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

Ref. Certif. No.
DK-5470

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

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

CB TEST CERTIFICATE
CERTIFICAT D'ESSAI OC

Product *Produit*	Switch Mode Power Supply
Name and address of the applicant *Nom et adresse du demandeur*	Puls Elektronische Stromversorgungen GmbH Arabellastr. 15 81925 Munich Germany
Name and address of the manufacturer *Nom et adresse du fabricant*	Same as applicant
Name and address of the factory *Nom et adresse de l'usine*	Puls Elektronische Stromversorgungen GmbH Weltenburgerstr. 6 81677 Munich Germany
Rating and principal characteristics *Valeurs nominales et caractéristiques principales*	100-120/200-240 V AC or 115/230 V AC, 50-60Hz, 2.0/0.9 A, Class I, IP X0
Trade mark (if any) *Marque de fabrique (si elle existe)*	--
Model/type Ref. *Ref. de type*	SLA3.10X, SLA3.50X and AC1216
Additional information (if necessary) *Information complémentaire (si nécessaire)*	Output: 30.5 V, 2.8 A

PUBLICATION	EDITION
IEC 60950:1999	3rd

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

E137006-A1-CB-2

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

UL International Demko A/S
Lyskaer 8, P.O. Box 514
DK-2730, Herlev, Denmark
Telephone: +45 44856565
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Date 28-08-2002

Signature

Steen Lumby
Certification Manager

A Subsidiary of
Underwriters Laboratories Inc.®

Internal Ref.:
Holger Laible

COVER PAGE FOR TEST REPORT

Test Item Description:	Power Supply, Built-In AC/DC
Model/Type Reference:	SLA3.10X, SLA3.50X and AC1216
Rating(s):	Input: 100-120/200-240 Vac or 115/230 Vac, 2.0/0.9 A, 50-60 Hz Output: 30.5 V, 2.8 A
Standards:	IEC60950, Third Edition (1999)
Applicant Name and Address:	PULS ELEKTRONISCHE STROMVERSORGUNGEN GMBH ARABELLASTR 15 81925 MUNICH GERMANY
Factory Location(s):	PULS ELEKTRONISCHE STROMVERSORGUNGEN GMBH WELTENBURGERSTR 6 81677 MUNICH GERMANY

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. National Differences
6. Enclosures

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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TEST REPORT
IEC 60950
Safety of information technology equipment

Report Reference No ..... :	E137006-A1-CB-2	
Compiled by (+ signature) ..... :	Holger Laible	
Reviewed by (+ signature) ..... :	Manfred Mueller	
Approved by (+ signature) ..... :	Steen Lumby	
Date of issue ..... :	26-Aug-02	
CB Testing Laboratory ..... :	UL International Demko A/S	
Address ..... :	Lyskaer 8, 2730, Herlev, Denmark	
Testing location/procedure ..... :	CBTL [ ] SMT [ ] TMP [x]	
Address ..... :	PULS ELEKTRONISCHE, STROMVERSORGUNGEN GMBH, ARABELLASTR 15, 81925 MUNICH, GERMANY	
Applicant's name ..... :	PULS ELEKTRONISCHE STROMVERSORGUNGEN GMBH	
Address ..... :	ARABELLASTR 15 81925 MUNICH GERMANY	
Test specification:		
Standard ..... :	IEC60950, Third Edition (1999)	
Test procedure ..... :	CB Scheme	
Non-standard test method ..... :	N/A	
Test Report Form No. ..... :	I950___F/00-03	
TRF originator ..... :	FIMKO	
Master TRF ..... :	dated 00-02	

Test item description ..... :	Power Supply, Built-In AC/DC
Trade Mark ..... :	
Model/Type reference ..... :	SLA3.10X, SLA3.50X and AC1216
Manufacturer ..... :	PULS ELEKTRONISCHE STROMVERSORGUNGEN GMBH ARABELLASTR 15 81925 MUNICH

	GERMANY
Rating ..... :	Input: 100-120/200-240 Vac or 115/230 Vac, 2.0/0.9 A, 50-60 Hz Output: 30.5 V, 2.8 A

Marking Plate - Refer to Enclosure titled Miscellaneous for copy.

