File E132594
Project 06ME07627

July 21, 2006

REPORT

on

Class 2 POWER SUPPLIES - LISTED

Globtek Inc
Northvale, NJ

DESCRIPTION

PRODUCT COVERED:

USL, CNL, Class 2 Inherently Limited Power Supply, Model GT-9100P9624.

GENERAL:

The unit covered by this Report is a cord connected Class 2 Power Unit.

The unit consists of a transformer and other related electronic circuitry wrapped with copper shield, which is housed in a thermoplastic enclosure, and provided with an IEC 320 style inlet for connection to line voltage. The above referenced copper shield is for EMC purposes only and is not relied upon for protective earth.

The unit or units described in this Report have been additionally investigated in accordance with the requirements of a Standard other than that for Class 2 Power Units. For details, see Construction Details, Engineering Considerations.

**USL indicates investigation to the U.S. Standard for Safety of Class 2 Power Units, UL 1310, Fifth Edition.**

**CNL indicates investigation to Canadian Standard C22.2 No. 223-M91.**

ELECTRICAL RATING:

| | Input | | | Output | |
|---|---|---|---|---|---|
| Model No. | V | Hz | A | V dc | A |
| GT-9100P9624 | 100-240 | 50-60 | 2.0 | 24 | 4.0 |

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

In addition to UL 1310 Standard for Class 2 Power Units, Fourth Edition, July 28, 1994/CSA C22.2 No. 223-M91, these models have been evaluated for compliance with the requirements for power supplies in the Standards specified below:

| Model | UL Standard No,/Edition |
|---|---|
| GT-9100P9624 | UL 60601-1, 1st Edition |
| GT-9100P9624 | UL 60950-1, 3rd Edition |

CONSTRUCTION DETAILS:

The unit shall be constructed in accordance with the following items. See also, Section General, Construction Details.

Printed Wiring Board Spacings - The pwb trace pattern shall be as illustrated in ILL. 1.

Markings – See Ill. 8 for markings and label material information. Section General, Markings for additional details.

| | | |
|---|---|---|
| Figures : | FIG. 1 | Front Overall View |
| | FIG. 2 | Rear Overall View |
| | FIG. 3 | Inside View |
| | FIG. 4 | Component Side View |
| | FIG. 5 | Bottom View |

| | | |
|---|---|---|
| Illustrations: | Ill. 1 | PWB Trace Layout |
| | Ill. 2 | Enclosure Assembly |
| | Ill. 3 | Transformer, T2: 24 V |
| | Ill. 4 | T2 Top Heatsink |
| | Ill. 5 | T2 Top Heatsink Insulation |
| | Ill. 6 | T2 Bottom Heatsink |
| | Ill. 7 | T2 Bottom Heatsink Insulation |

| 1.5.1 | **TABLE: list of critical components** | | | | |
|---|---|---|---|---|---|
| Object/part No. | Manufacturer/ trademark | type/model | technical data | Product Category CCN(s) | Required Marks of Conformity |
| Enclosure | GE | GE 940 | V-0, 3.5 mm min., 105 degrees C max. | QMFZ2 | UL R/C |
| AC Inlet | Yecx | TU-301-SP | 250V, 15A or better; C14 type | RTRT2 | UL R/C |
| AC Inlet | various | various | 250V, 15A or better; C14 type | RTRT2 | UL R/C |
| Output Cable | Lu Chiang Electric | XT | SPT-1 or SPT-2, 18 AWG, VW-1, 105°C | ZJCZ | LISTED |
| Diode Bridge, D1 | Sep | SEP 51A | 8A, 600V or better | -- | -- |
| Alternate Diode Bridge, D1 | Panjit | various | 8A, 600V or better | -- | -- |
| Alternate Diode Bridge, D1 | various | various | 8A, 600V or better | -- | -- |
| Printed Wiring Board | Jian he | AM 168 | V-1 or better, 130°C | ZPMV2 | UL R/C |
| Alternate Printed Wiring Board | Cheer | AM 168 | V-1 or better, 130°C | ZPMV2 | UL R/C |
| Fuses, F1, F2 | Walter | 2010 | 3.15A, 250V | JYDX2 | UL R/C |
| Alternate Fuses F1, F2 | Conquer | MST | 3.15A, 250V | JYDX2 | UL R/C |
| Varistor, VAR1 | Thinking | TVR07471K | 470 V | XUHT2 | UL R/C |
| Alternate Varistor, VAR1 | Joyin | JVR-07N471K65YRW-L | 470 V | XUHT2 | UL R/C |
| Alternate Varistor, VAR1 | various | various | 470 V | XUHT2 | UL R/C |
| Thermistor, RT | Thinking | SCK-2855A | 5.5 ohm, 5 A min. | XGPU2 | UL R/C |
| Alternate Thermistor, RT | various | various | 5.5 ohm, 5 A min. | XGPU2 | UL R/C |
| Photo coupler, IC6, IC7 | Sharp | PC817A | Distance > 0.4 mm; 5000 vac isolation min. | FPQU2 | UL R/C |
| Alternate Photo coupler, IC6, IC7 | Vishay | TCET1107G | Distance > 0.4 mm; 5000 vac isolation min. | FPQU2 | UL R/C |
| Alternate Photo coupler, IC6, IC7 | Liteon | LTV817 | Distance > 0.4 mm; 5000 vac isolation min. | FPQU2 | UL R/C |
| Alternate Photo coupler, IC6, IC7 | various | various | Distance > 0.4 mm; 5000 vac isolation min. | FPQU2 | UL R/C |
| MOSFET, Q1 | Fuji | 2SK3337-01 | 17 A/600 V or better | -- | -- |
| Alternate MOSFET, Q1 | various | various | 17 A/600 V or better | -- | -- |

