

File E113407

January 15, 1988

REPORT

on

COMPONENT - Panelboard and Switchboard Accessories

Tyco Electronics Corp  
Harrisburg, PA

Copyright © 1988 Underwriters Laboratories Inc.

Underwriters Laboratories Inc. authorizes the above named company to reproduce this Report provided it is in its entirety.

Underwriters Laboratories Inc. authorizes the above named company to reproduce the latest pages of that portion of this Report consisting of this Cover Page through Page 1.

## DESCRIPTION

## PRODUCT COVERED:

Component Panelboard Accessories - Bus plug connectors - Series 125F, 125F2, 125F3, 062F, and 062F2.

Component Panelboard Accessories - Bus plug connectors - Cat. Nos. 2204080 and 2204273.

**Component Panelboard Accessories - Bus Plug Connectors - Series 2204761**

General - Series 125 connectors are intended to be mounted on either a printed wiring board or copper bus bars, 0.125 inches thick. They are intended to "plug" onto copper bus bars 0.125 inches thick.

Series 062 connectors are intended to be mounted and plugged into 0.062 in thick bus bars.

Cat. Nos. 2204080 and 2204273 are intended to be mounted and plugged into 3 mm thick bus bars.

**Series 2204761 are intended to be mounted and plugged into 3 mm thick bus bars.**

Ratings - These connectors are designed to carry the rated currents below at a voltage of 15 V dc max. The maximum working temperature is intended to be 125°C.

125F, 125F2 and 125F3 - 200 A max

062F and 062F2 - 100 A max

2204080 - 200 A max (54 VDC)

2204273 - 500 A max (54 VDC)

**2204761-1 - 300A max (54 VDC)**

**2204761-2 - 300A max (54 VDC)**

## CONDITIONS OF ACCEPTABILITY (NOT FOR FIELD REPRESENTATIVE USE):

Use - For use only in products where the acceptability of the combination is determined by Underwriters Laboratories Inc.

1. These devices are for factory installation only and should be mounted and enclosed in accordance with the end product requirements.
2. The 125F and F2 devices were temperature tested with 0.125 inch by 1.0 inch by 12 inch long silver plated copper bus bars, 062F bus bars were 0.062 by 1/2 by 12 in. The 125F connectors were connected via No. 2 AWG wire with crimp connectors. At 100 A, the maximum temperature was 34 °C on the wire and 32°C on plugs and bus, ambient 24°C, at 200 A, the maximum temperature was 49°C on the wire and 51°C on the bus, 55°C on stab at 24°C ambient. At 400 A, the maximum temperature was 140°C on the wire, 132°C on 125F finger and 105°C average on all other parts including the 125F2. The ambient temperature was 22°F at 100 A, the 062F temperatures were 51°C at stabs and bus with a 23°C ambient. The suitability of these temperatures must be considered in the end product. No other tests were conducted.
3. The suitability of these devices with printed wiring boards must be determined in the end product as appropriate.

\*

4. The need for additional tests must be determined in the end product.
5. Cat. No. 2204080 was temperature tested with 3 mm by 25 mm cross sectional area silver plated copper bus bars.
6. Cat. No. 2204273 was temperature tested with 3 mm by 45 mm cross sectional area silver plated copper bus bars.