60°C

Sample Operation Position:

Horizontal (standard mounting orientation - input connectors on bottom, output connectors on top)

Mounting orientations other than horizontal require a reduction in continuous output power.

Model CD5.241-S1

Horizontal clockwise (cw) maximum output power: 108.5 W Horizontal counterclockwise (ccw) maximum output power: 108.6 W Upside down maximum output power: 108.6 W Table top mounting maximum output power: 108.5 W Because of the same circuit design/layout and same or lower output power, the results are transferable up to the models CD5.241,CD5.242, CD5.121 and SLAD4.100.

Technical Considerations

The product was submitted and tested for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 60°C

The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual

Engineering Conditions of Acceptability

When installed in an end-product, consideration must be given to the following:

The following Production-Line tests are conducted for this product: Electric Strength

The following secondary output circuits are SELV: All

The following secondary output circuits are at non-hazardous energy levels: All

The following output terminals were referenced to earth during performance testing: input plus, output minus, chassis ground;

The power supply terminals and/or connectors are: Suitable for field wiring

The investigated Pollution Degree is: 2

Proper bonding to the end-product main protective earthing termination is: Required

An investigation of the protective bonding terminals has: Not been conducted

The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C): T1 (Class B)

The following end-product enclosures are required: Fire

The following fuses were evaluated for use in the input circuits in the units: Walter TSC T5A 250Vac and Schurter SPT T5A 250Vac for input circuits not higher than 70 A at 60 Vdc and Walter TSC T10A 250Vac and Schurter SPT T10A 250Vac for input circuits not higher than 56 A at 32.4 Vdc. If the units were used on supply circuits capable for higher nominal current additional testing may be necessary.

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1	GENERAL		
1.5	Components		Pass
1.5.1	General		Pass
	Comply with IEC 60950 or relevant component standard	See Table 1.5.1	Pass
1.5.2	Evaluation and testing of components	Components certified to IEC harmonized standard and checked for correct application. Components, for which no relevant IEC-Standard exist, have been tested under the conditions occurring in the equipment, using applicable parts of IEC 60950. Components not certified are used in accordance with their ratings and they comply with applicable parts of IEC 60950 and the relevant component Standard.	Pass
1.5.3	Thermal controls		N/A
1.5.4	Transformers		Pass
1.5.5	Interconnecting cables		N/A
1.5.6	Capacitors in primary circuits:	Input-to-earth capacitors are subclass Y1 or Y2.	Pass
1.5.7	Double insulation or reinforced insulation bridged by components	Double/Reinforced insulation bridged by component(s)	Pass
1.5.7.1	General		Pass
1.5.7.2	Bridging capacitors	Double Insulation bridged by a single capacitor complying with IEC 384-14: 1993, subclass Y1 or Y2 as applicable.	Pass
1.5.7.3	Bridging resistors		N/A
1.5.7.4	Accessible parts		N/A
1.5.8	Components in equipment for IT power systems		N/A

1.6	Power interface	Pass

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

1.6.1	AC power distribution systems		Pass
1.6.2	Input current	The steady state input current of the equipment did not exceed the RATED CURRENT by more than 10% under NORMAL LOAD.	Pass
1.6.3	Voltage limit of hand-held equipment	The unit is not a hand-held equipment.	N/A
1.6.4	Neutral conductor		N/A

1.7.1	Power rating	Unit not provided with means for connection to mains.	
	Rated voltage(s) or voltage range(s) (V):	Refer to the Rating information at the beginning of this Test Report.	
	Symbol for nature of supply, for d.c. only:	IEC 60417 No. 5031 provided on marking label.	
	Rated frequency or rated frequency range (Hz) :	Refer to the Rating information at the beginning of this Test Report. (dc only)	
	Rated current (mA or A):	Refer to the Rating information at the beginning of this Test Report.	
	Manufacturer's name or trademark or identification mark:	1. See CB Certificate 2. See Marking label 3. Trademark authorized.	
	Type/model or type reference:	Refer to the Model information at the beginning of this Test Report.	
	Symbol for Class II equipment only:		
	Other symbols:	Additional markings are used and are defined in the installation instructions.	
	Certification marks	UL, c-UL.	
1.7.2	Safety instructions	Operating/safety instructions made available to the user.	
1.7.3	Short duty cycles		
1.7.4	Supply voltage adjustment:		
1.7.5	Power outlets on the equipment:	No standard power outlets are provided.	
1.7.6	Fuse identification:	Fuse(s) provided with an unambiguous cross-reference to service documentation.	
1.7.7	Wiring terminals		
1.7.7.1	Protective earthing and bonding terminals:	The earth terminal is marked with the standard earth symbol (60417-2-IEC-5019) near the terminal. Protective earthing to be	