| | | | | | |
|---|---|---|---|---|---|
| Line Choke, LF1 | Yao Sheng | AM688B-LF1 | Class B (130°C) designated YST-JC1, M7A90, M7ADEW or M7AGHB. | OBJY2 | UL R/C |
| Alternate Line Choke, LF1 | Dong-Guan Shek-Kit Top Nation Electronic Factory or Top Nation Electronic (Suzhou) Co. Ltd. | various | Class B (130°C) designated YST-JC1, M7A90, M7ADEW or M7AGHB. | OBJY2 | -- |
| Line Choke, LF2 | Yao Sheng | AM688B-LF2 | Class B (130°C) designated YST-JC1, M7A90, M7ADEW, M7AGHB or GTX-1. | OBJY2 | UL R/C |
| Alternate Line Choke, LF2 | Dong-Guan Shek-Kit Top Nation Electronic Factory or Top Nation Electronic (Suzhou) Co. Ltd. | various | Class B (130°C) designated YST-JC1, M7A90, M7ADEW, M7AGHB or GTX-1. | OBJY2 | UL R/C |
| Bridge Diode, BD1 | Panjit | KG600P | 8 A, 600 V or better | -- | -- |
| Alternate Bridge Diode, BD1 | various | various | 8 A, 600 V or better | -- | -- |
| Capacitor, C9 | Rubicon | MXG Series | 420 V, 47 uF, 105°C min. | -- | -- |
| Alternate Capacitor, C9 | various | various | 420 V, 47 uF, 105°C min. | -- | -- |
| Transformer, T1 | Yao Sheng | AM168B-T1 | Class B (130°C) designated YST-JC1, M7A90, M7ADEW, M7AGHB or GTX-1. | OBJY2 | -- |
| Alternate Transformer, T1 | Dong-Guan Shek-Kit Top Nation Electronic Factory or Top Nation Electronic (Suzhou) Co. Ltd. | AM168B-T1 | Class B (130°C) designated YST-JC1, M7A90, M7ADEW, M7AGHB or GTX-1. | OBJY2 | -- |
| Transformer, T2 | Yao Sheng | AM168B-T2-12V-A | Class F (155°C) designated RXT-2. | OBJY2 | -- |