Particulars: test item vs. test requirements	
Equipment mobility.....:	for building-in
Operating condition.....:	continuous
Mains supply tolerance (%).....:	+6%, -10%
Test for IT power systems.....:	No
IT testing, phase-phase voltage (V) .....:	N/A
Class of equipment .....:	Class I (earthed)
Mass of equipment (kg) .....:	< 1 kg
Protection against ingress of water.....:	IP X0
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)

General remarks:

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 a NCB in accordance with IECEE 02.

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.

General Product Information:	
Report Summary	
All applicable tests according to the referenced standard(s) have been carried out.	
Product Description	
The unit is a switch mode power supply for DIN Rail mounting. The power supply is considered for building-in and therefore not intended to be connected directly to AC mains supply.	
Model Differences	
All models are identical, except for changes with affect to appearance only. The character X stands for any number.	
Additional Information	
N/A	
Engineering Consideration	
The product was submitted and tested for use at the manufacturer's recommended ambient temperature (Tmra) of ..... :	60°C
The power supply means are ..... :	Permanently connected (field wired)
The product is intended for use on the following systems..... :	TN
Printed wiring board layouts for traces that were investigated as part of the protective earthing path are included in ..... :	Enclosure
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..... :	Earthing Continuity Electric Strength
The end-product Electric Strength Test is to be based upon a maximum working voltage of ..... :	342 Vrms, 604 Vpk
The following secondary output circuits are SELV ..... :	+/- power output
The following secondary output circuits are at non-hazardous energy levels..... :	+/- power output
The following output terminals were referenced to earth during performance testing..... :	minus

The power supply terminals and/or connectors are ..... :	Suitable for field wiring
The maximum investigated branch circuit rating is ..... :	15 A
The investigated Pollution Degree is ..... :	2
Proper bonding to the end-product main protective earthing termination is ..... :	Required (Terminal block or seperate screw can be used).
An investigation of the bonding terminals as protective earthing terminals has ..... :	Been conducted
The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY 2 insulation system with the indicated rating greater than Class A (105°C) ..... :	T1 (Class F) and L101 (105°C)
The following end-product enclosures are required ..... :	Electrical Fire
The following components require special consideration during end-product Heating tests due to the indicated maximum temperature measurements during component-level testing ..... :	Transformer T1: 116.8°C at 60°C ambient

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict
1	**GENERAL**		Pass
1.5	**Components**		Pass
1.5.1	Comply with IEC 950 or relevant component standard		Pass
1.5.2	Evaluation and testing of components		Pass
	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
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 .....:	Line-to-line capacitors are subclass X1 or X2.	Pass
1.5.7	Double or reinforced insulation bridged by components		N/A
1.5.7.1	Bridging capacitors		N/A
1.5.7.2	Bridging resistors		N/A
1.5.7.3	Accessible parts		N/A
1.5.8	Components in equipment for IT power systems		N/A
1.6	**Power Interface**		Pass
1.6.1	AC power distribution systems		Pass
1.6.2	Input current		Pass
1.6.3	Voltage limit of hand-held equipment		N/A
1.6.4	Neutral conductor		Pass
1.7	**Marking and Instructions**		Pass
1.7.1	Power rating		N/A
	Rated voltage(s) or voltage range(s) (V) .....:	100-120/200-240 or 115/230	Pass
	Symbol for nature of supply for d.c. .....:		N/A