UL International Demko A/S

Page 10 of 63

Requirement + Test

Marking and instructions

Clause

1.7

Pass

N/A

Pass

Pass

Pass

Pass

Pass

Pass

N/A Pass

Pass

Pass

N/A

N/A

N/A

Pass

Pass Pass

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

		evaluated in the end product.	
1.7.7.2	Terminal for a.c. mains supply conductors		N/A
1.7.7.3	Terminals for d.c. mains supply conductors	Unit is for building in - Marking adjacent to mains terminals indicates polarity.	N/A
1.7.8	Controls and indicators		N/A
1.7.8.1	Identification, location and marking:		N/A
1.7.8.2	Colours:	Only functional indicators use color.	N/A
1.7.8.3	Symbols according to IEC 60417:	There are no switches in the equipment.	N/A
1.7.8.4	Markings using figures:	Figures are not used for indicating different positions of controls.	N/A
1.7.9	Isolation of multiple power sources:	Unit is for building in.	N/A
1.7.10	IT power distribution systems		N/A
1.7.11	Thermostats and other regulating devices		N/A
1.7.12	Language:	-	-
1.7.13	Durability	The marking(s) withstood the required test.	Pass
1.7.14	Removable parts	No marking is located on (a) removable part(s).	Pass
1.7.15	Replaceable batteries	No batteries provided in product.	N/A
	Language:		-
1.7.16	Operator access with a tool:	No operator access areas require the use of a tool.	Pass
1.7.17	Equipment for restricted access locations:	Equipment is intended for building in.	N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

2	PROTECTION FROM HAZARDS		Pass
2.1	Protection from electric shock and energy hazards		Pass
2.1.1	Protection in operator access areas		Pass
2.1.1.1	Access to energized parts	Is to consider in the end use.	Pass
	Test by inspection:	as above.	Pass
	Test with test finger	Is to consider in the end use.	N/A
	Test with test pin	Is to consider in the end use.	N/A
	Test with test probe	No TNV present.	N/A
2.1.1.2	Battery compartments:		N/A
2.1.1.3	Access to ELV wiring		N/A
	Working voltage (V); minimum distance (mm) through insulation:		-
2.1.1.4	Access to hazardous voltage circuit wiring		N/A
2.1.1.5	Energy hazards:	The output of the power supply presents an energy hazard. No operator access permitted.	Pass
2.1.1.6	Manual controls	The equipment does not contain any knobs, handles, levers, or the like.	N/A
2.1.1.7	Discharge of capacitors in equipment	The units are supplied by voltages at SELV level only. Test was waved.	N/A
	Time-constant (s); measured voltage (V)		-
2.1.2	Protection in service access areas	No bare parts operating at HAZARDOUS VOLTAGES in a service access area.	N/A
2.1.3	Protection in restricted access locations		N/A

Issue Date:	2007-11-27	Page 13 of 63
133uc Date.	2007 11 27	1 age 10 01 00

	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict

2.2	SELV circuits		Pass
2.2.1	General requirements	SELV circuits overate at or below 42.4 Vpk or 60 Vdc under normal and single fault conditions.	Pass
2.2.2	Voltages under normal conditions (V):	All accessible voltages are less than 42.4 Vp or 60 V dc and are classified as SELV. Maximum accessible voltage in normal operating conditions is 30.4 Vdc.	Pass
2.2.3	Voltages under fault conditions (V):	Under fault conditions voltages never exceed 71V peak and 120Vdc and do not exceed 42.4V peak or 60V dc for more than 0.2 sec. The maximum voltage under a fault condition is 32 V.	N/A
2.2.3.1	Separation by double insulation or reinforced insulation (method 1)		N/A
2.2.3.2	Separation by earthed screen (method 2)		N/A
2.2.3.3	Protection by earthing of the SELV circuit (method 3)		N/A
2.2.4	Connection of SELV circuits to other circuits:	The SELV circuits are not connected to other circuits other than protective earth.	Pass

