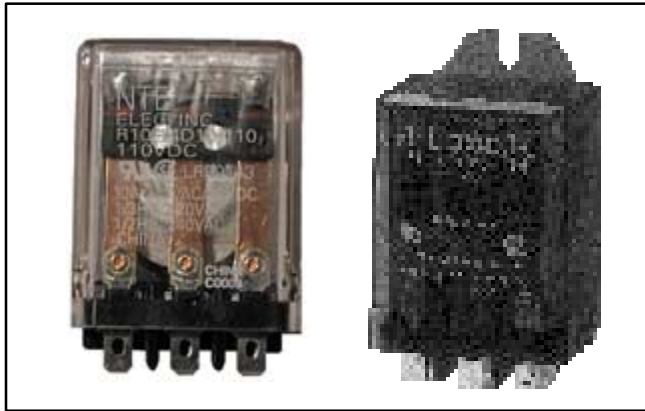


## Features

- .187" (4.75mm) 3-Way Terminals Suitable for Plug-In, Solder and Quick Connect
- SPDT, DPDT & 3PDT
- Clear See-Thru Cover
- Flange Mount Versions (F-suffix)
- Push-to-Test Button Types (B-suffix)
- Indicator Lamp Types (N-suffix)



## AC OPERATED

| NTE Type No.   | Nom. Voltage | Contact Arr. | Coil Res. Ohms (Typ) | Nom. Power | Max. Contact Cur. @ 28VDC or 120VAC | Diag No. |
|----------------|--------------|--------------|----------------------|------------|-------------------------------------|----------|
| R10-5A10-12    | 12VAC        | SPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-5A10-12B   | 12VAC        | SPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-5A10-12F   | 12VAC        | SPDT         | —                    | 2.0VA      | 10A                                 | D7B      |
| R10-5A10-12N   | 12VAC        | SPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-5A10-24    | 24VAC        | SPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-5A10-24B   | 24VAC        | SPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-5A10-24F   | 24VAC        | SPDT         | —                    | 2.0VA      | 10A                                 | D7B      |
| R10-5A10-24N   | 24VAC        | SPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-5A10-120   | 120VAC       | SPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-5A10-120B  | 120VAC       | SPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-5A10-120F  | 120VAC       | SPDT         | —                    | 2.0VA      | 10A                                 | D7B      |
| R10-5A10-120N  | 120VAC       | SPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-11A10-12   | 12VAC        | DPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-11A10-12B  | 12VAC        | DPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-11A10-12F  | 12VAC        | DPDT         | —                    | 2.0VA      | 10A                                 | D7B      |
| R10-11A10-12N  | 12VAC        | DPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-11A10-24   | 24VAC        | DPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-11A10-24B  | 24VAC        | DPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-11A10-24F  | 24VAC        | DPDT         | —                    | 2.0VA      | 10A                                 | D7B      |
| R10-11A10-24N  | 24VAC        | DPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-11A10-120  | 120VAC       | DPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-11A10-120B | 120VAC       | DPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-11A10-120F | 120VAC       | DPDT         | —                    | 2.0VA      | 10A                                 | D7B      |
| R10-11A10-120N | 120VAC       | DPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-11A10-240  | 240VAC       | DPDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-14A10-12   | 12VAC        | 3PDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-14A10-12B  | 12VAC        | 3PDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-14A10-12F  | 12VAC        | 3PDT         | —                    | 2.0VA      | 10A                                 | D7B      |
| R10-14A10-12N  | 12VAC        | 3PDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-14A10-24   | 24VAC        | 3PDT         | —                    | 2.75VA     | 10A                                 | D7A      |
| R10-14A10-24B  | 24VAC        | 3PDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-14A10-24F  | 24VAC        | 3PDT         | —                    | 2.75VA     | 10A                                 | D7B      |
| R10-14A10-24N  | 24VAC        | 3PDT         | —                    | 2.0VAC     | 10A                                 | D7A      |
| R10-14A10-120  | 120VAC       | 3PDT         | —                    | 2.75VA     | 10A                                 | D7A      |
| R10-14A10-120B | 120VAC       | 3PDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-14A10-120F | 120VAC       | 3PDT         | —                    | 2.75VA     | 10A                                 | D7B      |
| R10-14A10-120N | 120VAC       | 3PDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-14A10-240  | 240VAC       | 3PDT         | —                    | 2.75VA     | 10A                                 | D7A      |
| R10-14A10-240B | 240VAC       | 3PDT         | —                    | 2.0VA      | 10A                                 | D7A      |
| R10-14A10-240F | 240VAC       | 3PDT         | —                    | 2.0VA      | 10A                                 | D7B      |
| R10-14A10-240N | 240VAC       | 3PDT         | —                    | 2.0VA      | 10A                                 | D7A      |

