



## UL CONTACT LOAD RATINGS TABLE

| CONTACT MATERIAL | TYPE  | LOAD       | VOLTAGE                          |
|------------------|-------|------------|----------------------------------|
| SILVER           | 3AMP  | 3 AMP      | 28 VDC, 120 VAC                  |
|                  |       | 15 AMP     | 28 VDC, 150 VAC, N. O. ONLY      |
| SILVER ALLOY     | 5AMP  | 5 AMP      | 28 VDC, 120 VAC                  |
|                  |       | TV-3       | 120 VAC                          |
|                  |       | PILOT DUTY | B300 ( 120/240 VAC)              |
| SILVER ALLOY     | 10AMP | 10 AMP     | 120/240 VAC                      |
|                  |       | 10AMP      | 28 VDC                           |
|                  |       | 10AMP      | 277 VAC                          |
|                  |       | 1/3 HP     | 120 VAC                          |
|                  |       |            | 240 VAC, N. O. ONLY              |
|                  |       | 1/8 HP     | 277 VAC, N. C. ONLY              |
|                  |       | TUNGSTEN   | 2 AMP, 240W, 120 VAC, N. C. ONLY |
|                  |       |            | 5 AMP, 600W, 120 VAC, N. O. ONLY |
|                  |       | 1/4 HP     | 277 VAC, N. O. ONLY              |
|                  |       | BALLAST    | 1.7 AMP @ 277 VAC                |
|                  |       | 1/6 HP     | 120/240 VAC, N. C. ONLY          |
|                  |       | 15 AMP     | 28 VDC, 150 VAC, N. O. ONLY      |
|                  |       | 480 VAC    | 2 AMP MAX, 240/270 VAC           |
|                  |       | PILOT DUTY | B300 ( 120/240 VAC)              |
|                  |       | TV-5       | 120 VAC, N. O. ONLY              |
|                  |       | TV-3       | 120 VAC                          |

**MANUFACTURED  
UNDER  
ISO 9002  
& QS 9000**

## GENERAL SPECIFICATIONS (@ 25°C)

|                                  | UNITS                       |                                |
|----------------------------------|-----------------------------|--------------------------------|
| <b>COIL</b>                      |                             |                                |
| Pull-in Voltage AC (50/60 Hz):≤  | % of nominal                |                                |
| Pull-in Voltage DC:≤             | % of nominal                | Not applicable                 |
| Dropout Voltage AC (50/60 Hz):≥  | % of nominal                | 80                             |
| Dropout Voltage DC:≥             | % of nominal                | Not applicable                 |
| Maximum Voltage:                 | % of nominal                | 10                             |
| Resistance:                      | % ±                         | 120                            |
| Coil Power AC (60 Hz):           | VA                          | 10                             |
| Coil Power DC:                   | W                           | Not applicable                 |
| Duty:                            |                             | 0.4<br>Continuous              |
| <b>CONTACTS</b>                  |                             |                                |
| Contact Material:                |                             |                                |
| Contact Rating AC Amperes (AC1): | A                           | Silver gold clad plated/silver |
| Contact Rating AC Voltage:       | V                           | 3 / 5 / 10                     |
| Contact Rating DC Amperes (DC1): | A                           | 120 / 120 / 270                |
| Contact Rating DC Voltage:       | V                           | 3 / 5 / 10                     |
| Horse Power (AC):                | Hp                          | 28 / 28 / 28                   |
| Pilot Duty (60 Hz):              |                             | 1/3 @ 120<br>B300              |
| <b>TIMING</b>                    |                             |                                |
| Operate Time:                    | ms                          |                                |
| Release Time:                    | ms                          | 10<br>7                        |
| <b>DIELECTRIC STRENGTH</b>       |                             |                                |
| Coil to Contacts:                | V rms                       |                                |
| Across Open Contacts:            | V rms                       | 1500                           |
| Pole to Pole:                    | V rms                       | 500                            |
| Contacts to Frame:               | V rms                       | 1500                           |
| Insulation Resistance:           | megohms<br>minimum<br>@ VDC | Not applicable<br>1000 @ 500   |



