

# POTTER & BRUMFIELD SOCKETS & ACCESSORIES, KUP RELAYS

## GENERAL PURPOSE ACCESSORIES

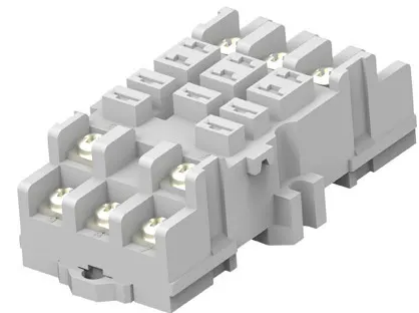
### INTRODUCTION

Relay accessories are devices to support the design and maintenance of relays in electrical circuits. This relay series include clips, mounting adapters and sockets. Mounting adapters provide adaptation between standard socket types. Sockets are used for relay mounting in configurations, including panel mount, PCB types and DIN rail and clips are used to secure the relay in the connector.



### FEATURES

- Sockets for 1 - 3 pole relays with .187" (4/75mm) quick connects
- Solder, PCB or screw terminal sockets
- Hold down springs
- Various mounting options



### APPROVALS

- UL E59244
- CSA LR15734



Technical data of approved types on request.

### TECHNICAL DATA

|                                    |                                           |
|------------------------------------|-------------------------------------------|
| Socket contact material            | Spring brass, tin plated                  |
| Socket body material               |                                           |
| Solder, PCB and QC terminal models | Nylon                                     |
| Screw terminal models - 3 pole     | Glass-filled polyester                    |
| Maximum current                    | 15A (300 VAC)<br>10A (300 VAC) for 27E893 |

# Potter & Brumfield Sockets & Accessories, KUP Relays

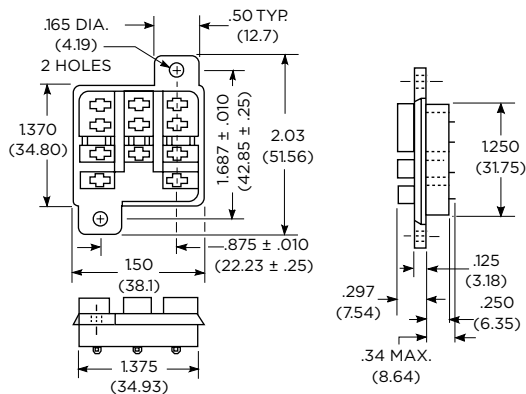
## DIMENSIONS: Inch(mm)

### Hard Mount Sockets For Relays Through 3 Poles

Sockets with .187" (4.75mm) quick connect, solder or printed circuit terminals are available for KUEP, KUL, KUMP and KUP relays, through 3 poles, with .187" (4.75mm) quick connect terminals.

27E043-with solder eyelet terminals.

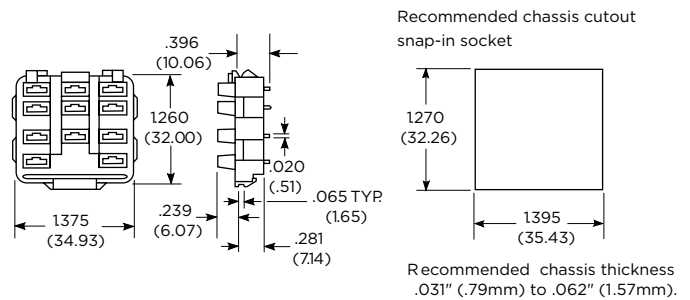
27E067-with .187" (4.75mm) quick connect terminals.



### Snap-in Socket For Relays Through 3 Poles

Socket with .187" (4.75mm) quick connect terminals is available for KUEP, KUL, KUMP and KUP relays, through 3 poles, with .187" (4.75mm) quick connect terminals.

27E396-with .187" (4.75mm) quick connect terminals.

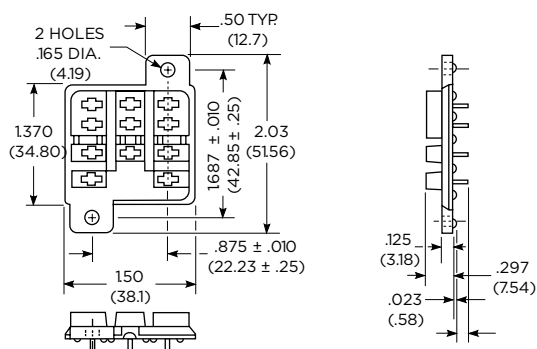


### PCB Hard Mount Sockets For Relays Through 3 Poles

Sockets with .144" (3.66mm) and .184" (4.67mm) long solder PCB/Solder terminals are available for KUEP, KUL, KUMP and KUP relays,

27E046-with .144" (3.66mm) long PCB/Solder terminals.