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict
	Rated frequency or frequency range (Hz).....:	50-60	Pass
	Rated current (A).....:	2.0/0.9	Pass
	Manufacturer's name/Trademark .....:	PULS	Pass
	Type/model.....:	SLA3.10X, SLA3.50X and AC1216	Pass
	Symbol of Class II .....:		N/A
	Other symbols.....:		N/A
	Certification marks.....:	UL Recognition Mark	Pass
1.7.2	Safety instructions		N/A
1.7.3	Short duty cycles		N/A
1.7.4	Supply voltage adjustment .....:	voltage selector switch visible in unit front and marked with 115/230.	Pass
1.7.5	Power outlets on the equipment .....:		N/A
1.7.6	Fuse identification .....:	Fuse marked with cross reference to service documentation (F101).	Pass
1.7.7	Wiring terminals		Pass
1.7.7.1	Protective earthing and bonding terminals		Pass
1.7.7.2	Terminal for a.c. mains supply conductors	Terminals marked L and N.	Pass
1.7.8	Controls and indicators		Pass
1.7.8.1	Identification, location and marking .....:	voltage selector switch marked with 115/230.	Pass
1.7.8.2	Colours .....:		N/A
1.7.8.3	Symbols according to IEC 60417.....:		N/A
1.7.8.4	Markings using figures .....:		N/A
1.7.9	Isolation of multiple power sources .....:		N/A
1.7.10	IT power system		N/A
1.7.11	Thermostats and other regulating devices		N/A
1.7.12	Language .....:		-
1.7.13	Durability	Fulfilled by use of UL certified labeling system.	Pass
1.7.14	Removable parts		N/A

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict
1.7.15	Replaceable batteries		N/A
	Language .....:		-
1.7.16	Operator access with a tool.....:		N/A
1.7.17	Equipment for restricted access locations .....:		N/A
2	**PROTECTION FROM HAZARDS**		Pass
2.1	**Protection from electric shock and energy hazards**		Pass
2.1.1	Protection in OPERATOR access areas	To be determined in the end-product.	N/A
2.1.1.1	Access to energized parts		N/A
	Test by inspection .....:	Unit is intended for building-in.	N/A
	Test with test finger .....:		N/A
	Test with test pin .....:		N/A
	Test with test probe .....:		N/A
2.1.1.2	Battery compartments.....:		N/A
2.1.1.3	Access to ELV wiring		N/A
	Working voltage (V); distance (mm) through insulation .....:		-
2.1.1.4	Access to hazardous voltage circuit wiring		N/A
2.1.1.5	Energy hazards .....:		N/A
2.1.1.6	Manual controls		N/A
2.1.1.7	Discharge of capacitors in the primary circuit	Unit is intended for building-in.	Pass
	Time-constant (s); measured voltage (V) .....:	Unit tested with input voltage of 264 Vac, 50 Hz. After 1.0 sec the voltage dropped to less than 37%. The fuse condition does not affect the result.	-
2.1.2	Protection in service access areas		N/A
2.1.3	Protection in restricted access locations		N/A

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict
2.2	**SELV Circuits**		Pass
2.2.1	General requirements		Pass
2.2.2	Voltages under normal conditions (V) .....:	Output voltage is less than 42.4 Vp or 60 V dc and is classified as SELV.	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.	Pass
2.2.3.1	Separation by double or reinforced insulation (method 1)		Pass
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 .....:	SELV reliability testing performed. Refer to Table 5.3 for details.	Pass
2.3	**TNV Circuits**		N/A
2.3.1	Limits		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

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict
	Frequency (Hz).....:		-
	Measured current (mA).....:		-
	Measured voltage (V).....:		-
	Measured capacitance (µF).....:		-
2.4.3	Connection of limited current circuits to other circuits		N/A
2.5	**Limited Power Sources**		N/A
	Inherently limited output	Unit output does not meet the requirements of IEC 60950 for LPS, but for NEC Class 2 circuit.	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):		-
2.6	**Provisions for Earthing and Bonding**		Pass
2.6.1	Protective earthing		Pass
2.6.2	Functional earthing		N/A
2.6.3	Protective earthing and protective bonding conductors		Pass
2.6.3.1	Size of protective earthing conductors		N/A
	Rated current (A), cross-sectional area (mm²), AWG.....:		-
2.6.3.2	Size of protective bonding conductors		N/A
	Rated current (A), cross-sectional area (mm²), AWG.....:		-

