

## SPECIFIC TECHNICAL CRITERIA

|  |   |
|--|---|
| <b>UL 60950-1, First Edition<br/>Information technology equipment - Safety-<br/>Part 1: General Requirements</b> |   |
| Report Reference No .....  | E204980-A7-UL-1   |
| Compiled by .....  | Davide Lin  |
| Reviewed by .....  | Sam Hsu   |
| Date of issue .....  | 2005-09-30  |
| Standards .....  | UL 60950-1:2003, First Edition<br>CSA C22.2 No. 60950-1-03 1st Ed. April 1, 2003                                |
| Test procedure .....   | Component Recognition   |
| Non-standard test method .....   | N/A   |
| <b>Test item</b> description .....   | Power Supply  |
| Trademark .....  | None  |
| Model and/or type reference .....  | ALS75-3.3, ALS75-5, ALS75-12, ALS75-15, ALS75-24, IOPS040S03,<br>IOPS060S05, IOPS065S12, IOPS075S15, IOPS075S24 |
| Rating(s) .....  | I/P: 100-240 V ac, 1.4 A, 50-60 Hz;   |
|  | ALS75-3.3, IOPS040S03:<br>O/P: 3.3 V dc 12 A  |
|  | ALS75-5, IOPS060S05:<br>O/P: 5 V dc, 12 A   |
|  | ALS75-12:<br>O/P: 12 V dc, 6.2 A  |
|  | ALS75-15, IOPS075S15:<br>O/P: 15 V dc, 5 A  |
|  | ALS75-24, IOPS075S24:<br>O/P: 24 V dc, 3.1 A  |
|  | IOPS065S12:<br>O/P: 12V dc, 5.2 A   |

|   |                   |
|---|-------------------|
| <b>Particulars: test item vs. test requirements</b> |                   |
| Equipment mobility .....                            | for building-in   |
| Operating condition .....                           | continuous        |
| Mains supply tolerance (%) .....                    | +10%, -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) .....                        | 0.28              |
| Protection against ingress of water .....           | IP X0             |

**Possible test case verdicts:**

- test case does not apply to the test object .....: N / A
- test object does meet the requirement .....: Pass
- test object does not meet the requirement .....: Fail (acceptable only if a corresponding, less stringent national requirement is "Pass")

**General remarks:**

- "(see Enclosure #)" refers to additional information appended to the Test Report
- "(see appended table)" refers to a table appended to the Test Report
- Throughout the Test Report a point is used as the decimal separator

| <b>GENERAL PRODUCT INFORMATION:</b> |  |
|-------------------------------------|--|
| CA1.0                               | <b>Report Summary</b>  |
| CA1.1                               | N/A  |
| CB1.0                               | <b>Product Description</b>   |
| CB1.1                               | Electronic components mounted on PWB.  |
| CC1.0                               | <b>Model Differences</b>   |
| CC1.1                               | - Model ALS75-3.3, ALS75-5, ALS75-12, ALS75-15, IOPS040S03, IOPS060S05, IOPS065S12, IOPS075S15 and IOPS075S24 are similar to Model ALS75-24 except for model designation and output rating.                                  |
| CD1.0                               | <b>Additional Information</b>  |
| CD1.1                               | N/A  |
| CE1.0                               | <b>Technical Considerations</b>  |
| CE1.2                               | The product was submitted and tested for use at the maximum ambient temperature (Tma) permitted by the manufacturer's specification of: 60°C ( for output loading 70% ), 50°C ( for output loading 100%)                     |
| CE1.4                               | The product is intended for use on the following power systems: TN   |
| CE1.14                              | The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual   |
| CF1.0                               | <b>Engineering Conditions of Acceptability</b>   |
| CF1.1                               | For use only in or with complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.<br><br>When installed in an end-product, consideration must be given to the following: |
| CF1.3                               | The end-product Electric Strength Test is to be based upon a maximum working voltage of:<br>Primary-SELV: 276 Vrms, 488 Vpk, Primary-Earthed Dead Metal: 276 Vrms, 463 Vpk   |
| CF1.5                               | The following secondary output circuits are SELV: All secondary outputs.   |
| CF1.7                               | The following secondary output circuits are at non-hazardous energy levels: All secondary outputs.   |
| CF1.10                              | The following output terminals were referenced to earth during performance testing: Secondary GND  |
| CF1.11                              | The power supply terminals and/or connectors are: Suitable for factory wiring only   |
| CF1.12                              | The maximum investigated branch circuit rating is: 20 A  |
| CF1.13                              | The investigated Pollution Degree is: 2  |
| CF1.15                              | Proper bonding to the end-product main protective earthing termination is: Required, ,   |

|        |  |
|--------|--|
| CF1.16 | An investigation of the protective bonding terminals has: Been conducted   |
| CF1.18 | The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C): T1 (Class B) |
| CF1.19 | The following end-product enclosures are required: Electrical, Fire  |
| CF1.23 | The equipment is suitable for direct connection to: AC mains supply  |
| CF2.0  | The maximum ambient temperature (Tma): 50 degree C (for output loading 100%), 60 degree C (for output loading 70%)   |