Issue Date: 2004-04-08 Page 1 of 1 Report Reference # E170507-A4-CB-1

Correction 2 2004-06-21

COVER PAGE FOR TEST REPORT

Test Item Description: Power Supply, Built-In AC/DC

Model/Type Reference: GT-3T400P41F

Rating(s): Input: 100-240V 6.2A 50-60Hz Standards: IEC 60950-1:2001, First Edition

Applicant Name and Address: GLOBTEK INC

186 VETERANS DR NORTHVALE NJ 07647

Factory Location(s): GLOBTEK INC

186 VETERANS DR

NORTHVALE NJ 07647 USA

HITRON ELECTRONICS CORP

B4-11 KAOHSIUNG EXPORT PROCESSING ZONE

PO BOX 26-110

KAOHSIUNG 806 TAIWAN

SANTRON ELECTRONICS CORP GAI SHAN INVESTMENT AREA FUZHOU, FUJIAN CHINA

This Report includes the following parts, in addition to this cover page:

1. Specific Technical Criteria

2. Enclosures

The original report was modified on 2004-06-21 to include the following changes/additions:

A Correction was issued to revise a schematic.

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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Issue Date:

2004-04-08

Page 1 of 3

Report Reference #

E170507-A4-CB-1

Correction 2 2004-06-21

TEST REPORT IEC 60950-1, First Edition Information technology equipment - Safety Part 1: General Requirements

Report Reference No E170507-A4-CB-1 Compiled by (+ signature) Gerard Soprych Reviewed by (+ signature)................. Joseph Rodriguez Approved by (+ signature)...... Don Vasco Date of issue...... 2004-04-08 CB Testing Laboratory...... Underwriters Laboratories Inc. Address 1285 Walt Whitman Road, NY, 11747, USA Testing location/procedure: CBTL [x] SMT [] TMP [] WMT [] USA Applicant's name GLOBTEK INC 186 VETERANS DR >Address NORTHVALE NJ 07647 Test specification: Standard IEC 60950-1:2001, First Edition Test procedure **CB Scheme** Non-standard test method: N/A Test Report Form No...... IEC60950 1A TRF originator SGS Fimko Ltd Master TRF dated 2002-03

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Marking Plate - Refer to Enclosure titled Miscellaneous for copy.

Issue Date: 2004-04-08 Page 2 of 3 Report Reference # E170507-A4-CB-1

Correction 2 2004-06-21

Particulars: test item vs. test requirements

Equipment mobility: for building-in Operating condition: continuous

Mains supply tolerance (%): +6%, -10%

Tested for IT power systems : No IT testing, phase-phase voltage (V) : N/A

Class of equipment: Class I (earthed)

Mass of equipment (kg) : < 18 kg
Protection against ingress of water : IP X0

Possible test case verdicts:

test case does not apply to the test object
 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.

Issue Date: 2004-04-08 Page 3 of 3 Report Reference # E170507-A4-CB-1

Correction 2 2004-06-21

General Product Information:

Report Summary

The original report was modified on 2004-05-13 to include the following changes/additions: Correct Enclosure diagrams and ratings.

The original report was modified on 2004-06-21 to include the following changes/additions: A Correction was issued to revise a schematic.

Product Description

USR/CNR

Model Differences

N/A

Additional Information

Output: 5V 35A, 12V 18A, 3.3V 4A, total power 400W max.

Technical Considerations

The product was submitted and tested for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 50°C

The product is intended for use on the following power systems: TN

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: 5V, 12V, 3.3V

The following secondary output circuits are at hazardous energy levels: 12V

The following secondary output circuits are at non-hazardous energy levels: 5V, 3.3V,

The power supply terminals and/or connectors are: Not investigated for field wiring

The maximum investigated branch circuit rating is: 20 A

The investigated Pollution Degree is: 2

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

The following end-product enclosures are required: Mechanical, Fire, Electrical

The maximum continuous power supply output (Watts) relied on forced air cooling from: an 8.9 CFM fan located next to L3 blowing toward the unit.

TRF No.: IEC60950 1A

Issue Date: 2004-04-08 Page 1 Report Reference # E170507-A4-CB-1

Correction 2 2004-06-21

Enclosure Schematics + PWB

(Total 4 Pages including this Cover Page)

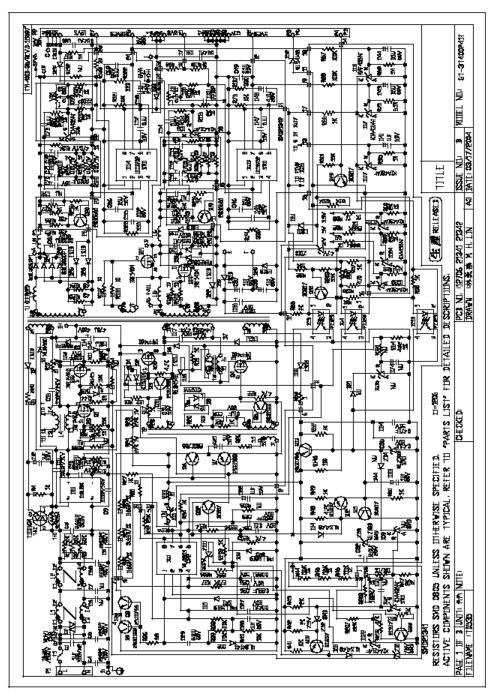
Supplement Id	Description
5-03	Schematics
5-04	PWB Artwork and Component Layout

Page 2 Report Reference # E170507-A4-CB-1

Correction 2 2004-06-21

2004-04-08

Issue Date:

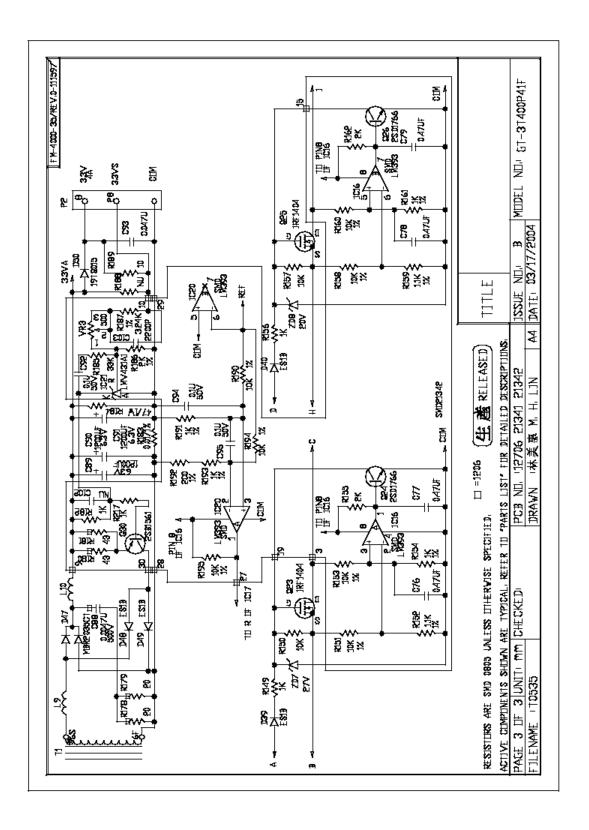




Page 3

Correction 2 2004-06-21

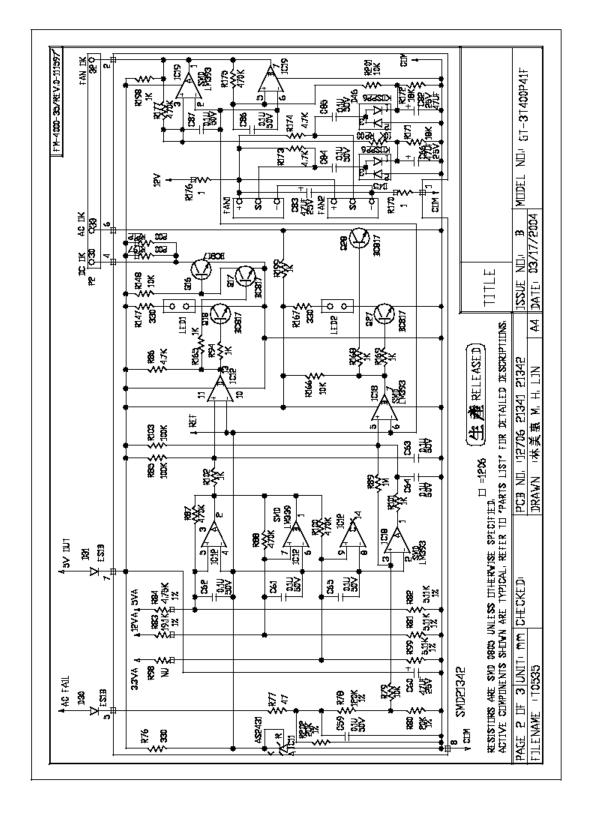
Issue Date:



Issue Date: Correction 2

2 2004-06-21

2004-04-08



Issue Date: 2004-04-08 Page 1 of 1 Report Reference # E170507-A4-CB-1

Correction 1 2004-05-13

COVER PAGE FOR TEST REPORT

Test Item Description: Power Supply, Built-In AC/DC

Model/Type Reference: GT-3T400P41F

Rating(s): Input: 100-240V 6.2A 50-60Hz Standards: IEC 60950-1:2001, First Edition

Applicant Name and Address: GLOBTEK INC

186 VETERANS DR NORTHVALE NJ 07647

Factory Location(s): GLOBTEK INC

186 VETERANS DR

NORTHVALE NJ 07647 USA

HITRON ELECTRONICS CORP

B4-11 KAOHSIUNG EXPORT PROCESSING ZONE

PO BOX 26-110

KAOHSIUNG 806 TAIWAN

SANTRON ELECTRONICS CORP GAI SHAN INVESTMENT AREA FUZHOU, FUJIAN CHINA

This Report includes the following parts, in addition to this cover page:

1. Specific Technical Criteria

2. Critical Components

3. Enclosures

The original report was modified on 2004-05-13 to include the following changes/additions:

Correct Enclosure diagrams and ratings.

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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Issue Date:

2004-04-08

Page 1 of 7

Report Reference #

E170507-A4-CB-1

Correction 1

2004-05-13

TEST REPORT IEC 60950-1, First Edition Information technology equipment - Safety Part 1: General Requirements

Report Reference No E170507-A4-CB-1

Compiled by (+ signature) David Keen

Reviewed by (+ signature)...... Joseph Rodriguez

CB Testing Laboratory...... Underwriters Laboratories Inc.

Address 1285 Walt Whitman Road, NY, 11747, USA

Testing location/procedure: CBTL [x] SMT [] TMP [] WMT []

Address Underwriters Laboratories Inc., 1285 Walt Whitman Road, NY, 11747,

USA

Applicant's name GLOBTEK INC

186 VETERANS DR

>Address NORTHVALE NJ 07647

Test specification:

Standard: IEC 60950-1:2001, First Edition

Test procedure : CB Scheme

Non-standard test method N/A

Test Report Form No.....: IEC60950__1A
TRF originator :: SGS Fimko Ltd
Master TRF :: dated 2002-03

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Test item description Power Supply, Built-In AC/DC

Trade Mark None

Model/Type reference : GT-3T400P41F

Manufacturer :: GLOBTEK INC

186 VETERANS DR

NORTHVALE NJ 07647 USA

Rating Input: 100-240V 6.2A 50-60Hz

Marking Plate - Refer to Enclosure titled Miscellaneous for copy.

Issue Date: 2004-04-08 Page 2 of 7 Report Reference # E170507-A4-CB-1

Correction 1 2004-05-13

Particulars: test item vs. test requirements

Equipment mobility: for building-in Operating condition: continuous

Mains supply tolerance (%): +6%, -10%

Tested for IT power systems : No IT testing, phase-phase voltage (V) : N/A

Class of equipment: Class I (earthed)

Mass of equipment (kg) : < 18 kg
Protection against ingress of water : IP X0

Possible test case verdicts:

test case does not apply to the test object
 test object does meet the requirement
 P(Pass)
 test object does not meet the requirement
 F(Fail)

General remarks:

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Issue Date: 2004-04-08 Page 3 of 7 Report Reference # E170507-A4-CB-1

Correction 1 2004-05-13

General Product Information:

Report Summary

The original report was modified on 2004-05-13 to include the following changes/additions: Correct Enclosure diagrams and ratings.

Product Description

USR/CNR

Model Differences

N/A

Additional Information

Output: 5V 35A, 12V 18A, 3.3V 4A, total power 400W max.

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The product was submitted and tested for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 50°C

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The following secondary output circuits are at hazardous energy levels: 12V

The following secondary output circuits are at non-hazardous energy levels: 5V, 3.3V,

The power supply terminals and/or connectors are: Not investigated for field wiring

The maximum investigated branch circuit rating is: 20 A

The investigated Pollution Degree is: 2

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

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The maximum continuous power supply output (Watts) relied on forced air cooling from: an 8.9 CFM fan

located next to L3 blowing toward the unit.

Issue Date: 2004-04-08 Page 4 of 7 Report Reference # E170507-A4-CB-1

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

1.5.1 TAB	LE: list of critica	I components			Pass
object/part No.	manufacturer/ trademark	type/model	technical data	standard	mark(s) of conformity ¹)
Transformer T1	Hitron	S9T40001-6	Class B. See Enclosure Miscellaneous.		
Insulation System	Hitron	R120E	Class B	UL1446	UL
Capacitor C1, C2	Cheng Tung	CTX Series	1uF, 300V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO
Capacitor C1, C2 Alternate	Shiny Space	SX1 Series	1uF, 300V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO
Capacitor C1, C2 Alternate	Rifa	PHE 820E Series	1uF, 275V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, FIMKO, CSA, IMQ
Capacitor C1, C2 Alternate	Rifa	PHE 820M Series	1uF, 275V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, FIMKO, CSA, IMQ
Capacitor C3	Cheng Tung	CTX Series	0.68uF, 300V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO
Capacitor C3 Alternate	Shiny Space	SX1 Series	0.68uF, 300V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO
Capacitor C3 Alternate	Philips	MKP 336 Series	0.68uF, 275V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO, CSA, IMQ
Capacitor C3 Alternate	Pilkor	PCX2 335 M MKP	0.68uF, 275V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO, CSA, IMQ, OVE

Issue Date: 2004-04-08 Page 5 of 7 Report Reference # E170507-A4-CB-1

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

Capacitor C3 Alternate	Rifa	PHE 820M Series	0.68uF, 275V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, FIMKO, CSA, IMQ
Capacitor C4, C5	Murata	KH	220pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, BSI
Capacitor C4, C5 Alternate	Pan Overseas	AC	220pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, BSI
Capacitor C4, C5 Alternate		CS	220pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, SAA, BSI, IMQ
Capacitor C8, C68	Murata	KH	2200pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, BSI
Capacitor C8, C68 Alternate	Mitsubishi	AM	2200pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, BSI
Capacitor C8, C68 Alternate	Pan Overseas	AC	2200pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, BSI
Capacitor C8, C68 Alternate	TDK	CS	2200pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, SAA, BSI, IMQ
Capacitor C8, C68 Alternate	Success	SF	2200pF, 250V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO
Fuse F1	Bel	5ST	250V, 6.3A	UL248, IEC60127	UL, SEMKO
Fuse F1 Alternate	Cooper	S506	250V, 6.3A	UL248, IEC60127	UL, VDE, SEMKO

Issue Date: 2004-04-08 Page 6 of 7 Report Reference # E170507-A4-CB-1

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

E E4	\A <i>C</i> -1	40405	050)/ 0.04	111040	LII VDE
Fuse F1 Alternate	Wickmann	19195	250V, 6.3A	UL248, IEC60127	UL, VDE, SEMKO, IMQ, BSI
Varistor MOV1	Walsin Tech.	VZ 7D 471 K	470V, 20J	UL1449	UL
Varistor MOV1 Alternate	Centra Sc.	CNR 07D 471K	470V, 30J	UL1449	UL
Varistor MOV1 Alternate	Ceramate	GNR 7D 471K	470V, 30J	UL1449	UL, CSA
Varistor MOV1 Alternate	Marcon	TNR 9G 471K	470V, 20J	UL1449	UL
Varistor MOV1 Alternate	Ishizuka	Z7D 471	470V, 20J	UL1449	UL
Varistor MOV1	Walsin Tech.	VZ070471KBS	470V, 20J	UL1449	UL
Thermistor TH1	Thinking	SCK-164	4A, 16ohm	UL1434	UL
Optical isolator IC3, IC4, IC13	LiteOn	LTV 817	5kVac isolation	UL1557, IEC60747-5, VDE884	UL, VDE, TUV, FIMKO, NEMKO, CSA, DEMKO, SEMKO
Optical isolator IC3, IC4, IC13 Alternate	Sharp	PC 123 FY2	5kVac isolation	UL1557, IEC60747-5, VDE884	UL, VDE, BSI, EI, SEMKO, DEMKO
Optical isolator IC3, IC4, IC13 Alternate	Toshiba	TLP 621	5kVac isolation	UL1557, IEC60747-5, VDE884	UL, BSI, SEMKO
Optical isolator IC3, IC4, IC13 Alternate	Toshiba	TLP 721	4kVac isolation	UL1557, IEC60747-5, VDE884	UL, VDE, BSI, SEMKO
Optical isolator IC3, IC4, IC13 Alternate	NEC	PS 2561	5kVac isolation	UL1557, IEC60747-5, VDE884	UL, VDE
Printed wiring board	-	-	Min V-1, 130 °C min., rated for direct support of live parts	UL796, IEC60603-2	UL
Inductor L1, L2	Hitron	S2-09945	Magnet wire wrapped on ferrite core, 3.0 mm margin tape between line and neutral windings.		