Issue Date:	2007-11-27	Page 14 of 63
loodo Bato.		i ago i i oi oo

Report Reference # E137006-A31-CB-1

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

2.3	TNV circuits		N/A
2.3.1 2.3.2	Limits	No TNV Circuits.	N/A
	Type of TNV circuits:		-
2.3.2	Separation from other circuits and from accessible parts		N/A
	Insulation employed:		-
2.3.3	Separation from hazardous voltages		N/A
	Insulation employed:		-
2.3.4	Connection of TNV circuits to other circuits		N/A
	Insulation employed		-
2.3.5	Test for operating voltages generated externally		N/A

2.4	Limited current circuits		N/A
2.4.1	General requirements		N/A
2.4.2	Limit values		N/A
	Frequency (Hz)		-
	Measured current (mA)		-
	Measured voltage (V)		-
	Measured capacitance (mF)		-
2.4.3	Connection of limited current circuits to other circuits		N/A

Issue Date:	2007-11-27	Page
loodo Dato.		1 4

Report Reference #

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

2.5	Limited power sources		N/A
	Inherently limited output		N/A
	Impedance limited output		N/A
	Overcurrent protective device limited output		N/A
	Regulating network limited output under normal operating and single fault condition		N/A
	Regulating network limited output under normal operating conditions and overcurrent protective device limited output under single fault condition		N/A
	Output voltage (V), output current (A), apparent power (VA)::		-
	Current rating of overcurrent protective device (A):		-

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

2.6	Provisions for earthing and bonding		Pass
2.6.1	Protective earthing	Accessible parts are earthed.	Pass
2.6.2	Functional earthing		N/A
2.6.3	Protective earthing and protective bonding conductors		N/A
2.6.3.1	General		N/A
2.6.3.2	Size of protective earthing conductors		N/A
	Rated current (A), cross-sectional area (mm2), AWG:		-
2.6.3.3	Size of protective bonding conductors		N/A
	Rated current (A), cross-sectional area (mm2), AWG:		-
2.6.3.4	Resistance (Ohm) of earthing conductors and their terminations, test current (A)		N/A
2.6.3.5	Colour of insulation:		N/A
2.6.4	Terminals		N/A
2.6.4.1	General		N/A
2.6.4.2	Protective earthing and bonding terminals		N/A
	Rated current (A), type and nominal thread diameter (mm):		-
2.6.4.3	Separation of the protective earthing conductor from protective bonding conductors		N/A
2.6.5	Integrity of protective earthing		Pass
2.6.5.1	Interconnection of equipment		N/A
2.6.5.2	Components in protective earthing conductors and protective bonding conductors		Pass
2.6.5.3	Disconnection of protective earth		N/A
2.6.5.4	Parts that can be removed by an operator		N/A
2.6.5.5	Parts removed during servicing		N/A
2.6.5.6	Corrosion resistance		Pass
2.6.5.7	Screws for protective bonding		N/A
2.6.5.8	Reliance on telecommunication network or cable distribution system		N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

2.7	Overcurrent and earth fault protection in primary circuits	
2.7.1	Basic requirements	N/A
	Instructions when protection relies on building installation	N/A
2.7.2	Faults not covered in 5.3	N/A
2.7.3	Short-circuit backup protection	Pass
2.7.4	Number and location of protective devices:	N/A
2.7.5	Protection by several devices	N/A
2.7.6	Warning to service personnel:	N/A

2.8	Safety interlocks	N/A
2.8.1	General principles	N/A
2.8.2	Protection requirements	N/A
2.8.3	Inadvertent reactivation	N/A
2.8.4	Fail-safe operation	N/A
2.8.5	Moving parts	N/A
2.8.6	Overriding	N/A
2.8.7	Switches and relays	N/A
2.8.7.1	Contact gaps (mm):	N/A
2.8.7.2	Overload test	N/A
2.8.7.3	Endurance test	N/A
2.8.7.4	Electric strength test	N/A
2.8.8	Mechanical actuators	N/A

Issue Date:	2007-11-27	Page 18 of 63	
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IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

2.9	Electrical insulation		Pass
2.9.1	Properties of insulating materials	Natural rubber, materials containing asbestos and hygroscopic materials are not used as insulation. Adequate clearances and creepage distances.	Pass
2.9.2	Humidity conditioning	Electric strength test was conducted after the humidity treatment.	Pass
	Humidity (%):	93	-
	Temperature (°C):	25	-
2.9.3	Grade of insulation		Pass