# R10 Series



## General Purpose, 10 Amp AC & DC Relays.

### DC OPERATED

| NTE Type No.  | Nom. Voltage | Contact Arr. | Coil Res. Ohms (Typ) | Nom. Power | Max. Contact Cur. @ 28VDC or 120VAC | Diag No. |
|---------------|--------------|--------------|----------------------|------------|-------------------------------------|----------|
| R10-5D10-12   | 12VDC        | SPDT         | 120                  | 1.2W       | 10A                                 | D7A      |
| R10-5D10-12B  | 12VDC        | SPDT         | 120                  | 1.2W       | 10A                                 | D7A      |
| R10-5D10-12F  | 12VDC        | SPDT         | 120                  | 1.2W       | 10A                                 | D7B      |
| R10-5D10-12N  | 12VDC        | SPDT         | 120                  | 1.2W       | 10A                                 | D7A      |
| R10-5D10-24   | 24VDC        | SPDT         | 470                  | 1.2W       | 10A                                 | D7A      |
| R10-5D10-24B  | 24VDC        | SPDT         | 470                  | 1.2W       | 10A                                 | D7A      |
| R10-5D10-24F  | 24VDC        | SPDT         | 470                  | 1.2W       | 10A                                 | D7B      |
| R10-5D10-24N  | 24VDC        | SPDT         | 470                  | 1.2W       | 10A                                 | D7A      |
| R10-11D10-12  | 12VDC        | DPDT         | 120                  | 1.2W       | 10A                                 | D7A      |
| R10-11D10-12B | 12VDC        | DPDT         | 120                  | 1.2W       | 10A                                 | D7A      |
| R10-11D10-12F | 12VDC        | DPDT         | 120                  | 1.2W       | 10A                                 | D7B      |
| R10-11D10-12N | 12VDC        | DPDT         | 120                  | 1.2W       | 10A                                 | D7A      |
| R10-11D10-24  | 24VDC        | DPDT         | 470                  | 1.2W       | 10A                                 | D7A      |
| R10-11D10-24B | 24VDC        | DPDT         | 470                  | 1.2W       | 10A                                 | D7A      |
| R10-11D10-24F | 24VDC        | DPDT         | 470                  | 1.2W       | 10A                                 | D7B      |
| R10-11D10-24N | 24VDC        | DPDT         | 470                  | 1.2W       | 10A                                 | D7A      |
| R10-11D10-110 | 110VDC       | DPDT         | 10K                  | 1.2W       | 10A                                 | D7A      |
| R10-14D10-12  | 12VDC        | 3PDT         | 120                  | 1.2W       | 10A                                 | D7A      |
| R10-14D10-12B | 12VDC        | 3PDT         | 120                  | 1.2W       | 10A                                 | D7A      |
| R10-14D10-12F | 12VDC        | 3PDT         | 120                  | 1.2W       | 10A                                 | D7B      |
| R10-14D10-12N | 12VDC        | 3PDT         | 120                  | 1.2W       | 10A                                 | D7A      |
| R10-14D10-24  | 24VDC        | 3PDT         | 470                  | 1.2W       | 10A                                 | D7A      |
| R10-14D10-24B | 24VDC        | 3PDT         | 470                  | 1.2W       | 10A                                 | D7A      |
| R10-14D10-24F | 24VDC        | 3PDT         | 470                  | 1.2W       | 10A                                 | D7B      |
| R10-14D10-24N | 24VDC        | 3PDT         | 470                  | 1.2W       | 10A                                 | D7A      |
| R10-14D10-110 | 110VDC       | 3PDT         | 10K                  | 1.2W       | 10A                                 | D7A      |

## Electrical Specifications

### Contact

#### Contact Rating

| Relay Type     | Poles     | 120VAC       | 240VAC       | 28VDC |
|----------------|-----------|--------------|--------------|-------|
| Standard       | SPDT      | 10A (1/3 HP) | 10A (1/2 HP) | 10A   |
|                | DPDT      | 12A (1/3 HP) | 12A (1/2 HP) | 12A   |
|                | 3PDT      | 11A (1/2 HP) | 11A (1/2 HP) | 11A   |
| Flange Mount   | SPDT      | 10A (1/3 HP) | 10A (1/2 HP) | 10A   |
|                | DPDT      | 12A (1/3 HP) | 12A (1/2 HP) | 12A   |
|                | 3PDT      | 11A (1/2 HP) | 11A (1/2 HP) | 11A   |
| Push Button    | All Types | 10A          | 10A          | 10A   |
| Indicator Lamp | All Types | 10A          | 10A          | 10A   |