Issue Date: 2004-04-08 Page 7 of 7 Report Reference # E170507-A4-CB-1

Correction 1 2004-05-13

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

Inductor L4	Hitron	S2-09551-3	Magnet wire wrapped on ferrite core wrapped with YDPU2 tubing. Secondary winding, OBJT2 TIW wrapped with YDPU2 tubing.		
Connector P1	Long Chu	P3060 Series	250V 3A	UL1977	UL, CSA, TUV
Connector P2	Positronic	PCIH38 Series	500V 40A	UL1977	UL
Insulator	Garware	ER	V-2	UL94	UL
Fans 2	Sunon	KDE1204PKBX or KDE1204PKVX	12V 0.13A	UL507	UL
AC Inlet	Inalways	0711	10/15A 250V		UL, CSA, VDE, SEMKO, SEV, DEMKO, NEMKO, SETI
Power Switch	TIW	372	12A 250V		UL, CSA, TUV, SEV, SEMKO, NEMKO, DEMKO, SETI
Enclosure	-	-	Aluminum case, overall 348 by 117 by 51 mm., 1.5 mm. thick. Galvanized steel front plate, overall 140 by 57 mm., 1.5 mm thick.		

¹⁾ an asterisk indicates a mark which assures the agreed level of surveillance

TRF originator: SGS FIMKO

Issue Date: 2004-04-08 Page 1 Report Reference # E170507-A4-CB-1

Correction 1 2004-05-13

Enclosure Photographs

(Total 3 Pages including this Cover Page)

Supplement Id	Description
3-03	GT-3T400P41F Internal View
3-04	Front View
3-05	Back View

Issue Date: 2004-04-08 Page 2 Report Reference # E170507-A4-CB-1



Issue Date: 2004-04-08 Page 3 Report Reference # E170507-A4-CB-1



Issue Date: 2004-04-08 Page 1 Report Reference # E170507-A4-CB-1

Correction 1 2004-05-13

Enclosure Schematics + PWB

(Total 13 Pages including this Cover Page)

Supplement Id	Description
5-03	Schematics
5-04	PWB Artwork and Component Layout

Issue Date:

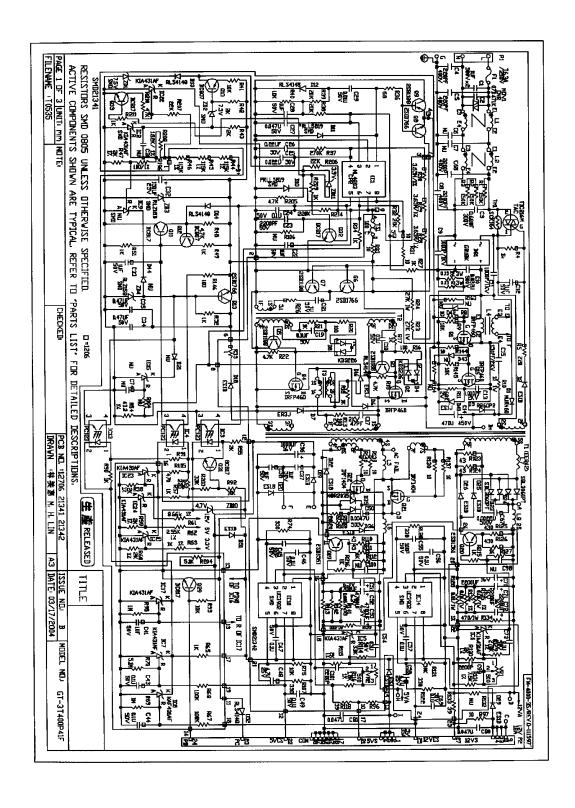
2004-04-08

Page 2

Report Reference #

E170507-A4-CB-1

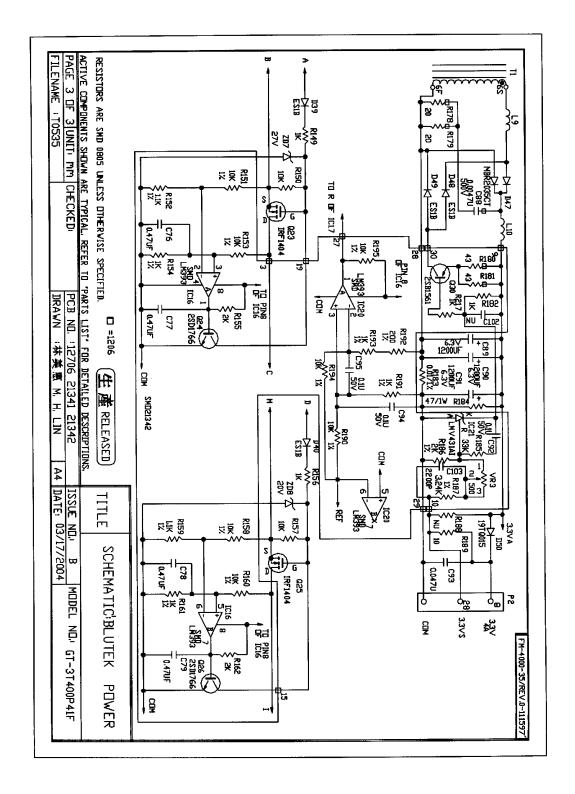
Correction 1



E170507-A4-CB-1

2004-04-08

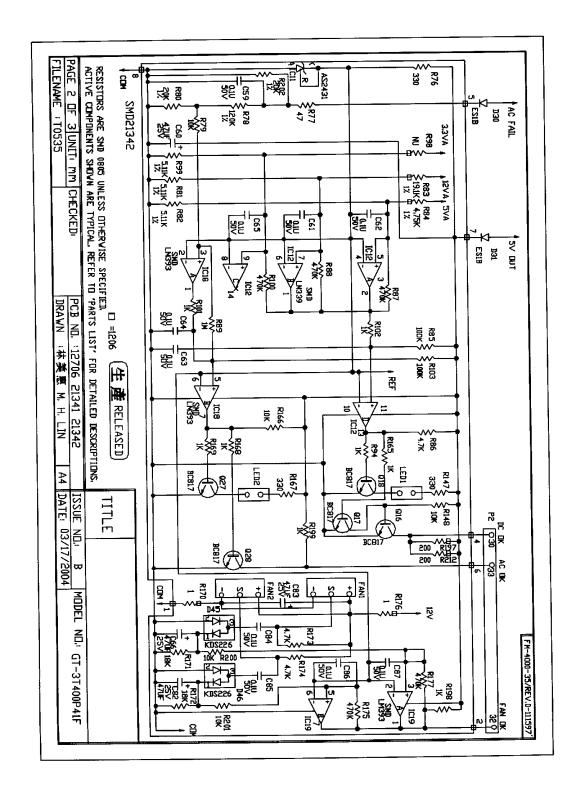
Page 3



E170507-A4-CB-1

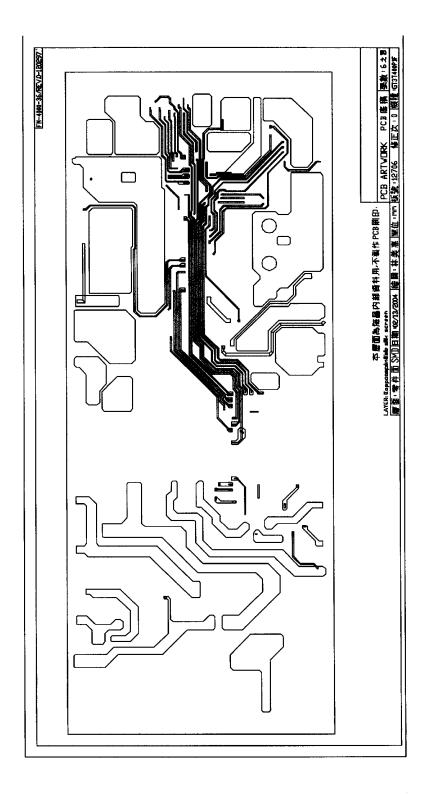
Page 4

Correction 1



Issue Date: 2004-04-08 Page 5 Report Reference #

E170507-A4-CB-1



Issue Date:

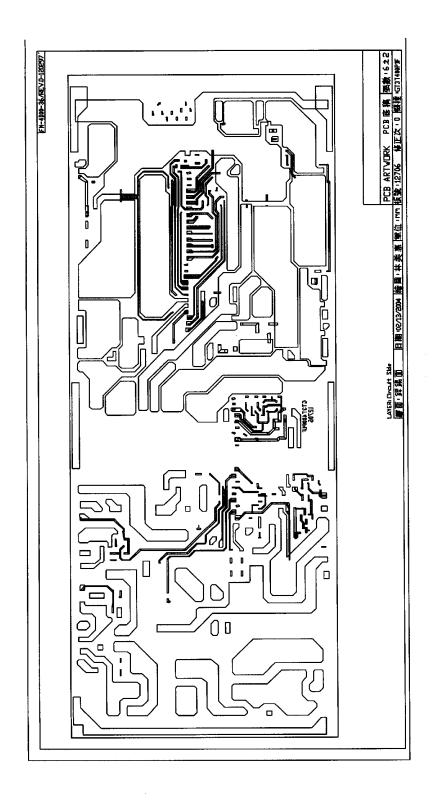
2004-04-08

Page 6

Report Reference #

E170507-A4-CB-1

Correction 1



E170507-A4-CB-1

Correction 1

2004-05-13

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Issue Date:

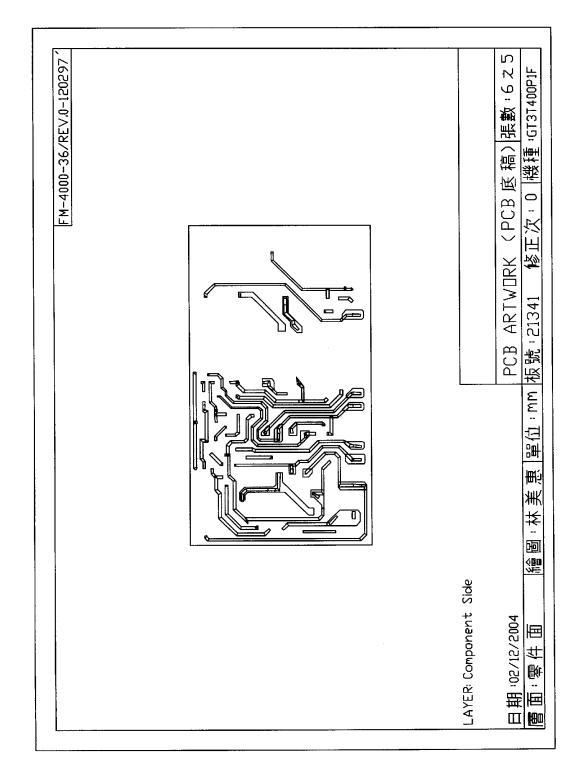
2004-04-08

Page 8

Report Reference #

E170507-A4-CB-1

Correction 1



Issue Date:

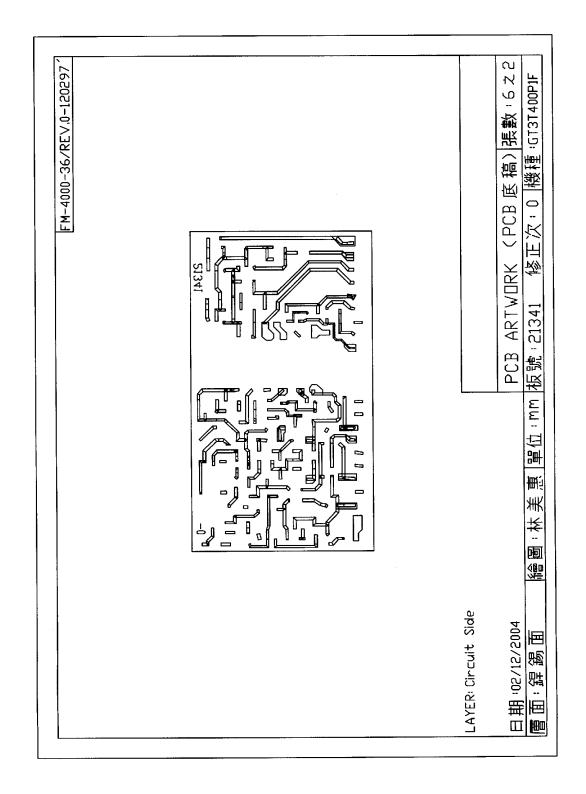
2004-04-08

Page 9

Report Reference #

E170507-A4-CB-1

Correction 1

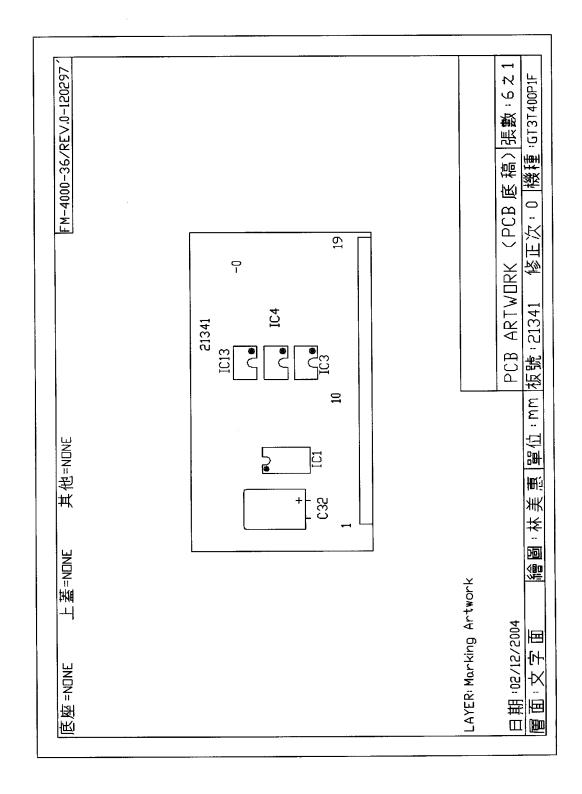


Page 10

Report Reference #

E170507-A4-CB-1

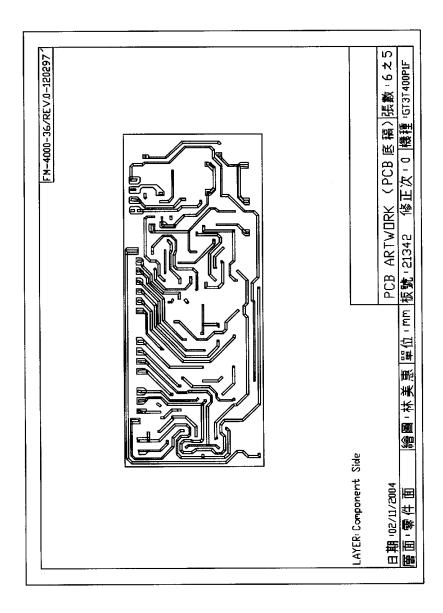
Correction 1



Correction 1

2004-05-13

2004-04-08

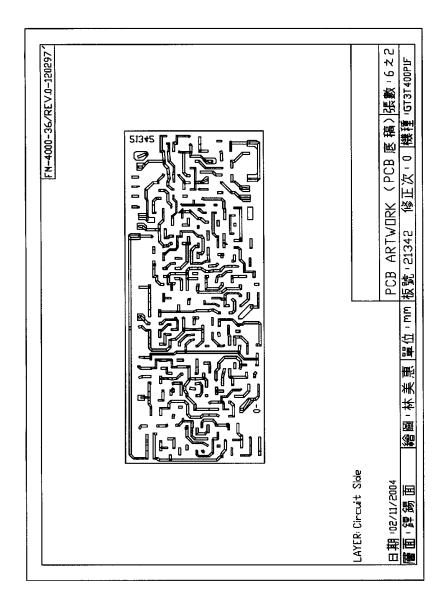


Page 12

Report Reference #

E170507-A4-CB-1

Correction 1

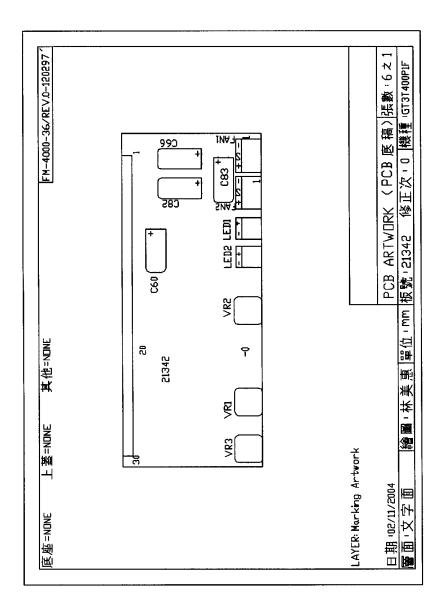


Page 13

Report Reference #

E170507-A4-CB-1

Correction 1



Issue Date: 2004-04-08 Page 1 of 1 Report Reference # E170507-A4-CB-1

COVER PAGE FOR TEST REPORT

Test Item Description: Power Supply, Built-In AC/DC

Model/Type Reference: GT-3T400P41F

Rating(s): Input: 100-240V 6.2A 50-60Hz Standards: IEC 60950-1:2001, First Edition

Applicant Name and Address: GLOBTEK INC

186 VETERANS DR NORTHVALE NJ 07647

Factory Location(s): GLOBTEK INC

186 VETERANS DR

NORTHVALE NJ 07647 USA

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PO BOX 26-110

KAOHSIUNG 806 TAIWAN

SANTRON ELECTRONICS CORP GAI SHAN INVESTMENT AREA FUZHOU, FUJIAN CHINA

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

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Issue Date: 2004-04-08 Page 1 of 36 Report Reference # E170507-A4-CB-1

TEST REPORT IEC 60950-1, First Edition Information technology equipment - Safety Part 1: General Requirements

Report Reference No : E170507-A4-CB-1

Compiled by (+ signature) : David Keen

Reviewed by (+ signature) : Joseph Rodriguez

Approved by (+ signature) : Don Vasco

Date of issue : 2004-04-08

CB Testing Laboratory : Underwriters Laboratories Inc.