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict
2.6.3.3	Rated current (A), type and nominal thread diameter (mm) .....:		N/A
	Resistance (Ohm) of earthing conductors and their terminations, test current (A) .....:	max. 3.2 mOhm tested with 30 A	Pass
2.6.3.4	Colour of insulation.....:		N/A
2.6.4	Terminals		Pass
2.6.4.1	Protective earthing and bonding terminals		Pass
	Rated current (A), type and nominal thread diameter (mm) .....:		-
2.6.4.2	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		N/A
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		Pass
2.6.5.8	Reliance on telecommunication network		N/A
2.7	**Overcurrent and Earth Fault Protection in Primary Circuits**		Pass
2.7.1	Basic requirements		Pass
	Instructions when protection relies on building installation		N/A
2.7.2	Faults not covered in 5.3		Pass
2.7.3	Short-circuit backup protection		Pass
2.7.4	Number and location of protective devices .....:	One fuse located in identified side of the line.	Pass
2.7.5	Protection by several devices		N/A
2.7.6	Warning to service personnel.....:		N/A

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict
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	Interlocks with moving parts		N/A
2.8.6	Overriding an interlock		N/A
2.8.7	Switches and relays in interlock systems		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 (V)		N/A
2.8.8	Mechanical actuators		N/A
2.9	**Electrical Insulation**		Pass
2.9.1	Properties of insulating materials		Pass
2.9.2	Humidity conditioning		Pass
2.9.3	Requirements for insulation		Pass
2.9.4	Insulation parameters		Pass
2.9.5	Categories of insulation		Pass
2.10	**Clearances, Creepage Distances and Distances Through Insulation**		Pass
2.10.1	General		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		Pass
2.10.3.3	Clearances in secondary circuits		N/A
2.10.3.4	Measurement of transient levels		N/A

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict
2.10.4	Creepage distances		Pass
	CTI tests.....:	Category IIIa and IIIb	-
2.10.5	Solid insulation		Pass
2.10.5.1	Minimum distance through insulation		Pass
2.10.5.2	Thin sheet material		Pass
	Number of layers (pcs) .....:	three	-
	Electric strength test.....:	(see appended table 5.2)	-
2.10.5.3	Printed boards		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 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
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 + Tmra - 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		N/A

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict
3	**WIRING, CONNECTIONS AND SUPPLY**		Pass
3.1	**General**		Pass
3.1.1	Current rating and overcurrent protection		Pass
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		Pass
3.1.7	Non-metallic materials in electrical connections		N/A
3.1.8	Self-tapping and spaced thread screws	Additional PE screw provided with star washer.	Pass
3.1.9	Termination of conductors		N/A
	10 N pull test		N/A
3.1.10	Sleeving on wiring		N/A
3.2	**Connection to A.C. Mains Supplies**		N/A
3.2.1	Means of connection .....:	The unit is for building-in. Connection to mains power is to be determined in the end product.	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
	Type.....:		-
	Rated current (A), cross-sectional area (mm^2),AWG .....:		-
3.2.6	Cord anchorages and strain relief		N/A
	Mass of equipment (kg), pull (N).....:		-

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict
	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		N/A
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	Rated current (A), cord/cable type, cross-sectional area (mm^2).....:		N/A
3.3.5	Rated current (A), type and nominal thread diameter (mm) .....:		N/A
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 A.C. Mains Supply**		N/A
3.4.1	General requirement		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		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

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict
3.4.11	Multiple power sources		N/A
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**		Pass
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		Pass
4.2.3	Steady force test, 30 N		Pass
4.2.4	Steady force test, 250 N		N/A
4.2.5	Impact test		N/A
4.2.6	Drop test		N/A
4.2.7	Stress relief		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
4.3	**Design and Construction**		Pass
4.3.1	Edges and corners		Pass
4.3.2	Handles and manual controls; force (N) .....:		N/A

