

R10-E1Y2-V185

✓ ACTIVE

Potter & Brumfield | Potter & Brumfield R10

TE Internal #: 4-1393766-0

General Purpose Signal Relay, DC, Monostable, 2 Form C DPDT-CO, 3 A Contact Rating, 12 VDC Coil Voltage, Potter & Brumfield R10

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Relays & Contactors > Electromechanical Relays



Relay & Contactor Type: **General Purpose Signal Relay**

Current Type: **DC**

Coil Magnetic System: **Monostable**

Contact Arrangement: **2 Form C DPDT-CO**

Contact Current Rating: **3 A**

Features

Product Type Features

|                        |                              |
|------------------------|------------------------------|
| Relay & Contactor Type | General Purpose Signal Relay |
|------------------------|------------------------------|

Configuration Features

|                         |                   |
|-------------------------|-------------------|
| Contact Number of Poles | 2                 |
| Coil Special Features   | Sensitive Version |
| Contact Arrangement     | 2 Form C DPDT-CO  |

Electrical Characteristics

|                                                         |             |
|---------------------------------------------------------|-------------|
| Contact Limiting Short-Time Current                     | 3 A         |
| Contact Limiting Making Current                         | 3 A         |
| Contact Limiting Continuous Current                     | 3 A         |
| Contact Limiting Breaking Current                       | 3 A         |
| Insulation Initial Dielectric Between Open Contacts     | 500 Vrms    |
| Insulation Initial Dielectric Between Adjacent Contacts | 1000 Vrms   |
| Contact Switching Load (Min)                            | 100mA @ 12V |
| Coil Resistance                                         | 185 Ω       |
| Insulation Initial Resistance                           | 10000 MΩ    |
| Contact Current Rating                                  | 3 A         |
| Coil Voltage Rating                                     | 12 VDC      |
| Contact Voltage Rating                                  | 120 VAC     |



|                      |      |
|----------------------|------|
| Coil Power Rating DC | .9 W |
|----------------------|------|

|                                                       |           |
|-------------------------------------------------------|-----------|
| Insulation Initial Dielectric Between Contacts & Coil | 1000 Vrms |
|-------------------------------------------------------|-----------|

Body Features

|                |               |
|----------------|---------------|
| Product Weight | 40 g[1.41 oz] |
|----------------|---------------|

|                |                |
|----------------|----------------|
| Enclosure Type | Dust Protected |
|----------------|----------------|

Contact Features

|                  |    |
|------------------|----|
| Contact Material | Ag |
|------------------|----|

Termination Features

|                                    |                          |
|------------------------------------|--------------------------|
| Main Termination & Connection Type | Solder/Plug-In Terminals |
|------------------------------------|--------------------------|

|                                    |                          |
|------------------------------------|--------------------------|
| Coil Termination & Connection Type | Solder/Plug-In Terminals |
|------------------------------------|--------------------------|

Mechanical Attachment

|                               |                |
|-------------------------------|----------------|
| Product Mounting Feature Type | Mounting Studs |
|-------------------------------|----------------|

|                    |                      |
|--------------------|----------------------|
| Product Mount Type | Panel & Socket Mount |
|--------------------|----------------------|

Dimensions

|               |                   |
|---------------|-------------------|
| Product Width | 18.66 mm[.734 in] |
|---------------|-------------------|

|                |                  |
|----------------|------------------|
| Product Length | 24.13 mm[.95 in] |
|----------------|------------------|

|                |                   |
|----------------|-------------------|
| Product Height | 29.97 mm[1.17 in] |
|----------------|-------------------|

Usage Conditions

|                             |                           |
|-----------------------------|---------------------------|
| Operating Temperature Range | -55 – 75 °C[-67 – 167 °F] |
|-----------------------------|---------------------------|

|                                      |     |
|--------------------------------------|-----|
| Environmental Category of Protection | RTI |
|--------------------------------------|-----|

|                                         |               |
|-----------------------------------------|---------------|
| Environmental Ambient Temperature (Max) | 75 °C[167 °F] |
|-----------------------------------------|---------------|

Operation/Application

|              |    |
|--------------|----|
| Current Type | DC |
|--------------|----|

|                      |            |
|----------------------|------------|
| Coil Magnetic System | Monostable |
|----------------------|------------|

Packaging Features

|                  |         |
|------------------|---------|
| Packaging Method | Package |
|------------------|---------|