Address: 1285 Walt Whitman Road, NY, 11747, USA

Testing location/procedure : CBTL [x] SMT [] TMP [] WMT []

Address: Underwriters Laboratories Inc., 1285 Walt Whitman Road, NY, 11747,

USA

Applicant's name : GLOBTEK INC

186 VETERANS DR

Address : NORTHVALE NJ 07647

Test specification:

Standard: IEC 60950-1:2001, First Edition

Test procedure : CB Scheme

Non-standard test method : N/A

Test Report Form No. : IEC60950__1A
TRF originator : SGS Fimko Ltd

Master TRF : dated 2002-03

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Test item description : Power Supply, Built-In AC/DC

Trade Mark : None

Model/Type reference : GT-3T400P41F

Manufacturer : GLOBTEK INC

186 VETERANS DR NORTHVALE NJ 07647 USA

Rating : Input: 100-240V 6.2A 50-60Hz

Marking Plate - Refer to Enclosure titled Miscellaneous for copy.

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Particulars: test item vs. test requirements

Equipment mobility: for building-in
Operating condition: continuous
Mains supply tolerance (%): +6%, -10%

Tested for IT power systems : No IT testing, phase-phase voltage (V) : N/A

Class of equipment: Class I (earthed)

Mass of equipment (kg) : < 18 kg
Protection against ingress of water : IP X0

Possible test case verdicts:

test case does not apply to the test object
 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.

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General Product Information:

Report Summary

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

Product Description

USR/CNR

Model Differences

N/A

Additional Information

Output: 5V 35A, 12V 18A, 3.3V 4A, total power 100W max.

Engineering Considerations

The product was submitted and tested for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 25°C

The product is intended for use on the following power systems TN

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 5V, 12V, 3.3V

The following secondary output circuits are at hazardous energy levels 12V

The following secondary output circuits are at non-hazardous energy levels 5V, 3.3V,

The power supply terminals and/or connectors are Not investigated for field wiring

The maximum investigated branch circuit rating is 20 A

The investigated Pollution Degree is 2

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

The following end-product enclosures are required Mechanical, Fire, Electrical

The maximum continuous power supply output (Watts) relied on forced air cooling from an 8.9 CFM fan located next to L3 blowing toward the unit.

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

1	GENERAL		Pass
1.5	Components		Pass
1.5.1	General		Pass
	Comply with IEC 60950 or relevant component standard	(see appended table 1.5.1)	Pass
1.5.2	Evaluation and testing of components		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:	Line-to-line capacitors are subclass X1 or X2. Primary-to-earth capacitors are subclass Y1 or Y2.	Pass
1.5.7	Double insulation or reinforced insulation bridged by components		N/A
1.5.7.1	General		N/A
1.5.7.2	Bridging capacitors		N/A
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
1.6.1	AC power distribution systems	N/A
1.6.2	Input current	Pass
1.6.3	Voltage limit of hand-held equipment	N/A
1.6.4	Neutral conductor	Pass

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

1.7	Marking and instructions		Pass
1.7.1	Power rating		Pass
	Rated voltage(s) or voltage range(s) (V):	100-240 Vac	Pass
	Symbol for nature of supply, for d.c. only:		N/A
	Rated frequency or rated frequency range (Hz):	50-60hz	Pass
	Rated current (mA or A)	6.2A	Pass
	Manufacturer's name or trademark or identification mark	Globtek Inc.	Pass
	Type/model or type reference:	See Ratings	Pass
	Symbol for Class II equipment only:		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:	Equipment is auto-ranging.	N/A
1.7.5	Power outlets on the equipment:	No standard power outlets are provided.	N/A
1.7.6	Fuse identification:	Fuse marking provided as follows: 250 V, 6.3 A.	Pass
1.7.7	Wiring terminals		N/A
1.7.7.1	Protective earthing and bonding terminals:		N/A
1.7.7.2	Terminal for a.c. mains supply conductors		N/A
1.7.7.3	Terminals for d.c. mains supply conductors		N/A
1.7.8	Controls and indicators		Pass
1.7.8.1	Identification, location and marking:	The function of controls affecting safety is obvious regardless of language.	Pass
1.7.8.2	Colours:		N/A
1.7.8.3	Symbols according to IEC 60417:	The mains switch is marked with the symbols: "0" and "I" (60417-1-IEC-5007 and IEC-5008).	Pass
1.7.8.4	Markings using figures		N/A
1.7.9	Isolation of multiple power sources:		N/A

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IEC 60950-1			
Clause	Requirement + Test	Result - Remark	Verdict
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		N/A
1.7.14	Removable parts		N/A
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		N/A
2.1.1.1	Access to energized parts	Unit is intended for building-in.	N/A
	Test by inspection:		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); minimum 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 equipment		Pass
	Time-constant (s); measured voltage (V):	1 second; 0 V	-
2.1.2	Protection in service access areas		N/A
2.1.3	Protection in restricted access locations		N/A

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IEC 60950-1			
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):	All accessible voltages are less than 42.4 Vp or 60 V dc and are 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 insulation 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:		N/A

2.3	TNV circuits		/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

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

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

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):	-

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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		Pass
2.6.3	Protective earthing and protective bonding conductors		Pass
2.6.3.1	General		Pass
2.6.3.2	Size of protective earthing conductors	Earthing conductor complies with Table 3B.	Pass
	Rated current (A), cross-sectional area (mm2), AWG	6.2 A, 1.0 sq. mm, 16 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 (W) of earthing conductors and their terminations, test current (A):	Component power supply for building-in. To be determined in end equipment assembly. Earthing conductor, from inlet earth pin to chassis tested; voltage drop is 0.333V at 40 A.	Pass
2.6.3.5	Colour of insulation:	Protective earthing is green with yellow stripe.	Pass
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		N/A
2.6.5.3	Disconnection of protective earth	Unit employs an appliance inlet.	Pass
2.6.5.4	Parts that can be removed by an operator		N/A
2.6.5.5	Parts removed during servicing		N/A

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

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 protective device in the "LIVE" phase.	Pass
2.7.5	Protection by several devices		N/A
2.7.6	Warning to service personnel:	Unit is intended for building-in.	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

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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		Pass
2.9.2	Humidity conditioning	120 hours	Pass
	Humidity (%)	92	-
	Temperature (°C)	40	-
2.9.3	Grade of insulation		Pass

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

2.10	Clearances, creepage distances and distances the	hrough 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		Pass
2.10.3.4	Measurement of transient voltage levels		N/A
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		N/A
2.10.5.2	Thin sheet material		Pass
	Number of layers (pcs):	Three layers used, with any combination of two which comply with the required electric strength test.	-
	Electric strength test:	4242Vdc 1min. for one layer	-
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		Pass
	Number of layers (pcs):	Three wrapped layers.	Pass
	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
	-		NI/A
2.10.6.3	Thermal cycling		N/A

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	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict
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		N/A

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	Pass
3.1.3	Securing of internal wiring	Pass
3.1.4	Insulation of conductors	Pass
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

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

3.2	Connection to an a.c. mains supply or a d.c. mains supply		Pass
3.2.1	Means of connection	Component power supply for building in. The unit is provided with an appliance inlet.	Pass
3.2.1.1	Connection to an a.c. mains supply		Pass
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	The appliance inlet complies with IEC 60320.	Pass
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 (mm2), 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		N/A

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

Wiring terminals for connection of external conductors	N/A
Wiring terminals	N/A
Connection of non-detachable power supply cords	N/A
Screw terminals	N/A
Conductor sizes to be connected	N/A
Rated current (A), cord/cable type, cross-sectional area (mm2):	-
Wiring terminal sizes	N/A
Rated current (A), type and nominal thread diameter (mm):	-
Wiring terminals design	N/A
Grouping of wiring terminals	N/A
Stranded wire	N/A
	Wiring terminals Connection of non-detachable power supply cords Screw terminals Conductor sizes to be connected Rated current (A), cord/cable type, cross-sectional area (mm2)

3.4	Disconnection from the mains supply		Pass
3.4.1	General requirement		Pass
3.4.2	Disconnect devices	The equipment is provided with an appliance coupler.	Pass
3.4.3	Permanently connected equipment		N/A
3.4.4	Parts which remain energized		Pass
3.4.5	Switches in flexible cords		N/A
3.4.6	Single-phase equipment and d.c. equipment	See 3.4.2.	N/A
3.4.7	Three-phase equipment		N/A
3.4.8	Switches as disconnect devices	The switch is marked with correct symbols in accordance with Sub-clause 1.7.8 ("O" and "I").	Pass
3.4.9	Plugs as disconnect devices	Component power supply for building-in. To be determined in end equipment assembly. See 3.4.2.	N/A
3.4.10	Interconnected equipment		N/A
3.4.11	Multiple power sources		N/A

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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	Pass
4.1	Stability	N/A
	Angle of 10°	N/A
	Test: force (N):	N/A

Pass
Pass
Pass
N/A

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

4.3	Design and construction		Pass
4.3.1	Edges and corners		N/A
4.3.2	Handles and manual controls; force (N):	No handles/grips/knobs or levers provided in the equipment.	N/A
4.3.3	Adjustable controls		N/A
4.3.4	Securing of parts		Pass
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
	Quantity of liquid (I): 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	lonizing 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
4.3.13.4	Human exposure to ultraviolet (UV) radiation:		N/A
4.3.13.5	Laser (including LEDs)		N/A

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	IEC 60950-1		
Clause	Requirement + Test	Result - Remark	Verdict
	Laser class		-
4.3.13.6	Other types:		N/A
4.4	Protection against hazardous moving parts	T	N/A
	<u> </u>	T	
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
		-	<u> </u>
15	Thormal requirements		Pace

4.5	Thermal requirements		Pass
4.5.1	Maximum temperatures		Pass
	Normal load condition per Annex L:	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		Pass

4.6	Openings in enclosures	N/A
4.6.1	Top and side openings	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):	-

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

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	Pass
	Method 2, application of all of simulated fault condition tests	N/A
4.7.2	Conditions for a fire enclosure	N/A
4.7.2.1	Parts requiring a fire enclosure	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

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

5	ELECTRICAL REQUIREMENTS AND SIMULATED	D ABNORMAL CONDITIONS	Pass
5.1	Touch current and protective conductor current		Pass
5.1.1	General		Pass
5.1.2	Equipment under test (EUT)		N/A
5.1.3	Test circuit		Pass
5.1.4	Application of measuring instrument		Pass
5.1.5	Test procedure		Pass
5.1.6	Test measurements		Pass
	Test voltage (V)	264Vac	-
	Measured touch current (mA):	0.5	-
	Max. allowed touch current (mA):	3.5 mA (Class I stationery)	-
	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	2 Electric strength		Pass
5.2.1	General		Pass
5.2.2	Test procedure		Pass

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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		Pass
5.3.2	Motors		N/A
5.3.3	Transformers		Pass
5.3.4	Functional insulation:	Functional insulation complies with the requirements (a), (b), or (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

6	CONNECTION TO TELECOMMUNICATION NETWORKS	N/A
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

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

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Clause	Requirement + Test	Result - Remark	Verdict

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

7	CONNECTION TO CABLE DISTRIBUTION SYSTEMS	
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

Α	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)	
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)	-

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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)	
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

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В	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
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):	-

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Clause	Requirement + Test		Result - Remark	Verdict

С	Annex C, TRANSFORMERS (see 1.5.4 and 5.3.3)	Pass
	Position T1	-
	Manufacturer Hitron	-
	Type: Switching	-
	Rated values	-
	Method of protection: Internal to Power Supply	-
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 TOUCH-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
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F	Annex F, MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES	Pass
	(see 2.10)	

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Clause	Requirement + Test	Result - Remark	Verdict		
G	Annex G, ALTERNATIVE METHOD FOR DETERM CLEARANCES	MINING MINIMUM	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		
Н	ANNEX H, IONIZING RADIATION (see 4.3.13)		N/A		

J	Annex J, TABLE OF ELECTROCHEMICAL POTENTIALS (see 2.6.5.6)			
	Metal used:	Galvanized Steel and Aluminum	-	

K	ANNEX K, THERMAL CONTROLS (see 1.5.3 and 5.3.7)		
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	

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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)		
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	N/A	

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 2.10.3.4, 6.2.2.1, 7.3.2 and clause G.5)		
N.1	ITU-T impulse test generators	N/A	
N.2	IEC 60065 impulse test generator	N/A	

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Clause	Requirement + Test Result - Remark	Verdict
Р	Annex P, NORMATIVE REFERENCES	Pass
Q	Annex Q, BIBLIOGRAPHY	Pass
R	Annex R, EXAMPLES OF REQUIREMENTS FOR QUALITY CONTROL PROGRAMMES	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
	:	-
U	Annex U, INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION (see 2.10.5.4)	N/A
	· · · · · · · · · · · · · · · · · · ·	-

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Clause	Requirement + Test		Result - Remark	Verdict	

1.5.1 TAB	LE: list of critica	I components			Pass
object/part No.	manufacturer/ trademark	type/model	technical data	standard	mark(s) of conformity ¹)
Transformer T1	Hitron	S9T40001-6	Class B. See Enclosure Miscellaneous.		
Insulation System	Hitron	R120E	Class B	UL1446	UL
Capacitor C1, C2	Cheng Tung	CTX Series	1uF, 300V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO
Capacitor C1, C2 Alternate	Shiny Space	SX1 Series	1uF, 300V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO
Capacitor C1, C2 Alternate	Rifa	PHE 820E Series	1uF, 275V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, FIMKO, CSA, IMQ
Capacitor C1, C2 Alternate	Rifa	PHE 820M Series	1uF, 275V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, FIMKO, CSA, IMQ
Capacitor C3	Cheng Tung	CTX Series	0.68uF, 300V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO
Capacitor C3 Alternate	Shiny Space	SX1 Series	0.68uF, 300V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO
Capacitor C3 Alternate	Philips	MKP 336 Series	0.68uF, 275V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO, CSA, IMQ
Capacitor C3 Alternate	Pilkor	PCX2 335 M MKP	0.68uF, 275V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO, CSA, IMQ, OVE

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Clause	Requirement + Test		Result - Remark	Verdict	

Capacitor C3 Alternate	Rifa	PHE 820M Series	0.68uF, 275V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, FIMKO, CSA, IMQ
Capacitor C4, C5	Murata	КН	220pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, BSI
Capacitor C4, C5 Alternate	Pan Overseas	AC	220pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, BSI
Capacitor C4, C5 Alternate	TDK	CS	220pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, SAA, BSI, IMQ
Capacitor C8, C68	Murata	KH	2200pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, BSI
Capacitor C8, C68 Alternate	Mitsubishi	AM	2200pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, BSI
Capacitor C8, C68 Alternate	Pan Overseas	AC	2200pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, BSI
Capacitor C8, C68 Alternate	TDK	CS	2200pF, 250V	UL1414, IEC60384-14	UL, VDE, CSA, SEV, DEMKO, NEMKO, SEMKO, FIMKO, SAA, BSI, IMQ
Capacitor C8, C68 Alternate	Success	SF	2200pF, 250V	UL1414, IEC60384-14	UL, VDE, SEV, DEMKO, NEMKO, SEMKO, FIMKO
Fuse F1	Bel	5ST	250V, 6.3A	UL248, IEC60127	UL, SEMKO
Fuse F1 Alternate	Cooper	S506	250V, 6.3A	UL248, IEC60127	UL, VDE, SEMKO

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E E4	IAC - Luca - con-	40405	050)/ 0.04	111040	LII VDE
Fuse F1 Alternate	Wickmann	19195	250V, 6.3A	UL248, IEC60127	UL, VDE, SEMKO, IMQ, BSI
Varistor MOV1	Walsin Tech.	VZ 7D 471 K	470V, 20J	UL1449	UL
Varistor MOV1 Alternate	Centra Sc.	CNR 07D 471K	470V, 30J	UL1449	UL
Varistor MOV1 Alternate	Ceramate	GNR 7D 471K	470V, 30J	UL1449	UL, CSA
Varistor MOV1 Alternate	Marcon	TNR 9G 471K	470V, 20J	UL1449	UL
Varistor MOV1 Alternate	Ishizuka	Z7D 471	470V, 20J	UL1449	UL
Varistor MOV1	Walsin Tech.	VZ070471KBS	470V, 20J	UL1449	UL
Thermistor TH1	Thinking	SCK-164	4A, 16ohm	UL1434	UL
Optical isolator IC3, IC4, IC13	LiteOn	LTV 817	5kVac isolation	UL1557, IEC60747-5, VDE884	UL, VDE, TUV, FIMKO, NEMKO, CSA, DEMKO, SEMKO
Optical isolator IC3, IC4, IC13 Alternate	Sharp	PC 123 FY2	5kVac isolation	UL1557, IEC60747-5, VDE884	UL, VDE, BSI, EI, SEMKO, DEMKO
Optical isolator IC3, IC4, IC13 Alternate	Toshiba	TLP 621	5kVac isolation	UL1557, IEC60747-5, VDE884	UL, BSI, SEMKO
Optical isolator IC3, IC4, IC13 Alternate	Toshiba	TLP 721	4kVac isolation	UL1557, IEC60747-5, VDE884	UL, VDE, BSI, SEMKO
Optical isolator IC3, IC4, IC13 Alternate	NEC	PS 2561	5kVac isolation	UL1557, IEC60747-5, VDE884	UL, VDE
Printed wiring board	-	-	Min V-1, 130 °C min., rated for direct support of live parts	UL796, IEC60603-2	UL
Inductor L1, L2	Hitron	S2-09945	Magnet wire wrapped on ferrite core, 3.0 mm margin tape between line and neutral windings.		