|                                | UNITS      |                             |
|--------------------------------|------------|-----------------------------|
| <b>VIBRATION RESISTANCE</b>    |            |                             |
| Functional:                    | g's        | 1.65 DA 10-55Hz             |
| <b>SHOCK RESISTANCE</b>        |            |                             |
| Functional:                    | g's        | 10                          |
| <b>TEMPERATURE</b>             |            |                             |
| Operating, AC Lower:           | °C         | Not applicable              |
| Operating, AC Upper:           | °C         | Not applicable              |
| Operating, DC Lower:           | °C         | -55                         |
| Operating, DC Upper:           | °C         | +85                         |
| Storage, Lower:                | °C         | -55                         |
| Storage, Upper:                | °C         | +130                        |
| <b>LIFE EXPECTANCY</b>         |            |                             |
| Electrical @ Rated Load (AC1): | operations | 100,000                     |
| Mechanical @ no Load :         | operations | 50,000                      |
| <b>MISCELLANEOUS</b>           |            |                             |
| Operating Position:            |            | Any                         |
| Enclosure Material:            |            | UL 94v-0 plastic epoxy seal |
| Cover Protection Category:     | IP         | 50                          |
| Weight:                        | grams      | 42                          |

# 49 PRINTED CIRCUIT BOARD ENCLOSED RELAY



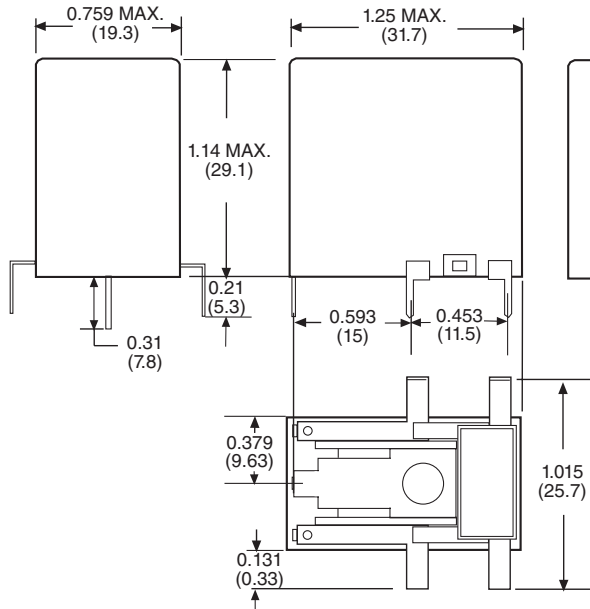
## SPDT, 3, 5 & 10 AMPS

### WIRING DIAGRAM (TOP VIEWED)

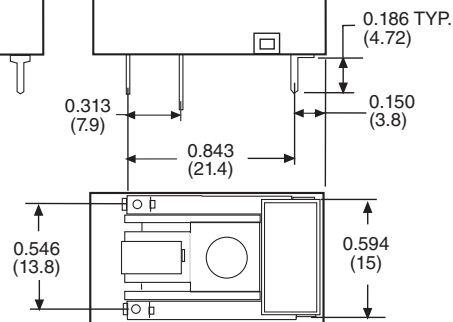
#### OUTLINE DIMENSIONS

DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).