IEC 60950			
Clause	Requirement + Test	Result - Remark	Verdict
4.3.3	Adjustable controls		N/A
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
	Torque (Nm) .....:		-
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 (l) .....:		N/A
	Flash point (°C).....:		N/A
4.3.13	Radiation; type of radiation .....:		N/A
	Equipment using lasers		N/A
4.4	**Protection Against Hazardous Moving Parts**		N/A
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	Temperature rises		Pass
	Normal load condition per Annex L.....:		N/A
4.5.2	Resistance to abnormal heat		Pass
4.6	**Openings in Enclosures**		N/A
4.6.1	Top and side openings		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	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/time .....:		-
4.7	**Resistance to Fire**		Pass
4.7.1	Reducing the risk of ignition and spread of flame		Pass
4.7.2	Conditions for a fire enclosure		N/A
4.7.2.1	Parts requiring a fire enclosure		Pass
4.7.2.2	Parts not requiring a fire enclosure		N/A
4.7.3	Materials		Pass
4.7.3.1	General		Pass
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		Pass
4.7.3.5	Materials for air filter assemblies		N/A
4.7.3.6	Materials used in high-voltage components		N/A
5	**ELECTRICAL REQUIREMENTS AND SIMULATED ABNORMAL CONDITIONS**		Pass
5.1	**Touch current and protective conductor current**		Pass
5.1.1	General	Unit is intended for building-in.	Pass
5.1.2	Equipment under test (EUT)		Pass
5.1.3	Test circuit	Test circuit of Annex D.1 used.	Pass
5.1.4	Application of measuring instrument		Pass

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Clause	Requirement + Test	Result - Remark	Verdict
5.1.5	Test procedure		Pass
5.1.6	Test measurements		Pass
	Test voltage (V).....:	264	-
	Measured current (mA).....:	0.31 (max.)	-
	Max. allowed current (mA).....:	3.5	-
5.1.7	Equipment with touch current exceeding 3.5 mA ..:		N/A
5.1.8	Touch currents to and from telecommunication networks		N/A
5.1.8.1	Limitation of the touch current to a telecommunication network		N/A
	Test voltage (V).....:		-
	Measured current (mA).....:		-
	Max. allowed current (mA).....:		-
5.1.8.2	Summation of touch currents from telecommunication networks		N/A
5.2	**Electric Strength**		Pass
5.2.1	General		Pass
5.2.2	Test procedure		Pass
5.3	**Abnormal Operating and Fault Conditions**		Pass
5.3.1	Protection against overload and abnormal operation		Pass
5.3.2	Motors		N/A
5.3.3	Transformers		Pass
5.3.4	Functional insulation.....:	Method B and C.	Pass
5.3.5	Electromechanical components		N/A
5.3.6	Simulation of faults		Pass
5.3.7	Unattended equipment		N/A
5.3.8	Compliance criteria for abnormal operating and fault conditions		Pass

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6	**CONNECTION TO TELECOMMUNICATION NETWORKS**		N/A
6.1	**Protection of telecommunication network service personnel, and users of other equipment connected to the network, from hazards in the equipment**		N/A
6.1.1	Protection from hazardous voltages		N/A
6.1.2	Separation of the telecommunication network from earth		N/A
6.1.2.1	Requirements		N/A
	Test voltage (V).....:		-
	Current in the test circuit(mA).....:		-
6.1.2.2	Exclusions .....:		N/A
6.2	**Protection of Equipment Users From Overvoltages on Telecommunication Networks**		N/A
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 Telecommunication Wiring System From Overheating**		N/A
	Max. output current (A) .....:		-
	Current limiting method.....:		-
A	**ANNEX A, TESTS FOR RESISTANCE TO HEAT AND FIRE**		N/A
A.1	**Flammability test for fire enclosures of movable equipment having a total mass exceeding 18 kg, and of stationary equipment (see 4.7.3.2)**		N/A
A.1.1	Samples, material .....:		-
	Wall thickness (mm) .....:		-
A.1.2	Conditioning of samples; temperature (°C) .....:		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
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).....:		-
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.2.6	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	**High current arcing ignition test (see 4.7.3.2)**		N/A
A.3.1	Samples, material .....:		-
	Wall thickness (mm).....:		-
A.3.5	Compliance criteria		N/A
	Sample 1 number of arcs to ignition (pcs) .....:		-
	Sample 2 number of arcs to ignition (pcs) .....:		-
	Sample 3 number of arcs to ignition(pcs).....:		-
	Sample 4 number of arcs to ignition(pcs).....:		-