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Inductor L4	Hitron	S2-09551-3	Magnet wire wrapped on ferrite core wrapped with YDPU2 tubing. Secondary winding, OBJT2 TIW wrapped with YDPU2 tubing.		
Connector P1	Long Chu	P3060 Series	250V 3A	UL1977	UL, CSA, TUV
Connector P2	Positronic	PCIH38 Series	500V 40A	UL1977	UL
Insulator	Garware	ER	V-2	UL94	UL
Fans 2	Sunon	or KDE1204PKVX	12V 0.13A	UL507	UL
AC Inlet	Inalways	0711	10/15A 250V		UL, CSA, VDE, SEMKO, SEV, DEMKO, NEMKO, SETI
Power Switch	TIW	372	12A 250V		UL, CSA, TUV, SEV, SEMKO, NEMKO, DEMKO, SETI
Enclosure	-	-	Aluminum case, overall 348 by 117 by 51 mm., 1.5 mm. thick. Galvanized steel front plate, overall 140 by 57 mm., 1.5 mm thick.		

1) an asterisk indicates a mark which assures the agreed level of surveillance

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1.6.2 TABLE: electrical data (in normal conditions)								
fuse#	I rated (A)	U (V)	P (W)	I (mA)	I fuse (mA)	condition/status		
F1	6.2	90	516.6	6.3	6300	5V 35A, 12V 18A, 3.3\	/ 4A	
F1	6.2	100	552.1	5.53	6300	5V 35A, 12V 18A, 3.3\	/ 4A	
F1	6.2	120	538.9	4.51	6300	5V 35A, 12V 18A, 3.3\	/ 4A	
F1	6.2	200	519.8	2.677	6300	5V 35A, 12V 18A, 3.3\	/ 4A	
F1	6.2	220	518.1	2.434	6300	5V 35A, 12V 18A, 3.3\	/ 4A	
F1	6.2	230	517.2	2.325	6300	5V 35A, 12V 18A, 3.3\	/ 4A	
F1	6.2	240	516.4	2.227	6300	5V 35A, 12V 18A, 3.3\	/ 4A	
F1	6.2	264	514.4	2.042	6300	5V 35A, 12V 18A, 3.3\	/ 4A	
suppleme	entary informa	ation:	_			_		

2.10.3 and 2.10.4 TABLE: clea	TABLE: clearance and creepage distance measurements								
clearance cl and creepage distance dcr at/of:	Up (V)	U r.m.s. (V)	required cl (mm)	cl (mm)	required dcr (mm)	dcr (mm)			
Reinforced Insulation Primary - Secondary(SELV	450	387	6.4	>6.4	4.8	>4.8			
Basic Insulation Pringer Protective Earth	nary 339	240	2.0	>2.0	2.5	>2.5			
supplementary information:									

2.10.5 TABLE: distance through insulation	TABLE: distance through insulation measurements					
distance through insulation di at/of:	Up (V)	test voltage (V)	required di (mm)	di (mm)		
supplementary information:	'					

4.5	TABLE: temperature rise measurements								
	test voltage (V)	90V	60Hz	264V 50Hz				_	
	t1 (°C)							_	
	t2 (°C)							_	

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Clause	Requirement + Test	Result - Remark	Verdict

maximum temperature T of part/at:		T (°C)						
Output Load 5V 35A, 12V 18A, 3.3V 4A								
L1	71.3	48.5				130		
C14	49.0	42.8				85		
Q4	64.5	59.5				-		
T1 (coil)	79.5	77.2				110		
T1 (core)	60.2	58.2				110		
D27	61.9	54.9				-		
L7	55.5	58.7				130		
L8	60.0	58.0				130		
PCB (Q23)	38.2	37.4				130		
Ambient	22.9	23.3				-		
temperature T of winding:		R ₁ (Ω)	R ₂ (Ω)	T (°C)	allowed Tmax (°C)	insulatio n class		
supplementary information:								

4.5.2	TABLE: ball pressure test of thermoplastics			N/A
	allowed impression diameter (mm):			_
part		test temperature (°C)	•	on diameter mm)
supplementa	ary information:			
	determined from examination of the physical characte equirements of the test.	ristics of the materials u	ised that t	he material

4.7 TABLE: resistance to fire					Pass	
part		manufacturer of material	type of material	thickness(mm)	flammability class	
supple	supplementary information:					
Metho	od 1 used (Comp	onent for building-in)				

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5.2	TABLE: electric strength tests, impulse tests and voltage surge tests			Pass
test voltage applied between: test voltage (V) a.c./d.c.			akdown s / No	
Reinforced I	nsulation - Primary to SELV	4242Vdc	No	
Basic Insula	tion - Primary to Ground	2121Vdc	No	
supplementa	ry information:			_

5.3	TABLE: fault	condition tests					Pass
	ambient tempe	erature (°C)		:	25		_
					See Cover Page of Test Report.		_
	manufacturer of power supply:			See Cover Pag Report.	e of Test	_	
	rated markings	of power supply.		:	See Models an	d Ratings	_
component No.	fault	test voltage (V)	test time	fuse No.	fuse current (A)	result	
Fan	blocked	264	40 minutes	F1	6.3	Thermal switch (T1 118.2°C) No	
Vents	blocked	264	1.5 hours	F1	6.3	NC, NT, NB, CT	-
DB1 (ac,+)	short	264	<1 second	F1	6.3	IP (F1, open), N	C, NT, NB
Q1 (D,S)	short	264	<1 second	F1	6.3	IP (F1, open), N	IC, NT, NB
Q1 (D,S)	short	264	<1 second	F1	6.3	IP (F1, open), N CD (Q2, Q4, D1	
T1 (winding 5)	overload	264	1.5 hours	F1	6.3	(T1 115.5°C) NO	C, NT, NB,
T1 (winding 4)	overload	264	2 hour	F1	6.3	(T1 96.5°C) NC CT	, NT, NB,
T1 (winding 6)	overload	264	2 hours	F1	6.3	(T1 105.6°C) NO CT	C, NT, NB,
5V O/P	short	264	20 minutes	F1	6.3	Unit entered hic outputs restored removed, NC, N 81.1°C	when short
5V O/P	overload	264	2 hours	F1	6.3	After after increa current over 40/ entered hicup m outputs restored removed, NC, N 84.8°C	A, unit node, d when short

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12V O/P	short	264	1.5 hours	F1	6.3	Unit entered hicup mode, NC, NT, NB, thermal switch operated, T1 153°C
12V O/P	overload	264	1 hour	F1	6.3	After after increasing current over 22A, unit entered hicup mode, outputs restored when short removed, NC, NT, NB, T1 84.5°C
3.3V O/P	short	264	20 minutes	F1	6.3	Unit entered hicup mode, outputs restored when short removed, NC, NT, NB, T1 85.5°C
3.3V O/P	overload	264	1 hour	F1	6.3	After after increasing current over 6.3A, unit entered hicup mode, outputs restored when short removed, NC, NT, NB, T1 80.5°C

supplementary information:

Results Key: IP = Internal protection operated (component indicated) CT = Constant temperatures were obtained TW = Transformer winding opened CD = Components damaged (damaged components indicated) NB = No indication of dielectric breakdown YB = Dielectric breakdown (time and location indicated) NC = Cheesecloth remained intact YC = Cheesecloth charred or flamed NT = Tissue paper remained intact YT = Tissue paper charred or flamed

