DESCRIPTION

PRODUCT COVERED:

USR, CNR Component Connector, Industrial Mini I/O Header and Plug Connector, Industrial mini I/O Piercing Plug and Receptacle Connector Kit.

GENERAL:

These devices are multi-pole connectors intended for factory assembly 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:

Series		Voltage Vac/Vdc		Ampere (A)		Conductor Sizes, AWG Sol/Str
Industrial Mini I/O header and plug connector		**60**		0.5		26-22 AWG
Industrial mini I/O Piercing Plug and Receptacle Connector Kit		**60**		0.5		26-22 AWG, str

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 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. No(s).	Current, A	Maximum Temp. Rise, °C	Max Temp., °C
1-2040537-1 (representing 2040537-1, 2823991-1 and 1-2823991-1)	0.5	20.1	
1981080-1 (Represents 2823990-1)	0.5	21.5	
1971886-2 (representing 1971886-1)	0.5	25.4	
1971885-2 (representing 1971885-1)	0.5	26.2	
2013595-1 or -3, 2069250-1, **-3; 1-2069250-2**	0.5	25.5	
Receptacle Conn. Kit, 2201864, str/26AWG	0.5	3.1	28.1
Plug Conn. Kit, 2201855, str/26AWG	0.5	3.1	28.1

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, °C
Industrial Mini I/O header connector (1)	A	0.325mm (Header Connector) and 0.7mm (Plug)	(+)	- (++)	- (++)	110 (++)	85
1971886, 1971885	B	0.325	V0	-	-	130	130
Cat. Nos. 2201864, 2201855 (Sub Assy)	C		V-0	-	-	125 (++)	85
Cat. Nos. 2201864, 2201855 (Cable Hsg)	D		V-0	4	0	130	85
Cat. Nos. 2823990-1, 1-2823990-1, 823991-1, 1-2823991-1	E	0.325	V-0	-	-	130	130

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.

(#) - Code for Insulating Body Material.

A. Tyco Raw Material # 1573144 (color: Black)
Dielectric Strength: --
CTI: 1

B. Tyco Raw Material # 1573878
Dielectric Strength: 39
CTI: 4

C. Tyco Raw Material # 705367
Dielectric Strength: --
CTI: 1

D. Tyco Raw Material # 704654
Dielectric Strength: --
CTI: 1

E. Tyco Raw Material # 1573851
Dielectric Strength: --
CTI: 0

Note (1): All except for PNs 1971886, 1971885

Mating Connectors

4. These devices have only been assessed for use with specific types of connectors within their product family. They have not been assessed to operate with any other similar devices from any other manufacturer.

Miscellaneous

5. The enclosure of the device has live parts that may be exposed to user contact when the connector is energized. The device is suitable for use only within an acceptable enclosure.