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

2.10	Clearances, creepage distances and distances through insulation		Pass
2.10.1	General	Pollution degree 2 applicable.	Pass
2.10.2	Determination of working voltage		Pass
2.10.3	Clearances		Pass
2.10.3.1	General		Pass
2.10.3.2	Clearances in primary circuit		N/A
2.10.3.3	Clearances in secondary circuits	(see appended table 2.10.3 and 2.10.4)	Pass
2.10.3.4	Measurement of transient voltage levels		N/A
2.10.4	Creepage distances	(see appended table 2.10.3 and 2.10.4)	Pass
	CTI tests:	Material group IIIb; 100 <= CTI < 175.	-
2.10.5	Solid insulation	Solid or laminated insulating materials having adequate thickness are provided.	Pass
2.10.5.1	Minimum distance through insulation	See Table 2.10.5	Pass
2.10.5.2	Thin sheet material	Tested in transformer construction.	Pass
	Number of layers (pcs):	3	-
	Electric strength test:	See Table 2.10.5 and 5.2	-
2.10.5.3	Printed boards	PWB is not used as reinforced or supplementary insulation.	N/A
	Distance through insulation		N/A
	Electric strength test for thin sheet insulating material:		-
	Number of layers (pcs):		N/A
2.10.5.4	Wound components		N/A
	Number of layers (pcs):		N/A
	Two wires in contact inside wound component; angle between 45° and 90°:		N/A
2.10.6	Coated printed boards		N/A
2.10.6.1	General		N/A
2.10.6.2	Sample preparation and preliminary inspection		N/A
2.10.6.3	Thermal cycling		N/A

Issue Date:

Report Reference #

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

2.10.6.4	Thermal ageing (°C):		N/A
2.10.6.5	Electric strength test		-
2.10.6.6	Abrasion resistance test		N/A
	Electric strength test:		-
2.10.7	Enclosed and sealed parts:		N/A
	Temperature T1=T2 = Tma - Tamb +10K (°C):		N/A
2.10.8	Spacings filled by insulating compound		N/A
	Electric strength test:		-
2.10.9	Component external terminations		N/A
2.10.10	Insulation with varying dimensions		Pass

3	WIRING, CONNECTIONS AND SUPPLY	N/A
3.1	General	N/A
3.1.1	Current rating and overcurrent protection	N/A
3.1.2	Protection against mechanical damage	N/A
3.1.3	Securing of internal wiring	N/A
3.1.4	Insulation of conductors	N/A
3.1.5	Beads and ceramic insulators	N/A
3.1.6	Screws for electrical contact pressure	N/A
3.1.7	Insulating materials in electrical connections	N/A
3.1.8	Self-tapping and spaced thread screws	N/A
3.1.9	Termination of conductors	N/A
	10 N pull test	N/A
3.1.10	Sleeving on wiring	N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

3.2	Connection to an a.c. mains supply or a d.c. mains supply		N/A
3.2.1	Means of connection		N/A
3.2.1.1	Connection to an a.c. mains supply		N/A
3.2.1.2	Connection to a d.c. mains supply		N/A
3.2.2	Multiple supply connections		N/A
3.2.3	Permanently connected equipment		N/A
	Number of conductors, diameter (mm) of cable and conduits:		-
3.2.4	Appliance inlets		N/A
3.2.5	Power supply cords		N/A
3.2.5.1	AC power supply cords		N/A
	Туре		-
	Rated current (A), cross-sectional area (mm ²), AWG:		-
3.2.5.2	DC power supply cords		N/A
3.2.6	Cord anchorages and strain relief		N/A
	Mass of equipment (kg), pull (N)		-
	Longitudinal displacement (mm):		-
3.2.7	Protection against mechanical damage		N/A
3.2.8	Cord guards		N/A
	D (mm); test mass (g):		-
	Radius of curvature of cord (mm)		-
3.2.9	Supply wiring space	The supply wiring space is satisfactory and connections can be inspected.	N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

3.3	Wiring terminals for connection of external conductors	N/A
3.3.1	Wiring terminals	N/A
3.3.2	Connection of non-detachable power supply cords	N/A
3.3.3	Screw terminals	N/A
3.3.4	Conductor sizes to be connected	N/A
	Rated current (A), cord/cable type, cross-sectional area (mm ²):	-
3.3.5	Wiring terminal sizes	N/A
	Rated current (A), type and nominal thread diameter (mm)	-
3.3.6	Wiring terminals design	N/A
3.3.7	Grouping of wiring terminals	N/A
3.3.8	Stranded wire	N/A