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Enclosure

National Differences

(Total 30 Pages including this Cover Page)

```
Argentina*
Australia / New Zealand
      Austria**
      Belgium**
   Czech Republic*
      Denmark
       Finland
       France*
      Germany
      Greece**
       Group
      Hungary*
       Ireland*
       Israel*
       Korea
      Malaysia*
    Netherlands**
       Norway
       Poland*
      Portugal*
      Slovakia*
      Slovenia*
       Spain*
       Sweden
     Switzerland
    USA / Canada
   United Kingdom
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- * No National Differences Declared
- ** Only Group Differences

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	IEC 60950-1		
SubClause	Difference + Test	Result - Remark	Verdict

,	Australia / New Zealand - Differences to IEC 60950-	1:2001, First Edition	
1.2.12.11	POTENTIAL IGNITION SOURCE Possible fault which can starts a fire if the open- circuit voltage measured across an interruption or faulty contact exceeds a value of 50 V (peak) a.c. or d.c. and the product of the peak value of this voltage and the measured r.m.s. current under normal operating conditions exceeds 15VA. Such a faulty contact or interruption in an electrical connection includes those which may occur in conductive patterns on printed boards. Note 201: An electronic protection circuit may be used to prevent such a fault from becoming a POTENTIAL IGNITION SOURCE.		N/A
1.5.1	Add to the first paragraph: "or the relevant Australian / New Zealand Standard".		N/A
1.5.2	Add to the first and third dashed items after the words "IEC Component Standard": "or the relevant Australian / New Zealand Standard".		N/A
1.6.1	Add: AC power distribution systems classified as TT or IT are not allowed		N/A
1.7.12	Add to the first paragraph: All safety instructions and safety markings shall be in English.		N/A

	IEC 60950-1		
SubClause	Difference + Test	Result - Remark	Verdict

3.2.5	Substitute for Table 3B: Sizes of Conductors	N/A
	Rated Nominal Current of cross-sectional Equipment area (A) (mm²)	
	0.2 <= 3	
	the cord of cord guard, enters the appliance, and the entry to the plug, does not exceed 2 m (0.5 mm² three-core supply flexible cords are not permitted; see Note 2 to Table 2.17 of AS/NZS 3191).	
4.3.6	Replace the third paragraph: Equipment with a plug portion, suitable for insertion into a 10 A 3-pin flat-pin socket-outlet complying with AS/NZS 3112, shall comply with the requirements in AS/NZS 3112 for equipment with integral pins for insertion into socket-outlets.	N/A
4.3.13	For the purpose of this standard compliance with AS/NZS 2211.1 is deemed to be compliance with IEC60825.1	N/A
4.7	Add after the clause: For alternative resistance to fire tests, refer to Annex YY.	N/A

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	IEC 60950-1			
SubClause	Difference + Test	Result - Remark	Verdict	
6.2.1	Replace item c) with: An SELV circuit, a TNV-2 circuit or a Limited Current Circuit provided for connection of other equipment. The requirement for separation applies whether or not this circuit is accessible.		N/A	
6.2.2	Replace the first paragraph by: In Australia (not in New Zealand), compliance with 6.2.2 is checked by the tests of both 6.2.2.1 and 6.2.2.2.		N/A	
6.2.2.1	Replace 6.2.2.1 with: In Australia (not in New Zealand), the electrical separation is subjected to 10 impulses of alternating polarity, using the impulse test generator of Annex N for 10/700µs impulses. The interval between successive impulses is 60 s and the initial voltage, Uc is:		N/A	
	- for 6.2.1a): 7.0 kV for hand-held telephones and for headsets; 2.5 kV for other equipment;			
	for 6.2.1b) and 6.2.1c): 1.5 kV.			
	NOTE 1 - The 7 kV impulse is to simulate lightning surges on typical rural and semi-rural network lines. NOTE 2 - The value of 2.5 kV for 6.2.1a) was chosen to ensure adequacy of the insulation concerned and does not necessarily simulate likely overvoltages.			
6.2.2.2	Replace the first and second paragraphs of 6.2.2.2 with: In Australia (not New Zealand), the electrical separation is subjected to an electric strength test according to 5.2.2.		N/A	
	The a.c. test voltage is:			
	- for 6.2.1a) 3 kV - for 6.2.1b) and 6.2.1c) 1.5 kV			
	NOTE 1 - Where there are capacitors across the insulation under test, it is recommended that d.c. test voltages are used. NOTE 2 - The 3 kV and 1.5 kV values have been determined considering the low frequency induced voltages from the power supply distribution system.			

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	IEC 60950-1		
SubClause	Difference + Test	Result - Remark	Verdict

	Denmark - Differences to IEC 60950-1:2001,	First Edition	
1.2.4.1	Certain types of Class I appliances (see sub-clause 3.2.1.1) may be provided with plug not establishing earthing continuity when inserted into Danish socket-outlets.	N.	/A
1.7.2	Supply cords of Class I equipment, which is delivered without a plug, must be provided with a visible tag with the following text: "Vigtigt! Lederen med grøn/gul isolation må kun tilsluttes en klemme mærket (IEC 417, No. 5019) eller (IEC 417, No. 5017)." If essential for the safety of the equipment, the tag must in addition be provided with a diagram, which shows the connection of the other conductors, or be provided with the following text: "For tilslutning af de øvrige ledere, se medfølgende installationsvejledning".	N.	/A
1.7.5	Socket-outlets for providing power to other equipment shall be in accordance with the Heavy Current Regulations, Section 107-2-D1, Standard Sheet DK 1-3a, DK 1-5a or DK 1-7a, when used on Class I equipment. For stationary equipment, the socket0outlet shall be in accordance with Standard Sheet DK 1-1b or DK 1-5a.	N.	/A
1.7.5	Class II equipment shall not be fitted with socket- outlets for providing power to other equipment.	N.	/A

	IEC 60950-1				
SubClause	Difference + Test	Result - Remark	Verdict		
3.2.1.1	Supply cord of single-phase equipment having a rated current not exceeding 13 A shall be provided with a plug according to the Heavy Current Regulations, Section 107-2-D1.		N/A		
	Class I equipment provided with socket-outlets with earth contact or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a.				
	If poly-phase equipment and single-phase equipment having a rated current exceeding 13 A is provided with a supply cord with a plug, this plug shall be in accordance with the Heavy Current Regulations, Section 107-2-D1 or EN 60309-2.				

	IEC 60950-1		
SubClause	Difference + Test	Result - Remark	Verdict

	Finland - Differences to IEC 60950-1:2001,	First Edition	
1.7.2	Class I Pluggable Equipment Type A intended for connection to other equipment or a network shall, if safety relies on connection to protective earth or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment must be connected to an earthed mains socket-outlet. The marking text shall be: "Laite on liitettävä suojamaadoituskoskettimilla varustettuun pistorasiaan"		N/A

IEC 60950-1

120 00330-1				
SubClause	Difference + Test	Result - Remark	Verdict	
			•	
6.1.2.1	Add the following text between the first and second paragraph:		N/A	
	If this insulation is solid, including insulation forming part of a component, it shall at least consist of either - two layers of thin sheet material, each of which shall pass the electric strength test below, or - one layer having a distance through insulation of at least 0.4 mm, which shall pass the electric strength test below. If this insulation forms part of a semiconductor component (e.g. an optocoupler), there is no distance through insulation requirement for the insulation consisting of an insulating compound completely filling the casing, so that clearances and creepage distances do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition: - passes the tests and inspection criteria of IEC 60950-1, 2.10.8 with an electric strength test of 1.5 kV multiplied by 1.6 (the electric strength test of 2.10.7 shall be performed using 1.5 kV), and - is subject to routing testing for electric strength during manufacturing, using a test voltage of 1.5 kV.			
	It is permitted to bridge this insulation with a capacitor complying with IEC 60384-14:1993, subclass Y2. A capacitor classified Y3 according to IEC 60384-14:1993, may bridge this insulation under the following conditions:			
	- the insulation requirements are satisfied by having a capacitor classified Y3 as defined by IEC 60384-14, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in EN			

60950-1, subclause 6.2.2.1;

- the additional testing shall be performed on all the test specimens as described in IEC 60384-14;

- the impulse test of 2,5 kV is to be performed before the endurance test in IEC 60384-14, in the sequence of tests as described in IEC 60384-14.

	IEC 60950-1			
SubClause	Difference + Test	Result - Remark	Verdict	
			·	
6.1.2.2	The exclusions are applicable for permanently connected equipment and pluggable equipment type B and equipment intended to be used in a restricted access location where equipotential bonding has been applied, e.g. in a telecommunication centre, and which has provision for a permanently connected protective earthing conductor and is provided with instructions for the installation of that conductor by a service person.		N/A	
7.1	Requirements according to this annex, 6.1.2.1 and 6.1.2.2 apply with the term telecommunication network in 6.1.2 being replaced by the term cable distribution system.		N/A	

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	IE	C 60950-1		
SubClause	Difference + Test		Result - Remark	Verdict

	Germany - Differences to IEC 60950-1:2001,	First Edition	
1.7.12	(Gesetz uber technische Arbeitsmittel (Garatesicherheitsgesetz) [Law of technical labour equipment {Equipment safety law}], of 23rd October 1992, Article 3, 3rd paragraph, 2nd sentence, together with the "Allgemeine Verwaltungsvorschrift zur Durchfuhrung des Zweiten Abschritts des Geratesicherheitsgesetzes" [General administrative regulation on the execution of the Second Section of the Equipment safety law], of 10th January 1996, article 2, the paragraph, item 2). Directions for use with rules to prevent certain hazards for (among others) maintenance of the technical labour equipment, also for imported technical labour equipment shall be written in the German language. NOTE: Of this requirement, rules for use even only by service personnel are not exempted.		N/A

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	IEC 60950-1		
SubClause	Difference + Test	Result - Remark	Verdict

		Ţ	
.7.15	(Regulation on protection against hazards by X-		N/A
	ray, of 8th January 1987, Article 5 [operation of X-		
	ray emission source], clauses 1 to 4)		
	a) A licence is required by those who operate an		
	X-ray emission source.		
	b) A licence in accordance with Cl. 1 is not		
	required by those who operate an X-ray emission		
	source on which the electron acceleration voltage does not exceed 20 kV if		
	1) the local dose rate at a distance of 0,1 m from		
	the surface does not exceed 1 µSv/h and		
	2) it is adequately indicated on the X-ray emission		
	source that		
	i) X-rays are generated		
	ii) the electron acceleration voltage must not		
	exceed the maximum value stipulated by the		
	manufacturer or importer.		
	c) A licence in accordance with Cl. 1 is also not		
	required by persons who operate an X-ray		
	emission source on which the electron acceleration		
	voltage exceeds 20 kV if		
	1) the X-ray emission source has been granted a		
	type approval and		
	2) it is adequately indicated on the X-ray emission		
	source that		
	i) X-rays are generated		
	ii) the device stipulated by the manufacturer or		
	importer guarantees that the maximum		
	permissible local dose rate in accordance with the		
	type approval is not exceeded and		
	iii) the electron acceleration voltage must not		
	exceed the maximum value stipulated by the		
	manufacturer or importer.		
	d) Furthermore, a licence in accordance with Cl. 1		
	is also not required by persons who operate X-ray emission sources on which the electron		
	acceleration voltage does not exceed 30 kV if		
	1) the X-rays are generated only by intrinsically		
	safe CRTs complying with Enclosure III, No. 6,		
	2) the values stipulated in accordance with		
	Enclosure III, No. 6.2 are limited by technical		
	measures and specified in the device and		
	3) it is adequately indicated on the X-ray emission		
	source that the X-rays generated are adequately		
	screened by the intrinsically safe CRT.		

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IEC 60950-1		
SubClause Difference + Test	Result - Remark	Verdict

	Group - Differences to IEC 60950-1:2001, F	irst Edition	
2.7.1	Replace the subclause as follows: Basic requirements To protect against excessive current, short-circuits and earth faults in primary circuits, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c): a) except as detailed in b) and c), protective devices necessary to comply with the requirements of 5.3 shall be included as parts of the equipment; b) for components in series with the mains input to the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and earth fault protection may be provided by protective devices in the building installation; c) it is permitted for pluggable equipment type B or permanently connected equipment, to rely on dedicated overcurrent and short-circuit protection in the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions. If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for pluggable equipment type A the building installation shall be regarded as providing protection in accordance with the rating of the wall socket outlet.	N//	A