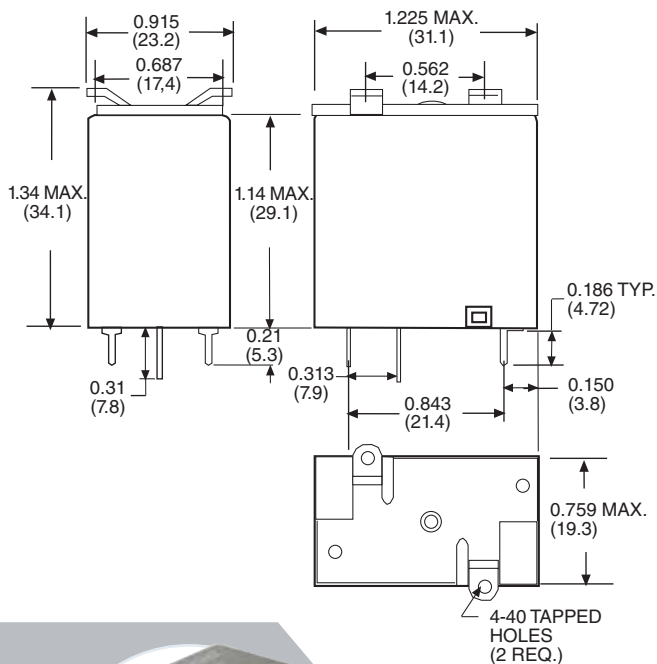
#### STYLE RE1C2



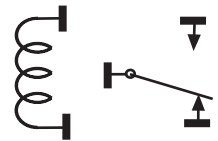
#### STYLE RE1C1



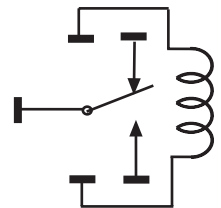
#### STYLE R1C4



#### STYLE RE1C1 R1C4



#### STYLE RE1C2



| STANDARD<br>PART<br>NUMBERS                            | CONTACT<br>CONFIGU-<br>RATION | COIL MEASURED @ 25 °C       |                                 |
|--------------------------------------------------------|-------------------------------|-----------------------------|---------------------------------|
|                                                        |                               | NOMINAL<br>INPUT<br>VOLTAGE | NOMINAL<br>RESISTANCE<br>(OHMS) |
| STYLE RE1C1, 3 AMP                                     |                               |                             |                                 |
| W49RE1C1VG-3DC-SIL                                     | SPDT                          | 3 VDC                       | 90 Ω                            |
| W49RE1C1VG-5DC-SIL                                     | SPDT                          | 5 VDC                       | 235 Ω                           |
| W49RE1C1VG-12DC-SIL                                    | SPDT                          | 12 VDC                      | 1350 Ω                          |
| W49RE1C2VF-6DC-SIL                                     | SPDT                          | 6 VDC                       | 410 Ω                           |
| W49RE1C2VF-12DC-SIL                                    | SPDT                          | 12 VDC                      | 1640 Ω                          |
| W49RE1C2VF-24DC-SIL                                    | SPDT                          | 24 VDC                      | 6560 Ω                          |
| STYLE RE1C1 AND RE1C2, 5 AMP                           |                               |                             |                                 |
| W49RE1C1VG-5DC-SCO                                     | SPDT                          | 5 VDC                       | 235 Ω                           |
| W49RE1C1VG-12DC-SCO                                    | SPDT                          | 12 VDC                      | 1350 Ω                          |
| W49RE1C1VG-24DC-SCO                                    | SPDT                          | 24 VDC                      | 5400 Ω                          |
| W49RE1C2VF-6DC-SCO                                     | SPDT                          | 6 VDC                       | 410 Ω                           |
| W49RE1C2VF-12DC-SCO                                    | SPDT                          | 12 VDC                      | 1640 Ω                          |
| W49RE1C2VF-24DC-SCO                                    | SPDT                          | 24 VDC                      | 6560 Ω                          |
| STYLE RE1C1, 10 AMP                                    |                               |                             |                                 |
| W49RE1C1VW-5DC-SCO                                     | SPDT                          | 5 VDC                       | 100 Ω                           |
| W49RE1C1VW-12DC-SCO                                    | SPDT                          | 12 VDC                      | 600 Ω                           |
| W49RE1C1VW-24DC-SCO                                    | SPDT                          | 24 VDC                      | 2400 Ω                          |
| SOLDER TERMINALS, BRACKET MOUNTING STYLE RE1C4, 10 AMP |                               |                             |                                 |
| W49R1C4VG-5DC-SCO                                      | SPDT                          | 5 VDC                       | 235 Ω                           |
| W49R1C4VG-12DC-SCO                                     | SPDT                          | 12 VDC                      | 1350 Ω                          |
| STYLE RE1C4, 10 AMP                                    |                               |                             |                                 |
| W49R1C4VW-5DC-SCO                                      | SPDT                          | 5 VDC                       | 100 Ω                           |
| W49R1C4VW-24DC-SCO                                     | SPDT                          | 24 VDC                      | 2400 Ω                          |

