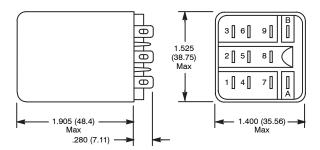
#### **Features**

- Magnetic Latching
- Solder/Plug-In
- .187" (4.75mm) Quick Connect Terminals
- SPDT or DPDT
- Dual Coil Version "C" Suffix
- Non-Mechanical Latches



#### **D50**



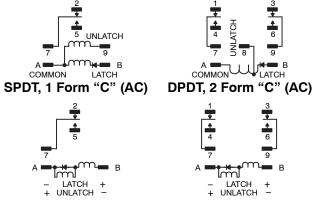
| AC OPERATED   |               |                 |  |               |   |             |  |  |
|---------------|---------------|-----------------|--|---------------|---|-------------|--|--|
| NTE Type No.  | Nom.<br>Volt. | Contact<br>Arr. | Coil Res.<br>Latch/Unlatch<br>Ohms (Typ) | Nom.<br>Power | Max.<br>Contact<br>Cur. @<br>28VDC<br>or 120VAC | Diag<br>No. |  |  |
| R50-5A10-120  | 120VAC        | SPDT            | 2090/17430                               | 1.7VA         | 10A   | D50         |  |  |
| R50-11A10-120 | 120VAC        | DPDT            | 2090/17430                               | 1.7VA         | 10A   | D50         |  |  |
| DC OPERATED   |               |                 |  |               |   |             |  |  |
| R50-5D10-24   | 24VDC         | SPDT            | 472/1152                                 | 1.2W          | 10A   | D50         |  |  |
| R50-11D10-12  | 12VDC         | DPDT            | 120/275                                  | 1.2W          | 10A   | D50         |  |  |
| R50-11D10-12C | 12VDC         | DPDT            | 88/275                                   | 1.2W          | 10A   | D50         |  |  |
| R50-11D10-24  | 24VDC         | DPDT            | 472/1152                                 | 1.2W          | 10A   | D50         |  |  |
| R50-11D10-24C | 24VDC         | DPDT            | 330/1070                                 | 1.2W          | 10A   | D50         |  |  |

| ACCESSORIES                      |              |                 |  |  |  |
|----------------------------------|--------------|-----------------|--|--|--|
| MOUNTING<br>STYLES               | DESCRIPTION  | NTE<br>TYPE NO. |  |  |  |
| SURFACE MOUNT<br>SCREW TERMINALS | 11-PIN BLADE | R95–105         |  |  |  |
| PANEL MOUNT<br>SOLDER TERM       | 11-PIN BLADE | R95–116         |  |  |  |
| PANEL MOUNT<br>QUICK CONNECT     | 11-PIN BLADE | R95–124         |  |  |  |
| DIN RAIL MOUNT                   | 11-PIN BLADE | R95-115         |  |  |  |
| PC MOUNT                         | 11-PIN BLADE | R95-123         |  |  |  |

# **R50 Series**



# AC and DC Magnetic Latching Industrial Relay for Industrial Controls, Instrumentation.



SPDT, 1 Form "C" (DC) DPDT, 2 Form "C" (DC)



DPDT, 2 Form "C" (DC) Dual Coil

# **Operational Information**

Magnetic latching is achieved by a specially designed magnetic core that makes it possible to maintain a substantial magnetic force of attraction after termination of the electrical pulse that energizes the core. There are no mechanical latches associated with this relay, nor permanent magnets. To restore the relay to its unoperated position, a short pulse of opposite polarity and lower magnitude than the operate pulse is applied to the coil or a second concentric wound coil.

# **Electrical Specifications**

#### Contact

Rating: 10 Amp @ 28VDC/120/240 VAC

1/3HP @ 120VAC,

1/2HP @ 240/480/600VAC

Material: 3/16" Silver Cadmium Oxide

Coil

Coil Voltages: See Chart

Pick-up Voltages: 85% of nominal Coil Vitg. (AC)

75% of nominal Coil VItg. (DC)

**Duty Cycle:** Continuous duty operation at 25% overvoltage

Resistance: See Chart

## **Operational Characteristics**

Timing Values:

Operate Time: 15ms Nominal, 20ms Max Release Time: 6ms Nominal, 10ms Max

## **Insulation Characteristics**

Dielectric Breakdown: >750VAC RMS across open contacts

>2500VAC RMS all other mutually

insulated elements

### **Environmental Characteristics**

Operating:  $-45^{\circ}$ C to  $+60^{\circ}$ C

Life

Mechanical: 10 million operations

Weight

Std: 3.0 oz (84 grams) approx