

File E66717
Project 4786840699

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REPORT

on

COMPONENT - Electrical Quick-connect Terminals

TYCO ELECTRONICS CORP
MIDDLETOWN PA

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DESCRIPTION

PRODUCT COVERED:

USR, CNR Component Non-insulated quick-connect steel connectors for copper alloy tabs, Cat. Nos. 2178438-1, 2178299-1, 2178300-1, 2178439-1, 2178423-1.

GENERAL CHARACTER AND USE:

The products covered are non-insulated quick-connect connectors intended for factory termination of internal wiring of electrical equipment. They may be reel fed or loose piece. They are intended for assembly onto rated copper wire using specific tooling.

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

Products designated USR have been investigated using requirements contained in the Standard for Electrical Quick Connect Terminals, UL 310.

Products designated CNR have been investigated using requirements contained in CSA C22.2 No. 153-14.

Conditions of Acceptability -

These devices are for use only in (or with) complete equipment where the acceptability of the combination is determined by UL LLC.

These devices are not to be used for current interruption.

These devices are only for internal wiring in electrical equipment.

These devices are for use only in equipment where steel is acceptable for current-carrying parts.

RATINGS:

The nominal wire strip length is as tabulated below.

Cat. No.	Wire Range	Wire Strip Length
2178438-1	22-20 AWG	2.4 mm
2178299-1	20-18 AWG	2.4 mm
2178300-1	18 AWG	2.4 mm
2178439-1	16 AWG	9.5 mm
2178423-1	20-16 AWG	9.5 mm

The quick-connect connectors are for use on the following copper wire sizes, copper alloy production tabs, not covered by this Report, using the specified tooling.

Cat. No.	Wire Range	No. of Strands	Mates With Male Tabs - Size	Power Tooling (Die ID.)
2178438-1	22-20 AWG	#	6.3 x 0.8 mm	TYCO ELECTRONICS CORP, DT-5K (2150337-1)
2178299-1	20-18 AWG			TYCO ELECTRONICS CORP, DT-5K (2150340-1)
2178300-1	18 AWG			TYCO ELECTRONICS CORP, DT-5K (2150339-1)
2178439-1	16 AWG			TYCO ELECTRONICS CORP, DT-5K (2150336-1)
2178423-1	20-16 AWG			TYCO ELECTRONICS CORP, DT-5K (2150335-1)

- Number of strands for wire size (internal wiring):

Wire Size	Number of strands
22 AWG	7
20 AWG	10
18 AWG	16
16 AWG	26
14 AWG	41
12 AWG	65
10 AWG	105

MARKING:

Each connector is marked with the manufacturer's name or trademark.

The smallest container, reel or packaging are permanently marked with:

1. The Recognized, trade name or trademark.
2. Catalog number, model number or the equivalent.
3. Wire range.
4. A statement referring to the installation instructions containing the proper tooling to be used.
5. A statement indicating the connectors are for internal wiring of equipment.
6. Copper wiring only or equivalent wording.
7. Stranded or STR.
8. Strip length.

INSTRUCTIONS:

Installation instructions are provided and include the following:

1. Pressing die identified by catalog number.
2. Strip length.