3.4	Disconnection from the mains supply		N/A
3.4.1	General requirement	Unit is intended for building in.	N/A
3.4.2	Disconnect devices		N/A
3.4.3	Permanently connected equipment		N/A
3.4.4	Parts which remain energized		N/A
3.4.5	Switches in flexible cords		N/A
3.4.6	Single-phase equipment and d.c. equipment		N/A
3.4.7	Three-phase equipment		N/A
3.4.8	Switches as disconnect devices		N/A
3.4.9	Plugs as disconnect devices		N/A
3.4.10	Interconnected equipment		N/A
3.4.11	Multiple power sources		N/A

Issue Date:	2007-11-27	Page 23 of 63	Report Reference #
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IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

3.5	Interconnection of equipment		N/A
3.5.1	General requirements		N/A
3.5.2	Types of interconnection circuits:		N/A
3.5.3	ELV circuits as interconnection circuits		N/A

4	PHYSICAL REQUIREMENTS	
4.1	Stability	N/A
	Angle of 10°	N/A
	Test: force (N):	N/A

4.2	Mechanical strength		Pass
4.2.1	General		Pass
4.2.2	Steady force test, 10 N	Inspection shows all components are properly fixed to avoid the reduction of clearances and creepages.	Pass
4.2.3	Steady force test, 30 N	Checked by inspection of construction and review of data on enclosure material.	Pass
4.2.4	Steady force test, 250 N		N/A
4.2.5	Impact test		N/A
	Fall test		N/A
	Swing test		N/A
4.2.6	Drop test	Unit is not hand-held, direct plug-in, or transportable.	N/A
4.2.7	Stress relief test	Checked by inspection of construction and review of data on enclosure material.	N/A
4.2.8	Cathode ray tubes		N/A
	Picture tube separately certified:		N/A
4.2.9	High pressure lamps		N/A
4.2.10	Wall or ceiling mounted equipment; force (N):		N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

4.3	Design and construction		Pass
4.3.1	Edges and corners	All edges and corners are judged to be sufficiently well rounded so as not to constitute a hazard.	Pass
4.3.2	Handles and manual controls; force (N):		N/A
4.3.3	Adjustable controls	Voltage setting requires the use of a tool	Pass
4.3.4	Securing of parts		N/A
4.3.5	Connection of plugs and sockets		N/A
4.3.6	Direct plug-in equipment		N/A
	Dimensions (mm) of mains plug for direct plug-in.:		N/A
	Torque and pull test of mains plug for direct plug-in; torque (Nm); pull (N):		N/A
4.3.7	Heating elements in earthed equipment		N/A
4.3.8	Batteries		N/A
4.3.9	Oil and grease		N/A
4.3.10	Dust, powders, liquids and gases		N/A
4.3.11	Containers for liquids or gases		N/A
4.3.12	Flammable liquids		N/A
	Quantity of liquid (I):		N/A
	Flash point (°C):		N/A
4.3.13	Radiation; type of radiation		N/A
4.3.13.1	General		N/A
4.3.13.2	Ionizing radiation		N/A
	Measured radiation (pA/kg):		-
	Measured high-voltage (kV):		-
	Measured focus voltage (kV):		-
	CRT markings:		-
4.3.13.3	Effect of ultraviolet (UV) radiation on materials		N/A
	Part, property, retention after test, flammability classification		N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

4.3.13.4	Human exposure to ultraviolet (UV) radiation:	N/A
4.3.13.5	Laser (including LEDs)	N/A
	Laser class:	-
4.3.13.6	Other types:	N/A

4.4	Protection against hazardous moving parts	
4.4.1	General	N/A
4.4.2	Protection in operator access areas	N/A
4.4.3	Protection in restricted access locations	N/A
4.4.4	Protection in service access areas	N/A

4.5	Thermal requirements		Pass
4.5.1	Maximum temperatures	The equipment and its component parts did not attain excessive temperatures during normal operation. (see appended table 4.5)	Pass
	Normal load condition per Annex L:	Thermal cut-outs or overcurrent protection did not operate during the test. Operated in the most unfavorable way of operation given in the operating instructions until steady conditions established.	Pass
4.5.2	Resistance to abnormal heat	It has been determined from examination of the physical characteristics of the materials used that the material meets the requirements of the test.	Pass