| | | | | | |
|---|---|---|---|---|---|
| Alternate Transformer, T2 | Dong-Guan Shek-Kit Top Nation Electronic Factory or Wujiang Fenhu | AM168B-T2-12V-A | Class F (155°C) designated RXT-2. | OBJY2 | -- |
| Transformer, T2 | Yao, Sheng | AM168B-T2-19V-A | Class F (155°C) designated RXT-2. | OBJY2 | -- |
| Alternate Transformer, T2 | Dong-Guan Shek-Kit Top Nation Electronic Factory or Top Nation Electronic (Suzhou) Co. Ltd. | AM168B-T2-19V-A | Class F (155°C) designated RXT-2. | OBJY2 | -- |
| Transformer, T2 | Yao Sheng | AM168B-T2-23V-A | Class F (155°C) designated RXT-2. | OBJY2 | -- |
| Alternate Transformer, T2 | Dong-Guan Shek-Kit Top Nation Electronic Factory or Top Nation Electronic (Suzhou) Co. Ltd. | AM168B-T2-23V-A | Class F (155°C) designated RXT-2. | OBJY2 | -- |
| Transformer, T2 | Yao Sheng | AM168B-T2-24V-A | Class F (155°C) designated RXT-2. | OBJY2 | -- |
| Alternate Transformer, T2 | Dong-Guan Shek-Kit Top Nation Electronic Factory or Top Nation Electronic (Suzhou) Co. Ltd. | AM168B-T2-24V-A | Class F (155°C) designated RXT-2. | OBJY2 | -- |
| Transformer, T2 | Yao Sheng | AM168B-T2-36V-A | Class F (155°C) designated RXT-2. | OBJY2 | -- |
| Alternate Transformer, T2 | Dong-Guan Shek-Kit Top Nation Electronic Factory or Top Nation Electronic (Suzhou) Co. Ltd. | AM168B-T2-36V-A | Class F (155°C) designated RXT-2. | OBJY2 | -- |

| | | | | | |
|---|---|---|---|---|---|
| Transformer, T2 | Yao Sheng | AM168B-T2-48V-A | Class F (155°C) designated RXT-2. | OBJY2 | -- |
| Alternate Transformer, T2 | Dong-Guan Shek-Kit Top Nation Electronic Factory or Top Nation Electronic (Suzhou) Co. Ltd. | AM168B-T2-48V-A | Class F (155°C) designated RXT-2. | OBJY2 | -- |
| Capacitor, CX1 | Ultra Tech | HQX | 0.1 uF, 275 V max. | FOWX2 | UL R/C |
| Alternate Capacitor, CX1 | Chen Tong | CTX | 0.1 uF, 300 V max. | FOWX2 | UL R/C |
| Alternate Capacitor, CX1 | Camel | MPX | 0.1 uF, 275 V max. | FOWX2 | UL R/C |
| Alternate Capacitor, CX1 | various | various | 0.1 uF, 275 V max. | FOWX2 | UL R/C |
| Capacitor, CX2 | Ultra Tech | HQX | 1 uF, 275 V max. | FOWX2 | UL R/C |
| Alternate Capacitor, CX2 | Chen Tong | CTX | 1 uF, 300 V max. | FOWX2 | UL R/C |
| Alternate Capacitor, CX2 | Camel | MPX | 1 uF, 275 V max. | FOWX2 | UL R/C |
| Alternate Capacitor, CX2 | various | various | 1 uF, 275 V max. | FOWX2 | UL R/C |
| Capacitor, CY1 | Success | Y1 (SE Type) | 102 pF, 400 V max. | FOKY2 | UL R/C |
| Alternate Capacitor, CY1 | Pan Overseas | Y1 (AH Type) | 102 pF, 400 V max. | FOKY2 | UL R/C |
| Alternate Capacitor, CY1 | TDK | Y1 (CD Type) | 102 pF, 400 V max. | FOKY2 | UL R/C |
| Alternate Capacitor, CY1 | various | various | 102 pF, 400 V max. | FOKY2 | UL R/C |
| Capacitor, CY2, CY3 | Ultra Tech | Y1 (SE Type) | 471 pF, 400 V max. | FOKY2 | UL R/C |
| Alternate Capacitor, CY2, CY3 | Chen Tong | Y1 (AH Type) | 471 pF, 400 V max. | FOKY2 | UL R/C |
| Alternate Capacitor, CY2, CY3 | TDK | Y1 (CD Type) | 471 pF, 400 V max. | FOKY2 | UL R/C |
| Alternate Capacitor, CY2, CY3 | various | Various | 471 pF, 400 V max. | FOKY2 | UL R/C |
| Mylar Insulation | Lcecl Enterprise Co. Ltd. | AM168B-M1-B | Dielectric Withstand 1500 V min. | QMFZ2 | UL R/C |
| Alternate Mylar Insulation | Lcecl Enterprise Co. Ltd. | AM168B-M2 | Dielectric Withstand 1500 V min. | QMFZ2 | UL R/C |

| | | | | | |
|---|---|---|---|---|---|
| PC Film | Lcecl Enterprise Co. Ltd. | FR-700 | O.432 mm thick min. | QMFZ2 | UL R/C |
| PC Film | various | various | O.432 mm thick min. | QMFZ2 | UL R/C |

TEST RECORD NO. 1

SAMPLES:

Representative production samples of Model GT-9100P9624, described in the preceding section of this Report, were subjected to a test program, as outlined below.