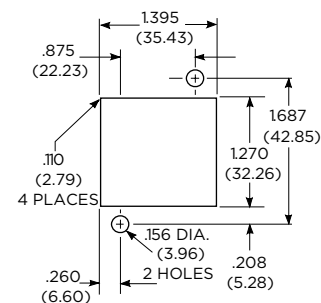
27E305-with .184" (4.67mm) long PCB/Solder terminals.



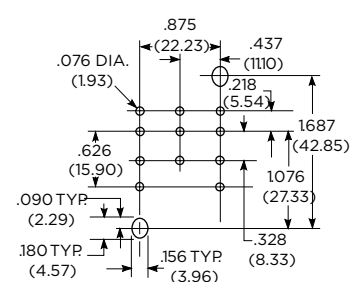
### Caution:

Printed circuit sockets are manufactured with "floating" (Loose) terminals. This permits them to align with holes in the circuit board and with the relay terminals. During the mounting and soldering of the socket, vertical float should be eliminated and the terminals seated on the board. (This may be accomplished by inserting a dummy relay in the socket.) Failure to eliminate float may cause fracture of the solder joint or separation of the copper conductor from the printed circuit board when a relay is inserted in the socket after soldering.

Recommended chassis cutout  
for solder terminal socket



PCB layout for 3 pole PCB  
terminal socket

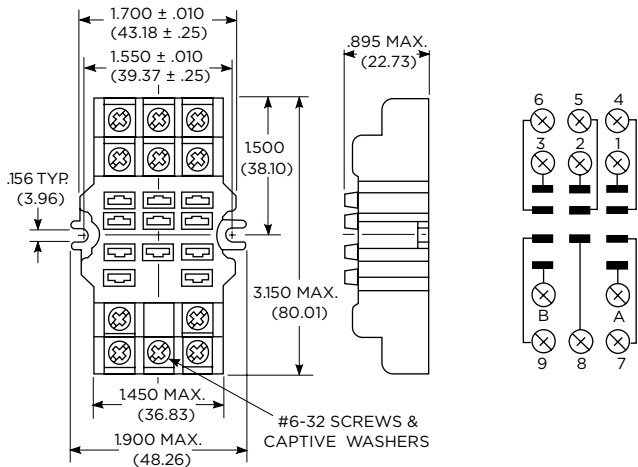


Recommended Chassis Thickness  
.031 (.79) to .062 (1.57)

Potter & Brumfield  
Sockets & Accessories, KUP Relays

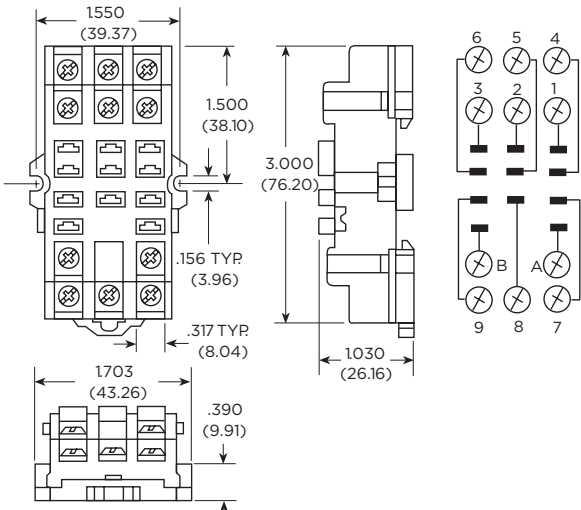
Screw terminal socket for relays through 3 poles 27E121

Offers screw termination for KUEP, KUL, KUMP and KUP relays, through 3 poles, with .187" (4.75mm) quick connect terminals. This socket stacks on 1.700" (43.18mm) centers. When surface mounting, two #6-32 screws of suitable length are required. When track mounting, two 24A071 retainer clips (not shown) are required.