2.7.2	Void	N//	A
2.10.2	Replace the first line "(see also 1.4.7)" by "(see also 1.4.8)".	N//	A
3.2.3	Delete NOTE 1, and in table 3A delete the conduit sizes in parentheses.	N//	A

	IEC 60950-	-1	
SubClause	Difference + Test	Result - Remark	Verdict

3.2.5	Replace:	N/A
	"60245 IEC 53" by "H05 RR-F" "60227 IEC 52" by "H03 VV-F or H03 VVH2-F" "60227 IEC 53" by "H05 VV-F or H05 VVH2-F"	
	In table 3B, replace the first four lines by the following: Up to and including 6 Over 6 up to and including 10 Over 10 up to and including 16 1.0 3 1.5	
	In the Conditions applicable to table 3B, delete the words "in some countries" in condition ¹ . In Note 1, delete the second sentence.	
3.3.4	In table 3D, delete the fourth line: conductor sizes for 10 to 13 A, and replace with the following: "Over 10 up to and including 16 1.5 to 2.5 1.5 to by 4"	N/A
	Delete the fifth line: conductor sizes for 13 to 16A.	
4.3.13.6	Add the following note: NOTE - Attention is drawn to 1999/519/EC: Council Recommendation on the limitation of exposure of the general public to electromagnetic fields 0 Hz to 300 GHz. Standards taking into account this recommendation are currently under development.	N/A
General	Delete all the "country" notes in the reference document according to the following list: 1.5.1 Note 2 1.5.8 Note 2 1.6.1 Note 1.7.2 Note 4 1.7.12 Note 2 2.1 Note 2.2.3 Note 2.2.4 Note 2.3.2 Note 2, 7, 8 2.3.3 Note 1, 2 2.3.4 Note 2,3 2.7.1 Note 2.10.3.1 Note 4 3.2.1.1 Note 3.2.3 Note 1, 2 3.2.5.1 Note 2 4.3.6 Note 1,2 4.7.2.2 Note 4.7.3.1 Note 2 6.1.2.1 Note 6.1.2.2 Note 6.2.2 Note 6.2.2.1 Note 2 6.2.2 Note 7 Note 4 7.1 Note G2.1 Note 1, 2 H Note 2	N/A

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IEC 60950-1			
SubClause	Difference + Test	Result - Remark	Verdict

Н	Replace the last paragraph of this annex by: At any point 10 cm from the surface of the operator access area, the dose rate shall not exceed 1 µSv/h (0,1 mR/h) (see note). Account is taken of the background level. Replace the notes as follows: NOTE - These values appear in Directive 96/29/Euratom. Delete Note 2.	N/A
Р	Replace the text of this annex by: See annex ZA	N/A
Q	Replace the title of IEC 61032 by "Protection of persons and equipment by enclosures - Probes for verification". Add the following notes for the standards indicated: IEC 60127 NOTE Harmonized as EN 60127 (Series) (not modified) IEC 60269-2-1 NOTE Harmonized as HD 630.2.1 S4:2000 (modified) IEC 60529 NOTE Harmonized as EN 60529:1991 (not modified) IEC 61032 NOTE Harmonized as EN 61032:1998 (not modified) IEC 61140 NOTE Harmonized as EN 61140:2001 (not modified) ITU-T Recommendation K.31 NOTE in Europe, the suggested document is EN 50083-1.	N/A

	Korea - Differences to IEC 60950-1:2001, F	First Edition	
1.5.101	Addition: Plugs for the connection of the apparatus to the supply mains comply with the Korean requirement (KSC 8305).		N/A
7	Addition: EMC - The apparatus shall complies with the relevant CISPR standards.		N/A

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	IEC 60950-1		
SubClause	Difference + Test	Result - Remark	Verdict

	Norway - Differences to IEC 60950-1:2001,	First Edition
1.5.8	Due to the IT power system used (see annex V, figure V.7), capacitors are required to be rated for the applicable phase-to-phase voltage (230 V).	N/A
1.7.2	Class I Pluggable Equipment Type A intended for connection to other equipment or a network shall, if safety relies on connection to protective earth or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment must be connected to an earthed mains socket-outlet. The marking text shall be: "Apparatet må tilkoples jordet stikkontakt"	N/A
2.2.4	Requirements according to this annex, 1.7.2 and 6.1.2.1 apply.	N/A
2.3.2	Requirements according to this annex, 6.1.2.1 apply.	N/A
2.3.3	Requirements according to this annex, 1.7.2 and 6.1.2.1 apply.	N/A
2.3.4	Requirements according to this annex, 1.7.2 and 6.1.2.1 apply.	N/A
2.10.3.1	Due to the IT power distribution system used (see annex V, figure V.7), the A.C. mains supply voltage is considered to be equal to the line-to-line voltage, and will remain at 230 V in case of a single earth fault.	N/A

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IEC 60950-1

SubClause	Difference + Test	Result - Remark	Verdict
6.1.2.1	Add the following text between the first and second paragraph:		N/A
	If this insulation is solid, including insulation forming part of a component, it shall at least consist of either		
	- two layers of thin sheet material, each of which shall pass the electric strength test below, or - one layer having a distance through insulation of		
	at least 0.4 mm, which shall pass the electric strength test below. If this insulation forms part of a semiconductor		
	component (e.g. an optocoupler), there is no distance through insulation requirement for the		
	insulation consisting of an insulating compound completely filling the casing, so that clearances and creepage distances do not exist, if the component		
	passes the electric strength test in accordance with the compliance clause below and in addition: - passes the tests and inspection criteria of IEC		
	60950-1, 2.10.8 with an electric strength test of 1.5 kV multiplied by 1.6 (the electric strength test of		

It is permitted to bridge this insulation with a capacitor complying with IEC 60384-14:1993, subclass Y2.

kV.

2.10.7 shall be performed using 1.5 kV), and - is subject to routing testing for electric strength during manufacturing, using a test voltage of 1.5

A capacitor classified Y3 according to IEC 60384-14:1993, may bridge this insulation under the following conditions:

- the insulation requirements are satisfied by having a capacitor classified Y3 as defined by IEC 60384-14, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in EN 60950-1, subclause 6.2.2.1;
- the additional testing shall be performed on all the test specimens as described in IEC 60384-14;
- the impulse test of 2,5 kV is to be performed before the endurance test in IEC 60384-14, in the sequence of tests as described in IEC 60384-14.

IEC 60950-1			
SubClause	Difference + Test	Result - Remark	Verdict
6.1.2.2	The exclusions are applicable for permanently connected equipment and pluggable equipment type B and equipment intended to be used in a restricted access location where equipotential bonding has been applied, e.g. in a telecommunication centre, and which has provision for a permanently connected protective earthing conductor and is provided with instructions for the installation of that conductor by a service person.		N/A
7.1	Requirements according to this annex, 6.1.2.1 and 6.1.2.2 apply with the term telecommunication network in 6.1.2 being replaced by the term cable distribution system.		N/A
G.2.1	Due to the IT power distribution system used (see annex V, figure V.7), the A.C. mains supply voltage is considered to be equal to the line-to-line voltage, and will remain at 230 V in case of a single earth fault.		N/A

IEC 60950-1		
SubClause Difference + Test	Result - Remark	Verdict

	Sweden - Differences to IEC 60950-1:2001,	First Edition
1.5.1	(Ordinance (1990:944)) Add NOTE: Switches containing mercury such as thermostats, relays and level controllers are not allowed.	N/A
1.7.2	Class I Pluggable Equipment Type A intended for connection to other equipment or a network shall, if safety relies on connection to protective earth or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment must be connected to an earthed mains socket-outlet. The marking text shall be: "Apparaten skall anslutas till jordat uttag"	N/A

	IEC 60950-1			
SubClause	Difference + Test	Result - Remark	Verdict	
6.1.2.1	Add the following text between the first and second		N/A	

paragraph: If this insulation is solid, including insulation forming part of a component, it shall at least consist of either - two layers of thin sheet material, each of which shall pass the electric strength test below, or - one layer having a distance through insulation of at least 0.4 mm, which shall pass the electric strength test below. If this insulation forms part of a semiconductor component (e.g. an optocoupler), there is no distance through insulation requirement for the insulation consisting of an insulating compound completely filling the casing, so that clearances and creepage distances do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition: - passes the tests and inspection criteria of IEC 60950-1, 2.10.8 with an electric strength test of 1.5 kV multiplied by 1.6 (the electric strength test of 2.10.7 shall be performed using 1.5 kV), and - is subject to routing testing for electric strength during manufacturing, using a test voltage of 1.5 kV. It is permitted to bridge this insulation with a capacitor complying with IEC 60384-14:1993, subclass Y2. A capacitor classified Y3 according to IEC 60384-14:1993, may bridge this insulation under the following conditions: - the insulation requirements are satisfied by having a capacitor classified Y3 as defined by IEC 60384-14, which in addition to the Y3 testing, is tested with an impulse test of 2.5 kV defined in EN 60950-1, subclause 6.2.2.1; - the additional testing shall be performed on all the test specimens as described in IEC 60384-14; - the impulse test of 2,5 kV is to be performed before the endurance test in IEC 60384-14, in the sequence of tests as described in IEC 60384-14.

IEC 60950-1				
SubClause	Difference + Test	Result - Remark	Verdict	
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6.1.2.2	The exclusions are applicable for permanently connected equipment and pluggable equipment type B and equipment intended to be used in a restricted access location where equipotential bonding has been applied, e.g. in a telecommunication centre, and which has provision for a permanently connected protective earthing conductor and is provided with instructions for the installation of that conductor by a service person.		N/A	
7.1	Requirements according to this annex, 6.1.2.1 and 6.1.2.2 apply with the term telecommunication network in 6.1.2 being replaced by the term cable distribution system.		N/A	

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IEC 60950-1			
SubClause	Difference + Test	Result - Remark	Verdict

	Switzerland - Differences to IEC 60950-1:2001, First Edition	
1.5.1	Add NOTE: Switches containing mercury such as thermostats, relays and level controllers are not allowed.	N/A
1.7.15	Annex 4.10 of SR 814.013 (Ordinance on environmentally hazardous substances) applies for batteries.	N/A
3.2.1.1	Supply cords of equipment having a rated current not exceeding 10 A shall be provided with a plug complying with SEV 1011 or IEC 60884-1 and one of the following dimension sheets: SEV 6532-2.1991, Plug type 15, 3P+N+PE 250/400 V,10 A SEV 6533-2.1991, Plug type 11, L+N 250 V,10 A SEV 6534-2.1991, Plug type 12, L+N+PE 250 V,10 A In general, EN 60309 applies for plugs for currents exceeding 10 A. However, a 16 A plug and socketoutlet system is being introduced in Switzerland, the plugs of which are according to the following dimension sheets, published in February 1998: SEV 5932-2.1998, Plug type 25, 3P+N+PE 230/400 V,16 A SEV 5933-2.1998, Plug type 21, L+N 250 V,16 A SEV 5934-2.1998, Plug type 23, L+N+PE 250	N/A

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IEC 60950-1			
SubClause	Difference + Test	Result - Remark	Verdict

USA / Canada - Differences to IEC 60950-1:200	01, First Edition	
Equipment able to be installed in accordance with the National Electrical Code ANSI/NFPA 70 and the Canadian Electrical Code, Part1, and when applicable, the National Electrical Safety Code, IEEE C2.		N/A
Equipment able to be installed in accordance with ANSI/NFPA 75 and NEC Art. 645 unless intended for use outside of computer room and provided with such instructions.		N/A
Equipment in wire-line communication facilities serving high-voltage electric power stations operating at greater than 1kV are excluded.		N/A
Special requirements apply to equipment intended for use outdoors.		N/A
For Pluggable Equipment Type A, the protection in the installation is assumed to be 20 A.		N/A
All IEC standards for components identified in Annex P.1 replaced by the relevant requirements of CSA and UL component standards in Annex P.1.		Pass
All IEC standards for components identified in Annex P.2 alternatively satisfied by the relevant requirements of CSA and UL component standards in Annex P.2.		Pass
Interconnecting cables acceptable for the application regarding voltage, current, temperature, flammability, mechanical serviceability and the like.		N/A
For other than limited power and TNV circuits, the type of output circuit identified for output connector.		N/A
External cable assemblies that exceed 3.05 m in length to be types specified in the NEC and CEC.		N/A
Detachable external interconnecting cables 3.05 m or less in length and provided with equipment marked to identify the responsible organization and the designation for the cable.		N/A
Building wiring and cable for use in ducts, plenums and other air handling space subject to special requirements and excluded from scope.		N/A
Telephone line and extension cords and the like comply with UL 1863 and CSA C22.2 No. 233.		N/A