Unless otherwise noted, tests were conducted in the order indicated. The following Standards were used:

a. UL 1310, 5th Edition
b. CAN/CSA-C22.2 NO.223-M91

Only the following tests were considered necessary based upon previous evaluation under the CB Scheme Test Certificate and Report Ref. No. E170507-A11 & E172861-A7.

Model GT-9100P9624

Maximum Output Voltage Test
Output Current And Power
Component Breakdown Test

CONCLUSION

Samples of the product covered by this Report have been found to comply with the requirements covering the class and the product are judged to be eligible for Listing and Follow-Up Service. The manufacturer is authorized to use the Laboratories' Mark on such products which comply with the Follow-Up Service Procedure and any other applicable requirements of Underwriters Laboratories Inc. Only those products which properly bear the Laboratories' Mark are considered as Listed by Underwriters Laboratories Inc.

| Report by: | Reviewed by: |
| --- | --- |
| MAX S. RODRIGUEZ | David V. Alma |
| Project Engineer | Staff Engineer |
| Conformity Assessment Services | Conformity Assessment Services |

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Compliance Review Conducted by: _____ Date _____
Printed Name Signature

CONSTRUCTION COMPLIANCE REVIEW RECORD

| | |
|---|---|
| Completed Construction Compliance Review was Reviewed and accepted by: | DAVID V ALMA |
| | (Qualified Reviewer) Printed Name Signature |

Sample Identification -

| Sample Card No. | Date Received | Sample No. | Manufacturer, Product Identification and Ratings |
|---|---|---|---|
| 0799132-001 | 6-12-06 | 1-6 | GLOBTEK, MODEL GT-9100P9624, 100-240V, 50/60HZ, 2.0A |
| | | | |
| | | | |

Measurement Instrument Information -

| Inst. ID No. | Instrument Type | Function/Range | Last Cal. Date | Next Cal. Date |
|---|---|---|---|---|
| 5A-548 | SPACER KEYS | MM | 9-15-05 | 9-30-06 |
| | | | | |
| | | | | |

**Comment [GE FG1]:** Page: 1
Based on requirement in GLPM, Par. 5.2.5

**Comment [GE FG2]:** Page: 1
Based on requirement in GLPM, Par. 5.2.6

**Comment [GE FG3]:** Page: 1
Based on requirement in GLPM, Par. 5.2.1, 5.2.2, 5.2.3

**Comment [GE FG7]:** Page: 1
Based on requirement in LOM, Par. 6.3 D and CIP Manual

**Comment [GE FG8]:** Page: 1
Based on requirement in LOM, Par. 6.3 E and CIP Manual

**Comment [GE FG4]:** Page: 1
Based on requirement in LOM, Par. 6.3 B and CIP Manual

**Comment [GE FG5]:** Page: 1
Based on requirement in LOM, Par. 6.3 A and CIP Manual

**Comment [GE FG6]:** Page: 1
Based on requirement in LOM, Par. 6.3 C and CIP Manual

Compliance Review Conducted by: _____ Date _____
Printed Name Signature

CONSTRUCTION COMPLIANCE REVIEW:

The sample was reviewed for compliance with the construction requirements in the following Standard and compliance with applicable construction requirements is noted below.

Standard CAN/CSA-C22.2 No. 223-M91, Power Supplies with Extra-Low-Voltage Class 2 Outputs Edition 1991

