File E28476
SR9481720-T001

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REPORT

On

COMPONENT - CONNECTORS FOR USE IN
DATA, SIGNAL, CONTROL AND POWER APPLICATIONS

TYCO ELECTRONICS CORP
HARRISBURG PA 17111

DESCRIPTION

PRODUCT COVERED:

USR, CNR Component Connector, Cat. Nos. 2170007, 2170231, and 2322260, **maybe followed by prefix number from blank or 0 thru 9, maybe followed by suffix number from blank or 0 thru 9.**

Note: Base numbers add different prefix and/or suffix number, represent different package or position number or pin foot.

GENERAL:

These devices are multi-pole connectors intended for factory assembly on printed wiring boards where the acceptability of combinations is determined by Underwriters Laboratories Inc. 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. No.		Voltage	Ampere, A
2170007-2	DC Power	60 Vdc	20
	AC Power	300 Vac	18
	Signal	60 Vdc	1
	Low current power	60 Vdc	5
2170231-1, 2170231-2	DC Power	60 Vdc	20
	AC Power	300 Vac	18
	Signal	60 Vdc	1
	Low current power	60 Vdc	5
2322260	DC Power	60 Vdc	125(62.5 perside)
	AC Power	250 Vac	25(12.5 per side)
	Signal	60 Vdc	1

Disconnecting Use - see Sec Gen for required marking.

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 Underwriters Laboratories Inc.

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 suitable for interrupting the flow of current by connecting or disconnecting the mating connector. These devices have been tested for make-and-break cycles of interrupting a current by connecting and disconnecting the mating connector.

Cat. No.		Test rating	No. of Make-and-break cycles		Represent Cat. No.
			Overload	Resistance to Arcing	
2170007-2	DC Power	30A/60Vdc	50	200	2170231, **2170007**
	AC Power	27A/300Vac	50	200	

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. No.		Current, A	Maximum Temperature Rise, °C	Represent Cat. No.
2170007-2	DC Power	20	18.3	2170231, **2170007**
		30	25.4	
	AC Power	18	14.5	
	Signal	1	10.5	
	Low current power	5	15.7	
2322260	DC Power	125(62.5 per side	23.2	-
	AC Power	25(12.5 per side)	16.4	
	Signal	1	19.6	

Continued:

Cat No.		Current, A	Maximum Temperature Rise, °C	Represent Cat. No.
2170231-1	DC Power	30	8.6	2170231, 2170007
	AC Power	30	6.9	
	Signal	1	8.6	
	Low current power	5	6.9	

Insulating Materials

3. 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.	Insulating Material (#)	Measured Minimum Thickness	Flame Class	HWI	HAI	RTI Elec	Max Operating Temp, ^{0}C
2170007	A	0.60 mm	V-0	4	3	130	95
2170231	A	0.60 mm	V-0	4	3	130	95
2322260	B	0.45 mm	V-0	4	0	130	125

(#) - Code for Insulating Body Material.

A. **Tyco Electronics raw material Part No. 1573551**
1. Dielectric strength (kV/mm): -
2. CTI: 2

B. **Tyco Electronics raw material Part No. 1573878**
1. Dielectric strength (kV/mm): 39
2. CTI: 4

Terminations

4. The suitability of the quick-connect terminal for grounding shall be determined in the end-use.