

File E28476
Project 95ME14640

Issued: May 1, 1995
Revised: April 7, 2017

REPORT

on

***CONNECTORS FOR USE IN DATA, SIGNAL, CONTROL AND POWER
APPLICATIONS**

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MIDDLETOWN PA 17057-3170

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DESCRIPTION

PRODUCT COVERED:

USR, CNR - Component Connectors, Series Faston Connectors.

USR/CNR - Component Connectors, Faston Connector, Cat. Nos. 1969725-1, 1969387-1, 1969639-1, 1969640-1, 1969656-1, 1969657-1, 1969843-1, **2133857-1, 2133857-3 and 2133857-4.**

USR, CNR - Component Connector, Series Faston Dual Tab Connector, Cat. No. 1969375-1.

USR - Component Connectors, Series Faston, Cat. No. 1969632-1.

GENERAL:

These devices are single-pole or multi-pole connectors employing contacts of the crimp termination type for use in electrical equipment where the acceptability of the combinations is determined by Underwriters Laboratories Inc.

ELECTRICAL RATINGS:

Cat. No.	Current (A)/ Voltage	Wire AWG (or Wire Cross-sectional area)
Housing 8-735075-0 and 6-735075-0 with Contacts 444334-x	3 /240V AC/DC	22
Housing 8-735075-0 and 6-735075-0 with Contacts 444334-x	6 /240V AC/DC	18
Housing 8-735075-0 and 6-735075-0 with Contacts 444335-x	8 /240V AC/DC	1.0 mm ²
Housing 8-735075-0 and 6-735075-0 with Contacts 444335-x	14 /240V AC/DC	2.5 mm ²
1969387-1 with Contacts 63306	230 V AC/DC	14, 16, 18 AWG
Housings 1969507-2, 1969507-3 with FASTON 250 Series Quick Connect Connectors (E66717 report issued 1982-01-28)	No Electrical Ratings	10 - 22 AWG str
Housings 1969538-1, 1969547-1 with FASTON 250 Series Quick Connect Connectors - Cat. No. 63009 (E66717 report issued 1982-01-28)	No Electrical Ratings	14 - 18 AWG str
Housings 2-480435-1, 2-480435-2 with FASTON 187 Series (budget and premier) Quick Connect Connectors (E66717 report issued 1982-01-28)	No Electrical Ratings	16 - 22 AWG str
Housings 1969632-1 with FASTON 250 Series Quick-Connect Connectors - Cat. No. 1742198-1 (E66717 report issued 1978-07-19)	No Electrical Ratings	18 - 14 AWG str
Housings 1969655-1 and 521053-1 with Listed Tyco FASTON terminals as shown in Ill. 87	No Electrical Ratings	Refer to Ill. 87

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Connector Cat. No. [1]	Contact Cat. No.	Wire Gauge	Investigated Current	Maximum Temp Rise
1969657-1 (representing 1969656-1)	63010-1 (representing 63009-1)	18	7	8.6
		16	10	11.4
		14	15	19.1

3. The suitability of the mounting means shall be determined in the end use.
4. The electrical and mechanical suitability of the wiring terminals shall be determined in the end use.
5. The placement of these devices within the equipment enclosure should be such that spacings between the live parts and the equipment are suitable for the particular application.
6. The suitability of the spacings between adjacent poles and the associated voltage rating shall be determined in the end use. (Dielectric testing has not been performed.)

Dielectric testing was performed on below connectors:

Cat. No.
Housing 8-735075-0 with Contacts 444334-x
Housing 8-735075-0 with Contacts 444335-x
Model 1969387-1 with Contacts 63306

Note - Housing 8-735075-0 represents Housing 6-735075-0

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12. 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.

Cat. No.	Raw Material Designation	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, °C
Housing 735075	---	0.48 mm	V-2	-	-	65	65
Overmold 1969375-1	---	2.34 mm	V-0	4	0	120	120
Housing 1969422-1	---	0.45 mm	V-0	-	-	65	65
Housing 1969437-1	---	0.72 mm	V-0	0	0	130	130
Housing 1969507-2, 2-480435-1	4	0.76 mm	V-0	4	2	150	150
Housing 1969507-3	1	0.76 mm	V-0	0	0	130	130
Housings 1969538-1, 1969547-1	7	0.76 mm	V-0	4	0	120	120
Housing 2-480435-2	---	0.76 mm	V-0	4	0	140	140
Housing 2-480435-3	---	0.76 mm	--(+)	1(++)	4(++)	240	240
H; connector Cat. Nos. 1969656-1, 1969657-1	D	0.76 mm	V-0	4	2	150	150
Housing 1969632-1	I		V-0	-	-	240	240
Connector Cat. Nos. 1969639-1 and 1969640-1	F	0.76 mm	V0	4	0	120	120
Housings 1969705-1, 1969706-1	1 J	0.76 mm	V-0	0	0	130	130
Housings 1969725-1, 1969843-1	D	0.64 mm	V-0	4	2	150	150
2133857-1		0.6mm	V2	4	0	105	105
2133857-3		0.6mm	V2 (++)	-- (++)	-- (++)	130 (++)	130 (++)
2133857-4		0.6mm	V2	--	--	65 (GENERIC)	65 (GENERIC)
Housings 1969843-1	N	0.64mm	V-0	0	0	150	150

Note

(+): Thickness is less than the minimum Recognized material thickness, as such no assigned Flame class. UL746C 12mm Flammability test conducted.

(++): These PLCs are based on the minimum Recognized material thickness.

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- A - 1. Dielectric strength (kV/mm): -
2. CTI: 2
- B - 1. Dielectric strength (kV/mm): -
2. CTI: 0
- C - 1. Dielectric strength (kV/mm): - 26
2. CTI: 1
- D - 1. Dielectric strength (kV/mm): - 14
2. CTI: 0
- E - 1. Dielectric strength (kV/mm): - 26
2. CTI: 1
- F - 1. Dielectric strength (kV/mm): - --
2. CTI: 0
- G - 1. Dielectric strength (kV/mm): - --
2. CTI: 2
- H - 1. Dielectric strength (kV/mm): - 21
2. CTI: 3
- I - 1. Dielectric strength (kV/mm): - 21
2. CTI: 3
- J - 1. Dielectric strength (kV/mm): - 26
2. CTI: 1
- K - 1. Dielectric strength (kV/mm): - --
2. CTI: 0
- L - 1. Dielectric strength (kV/mm): - 18
2. CTI: 1
- M - 1. Dielectric strength (kV/mm): - --
2. CTI: 2
- N - 1. Dielectric strength (kV/mm): - 20
2. CTI: 0**

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13. For Housings 8-735075-0 and 6-735075-0 with Contacts 444334-x or Contacts 444335-x, when conducting temperature test, each mating male contact was connected with two connectors, six connectors were tested in series and there are 40 in conductor lengths between each connector assembly. Repeat of temperature test shall be considered in the end product.
14. The Series Faston Dual Tab Connector, Cat. No. 1969375-1, is intended for use with mating connectors size .250 in.
15. Cat. Nos. 1969725-1, 1969843-1 employs the following contacts and intended tooling:

Contact	Wire Range - Cu str	Tooling
63477-1	16 - 20 AWG	Tooling: Ocean Applicator PN 2150007 Crimp height (in) (min/max wire range): 16AWG - .060 +-.002; 20AWG - .049+-.002
1742975-1	18 - 22 AWG	Tooling: Ocean Applicator 2150325 Crimp Height (in) (min/max wire range): 18AWG - .049+-.002; 22AWG - .039+-.002

The suitability of any other tooling shall be an end product consideration.