	Equipment able to be installed in accordance with the National Electrical Code ANSI/NFPA 70 and the Canadian Electrical Code, Part1, and when applicable, the National Electrical Safety Code, IEEE C2. Equipment able to be installed in accordance with ANSI/NFPA 75 and NEC Art. 645 unless intended for use outside of computer room and provided with such instructions. Equipment in wire-line communication facilities serving high-voltage electric power stations operating at greater than 1kV are excluded. Special requirements apply to equipment intended for use outdoors. For Pluggable Equipment Type A, the protection in the installation is assumed to be 20 A. All IEC standards for components identified in Annex P.1 replaced by the relevant requirements of CSA and UL component standards in Annex P.1. All IEC standards for components identified in Annex P.2 alternatively satisfied by the relevant requirements of CSA and UL component standards in Annex P.2. Interconnecting cables acceptable for the application regarding voltage, current, temperature, flammability, mechanical serviceability and the like. For other than limited power and TNV circuits, the type of output circuit identified for output connector. External cable assemblies that exceed 3.05 m in length to be types specified in the NEC and CEC. Detachable external interconnecting cables 3.05 m or less in length and provided with equipment marked to identify the responsible organization and the designation for the cable. Building wiring and cable for use in ducts, plenums and other air handling space subject to special requirements and excluded from scope. Telephone line and extension cords and the like	the National Electrical Code ANSI/NFPA 70 and the Canadian Electrical Code, Part1, and when applicable, the National Electrical Safety Code, IEEE C2. Equipment able to be installed in accordance with ANSI/NFPA 75 and NEC Art. 645 unless intended for use outside of computer room and provided with such instructions. Equipment in wire-line communication facilities serving high-voltage electric power stations operating at greater than 1kV are excluded. Special requirements apply to equipment intended for use outdoors. For Pluggable Equipment Type A, the protection in the installation is assumed to be 20 A. All IEC standards for components identified in Annex P.1 replaced by the relevant requirements of CSA and UL component standards in Annex P.1. All IEC standards for components identified in Annex P.2 alternatively satisfied by the relevant requirements of CSA and UL component standards in Annex P.2. Interconnecting cables acceptable for the application regarding voltage, current, temperature, flammability, mechanical serviceability and the like. For other than limited power and TNV circuits, the type of output circuit identified for output connector. External cable assemblies that exceed 3.05 m in length to be types specified in the NEC and CEC. Detachable external interconnecting cables 3.05 m or less in length and provided with equipment marked to identify the responsible organization and the designation for the cable. Building wiring and cable for use in ducts, plenums and other air handling space subject to special requirements and excluded from scope. Telephone line and extension cords and the like

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	IEC 60950-1			
SubClause	Difference + Test	Result - Remark	Verdict	

1.6.1.2	Equipment intended for connection to a d.c. power (mains) distribution system is subject to special circuit classification requirements (e.g., TNV-2)	N/A
1.6.1.2	Earthing of d.c. powered equipment provided.	N/A
1.7	Lamp replacement information indicated on lampholder in operator access area.	N/A
1.7.1	Special marking format for equipment intended for use on a supply system with an earthed neutral and more than one phase conductor.	N/A
1.7.1	Equipment voltage rating not higher than rating of the plug except under special conditions.	N/A
1.7.6	Special fuse replacement marking for operator accessible fuses.	N/A
1.7.7	Identification of terminal connection of the equipment earthing conductor.	N/A
1.7.7	Connectors and field wiring terminals for external Class 2 or Class 3 circuits provided with marking indicating minimum Class of wiring to be used.	N/A
1.7.7	Marking located adjacent to terminals and visible during wiring.	N/A
2.1.1	Screw shell of Edison-base lampholder tied to the neutral conductor.	N/A
2.1.1.1	Bare TNV conductive parts in the interior of equipment normally protected against contact by a cover intended for occasional removal are exempt provided instructions include directions for disconnection of TNV prior to removal of the cover.	N/A
2.3.1.b	Other telecommunication signaling systems (e.g., message waiting) than described in 2.3.1(b) are subject to M.4.	N/A
2.3.1.b	For TNV-2 and TNV-3 circuits with other than ringing signals and with voltages exceeding 42.4 Vp or 60 V d.c., the maximum current limit through a 2000 Ohm or greater resistor with loads disconnected is 7.1 mA peak or 30 mA d.c. under normal conditions.	N/A
2.3.1.b	Limits for measurements across 5000 ohm resistor in the event of a single fault are replaced after 200 ms with the limits of M.3.1.4.	N/A

	IEC 60950-1			
SubClause	Difference + Test	Result - Remark	Verdict	

2.3.2	Enamel coating on signal transformer winding wire allowed as an alternative to Basic insulation in specific telecommunication applications when subjected to special construction requirements and routine testing.	N/A
2.3.2	In the event of a single fault, the limits of 2.2.3 apply to SELV circuits and accessible conductive parts.	Pass
2.5	Overcurrent protection device required for Class 2 and Class 3 limiting in accordance with the NEC, or for a Limited Power Source, not interchangeable with devices of higher ratings if operator replaceable.	N/A
2.6	Equipment having receptacles for output a.c. power connectors generated from an internal separately derived source have the earthed (grounded) circuit conductor suitably bonded to earth.	N/A
2.6.3.3	For Pluggable Equipment Type A, if neither a) or b) are applicable, the current rating of the circuit is taken as 20 A.	N/A
2.6.3.4	Capacity of connection between earthing terminal and parts required to be earthed subject to special conditions based on the current rating of the circuit.	N/A
2.6.3.4	Protective bonding conductors and their terminals of non-standard constructions (e.g. PWB traces) evaluated to limited short-circuit test of CSA C22.2 No.4.	N/A
2.6.4.1	Field wiring terminals for earthing conductors suitable for wire sizes (gauge) used in US and Canada.	N/A
2.7.1	Data for selection of special external branch circuit overcurrent devices marked on the equipment.	N/A
2.7.1	Standard supply outlets protected by overcurrent device in accordance with the NEC, and CEC, Part 1.	N/A
2.7.1	Overcurrent protection for individual transformers that distribute power to other units over branch circuit wiring.	N/A
2.7.1	Additional requirements for overcurrent protection apply to equipment provided with panelboards.	N/A
2.7.1	Non-motor-operated equipment requiring special overcurrent protective device marked with device rating.	N/A

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SubClause	Difference + Test	Result - Remark	Verdict

2.10.5.4	Multi-layer winding wire subject to UL component wire requirements in addition to 2.10.5.4 and Annex U.	N/A
3.1.1	Permissible combinations of internal wiring/external cable sizes for overcurrent and short circuit protection.	Pass
3.1.1	All interconnecting cables protected against overcurrent and short circuit.	N/A
3.2	Wiring methods permit connection of equipment to primary power supply in accordance with the NEC and CEC, Part 1.	N/A
3.2.1	Permitted use for flexible cords and plugs.	N/A
3.2.1	Flexible cords provided with attachment plug rated 125% of equipment current rating.	N/A
3.2.1	Any Class II equipment provided with 15 or 20 A standard supply outlets, Edison-base lampholders or single pole disconnect device provided with a polarized type attachment plug.	N/A
3.2.1.2	Equipment intended for connection to DC mains supply power systems complies with special wiring requirements (e.g., no permanent connection to supply by flexible cord).	N/A
3.2.1.2	Equipment with one pole of the DC mains supply connected to both the equipment mains input terminal and the main protective earthing terminal provided with special instructions and construction provisions for earthing	N/A
3.2.1.2	Equipment with means for connecting supply to earthing electrode conductor has no switches or protective devices between supply connection and earthing electrode connection.	N/A
3.2.1.2	Special markings and instructions for equipment with provisions to connect earthed conductor of a DC supply circuit to earthing conductor at the equipment.	N/A
3.2.1.2	Special markings and instructions for equipment with earthed conductor of a DC supply circuit connected to the earthing conductor at the equipment.	N/A

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SubClause	Difference + Test	Result - Remark	Verdict

3.2.1.2	Terminals and leads provided for permanent connection of DC powered equipment to supply marked to indicate polarity if reverse polarity may result in a hazard.	N/A
3.2.3	Permanently connected equipment has provision for connecting and securing a field wiring system (i.e. conduit, or leads etc.) per the NEC and CEC, Part 1.	N/A
3.2.3	Permanently connected equipment may have terminals or leads not smaller than No. 18 AWG (0.82 mm²) and not less than 152 mm in length for connection of field installed wiring.	N/A
3.2.3	If supply wires exceed 60 °C, marking indicates use of 75 °C or 90 °C wiring for supply connection as appropriate.	N/A
3.2.3	Equipment compatible with suitable trade sizes of conduits and cables.	N/A
3.2.5	Length of power supply cord limited to between 1.5 and 4.5 m unless shorter length used when intended for a special installation.	N/A
3.2.5	Conductors in power supply cords sized according to NEC and CEC, Part I.	N/A
3.2.5	Power supply cords and cord sets incorporate flexible cords suitable for the particular application.	N/A
3.2.6	Strain relief provided for non-detachable interconnecting cables not supplied by a limited power source.	N/A
3.2.9	Adequate wire bending space and volume of field wiring compartment required to properly make the field connections.	N/A
3.2.9	Equipment intended solely for installation in Restricted Access Locations using low voltage d.c. systems may not need provision for connecting and securing a field wiring system. A method of securing wiring or instructions provided to ensure the wiring is protected from abuse.	N/A
3.3	Field wiring terminals provided for interconnection of units for other then LPS or Class 2 circuits also comply with 3.3.	N/A
3.3	Interconnection of units by LPS or Class 2 conductors may have field wiring connectors other than those specified in 3.3 if wiring is reliably separated.	N/A

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SubClause	Difference + Test	Result - Remark	Verdict

3.3.1	Terminals for the connection of neutral conductor identified by a distinctive white marking or other equally effective means.	N/A
3.3.3	Wire binding screw terminal permitted for connection of No. 10 AWG (5.3 mm²) or smaller conductor if provided with upturned lugs, cupped washer or equivalent retention.	N/A
3.3.4	Terminals accept wire sizes (gauge) used in the U.S. and Canada.	N/A
3.3.4	Terminals accept current-carrying conductors rated 125% of the equipment current rating.	N/A
3.3.6	Field wiring terminals marked to indicate the material(s) of the conductor appropriate for the terminals used.	N/A
3.3.6	Connection of an aluminum conductor not permitted to terminal for equipment earthing conductor.	N/A
3.3.6	Field wiring connections made through the use of suitable pressure connectors (including set screw type), solder lugs or splices to flexible leads.	N/A
3.4.2	Separate motor control device(s) required for cord- connected equipment rated more than 12 A, or with motor rated more than 1/3 hp or more than 120 V.	N/A
3.4.8	Vertically mounted disconnect devices oriented so up position of handle is "on".	N/A
3.4.11	For computer-room applications, equipment with battery systems capable of supplying 750 VA for 5 min require battery disconnect means.	N/A
4.2.8.1	Special opening restrictions for enclosures around CRTs with face dimension of 160 mm or more.	N/A
4.2.9	Compartment housing high-pressure lamp marked to indicate risk of explosion.	N/A
4.3.2	Loading test for equipment with handle(s) used to support more than 9 kg tested at four times the weight of the unit.	N/A
4.3.6	In addition to the IEC requirements, Direct Plug-in Equipment complies with UL 1310 or CSA 223 mechanical assembly requirements.	N/A
4.3.12	The maximum quantity of flammable liquid stored in equipment complies with ANSI/NFPA 30(Table NAE.6).	N/A

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SubClause	Difference + Test	Result - Remark	Verdict

4.3.12	Equipment using replenishable liquids marked to indicate type of liquid to be used.	N/A
4.3.13.2	Equipment that produces x-radiation and does not comply with 4.3.12 under all conditions of servicing marked to indicate the presence of radiation where readily visible.	N/A
4.3.13.5	Requirements contained in the applicable national codes and regulations apply to lasers (21 CFR 1040 and REDR C1370).	N/A
4.7	Automated information storage equipment intended to contain more than 0.76 mm³ of combustible media requires provision for automatic sprinklers or a gaseous agent extinguishing system.	N/A