Other

|                         |          |
|-------------------------|----------|
| Coil Power Rating Class | .8 – 1 W |
|-------------------------|----------|

|                       |      |
|-----------------------|------|
| Contact Current Class | 16 A |
|-----------------------|------|

|                                         |            |
|-----------------------------------------|------------|
| Environmental Ambient Temperature Class | 70 – 85 °C |
|-----------------------------------------|------------|

|                           |            |
|---------------------------|------------|
| Height Class (Mechanical) | 30 – 40 mm |
|---------------------------|------------|

|  |  |
|--|--|
|  |  |
|--|--|



|                           |            |
|---------------------------|------------|
| Length Class (Mechanical) | 25 – 30 mm |
| Width Class (Mechanical)  | 16 – 20 mm |

Product Compliance

For compliance documentation, visit the product page on TE.com>

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EU RoHS Directive 2011/65/EU                  | Compliant with Exemptions                                                                                                                                                                                                                                                                                                                                                                                              |
| EU ELV Directive 2000/53/EC                   | Compliant with Exemptions                                                                                                                                                                                                                                                                                                                                                                                              |
| China RoHS 2 Directive MIIT Order No 32, 2016 | Restricted Materials Above Threshold                                                                                                                                                                                                                                                                                                                                                                                   |
| EU REACH Regulation (EC) No. 1907/2006        | Current ECHA Candidate List: JAN 2025 (247)<br>Candidate List Declared Against: JAN 2025 (247)<br>SVHC > Threshold:<br>Pb (3.7% in 74019790)<br><b>Article Safe Usage Statements:</b><br>Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Recycle if possible and dispose of the article by following all applicable governmental regulations relevant to your geographic location. |
| Halogen Content                               | Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free                                                                                                                                                                                                                                                                                                                                    |
| Solder Process Capability                     | Not applicable for solder process capability                                                                                                                                                                                                                                                                                                                                                                           |

Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked. Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulation, the information TE provides on SVHC in articles for this part number is based on the latest European Chemicals Agency (ECHA) ‘Guidance on requirements for substances in articles’ posted at this URL: <https://echa.europa.eu/guidance-documents/guidance-on-reach>

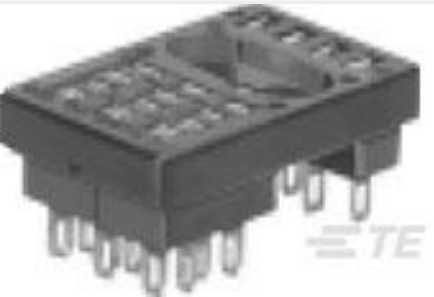
Compatible Parts



TE Part # 1393143-8  
27E125=SOCKET,R10,10,SLG,PHE



TE Part # 4-1393143-1  
27E446=SOCKET,R10,2POLE,FLG-MNT,SOLDER



TE Part # 3-1393143-4  
27E317=SOCKET,R10,2POLE,W/BRACKET



Also in the Series

Potter & Brumfield R10

Board-to-Board Headers & Receptacles(1)

PCB Headers & Receptacles(1)

PCB Relays(28)

Relay Accessories(27)

Customers Also Bought

TE Part #1-1437624-5  
PKA70B1/4=KNOB PLASTIC 1/4 IN

TE Part #1393766-9  
R10-E1X2-V700=R10

TE Part #1419106-4  
27E046=SOCKET,KU,11,PCB,NYL,NAT

TE Part #2-1393249-1  
W58-XB1A4A-7=W58

TE Part #3-1393159-9  
20C254=SPRING,HOLD-DOWN,KUP,0

TE Part #1393143-8  
27E125=SOCKET,R10,10,SLG,PHE

TE Part #4-1437558-3  
MTA406N=(MSTA) SW TOG 4PDT

TE Part #5053142385  
RNF-100-3/8-BK-STK

TE Part #YCTL-20C0150000000  
JUNCTION ASSY

TE Part #862779-000  
382A012-15-CS-2067-0

Documents

- CAD Files
- Customer View Model
- ENG\_CVM\_CVM\_4-1393766-0\_A.2d\_dxf.zip
- English
- 3D PDF
- 3D
- Customer View Model



[ENG\\_CVM\\_CVM\\_4-1393766-0\\_A.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_4-1393766-0\\_A.3d\\_stp.zip](#)

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

Datasheets & Catalog Pages

[R10 General Purpose Dry Circuit to 7.5 Amp Multicontact AC or DC Relay](#)

English

Product Specifications

[Definitions General Purpose Relays](#)

English

Agency Approvals

[CSA Certificate](#)

English