| Clause/Par. Reference and Construction Requirement | Comply YES | Comply NO | Comply N/A | Comments/Measurements | Inst. ID No. |
|---|---|---|---|---|---|
| 4. Construction | | | | | |
| 4.1 General | | | | | |
| 4.1.1 Characteristics | X | | | | |
| 4.1.2 Components not intended for power | X | | | | |
| 4.1.3 Component parts | X | | | | |
| 4.1.4 Mass and centre of mass | | | X | | |
| 4.1.5 Determination of moment of force and mass | | | X | | |
| 4.2 Sources of Fire Hazard | X | | | | |
| 4.3 Enclosures | | | | | |
| 4.3.1 Prevention of access | X | | | | |
| 4.3.2 Supplementary decorative enclosures | | | X | | |
| 4.3.3 Enclosure compliance after drop and impact tests | X | | | | |
| 4.3.4 Nonmetallic enclosures | X | | | | |
| 4.3.5 Protection against corrosion of iron and steel parts | X | | | | |
| 4.3.6 Openings in Enclosures | | | | | |
| 4.3.6.1 Accessibility of live parts | | | X | NO OPENINGS PROVIDED | |

Compliance Review Conducted by: _____ Date _____
Printed Name Signature

| Clause/Par. Reference and Construction Requirement | Comply | | | Comments/Measurements | Inst. ID No. |
|---|---|---|---|---|---|
| | YES | NO | N/A | | |
| 4.3.6.2 Compliance with impact test | | | X | | |
| 4.4 Mechanical Assembly | X | | | | |
| 4.5 Supply Connections | | | | | |
| 4.5.1 Direct Plug-In Power Supplies | | | | | |
| 4.5.1.1 Blade assembly | | | X | | |
| 4.5.1.2 No mounting tab | | | X | | |
| 4.5.1.3 Duplex receptacle access | | | X | | |
| 4.5.1.4 Enclosure perimeter | | | X | | |
| 4.5.2 Cord-Connected Power Supplies | | | | | |
| 4.5.2.1 Provision of a flexible cord and attachment plug or cord set | | | X | IEC 320 STYLE | |
| 4.5.2.2 Supply cord type SPT-2 or equial | | | X | | |
| 4.5.2.3 Supply cord type SPT-1 or equal | | | X | | |
| 4.5.2.4 Capacitor stored enerty | X | | | | |
| 4.5.2.5 A power supply cord shall not pass through the same strain relief as an output cord | X | | | | |
| 4.5.2.6 Enclosed separated conductors | X | | | | |
| 4.6 Internal Wiring | | | | | |
| 4.6.1 Use of suitable insulation | X | | | | |
| 4.6.2 Circuit separation | X | | | | |
| 4.6.3 Securing of solder connections | X | | | | |
| 4.6.4 Internal quick disconnect terminals and connectors of the blade and jaw configuration | | | X | | |

Compliance Review Conducted by: _____ Date _____
Printed Name Signature

| Clause/Par. Reference and Construction Requirement | Comply | | | Comments/Measurements | Inst. ID No. |
|---|---|---|---|---|---|
| | YES | NO | N/A | | |
| 4.7 Electrical Insulating Materials | | | | | |
| 4.7.1 Materials on which bare live parts are | | | X | | |
| 4.7.2 Materials that contact primary circuit bare live parts and exposed metal parts or secondary circuits | X | | | | |
| 4.8 Transformers and Magnetic Components | | | | | |
| 4.8.1 Transformers shall comply with the requirements of Clauses 4.8.2 to 4.8.9 | X | | | | |
| 4.8.2 Insulation locations | X | | | | |
| 4.8.3 Insulation moisture-absorption resistant | X | | | | |
| 4.8.4 Normal operation above Class 105 limits | X | | | | |
| 4.8.5 Insulation between the primary and secondary windings, between secondary windings, and between the primary winding and the core | X | | | | |
| 4.8.6 0.8 mm bent-up edge | | | X | | |
| 4.8.7 Crossover lead insulation or spacing | X | | | | |
| 4.8.8 Crossover lead insulation options | | | X | | |
| 4.8.9 Class 2 secondary crossover lead exception | | | X | | |
| 4.8.10 Moulded bobbin transformer having a slot for the crossover lead | X | | | | |