Issue Date:	2007-11-27	Page 26 of 63
-------------	------------	---------------

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

4.6	Openings in enclosures		N/A
4.6.1	Top and side openings	Is to be considered in the end use.	N/A
	Dimensions (mm):		-
4.6.2	Bottoms of fire enclosures		N/A
	Construction of the bottom:		-
4.6.3	Doors or covers in fire enclosures		N/A
4.6.4	Openings in transportable equipment		N/A
4.6.5	Adhesives for constructional purposes		N/A
	Conditioning temperature (°C)/time (weeks):		-

4.7	Resistance to fire		Pass
4.7.1	Reducing the risk of ignition and spread of flame		Pass
	Method 1, selection and application of components wiring and materials	(see appended table 1.5.1)	Pass
	Method 2, application of all of simulated fault condition tests		N/A
4.7.2	Conditions for a fire enclosure	Is to be considered in the end use.	N/A
4.7.2.1	Parts requiring a fire enclosure	The unit is for building-in, fire enclosure to be provided in the end product.	N/A
4.7.2.2	Parts not requiring a fire enclosure		N/A
4.7.3	Materials		N/A
4.7.3.1	General		N/A
4.7.3.2	Materials for fire enclosures		N/A
4.7.3.3	Materials for components and other parts outside fire enclosures		N/A
4.7.3.4	Materials for components and other parts inside fire enclosures		N/A
4.7.3.5	Materials for air filter assemblies		N/A
4.7.3.6	Materials used in high-voltage components		N/A

	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict

5	ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS		Pass
5.1	Touch current and protective conductor current		N/A
5.1.1	General	SELV supplied.	N/A
5.1.2	Equipment under test (EUT)		N/A
5.1.3	Test circuit		N/A
5.1.4	Application of measuring instrument		N/A
5.1.5	Test procedure		N/A
5.1.6	Test measurements		N/A
	Test voltage (V):		-
	Measured touch current (mA):		-
	Max. allowed touch current (mA):		-
	Measured protective conductor current (mA):		-
	Max. allowed protective conductor current (mA) :		-
5.1.7	Equipment with touch current exceeding 3.5 mA:		N/A
5.1.8	Touch currents to and from telecommunication networks and cable distribution systems and from telecommunication networks		N/A
5.1.8.1	Limitation of the touch current to a telecommunication network and a cable distribution system		N/A
	Test voltage (V):		-
	Measured touch current (mA):		-
	Max. allowed touch current (mA):		-
5.1.8.2	Summation of touch currents from telecommunication networks:		N/A

5.2	Electric strength		Pass
5.2.1	General	Based on the electric strength test the use of the insulating materials within the equipment is satisfactory. (see appended table 5.2)	Pass
5.2.2	Test procedure	No insulation breakdown detected during the test.	Pass

	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict

5.3	Abnormal operating and fault conditions		Pass
5.3.1	Protection against overload and abnormal operation	(see appended table 5.3)	Pass
5.3.2	Motors		N/A
5.3.3	Transformers	See appended table.	Pass
5.3.4	Functional insulation	.: Functional insulation complies with the requirements (a), (b), or (c).	Pass
5.3.5	Electromechanical components	The equipment does not have any electromechanical components in the secondary.	N/A
5.3.6	Simulation of faults	No other components where failure could adversely affect SUPPLEMENTARY or REINFORCED INSULATION. Transformer temperatures measured for compliance with Annex C during test.	Pass
5.3.7	Unattended equipment		N/A
5.3.8	Compliance criteria for abnormal operating and fault conditions	No fire, emission of molten metal or deformation was noted during the tests. The maximum temperature of 300°C was not exceeded. Electric Strength tests performed after abnormal and fault tests.	Pass

6	CONNECTION TO TELECOMMUNICATION NETWORKS	
6.1	Protection of telecommunication network service persons, and users of other equipment connected to the network, from hazards in the equipment	
6.1.1	Protection from hazardous voltages	
6.1.2	Separation of the telecommunication network from earth	
6.1.2.1	Requirements	N/A
	Test voltage (V):	-
	Current in the test circuit (mA):	-
6.1.2.2	Exclusions:	N/A