4.7.3.1	Equipment for use in environmental air space other than ducts or plenums provided with metal enclosure or with non-metallic enclosure having adequate fire-resistance and low smoke producing characteristics. Low smoke-producing characteristics evaluated according to UL 2043. Equipment for installation in space used for environmental air as described in Sec. 300-22(c) of the NEC provided with instructions indicating suitability for installation in such locations.	N/A
4.7.3.1	Flame spread rating for external surface of combustible material with exposed area greater than 0.93 m² or a single dimension greater than 1.8 m; 50 or less for computer room applications or 200 or less for other applications.	N/A
4.7.3.4	Wire marked "VW-1" or "FT-1" considered equivalent.	N/A
5.1.8.2	Special earthing provisions and instructions for equipment with high touch current due to telecommunication network connections.	N/A
5.1.8.3	Touch current due to ringing voltage for equipment containing telecommunication network leads.	N/A
5.3.6	Overloading of SELV connectors and printed wiring board receptacles accessible to the operator.	N/A
5.3.6	Tests interrupted by opening of a component repeated two additional times.	N/A
5.3.8.1	Test interrupted by opening of wire or trace subject to certain conditions.	N/A

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IEC 60950-1			
SubClause	Difference + Test	Result - Remark	Verdict

6	Specialized instructions provided for telephones that may be connected to a telecommunications network.	N/A
6	Marking identifying function of telecommunication type connectors not used for connection to a telecommunication network.	N/A
6.2.1	Special requirements for enameled wiring used as electrical separation provided between parts connected to telecommunication network and telecommunication circuitry intentionally isolated from network.	N/A
6.2.1	Digital line termination equipment (e.g., NCTE) subject to separation requirements.	N/A
6.3	Equipment remotely powered over telecommunication wiring systems provided with specialized markings adjacent to the connection.	N/A
6.3	Overcurrent protection incorporated into equipment to provide power over telecommunication wiring system not interchangeable with devices of higher ratings if operator replaceable.	N/A
6.4	Additional requirements for equipment intended for connection to a telecommunication network using cable subject to overvoltage from power line failures (Fig. 6C).	N/A
6.4	Where 26 AWG line cord required by Fig. 6C, either the cord is provided with the equipment or described in the safety instructions.	N/A
6.5	Acoustic pressure from an ear piece less than 136 dBA for short duration disturbances, and less than 125 dBA for handsets, 118 dBA for headsets, and 121 dBA for insert earphones, for long duration disturbances.	N/A
7	Equipment associated with the cable distribution system may need to be subjected to applicable parts of Chapter 8 of the NEC.	N/A
Н	Ionizing radiation measurements made under single fault conditions in accordance with the requirements of the Code of Federal Regulations 21 CFR 1020 and the Canadian Radiation Emitting Devices Act, REDR C1370.	N/A
M.2	Continuous ringing signals evaluated to Method A subjected to special accessibility considerations.	N/A

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SubClause	Difference + Test	Result - Remark	Verdict

M.4	Special requirements for message waiting and similar telecommunications signals.	N/A
NAC	Equipment intended for use with a generic secondary protector marked with suitable instructions.	N/A
NAC	Equipment intended for use with a specific primary or secondary protector marked with suitable instructions.	N/A

	United Kingdom - Differences to IEC 60950-1:2001, First	Edition
2.6.3.3	The current rating of the circuit shall be taken as 13 A, not 16 A.	N/A
2.7.1	To protect against excessive currents and short-circuits in the primary circuit of direct plug-in equipment, protective device shall be included as integral parts of the direct plug-in equipment.	N/A
3.2.1.1	Apparatus which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to BS 1363 by means of that flexible cable or cord and plug, shall be fitted with a "standard plug" in accordance with Statutory Instrument 1786: 1994 - The Plugs and Sockets etc. (Safety) Regulations 1994, unless exempted by those regulations. NOTE: "Standard plug" is defined in SI 1786: 1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.	N/A
3.2.5.1	A power supply cord with conductor of 1.25 mm² is allowed for equipment with a rated current over 10A and up to and including 13A.	N/A
3.3.4	The range of conductor sizes of flexible cords to be accepted by terminals for equipment with a rated current of over 10 A up to and including 13 A is 1.25 mm² to 1.5 mm² nominal cross-sectional area.	N/A
4.3.6	The torque test is performed using a socket outlet complying with BS 1363 and the plug part of Direct Plug-In Equipment shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.16 and 12.17, except that the test of 12.17 is performed at not less than 125 °C.	N/A

Enclosure

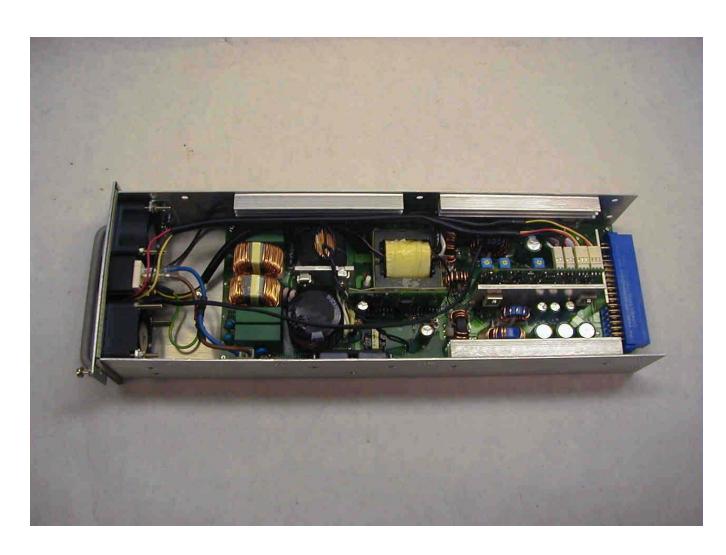
Photographs

(Total 4 Pages including this Cover Page)

Supplement Id	Description
3-01	GT-3T400P41F Front View
3-02	GT-3T400P41F Back View
3-03	GT-3T400P41F Internal View







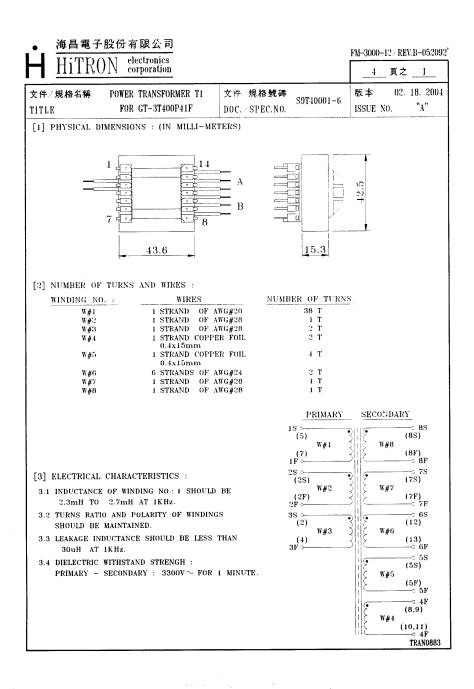
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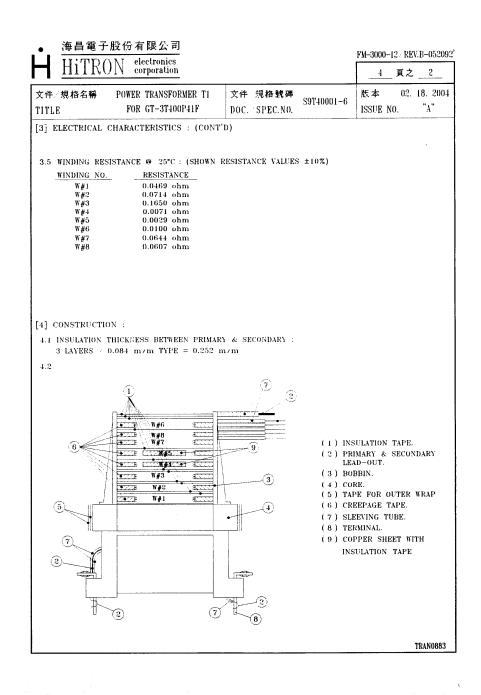
Diagrams

(Total 7 Pages including this Cover Page)

Supplement Id	Description
4-01	Transformer T1
4-02	Inductor L4

2004-04-08

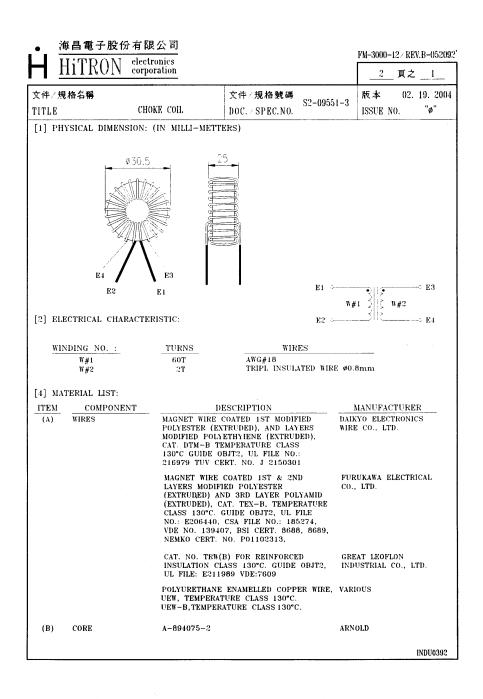




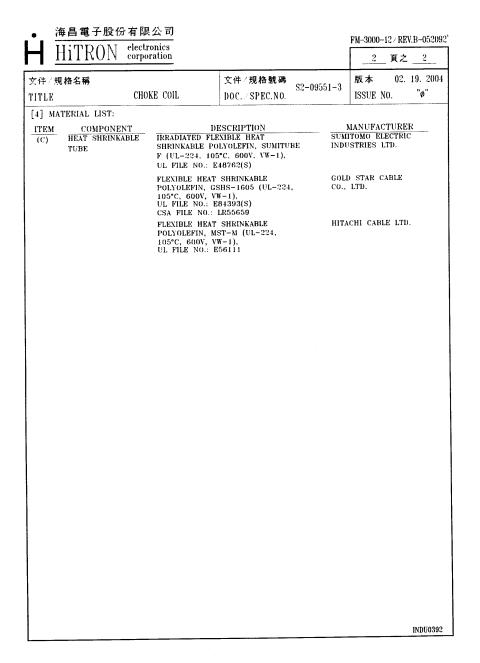
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- H	iTRON electro	FM-3000-12/REV.B-05209 4 頁之 3					
 文件/規: [1][LE		NSFORMER T1 3T400P41F	文件/規格號碼 59T40001 DOC./SPEC.NO.	-6	版本 02. 18. 2004 ISSUE NO. "A"		
		914001411	DUC. SPEC.NO.		ISSUE NO. A		
[5] MAT	"ERIAL LIST :						
ITEM COMPONENT INSULATION TAPE FLAM			DESCRIPTION AME RETARDANT POLYESTER FILM		MANUFACTURER MINNESOTA MINING &		
1	INSULATION TAPE	INSULATING TA NO.1350, THICK TEMPERATURE	ANT PULTESTER FILM PE, "SCOTCH" BRAND INESS 0.056mm, CLASS 130°C, GUIDE E NO.: E17385(N)	MFG	CO., ELECTRICAL CIALTIES DIV.		
		NO.553H-UL, T DIELECTRIC STI 1 LAYER, TEMP	M (PETP) TAPE, CAT. CHICKNESS 0.025mm, RENGTH 2KV/min./ CERATURE CLASS 130°C, UL FILE NO.: E59620(S)	NICH	HBAN CO., LTD.		
		INSULATING TA NO.01, THICKN TEMPERATURE	M, FLAME RETARDANT, PE, "SCOTCH" BRAND ESS 0.084mm, CLASS 130°C, GUIDE E NO.: E17385(N)	MFG	NESOTA MINING & . CO., ELECTRICAL CIALTIES DIV.		
		"SCOTCH" BRAN 0.14mm, TEMF	B INSULATING TAPE, ND NO.10, THICKNESS PERATURE CLASS 130°C, UL FILE NO.: E17385(N)	MFG	NESOTA MINING & . CO., ELECTRICAL CIALTIES DIV.		
		IMPREGNATED NON-WOVEN PI INSULATING TA THICKNESS 0.1	RESSURE SENSITIVE .PE, CAT. NO.354 5mm, TEMPERATURE UIDE OANZ2, UL	NITI	O DENKO COPR.		
2	PRIMARY & SECONDARY LEAD-		ESTER ENAMELED WIRE, PATURE CLASS 155°C.		FIC ELECTRIC WIRE ABLE CO., LTD.		
	OUT(MAGNET WIRE)		DE ENAMELED COPPER , TEMPERATURE 80°C.		G SHING WIRE LTD.		
		POLYESTER ENTEMPERATURE	AMEL CPOOER WIRE, CLASS 155°C.	VARI	ous		
3	BOBBIN	MATERIALS:PBT FLAMMABILITY	PLASTICS CO., LTD. CLASSIFICATION. MFZ2, UL FILE NO.:		-HWA ENTERPRISE LTD		
4	CORE	EER-4215, MAT	TERIAL SB-7C		ENE METAL STRY CO., LTD.		
5	TAPE FOR OUTER WRAP	INSULATING TA NO.1350, THICK TEMPERATURE	ANT POLYESTER FILM PE, "SCOTCH" BRAND (NESS 0.056mm, CLASS 130°C, UL FILE NO.: E17385(N)	MFG	NESOTA MINING & . CO., ELECTRICAL CIALTIES DIV.		

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[5] MAT	ERIAL LIST :		<u> </u>		
1TEM 5	COMPONENT TAPE FOR OUTER WRAP	POLYESTER FIL NO.553H-UL, DIELECTRIC ST 1 LAYER, TEM	ESCRIPTION LM (PETP) TAPE, CAT. THICKNESS 0.025mm, RENGTH 2RV/min./ PERATURE CLASS 130°C, UL FILE NO.: E59620(S)		MANUFACTURER HIBAN CO., LTD.
		INSULATING TANO.01, THICKN TEMPERATURE	LM, FLAME RETARDANT, APE, "SCOTCH" BRAND IESS 0.084mm, CLASS 130°C, UL FILE NO.: E17385(N)	MFC	NESOTA MINING & G. CO., ELECTRICAL CIALTIES DIV.
		"SCOTCH" BRA	EB INSULATING TAPE, ND NO.10, THICKNESS PERATURE CLASS 130°C. UL FILE NO.: E17385(N)	MF	NESOTA MINING & G. CO., ELECTRICAL CCIALTIES DIV.
6 CREEPAGE TAPE		CAT. NO.156, V 0.18mm, TEM	ANT ACETATE CLOTH TAPE, WIDTH 5.0mm, THICKNESS PERATURE CLASS 130°C, UL FILE NO.: E34833(M)	NIT	TO DENKO CORP.
		ACRYLIC ADHE MY1L, MY3L), 0.135mm,(MIN	LM INSULATING TAPE WITH SIVE, CAT. NO.35661 (P/N: WIDTH 3.0mm, THICKNESS .), TEMPERATURE CLASS 130°C UL FILE NO.: E50292(S)	ENT	R PILLARS ERPRISE CO., LTD.
		"SCOTCH" BRA' TEMPERATURE	n, GUIDE OANZ2, UL	MFG	NESOTA MINING & . CO., ELECTRICAL CIALTIES DIV.
7	SLEEVING TUBE	ZEUS PTFE, TI CLASSIFICATION	OROETHYLENE (PTFE), FE-, FLAMMABILITY N VW-1 UL FILE NO.: E64007(M)		S INDUSTRIAL DUCTS INC.
		TYPE TFL, FL	OROETHYLENE (PTFE), AMMABILITY CLASSIFICATION UL FILE NO.: E156256		CAT HOLDING USTRIAL CO., LTD.
8	TERMINAL	STEEL WIRE (S	COLDER PLATED)		
9	COPPER SHEET INSULATION TAPE	ACRYLIC ADHE	LM INSULATING TAPE WITH SIVE, CAT. NO.MY130 PHICKNESS 0.05mm.(MIN.), CLASS 130°C, GUIDE OANZ2, E50292(S)		PR PILLARS PERPRISE CO., LTD.
	"CLASS B	INSULA'	TION SYSTEM TURE BY HITRO	ΓΥI	PE R120E"



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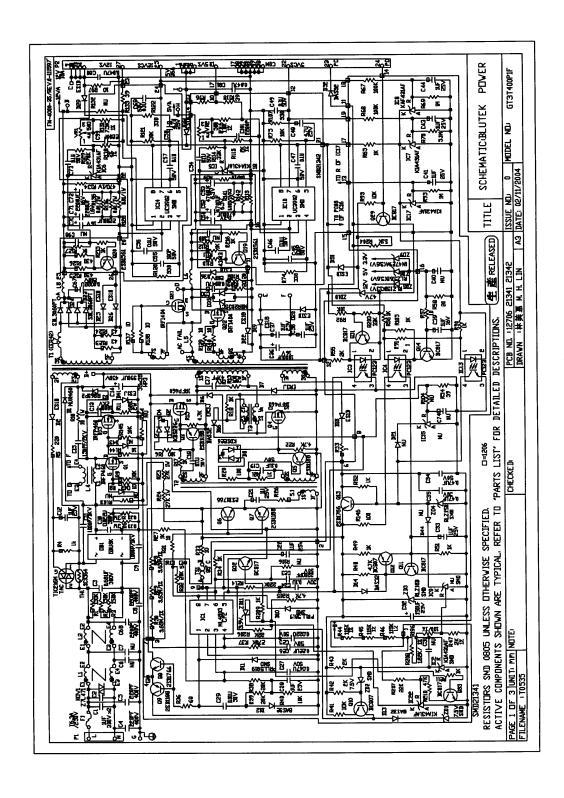


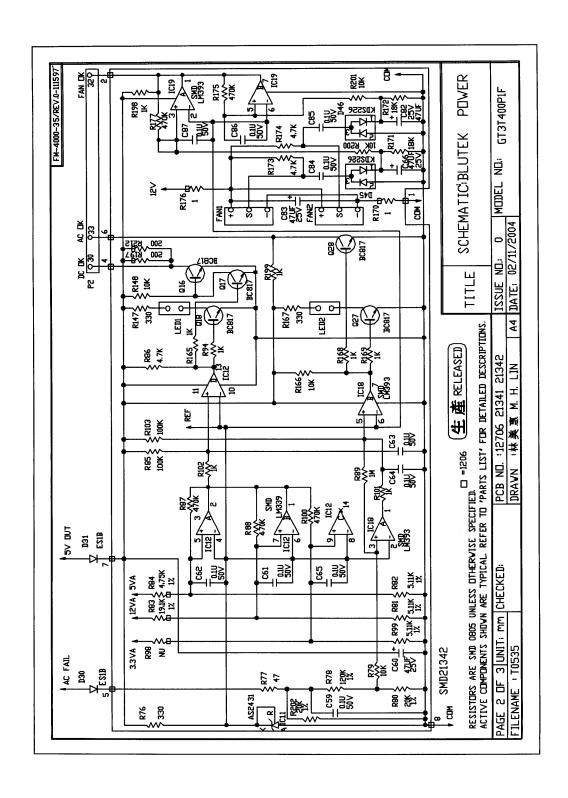
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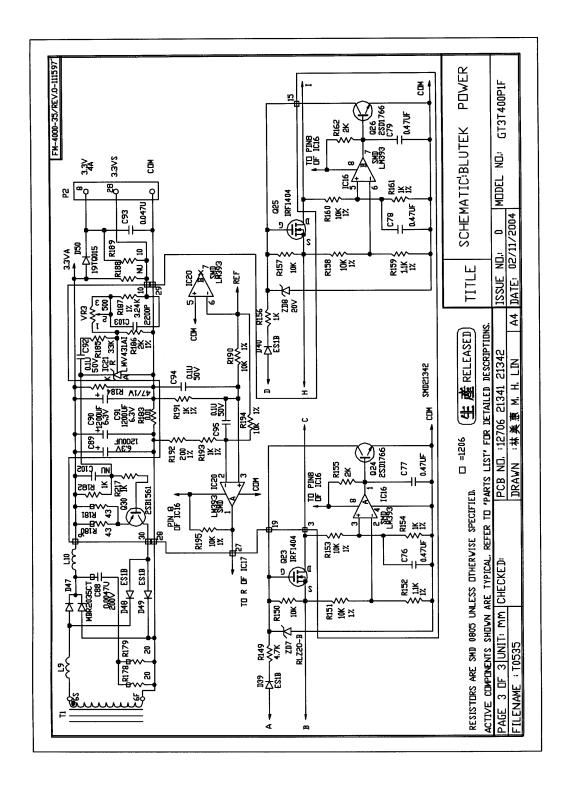
Schematics + PWB

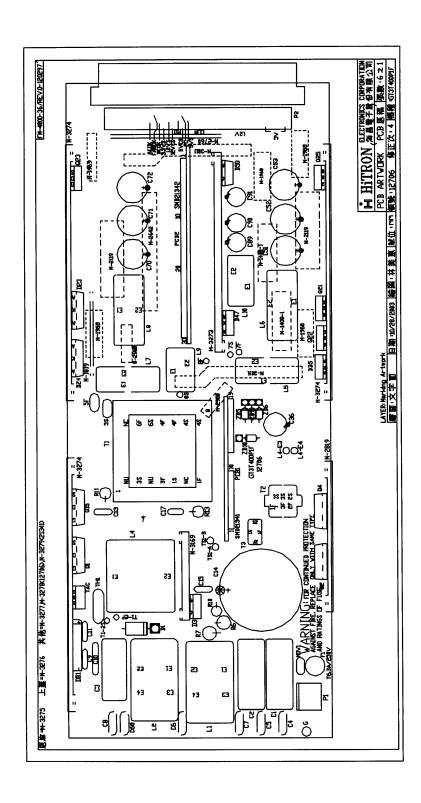
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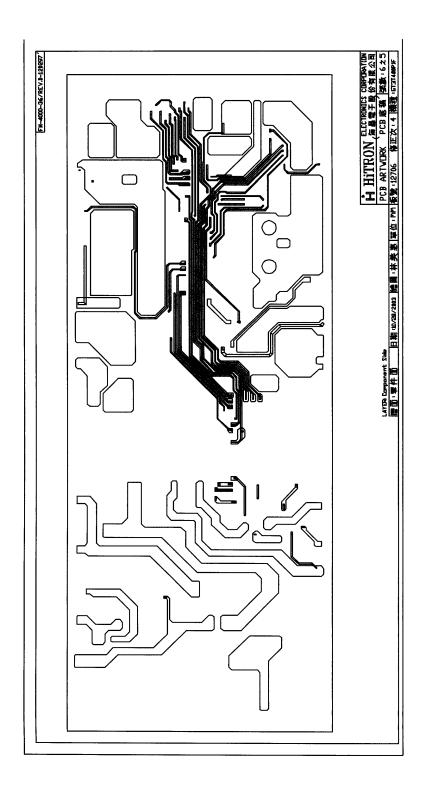
Supplement Id	Description
5-01	Schematics
5-02	Component Layout and PWB Artwork



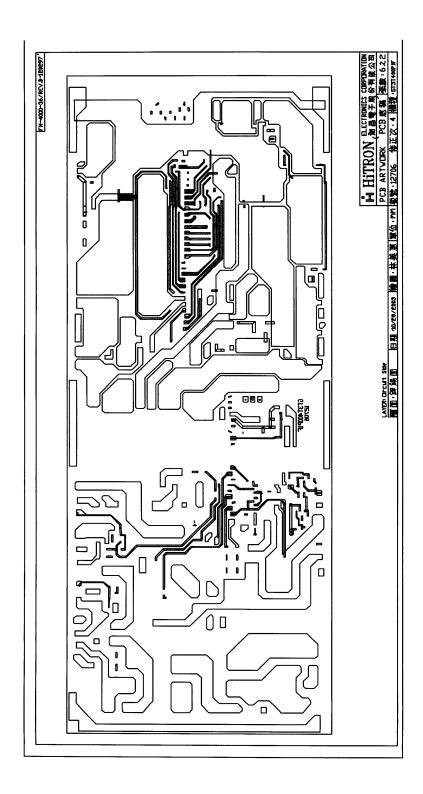




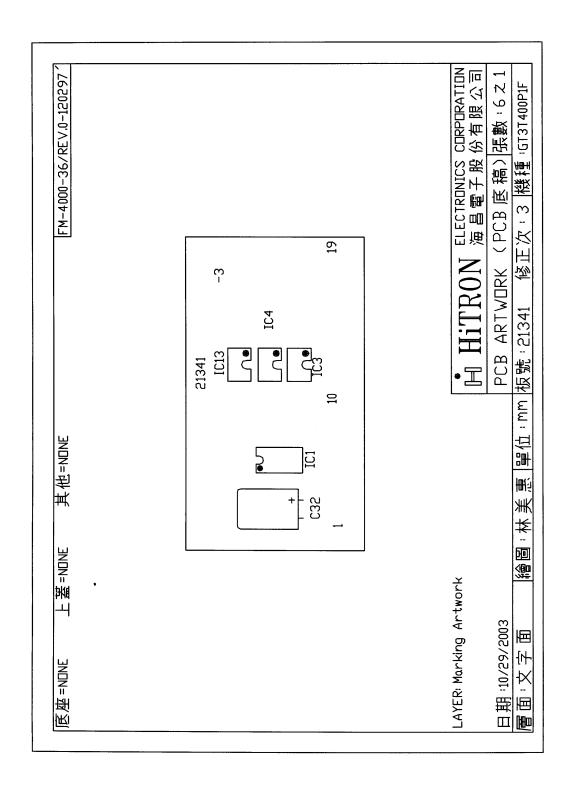




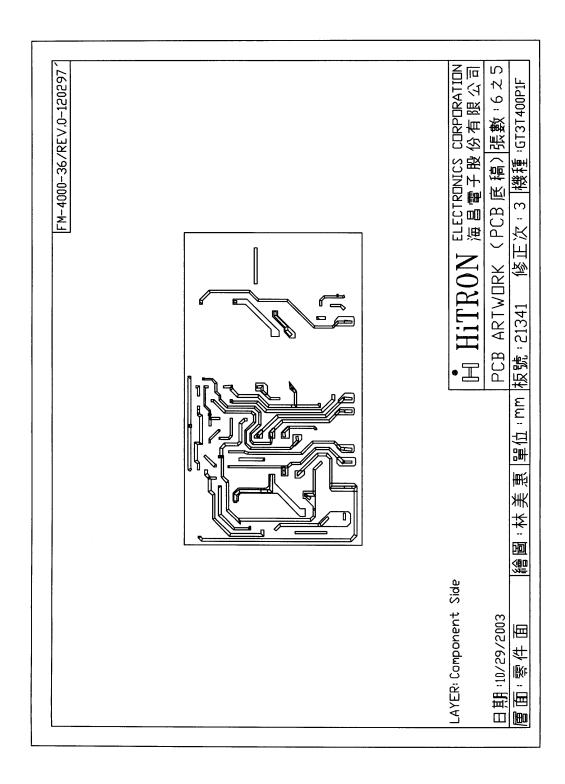
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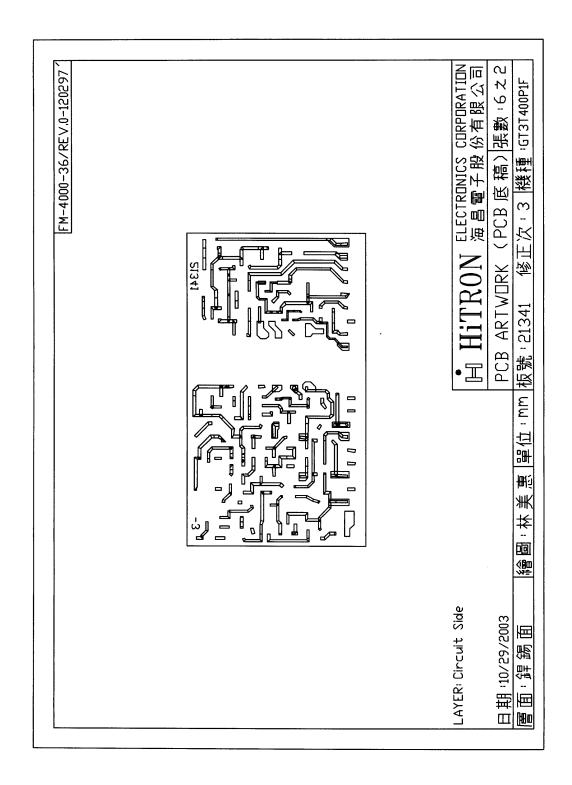
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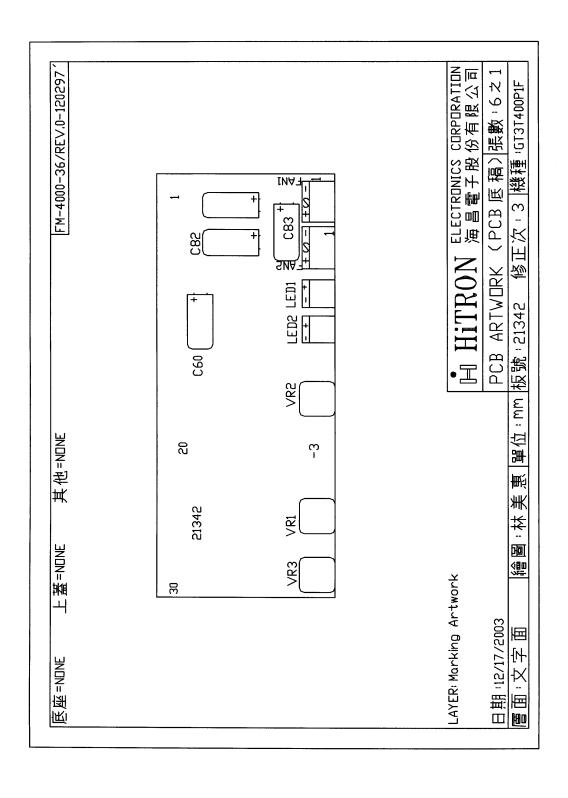


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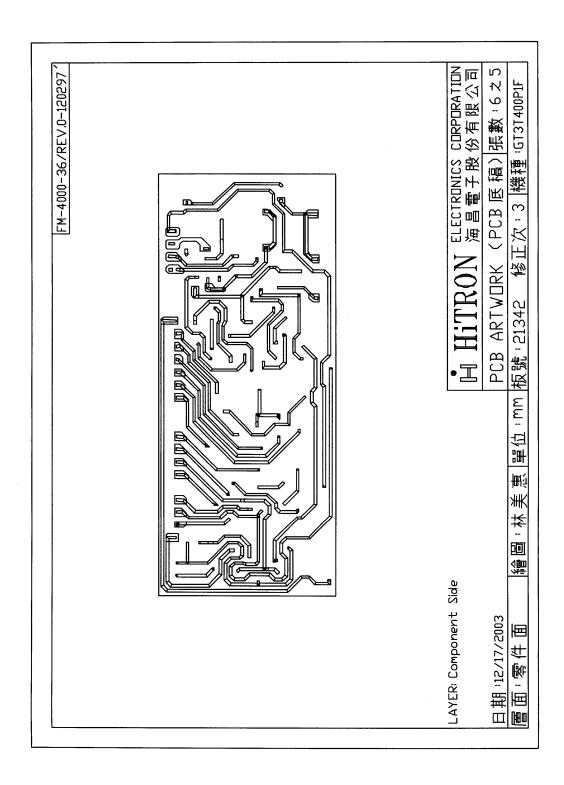


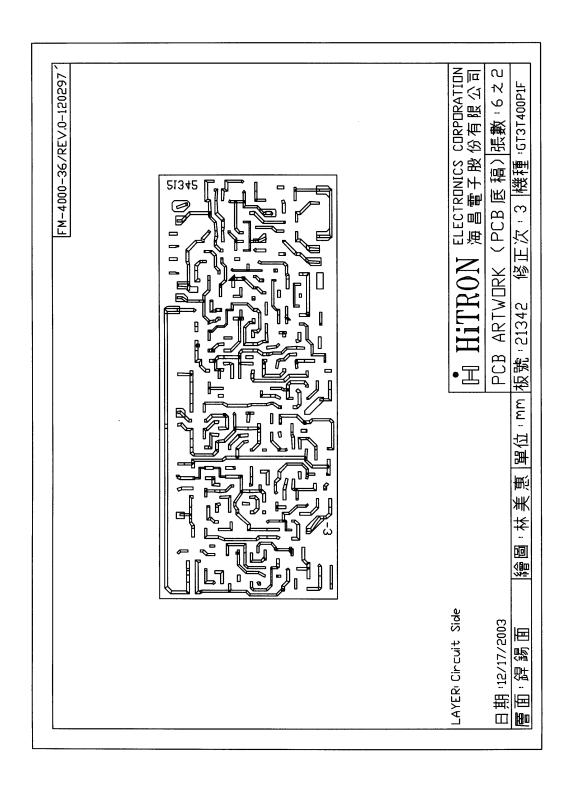
Issue Date:





Report Reference #





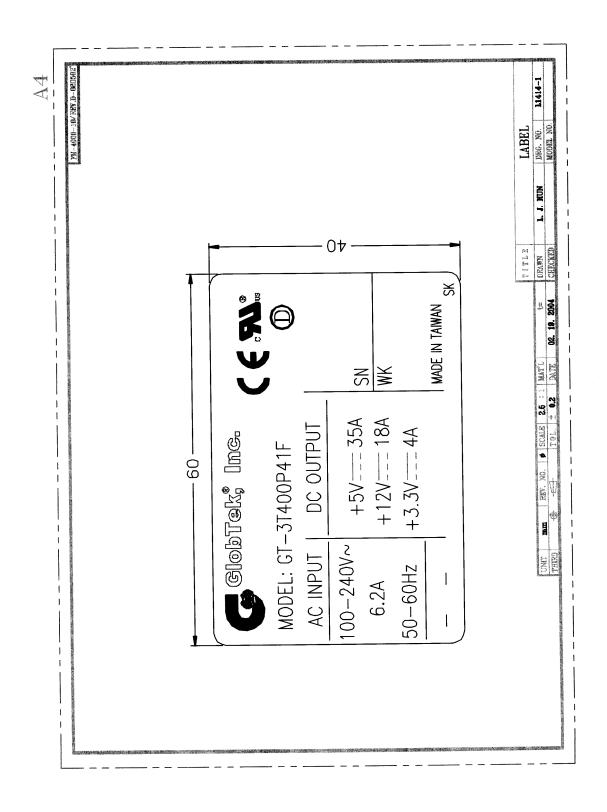
Enclosure

Miscellaneous

(Total 2 Pages including this Cover Page)

Supplement Id	Description
7-01	Label

Issue Date:

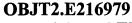


Enclosure

Licenses

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Supplement Id	Description
8-01	Triple Insulated Wire





2004-04-08

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Guide Information

DAIKYO ELECTRONICS WIRE CO LTD

October 22, 2003

E216979

3-14-10 NAGAYOSHI-KAWANABE HIRANO-KU **OSAKA-SHI** OSAKA 547-0014, JAPAN

Cat. No. DTM-B for reinforced insulation, rated 130° C (Class B), 1.41 KV, 22-32 AWG (0.20-0.65 mm). (Report Date: 05/13/2002)

Cat. No. DTM2 for reinforced insulation, rated 130° C (Class B), 1.41 KV, 32 AWG (0.20 mm). (Report Date: 05/13/2002)

Cat. No. DTM2-B for reinforced insulation, rated 130°C (Class B), 1.41 KV, 23 AWG (0.60 mm). (Report Date: 05/13/2002)

Marking: Company name and material designation on package, reel or on a tag attached to the end of the wire, and Recognized Component Mark.

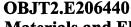
Cutoff

See General Information Preceding These Recognitions

For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Subscriber ID: 155361001

Directory: RECCOMP





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E206440

Report Reference #

June 14, 2002

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FURUKAWA ELECTRIC CO LTD HIRATSUKA MAGNET WIRE WORKS 5-1-9 HIGASHI YAHATA HIRATSUKA-SHI

KANAGAWA 254-0016, JAPAN

Cat Nos. FSX-E (Report Date: 11/09/1999), SX-E (Report Date: 11/09/1999), basic insulation rated 105° C, working voltage 354 Vdc or Vp.

Cat No. FWX-E (Report Date: 12/17/2001), supplementary insulation rated 120° C, working voltage 354 V dc or Vp.

Cat Nos. TEX-E (Report Date: 11/10/1999), TEX-EA (Report Date: 11/10/1999), reinforced insulation rated 105° C, working voltage of up to 1.4 kV.

Cat No. TEX-ELZ (Report Date: 11/11/1999), reinforced insulation rated 105° C, working voltage of up to 1.4 kV.

Cat No. TEX-ECEW3 (Report Date: 11/12/1999), reinforced insulation rated 105° C, working voltage of up to 1.4 kV.

Cat No. TEX-F (Report Date: 11/13/1999), reinforced insulation rated 105° C, working voltage of up to 1.4

Cat No. TEX-B (Report Date: 12/14/2001), reinforced insulation rated 130° C, working voltage of up to 1.4

Marking: Company name and material designation on package, reel or on tag attached to the end of the wire and Recognized Component Mark.

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2004-04-08

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Guide Information

GREAT LEOFLON INDUSTRIAL CO LTD

July 23, 2002

E211989

10TH FL 649-6 CHUNG CHENG RD **HSIN CHUANG** TAIPEI HSIEN, TAIWAN

Cat. No. UTW(B) (Report Date: 10/18/2000) for basic insulation, rated 130° C (Class B), 300 Volts, 18-31 AWG.

Cat. No. UTW(F) (Report Date: 04/02/2001) for supplemental insulation, rated 155°C (Class F), 600 Volts, 18-38 AWG.

Cat. No. TRW(F) (Report Date: 07/20/2001) for Reinforced Insulation, rated 155°C (Class F), 600 Volts, 18-31 AWG.

Cat. No. TRW(B) (Report Date: 06/17/2002) for Reinforced Insulation, rated 130°C (Class B), 600 Volts, 18-31 AWG.

Marking: Company name and material designation on package, reel or on a tag attached to the end of the wire and Recognized Component Mark.

Cutoff

See General Information Preceding These Recognitions

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