Screw terminal, DIN rail, snap-mount socket 27E893

Offers screw termination for KUEP, KUL, KUMP and KUP relays, through 3 poles, with .187" (4.75mm) quick connect terminals. This socket is constructed with a spring-loaded latch which allows it to be quickly snapped onto or removed from a DIN or "top hat" style mounting track. No special tools or extra hardware is required for installation.



ORDERING CODE FOR SOCKETS

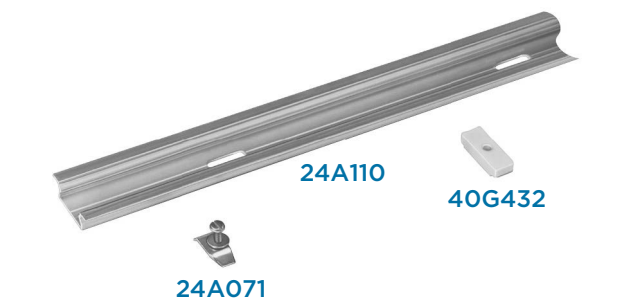
| Product Code | Poles | Terminal type                  | Mounting   | Rating | Part number |
|--------------|-------|--------------------------------|------------|--------|-------------|
| 27E043       | 3     | Solder eyelet                  | Hard mount | 15A    | 1393143-1   |
| 27E067       | 3     | .187 in (4.75) quick connect   | Hard mount | 15A    | 1393143-2   |
| 27E046       | 3     | PCB/Solder .144 in (3.66) long | Hard mount | 15A    | 1419106-4   |
| 27E305       | 3     | PCB/Solder .184 in (4.67) long | Hard mount | 15A    | 3-1393143-2 |
| 27E396       | 3     | .187 in (4.75) quick connect   | Snap-in    | 15A    | 3-1393143-8 |
| 27E121       | 3     | Screw                          | Panel/rail | 15A    | 1393143-5   |
| 27E893       | 3     | Screw                          | DIN-rail   | 10A*   | 2-1419106-5 |

All accessories must be ordered separately.

Recommended installation torque for terminal screws is 7.5 in-lb.

\*Rating is per pole with a maximum total rating per device of 20 A, 300 V or 30 A, 150 V.

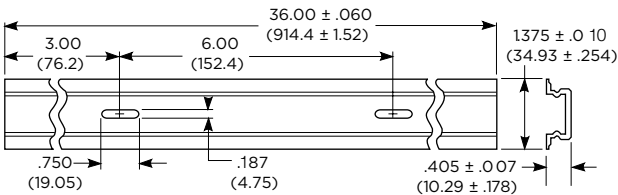
## TRACK AND MOUNTING ACCESSORIES



### DIMENSIONS: Inch(mm)

#### 24A110 DIN rail style mounting track

24A110 mounting track is designed to accept snap-mount sockets, as well as other P&B screw terminal sockets. Track is made of lightweight, sturdy extruded aluminum and is shipped in three-foot (914cm) lengths with mounting holes on six-inch (152mm) centers. Track can be cut to shorter lengths or used end-to-end.



#### End Clip

24A071 steel mounting clip with one #6-32 screw 7/16" (11.1 mm ) long is used with a 40G432 insulator to prevent sockets form moving sideways or sliding off the end of the track.

## ORDERING CODE FOR ACCESSORIES

| Product Code | Terminal type                                                                                                       | Part number |
|--------------|---------------------------------------------------------------------------------------------------------------------|-------------|
| 20C254       | Snap-in relay hold down spring for use with all KUP sockets listed on these pages except 27E396 ,27E121 and 27E893. | 3-1393159-9 |
| 20C228       | Relay hold down spring for use with hard mount KUP sockets. Is held in place by socket mounting hardware.           | 1419111-3   |
| 20C318       | Relay hold down spring for use with 27E893 DIN rail screw terminal socket                                           | 4-1393159-8 |
| 20C314       | Relay hold down clip for use with 27E121 screw terminal socket. 2 required per socket.                              | 4-1393159-6 |
| 24A110       | Mounting track                                                                                                      | 1419111-6   |
| 24A071       | Steel mounting clip with #6-32 screw - use with 27E166 on 24A110 track                                              | 1419111-5   |
| 40G432       | Plastic insulator - use with 24A071 to make end clip for 24A110 track                                               | 9-1393159-5 |

All accessories must be ordered separately.

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