2 POSITION POSITIVE LOCK HOUSINGS

For RF Series Relays

Designed for control board applications

PRODUCT DESCRIPTION

TE Connectivity (TE) introduces two-position housings for Positive Lock Mark I receptacle terminals. These housings provide insulation, allow the user to make two connections to the relay in one easy step, improve ergonomics, and can accommodate low insertion force, high retention force Positive Lock receptacles. The housings are specifically designed to accommodate the mating of 250 series Positive Lock Mark I receptacles with the vertical quick connect tabs of TE's SCHRACK RF series PC board relays in power switching, control board applications. By making two connections simultaneously, the housings allow OEMs to potentially speed an assembly step by a factor of two to one, while insulating the terminals and improving ergonomics for their workers.

KEY FEATURES

- Two position housings
- For use with RF series PC board relays having vertical tabs for load connections
- Electrically insulates terminals
- Large gripping, pushing surfaces for fingers
- Nylon 6/6 materials
- UL recognized, file E28476, for the U.S. and Canada when used with specified Positive Lock Mark I receptacles
- Offered in neutral, yellow, and black color keying (Other colors available on a special order basis for high volume requirements)

APPLICATIONS

- Control boards used in appliances
- Control boards used in HVAC systems
- Control boards used in industrial machinery
- Commercial electronics & communications

BASIC HOUSING DETAILS

- Positions: 2
- Material: Nylon 6/6
- Temperature Range: -40 to 105°C
- Agency approvals: UL Recognized when used with designated receptacle terminals
- UL Flammability Rating: 94 V-0
- Part numbers/colors: 1969717-5 Natural;1969717-6 Black;1969717-3 Yellow

BASIC RECEPTACLE DETAILS

- 250 series Positive Lock Mark I receptacles on wire are inserted into the housings
- These are low insertion force, straight, pre-tinned brass receptacles with a feature that locks onto the tab with a tactile and audible click for high retention force and secure power connections.

BASIC RF SERIES RELAYS DETAILS

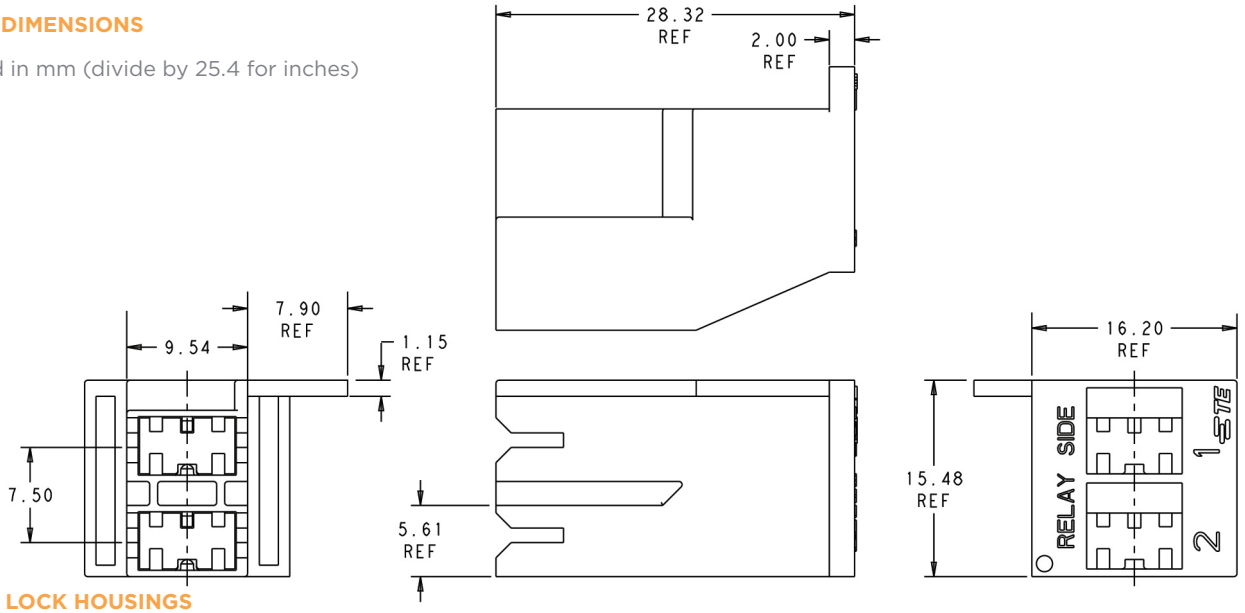
- These housings with inserted receptacles are designed to be plugged onto PC board mounted TE RF series relays with vertical quick connect tabs.

POSITIVE LOCK HOUSINGS

2 pos. Positive Lock Housings for RF Series Relays

OUTLINE DIMENSIONS

Expressed in mm (divide by 25.4 for inches)



POSITIVE LOCK HOUSINGS

Part Number	1969717-3	1969717-5	1969717-6
Color	Yellow	Natural	Black

These Positive Lock housings are compatible with the below .250 Positive Lock receptacles.

POSITIVE LOCK RECEPTACLES

Part Number	Series	Wire Size	Insulation Diameter (max.)
1-160759-1	.250	20-15 AWG (0.5- 1.5 mm^2)	0.13 in (3.3 mm)
154718-3	.250	18-14 AWG (0.8- 2.0 mm^2)	0.126 in (3.2 mm)
154717-3	.250	14-11 AWG (2.5- 4.00 mm^2)	0.169 in (4.3 mm)

These housings with inserted receptacles are designed to be plugged onto TE RF series relays with vertical quick connect tabs.

RF RELAYS

Part Number	Description
8-1415513-1	RF334012
7-1415517-1	RF334012WG
9-1415513-1	RF334024
8-1415517-1	RF334024WG
4-1415518-1	RF354012WG
3-1415520-1	RFH34006WG
6-1415510-1	RFH34012
5-1415520-1	RFH34012WG
1415511-1	RFH34024

Part Number	Description
6-1415520-1	RFH34024WG
9-1415520-1	RFH54005WG
1415521-1	RFH54006WG
1-1415521-1	RFH54009WG
6-1415511-1	RFH54012
2-1415521-1	RFH54012WG
2-1833005-3	RFH54015WG
3-1415521-1	RFH54024WG
3-1415530-1	RFJ34012

DESIGN-IN QUESTIONS

1. **Are you using TE's SCHRACK RF series relays or similar competitive relays with two, vertical 250 series quick connect tabs on 7.5mm centers, or are you developing harnesses to interface with such relays?**

   These new Positive Lock housings are designed specifically to work with the vertical tabs on TE's SCHRACK RF series relays. They may be suitable for use with similar relays from other manufacturers, too; however, testing should be done to verify applicability on other relays.

2. **Would you like to apply receptacles to both output terminals of those relays simultaneously?**

   These 2 position Positive Lock receptacles can potentially reduce the time required for this assembly step by 50%.

3. **Are you looking for a more ergonomic way to apply the receptacles to the output terminals?**

   With their large gripping and pushing surfaces, these housings represent a solution that is much more finger-friendly when making connections. Plus, Positive Lock Mark I receptacles are designed to have a low insertion force.

4. **Would you like to assure your connection is secure by using Positive Lock receptacles to prevent them from pulling off?**

   To reduce unwanted backout, Positive Lock Mark I receptacles incorporate a spring-loaded detent lever that locks the receptacle onto the tab with a mechanical snap you can both hear and feel. With their high retention force, these receptacles provide a reliable, easy-to-use solution for high-current applications.

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