File E52653 Project 4786452829

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REPORT

on

COMPONENT - Connectors for Use in Data, Signal, Control and Power Applications - Component

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Recognized Company: HIROSE ELECTRIC CO LTD

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DESCRIPTION

PRODUCT COVERED:

* USR, CNR Component Connector, Series DF5A. Cat. Nos. DF5A-xP-5DSA (yy) and DF5A-xS-5C (yy) where x can be 2 - 10 and (yy) can be 01-99 or blank. Cat. Nos. DF5A-xDP-5DSA (yy) and DF5A-xDS-5C (yy) where x can be 4 - 16 and (yy) can be 01-99 or blank. "(yy)" denotes packaging differencesand plating variations.

GENERAL:

These devices are multi-pole connectors intended for factory assembly on copper wire sizes as indicated in Ratings table below and on printed wiring boards where the acceptability of combinations is determined by UL LLC. The devices are identified as follows:

USR indicates investigation to United States Standards, UL 1977.

CNR indicates investigation to Canadian National Standards, C22.2 No. 182.3.

RATINGS:

Cat. Nos.	No. of Poles Represented	Voltage, Vac	Ampere (A)	Conductor Sizes, AWG Str
DF5A-10P-5DSA and DF5A-10S-5C	2 - 10	500	8	18
DF5A-16DP-5DSA and DF5A-16DS-5C	8 - 16	500	7	18
DF5A-12DP-5DSA and DF5A-12DS-5C	2 - 12	500	6	20
DF5A-16DP-5DSA and DF5A-16DS-5C	14 - 16	500	5	20
DF5A-10DP-5DSA and DF5A-10DS-5C	2 - 10	500	5	22
DF5A-16DP-5DSA and DF5A-16DS-5C	12 - 16	500	4	22

Disconnecting Use - see Sec Gen for required marking

NOMENCLATURE: - Refer to Ill. 1

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TECHNICAL 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 UL LLC.

Conditions of Acceptability - The following are among the considerations to be made when evaluating the device in the end-use product.

Interruption of Current

1. These devices are not suitable for interrupting the flow of current by connecting or disconnecting the mating connector.

Current-Carrying Capability and Current Ratings

2. These devices have been subjected to the Temperature test with the rated currents and maximum temperature rise values tabulated below.

Cat Nos.	Current, A	Maximum Temperature USR, °C	Maximum Temperature Rise CNR, °C
DF5A-10P-5DSA and DF5A-10S-5C	8	52.8	27.8
DF5A-16DP-5DSA and DF5A-16DS-5C	7	51.9	26.9
DF5A-12DP-5DSA and DF5A-12DS-5C	6	53.8	28.8
DF5A-16DP-5DSA and DF5A-16DS-5C	5	54.7	29.7
DF5A-10DP-5DSA and DF5A-10DS-5C	5	44.6	19.6
DF5A-16DP-5DSA and DF5A-16DS-5C	4	47.0	22.0

3. These devices have been evaluated at potentials of 500 Vac based on the results of a Dielectric Voltage Withstand Test performed at 2000 Vac.

Insulating Materials

4. These devices employ insulating materials with properties as tabulated below at the minimum thickness employed in the connector housing, the suitability of the insulating materials based on the documented values shall be determined in the end-use application. Please note the values specified in the table when multiple materials are indicated represent the minimum values for the group of materials.