Contact Material: 3/16" Silver cadmium oxide

### Coil

Coil Voltages: See Chart

Pick-up Voltage:

75% of nominal or less for DC relays @ 25°C

85% of nominal or less for AC relays @ 25°C

Resistance: See chart

Min Sensitivity: 250 (DPDT), 375 (3PDT) mW per pole

Duty Cycle: Continuous

### Operational Characteristics

Timing Values . . . . Operate Time: 15ms (SPDT)  
20 mS (DPDT),  
24 mS (3PDT) } at nominal coil voltage

Release Time: 10ms (SPDT)  
28 mS (DPDT),  
26 mS (3PDT)

# R10 Series (Continued)

## Electrical Specifications (Cont'd)

### Insulation Characteristics

Dielectric Strength

Contact To Coil: 2000 VRMS  
 Across Open Contacts: 500 VRMS  
 Pole to Pole: 2000 VRMS  
 Contact To Frame: 2000 VRMS

### Environmental Characteristics

Operating: -30°C to +50°C (AC), -30°C to +65°C (DC)

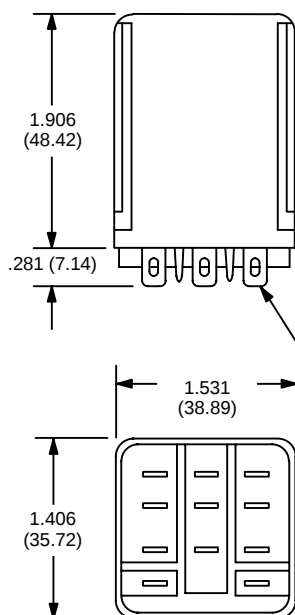
Non-operating (storage): -30°C to +100°C

### Weight

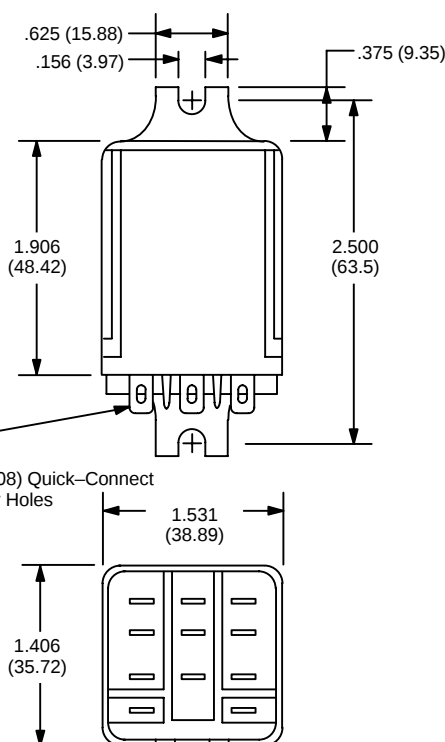
Std: 3.1 ozs (88 grams)—approx

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

### D7A Standard Cover



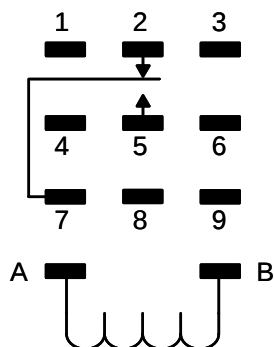
### D7B Flange Cover



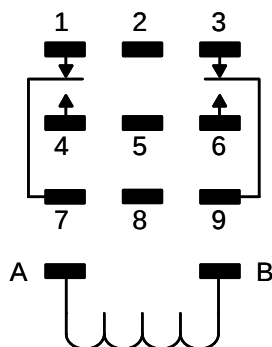
.187 (4.75) x .020 (.508) Quick-Connect  
Terminals with Solder Holes

**Note:** Models with "N" suffix will have indicator lamp connected across coil.

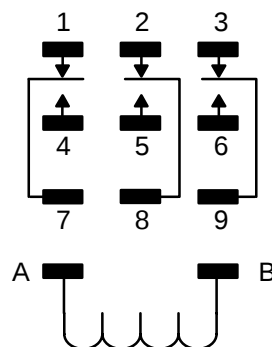
### SPDT, 1 Form "C"



### DPDT, 2 Form "C"



### 3PDT, 3 Form "C"



Schematic Diagrams Viewed from Terminal End