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Project 03NK09050

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REPORT

on

UNLISTED COMPONENT – CLASS 2 POWER UNITS

For Use Only In

APPLICANT'S LISTED INDUSTRIAL CONTROL EQUIPMENT

Idec Izumi Corp
Yodogawa-Ku, Osaka

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DESCRIPTION

PRODUCT COVERED:

USR, CNR Unlisted Component - Class 2 Power Units Models PS5R-SC12, PS5R-SC24, and PS5R-SD24 for use with Applicant Listed Industrial Control Equipment.

Where:

USR – Has been evaluated to UL1310 Class 2 Power Units 4th Edition
CNR – Has been evaluated to Canadian Standard for Power Supplies With Extra-Low-Voltage Class 2 Outputs, CAN/CSA-C22.2 No. 223-M91

GENERAL:

The units covered by this Report are switch mode power supplies that are incomplete and intended for installation in an end product.

The units consist of a transformer and other related electronic circuitry housed in a thermoplastic enclosure, and provided with screw terminals for output circuit and for connection to line voltage. The enclosure was not evaluated to the applicable enclosure requirements.

MODEL DIFFERENCES:

1. Model PS5R-SC12 is the same as Model PS5R-SC24 except for transformer secondary winding turns.

2. Models PS5R-SC12, PS5R-SC24, and PS5R-SD24 employ the same enclosure.

ELECTRICAL RATINGS:

Model	Input			Output	
	V	Hz	A	V dc	A
PS5R-SC12	100-240	50/60	0.9	12	2.5
PS5R-SC24	100-240	50/60	0.9	24	1.3
PS5R-SD24	100-240	50/60	1.7	24	2.5

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

Use - For use only in or with complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

These components have been judged on the basis of the spacings required in end use application, the Standard for Industrial Control Equipment, UL 508, 17th Edition, Table 36.1.

Conditions of Acceptability -

1. The transformer provided in these units employ a Class 105(A) insulation system.

2. Leakage current measurements shall be performed on the combination at the equipment connection in the end-use product.

3. The temperature test was not performed as part of this investigation. The temperature test shall be performed in the end use application to ensure components do not exceed allowable temperatures limits.

4. The suitability of the enclosure and vent openings shall be determined in the end product.

5. The power supplies are to be used within the recognized electrical ratings.

6. The input and output connection means provided have not been evaluated for field wiring. The input and output connection means are suitable for factory wiring only.

7. The tested units were found suitable for use in a 25C operating ambient. Testing must be repeated when installed in end use application with an operating ambient higher than 25C.

8. Mounting brackets were not evaluated.

9. The primary fuse (F1) was relied upon for compliance with abnormal test requirement. Abnormal tests shall be repeated if a fuse with a higher rating is used.

10. The abnormal tests were not conducted with Line and Neutral inputs reversed as specified in Clause 6.6.3 of the CSA Standard 22.2 223-M91.

    The abnormal tests shall be repeated if the power supply connection means to the power source is not polarized.

CONSTRUCTION DETAILS:

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