Compliance Review Conducted by: _____ Date _____
Printed Name Signature

| Clause/Par. Reference and Construction Requirement | Comply | | | Comments/Measurements | Inst. ID No. |
|---|---|---|---|---|---|
| | YES | NO | N/A | | |
| 4.8.11 Insulation between the primary lead connections and the adjacent winding and between secondary lead connections and the primary winding | X | | | | |
| 4.8.12 Protective devices implanted within transformers | | | X | | |
| 4.9 Switches | | | X | | |
| 4.10 Electrical Spacings | | | | | |
| 4.10.1 Spacings per Tables 1 and 2 | X | | | TABLE 2 – NO OPENINGS<br>MIN CREEPAGE = 6.5MM<br><br>MIN CLEARANCE = 6.5MM | 5A-548 |
| 4.10.2 Spacings within components | X | | | | |
| 4.10.3 Provision of the minimum required spacings with 1 N force | | | X | | |
| 4.10.4 The spacing at exposed field wiring terminal screws | | | X | | |
| 4.10.5 The spacings for live parts on the load side of overcurrent devices | X | | | | |
| 4.10.6 Printed wiring board spacings | X | | | | |
| 4.10.7 Spacings of extra-low-voltage secondary circuits | | | X | | |
| 4.11 Output Connections | | | | | |

Compliance Review Conducted by: _____ Date _____
Printed Name Signature

| Clause/Par. Reference and Construction Requirement | Comply | | | Comments/Measurements | Inst. ID No. |
|---|---|---|---|---|---|
| | YES | NO | N/A | | |
| 4.11.1 Provision of wire binding screws, terminal studs, jacks, or a permanently attached cord on power supplies<br>Provision of telephone plugs and jacks for use as output connectors on power supplies intended for use with designated end-use equipment | X | | | | |
| 4.11.2 Non-standard receptacles or attachment plugs | | | X | | |
| 4.11.3 Polarity marked or polarized connector | | | X | | |
| 4.11.4 Output connectors mounted on the enclosure | | | X | | |
| 4.11.5 Terminal plate for a wire binding screw or stud | | | X | | |
| 4.11.6 A wire binding screw or terminal shall be not smaller than M3.5 or No. 6 | | | X | | |
| 4.11.7 A screw or stud shall be of brass or other nonferrous metal or plated steel | | | X | | |
| 4.11.8 Field wiring terminals prevented from movement | | | X | | |
| 4.12 Strain Relief and Blade Retention | | | | | |
| 4.12.1 Provision of strain relief for flexible cords | X | | | | |
| 4.12.2 Specs of the strain relief | X | | | | |
| 4.12.3 A knot in the supply cord | | | X | | |
| 4.12.4 The blades and grounding pin blade retention | | | X | | |

Compliance Review Conducted by: _____ Date _____
Printed Name Signature

| Clause/Par. Reference and Construction Requirement | Comply | | | Comments/Measurements | Inst. ID No. |
|---|---|---|---|---|---|
| | YES | NO | N/A | | |
| 4.13 Open-Circuit Secondary Voltage | | | | | |
| 4.13.1 The open-circuit secondary voltage shall not be more than 30 V rms (42.4 V peak or dc) | X | | | | |
| 4.13.2 Interconnection of the output terminals | | | X | | |
| 4.13.3 Interconnection marking | | | X | | |
| 4.14 Provisions for Limiting Output Current | | | | | |
| 4.14.1 Limitation of output current | X | | | | |
| 4.14.2 Use of an internal overcurrent device | X | | | | |
| 4.14.3 Acceptability of special-purpose fasteners | | | X | | |
| 4.15 Secondary Circuit Protection | | | X | | |
| 4.16 Grounding and Bonding | | | | | |
| 4.16.1 Exposed non-current-carrying metal parts of power supplies shall be grounded in accordance with CSA-C22.2 No. 0.4 | | | X | | |
| 4.16.2 Grounding pin for direct plug-in unit | | | X | | |
| 4.16.3 Impedence testing based on primary protector | | | X | | |
| 4.17 Printed Wiring Boards | | | | | |
| 4.17.1 Printed-wiring boards used in enclosures that have openings | | | X | | |
| 4.17.2 Printed-wiring boards that contain only components in Class 2 circuits | | | X | | |
| 5. Marking | X | | | | |

Compliance Review Conducted by: _____ Date _____
Printed Name Signature

| Clause/Par. Reference and Construction Requirement | Comply | | | Comments/Measurements | Inst. ID No. |
|---|---|---|---|---|---|
| | YES | NO | N/A | | |
| 5.1 Permanent and visible markings | X | | | | |
| 5.2 Applicable warnings | X | | | | |
| 5.3 Polarity | X | | | | |
| 5.4 Telephone type output connectors for designated use | | | X | | |
| 5.5 Telecommunication applications | | | X | | |
| 5.6 Duty cycle | | | X | | |