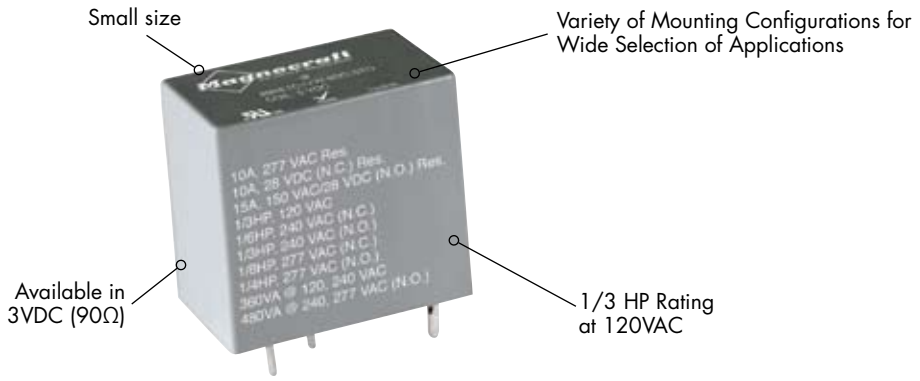
# 49 PCB Mount Enclosed Relay/SPDT 3 - 10 Amp Rated

UL Recognized
File No. E191122

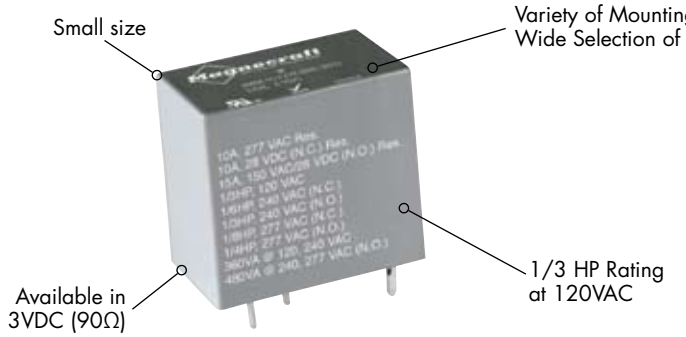
RoHS Compliant




## General Specifications (UL 508)

| Contact Characteristics | | | Units | 10 Amp STO SPDT | |
|---|---|---|---|---|---|
| Number and type of Contacts | | | | Normally Open | Normally Closed |
| Contact materials | | | | Silver Alloy | |
| Current rating | | | A | 15 | 10 |
| Switching voltage | | ~ | V | 277 V 50/60 Hz | |
| | | ⎓ | V | 28 V | |
| | | | HP | 1/3 @ 240 VAC | 1/6 @ 240 VAC |
| | | | HP | 1/4 @ 277 VAC | 1/8 @ 277 VAC |
| | | | Pilot Duty | B300 (120/240 VAC) | |
| Minimum Switching Requirement | | | mA | 100 | |
| **Coil Characteristics** | | | | | |
| Voltage Range | | ⎓ | V | 3....24 | |
| Operating Range | % of Nominal | ⎓ | | 75% to 110% | |
| Average consumption | | ⎓ | W | 0.11 | |
| Drop-out voltage threshold | | ⎓ | | 10% | |
| **Performance Characteristics** | | | | | |
| Electrical Life | Operations @ Rated Current (Resistive) | | | 100,000 | |
| Mechanical Life | Unpowered | | | 10,000,000 | |
| Operating time (response time) | | | ms | 25 | |
| Dielectric | Between coil and contact | ~ | V | 1500 | |
| | Between contacts | ~ | V | 500 | |
| **Environment** | | | | | |
| Product certifications | Standard version | | | UL | |
| Ambient air temperature around the device | Storage | | °C | -40...+85 | |
| | Operation | | °C | -40...+55 | |
| Vibration resistance | Operational | | g-n | 3, 10 to 55 Hz | |
| Shock resistance | | | g-n | 10 | |
| Weight | | | grams | 42 | |

| 5 Amp STO<br>SPDT | | 3 Amp SIL<br>SPDT | |
|---|---|---|---|
| Normally Open | Normally Closed | Normally Open | Normally Closed |
| Silver Alloy | | Fine Silver | |
| 5 | | 15 | 3 |
| 120 V 50/60 Hz | | 150 V 50/60 Hz | |
| 28 V | | 28 V | |
| 1/3 @ 240 VAC | 1/6 @ 240 VAC | 1/3 @ 240 VAC | 1/6 @ 240 VAC |
| 1/4 @ 277 VAC | 1/8 @ 277 VAC | 1/4 @ 277 VAC | 1/8 @ 277 VAC |
| B300 (120/240 VAC) | | B300 (120/240 VAC) | |
| 100 | | 100 | |
| | | | |
| 3....24 | | 3....24 | 5....24 |
| 75% to 110% | | 75% to 110% | |
| 0.11 | | 0.11 | |
| 10% | | 10% | |
| | | | |
| 100,000 | | 100,000 | |
| 10,000,000 | | 10,000,000 | |
| 25 | | 25 | |
| 2500 | | 2500 | |
| 500 | | 500 | |
| | | | |
| UL | | UL | |
| -40...+85 | | -40...+85 | |
| -40...+55 | | -40...+55 | |
| 3, 10 to 55 Hz | | 3, 10 to 55 Hz | |
| 10 | | 10 | |
| 42 | | 42 | |