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Clause	Requirement + Test	Result - Remark	Verdict
	Sample 5 number of arcs to ignition (pcs) .....:		-
A.4	**Hot wire ignition test (see 4.7.3.2)**		N/A
A.4.1	Samples, material .....:		-
	Wall thickness (mm) .....:		-
A.4.5	Compliance criteria		N/A
	Sample 1 ignition time (s) .....:		-
	Sample 2 ignition time (s) .....:		-
	Sample 3 ignition time (s) .....:		-
	Sample 4 ignition time (s) .....:		-
	Sample 5 ignition time (s) .....:		-
A.5	**Hot flaming oil test (see 4.6.2)**		N/A
A.6	**Flammability tests for classifying materials V-0, V-1 or V-2**		N/A
A.6.1	Samples, material .....:		-
	Wall thickness (mm) .....:		-
A.6.5	Compliance criteria		N/A
A.6.6	Permitted retest		N/A
A.7	**Flammability test for classifying foamed materials HF-1, HF-2 or HFB**		N/A
A.7.1	Sample, material .....:		-
	Wall thickness (mm) .....:		-
A.7.4	Compliance criteria		N/A
A.7.5	Compliance criteria, HF-2		N/A
A.7.6	Compliance criteria, HF-1		N/A
A.7.7	Compliance criteria, HBF		N/A
A.7.8	Permitted retest, HF-1 or HF-2		N/A
A.7.9	Permitted retest, HBF		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
A.8	**Flammability test for classifying materials HB**		N/A
A.8.1	Samples, material .....:		-
	Sample thickness (mm) .....:		-
A.8.2	Conditioning of samples; temperature (°C) .....:		N/A
A.8.4	Test procedure		N/A
A.8.5	Compliance criteria		N/A
A.8.6	Permitted retest		N/A
A.9	**Flammability test for classifying materials 5V**		N/A
A.9.1	Samples, material .....:		-
	Sample thickness (mm) .....:		-
A.9.4	Test procedure, test bars		N/A
A.9.5	Test procedure, test plaques		N/A
A.9.6	Compliance criteria		N/A
A.9.7	Permitted retest		N/A
A.10	**Stress relief conditioning (see 4.2.7)**		N/A
	Temperature (°C) .....:		-
B	**ANNEX B, MOTOR TESTS UNDER ABNORMAL CONDITIONS (see 4.7.2.2 and 5.3.2)**		N/A
B.1	General requirements		N/A
	Position .....:		-
	Manufacturer .....:		-
	Type.....:		-
	Rated values.....:		-
B.2	Test conditions		N/A
B.3	Maximum temperatures		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
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 DC motors in secondary circuits		N/A
B.7	Locked-rotor overload test for DC 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) .....:		-
C	**ANNEX C, TRANSFORMERS (see 1.5.4 and 5.3.3)**		Pass
	Position .....:	T1	-
	Manufacturer .....:	Puls	-
	Type.....:	E32/16/11	-
	Rated values.....:	N/A	-
	Method of protection.....:	inherently	-
C.1	Overload test	max. 100°C at 24°C ambient	Pass
C.2	Insulation		Pass
	Protection from displacement of windings .....:	margin tape	Pass
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

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Clause	Requirement + Test	Result - Remark	Verdict
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
	Ionizing radiation		N/A
	Measured radiation (mR/h) .....:		-
	Measured high-voltage (kV) .....:		-
	Measured focus voltage (kV).....:		-
	CRT markings .....:		-
J	**ANNEX J, TABLE OF ELECTROCHEMICAL POTENTIALS (see 2.6.5.6)**		Pass
	Metal used .....:	Aluminum/Zinc	-
K	**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
M	**ANNEX M, CRITERIA FOR TELEPHONE RINGING SIGNALS (see 2.3.1)**		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 (f) .....:		-

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Clause	Requirement + Test	Result - Remark	Verdict
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
U	**ANNEX U, INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION (see 2.10.5.4)**		N/A
	Separate test report		N/A

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.