Issue Date: 2007-11-27

Report Reference #

Issue Date: 2007-11-27 Page 29 of 63	Date:	2007-11-27	Page 29 of 63	Repo
--------------------------------------	-------	------------	---------------	------

ort Reference # E137006-A31-CB-1

	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict

6.2	Protection of equipment users from overvoltages on telecommunication networks	
6.2.1	Separation requirements	N/A
6.2.2	Electric strength test procedure	N/A
6.2.2.1	Impulse test	N/A
6.2.2.2	Steady-state test	N/A
6.2.2.3	Compliance criteria	N/A

6.3	Protection of the telecommunication wiring system from overheating	
	Max. output current (A):	-
	Current limiting method:	-

7	CONNECTION TO CABLE DISTRIBUTION SYSTEMS	N/A
7.1	Protection of cable distribution system service persons, and users of other equipment connected to the system, from hazardous voltages in the equipment	
7.2	Protection of equipment users from overvoltages on the cable distribution system	N/A
7.3	Insulation between primary circuits and cable distribution systems	N/A
7.3.1	General	N/A
7.3.2	Voltage surge test	N/A
7.3.3	Impulse test	N/A

Issue Date:	2007-11-27	Page 30 of 63
issue Dale.	2007-11-27	raye SU UI US

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

А	Annex A, TESTS FOR RESISTANCE TO HEAT AND FIRE Flammability test for fire enclosures of movable equipment having a total mass exceeding 18 kg, and of stationary equipment (see 4.7.3.2)	
A.1		
A.1.1	Samples	-
	Wall thickness (mm)	-
A.1.2	Conditioning of samples; temperature (°C):	N/A
A.1.3	Mounting of samples	N/A
A.1.4	Test flame	N/A
A.1.5	Test procedure	N/A
A.1.6	Compliance criteria	N/A
	Sample 1 burning time (s)	-
	Sample 2 burning time (s)	-
	Sample 3 burning time (s)	-

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

A.2	Flammability test for fire enclosures of movable equipment having a total mass not exceeding 18 kg, and for material and components located inside fire enclosures (see 4.7.3.2 and 4.7.3.4)	N/A
A.2.1	Samples, material	-
	Wall thickness (mm)	-
A.2.2	Conditioning of samples	N/A
A.2.3	Mounting of samples	N/A
A.2.4	Test flame	N/A
A.2.5	Test procedure	N/A
A.2.6	Compliance criteria	N/A
	Sample 1 burning time (s)	-
	Sample 2 burning time (s)	-
	Sample 3 burning time (s)	-
A.2.7	Alternative test acc. to IEC 60695-2-2, cl. 4, 8	N/A
	Sample 1 burning time (s)	-
	Sample 2 burning time (s)	-
	Sample 3 burning time (s)	-

A.3	Hot flaming oil test (see 4.6.2)	N/A
A.3.1	Mounting of samples	N/A
A.3.2	Test procedure	N/A
A.3.3	Compliance criterion	N/A

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

В	Annex B, MOTOR TESTS UNDER ABNORMAL CONDITIONS(see 4.7.2.2 and 5.3.2)	
B.1	General requirements	N/A
	Position	-
	Manufacturer	-
	Туре	-
	Rated values	-
B.2	Test conditions	N/A
B.3	Maximum temperatures	N/A
B.4	Running overload test	N/A
B.5	Locked-rotor overload test	N/A
	Test duration (days)	-
	Electric strength test: test voltage (V)	-
B.6	Running overload test for d.c. motors in secondary circuits	N/A
B.7	Locked-rotor overload test for d.c. motors in secondary circuits	N/A
B.7.1	Test procedure	N/A
B.7.2	Alternative test procedure; test time (h):	N/A
B.7.3	Electric strength test	N/A
B.8	Test for motors with capacitors	N/A
B.9	Test for three-phase motors	N/A
B.10	Test for series motors	N/A
	Operating voltage (V)	-

Issue Date:	2007-11-27	Page 33 of 63	

Report Reference # E137006-A31-CB-1

IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict

С	Annex C, TRANSFORMERS (see 1.5.4 and 5.3.3)		Pass
	Position:	T1	-
	Manufacturer:	PULS or AXIS	-
	Туре	Refer to table 1.5.1	-
	Rated values:	Refer to table 1.5.1	-
	Method of protection:	None	-
C.1	Overload test		Pass
C.2	Insulation		Pass
	Protection from displacement of windings:	Margin tape provided on each end of each winding.	Pass

D	Annex D, MEASURING INSTRUMENTS FOR TOU	CH-CURRENT TESTS	N/A
D.1	Measuring instrument		N/A
D.2	Alternative measuring instrument		N/A

E	Annex E, TEMPERATURE RISE OF A WINDING	N/A	
	Alliex E, TEMPERATORE RISE OF A WINDING	IN/A	1

F	Annex F, MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES	Pass	l
	(see 2.10)		I

	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict

G	Annex G, ALTERNATIVE METHOD FOR DETERMINING MINIMUM CLEARANCES	N/A
G.1	Summary of the procedure for determining minimum clearances	N/A
G.2	Determination of mains transient voltage (V)	N/A
G.2.1	AC mains supply	N/A
G.2.2	DC mains supply	N/A
G.3	Determination of telecommunication network transient voltage (V) :	N/A
G.4	Determination of required withstand voltage (V) :	N/A
G.5	Measurement of transient levels (V):	N/A
G.6	Determination of minimum clearances:	N/A

H ANNEX H, IONIZING RADIATION (see 4.3.13)	N/A
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J	Annex J, TABLE OF ELECTROCHEMICAL POTENTIALS (see 2.6.5.6)		Pass
	Metal used:	Steel, Zinc	-

К	ANNEX K, THERMAL CONTROLS (see 1.5.3 and 5.3.7)	N/A
K.1	Making and breaking capacity	N/A
K.2	Thermostat reliability; operating voltage (V):	N/A
K.3	Thermostat endurance test; operating voltage (V) :	N/A
K.4	Temperature limiter endurance; operating voltage (V):	N/A
K.5	Thermal cut-out reliability	N/A
K.6	Stability of operation	N/A

	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict

L	Annex L, NORMAL LOAD CONDITIONS FOR SOME TYPES OF ELECTRICAL BUSINESS EQUIPMENT (see 1.2.2.1 and 4.5.1)	Pass
L.1	Typewriters	N/A
L.2	Adding machines and cash registers	N/A
L.3	Erasers	N/A
L.4	Pencil sharpeners	N/A
L.5	Duplicators and copy machines	N/A
L.6	Motor-operated files	N/A
L.7	Other business equipment	Pass

М	Annex M, CRITERIA FOR TELEPHONE RINGING SIGNALS (see 2.3.1)	N/A
M.1	Introduction	N/A
M.2	Method A	N/A
M.3	Method B	N/A
M.3.1	Ringing signal	N/A
M.3.1.1	Frequency (Hz):	-
M.3.1.2	Voltage (V):	-
M.3.1.3	Cadence; time (s), voltage (V):	-
M.3.1.4	Single fault current (mA):	-
M.3.2	Tripping device and monitoring voltage:	N/A
M.3.2.1	Conditions for use of a tripping device or a monitoring voltage	N/A
M.3.2.2	Tripping device	N/A
M.3.2.3	Monitoring voltage (V)	N/A

N	Annex N, IMPULSE TEST GENERATORS (see 2.1 clause G.5)	10.3.4, 6.2.2.1, 7.3.2 and	N/A
N.1	ITU-T impulse test generators		N/A
N.2	IEC 60065 impulse test generator		N/A

Issue Date:	2007-11-27	Page 36 of 63	Report Reference #
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	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict

E137006-A31-CB-1

	Р	Annex P, NORMATIVE REFERENCES	Pass
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Q Annex Q, BIBLIOGRAPHY	Pass
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R	Annex R, EXAMPLES OF REQUIREMENTS FOR PROGRAMMES	QUALITY CONTROL	N/A
R.1	Minimum separation distances for unpopulated coated printed boards (see 2.10.6)		N/A
R.2	Reduced clearances (see 2.10.3)		N/A

S	Annex S, PROCEDURE FOR IMPULSE TESTING (see 6.2.2.3)	N/A
S.1	Test equipment	N/A
S.2	Test procedure	N/A
S.3	Examples of waveforms during impulse testing	N/A

Т	Annex T, GUIDANCE ON PROTECTION AGAINST INGRESS OF WATER (see 1.1.2)	N/A
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U	Annex U, INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION (see 2.10.5.4)	N/A
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This is an extract of the CB-Scheme report with the most important information. If a complete copy of the report is required, please contact your PULS sales representative.