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## Standard Part Numbers

**BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED**

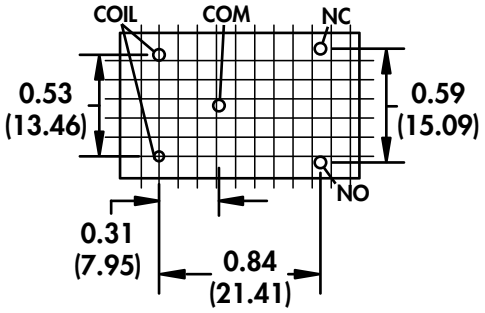
| Nominal Input Voltage | Nominal Coil Resistance (Ω) | Part Number | Contact Configuration |
|---|---|---|---|
| **3 Amp, Style RE1C1** | | | |
| 3 VDC | 90 Ω | W49RE1C1VG-3DC-SIL | SPDT |
| 5 VDC | 235 Ω | W49RE1C1VG-5DC-SIL | SPDT |
| 12 VDC | 1350 Ω | **W49RE1C1VG-12DC-SIL** | SPDT |
| 6 VDC | 410 Ω | W49RE1C2VF-6DC-SIL | SPDT |
| 12 VDC | 1640 Ω | W49RE1C2VF-12DC-SIL | SPDT |
| 24 VDC | 6560 Ω | W49RE1C2VF-24DC-SIL | SPDT |
| **5 Amp, Style RE1C1 and RE1C2** | | | |
| 5 VDC | 235 Ω | **W49RE1C1VG-5DC-STO** | SPDT |
| 12 VDC | 1350 Ω | **W49RE1C1VG-12DC-STO** | SPDT |
| 24 VDC | 5400 Ω | **W49RE1C1VG-24DC-STO** | SPDT |
| 6 VDC | 410 Ω | **W49RE1C2VF-6DC-STO** | SPDT |
| 12 VDC | 1640 Ω | W49RE1C2VF-12DC-STO | SPDT |
| 24 VDC | 6560 Ω | W49RE1C2VF-24DC-STO | SPDT |
| **10 Amp, Style RE1C1** | | | |
| 5 VDC | 100 Ω | **W49RE1C1VW-5DC-STO** | SPDT |
| 12 VDC | 600 Ω | **W49RE1C1VW-12DC-STO** | SPDT |
| 24 VDC | 2400 Ω | **W49RE1C1VW-24DC-STO** | SPDT |
| **10 Amp, Style R1C4** | | | |
| 5 VDC | 235 Ω | W49R1C4VG-5DC-STO | SPDT |
| 12 VDC | 1350 Ω | W49R1C4VG-12DC-STO | SPDT |
| **10 Amp, Style R1C4** | | | |
| 5 VDC | 100 Ω | W49R1C4VW-5DC-STO | SPDT |
| 24 VDC | 2400 Ω | W49R1C4VW-24DC-STO | SPDT |

**Part Number Builder**

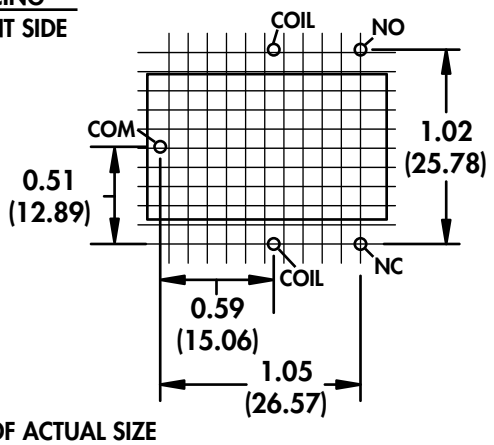
| 49 | R1C4 | VW | -5DC | -SCO |
|---|---|---|---|---|
| **Series** | **Footprint** | **Rating** | **Coil Voltage** | **Contact Material** |
| 49 | RE1C1 = Narrow Footprint | VG = (RE1C1) 5A STO or 3A SIL | 3DC = 3 VDC | SIL = Fine Silver Contacts |
| | RE1C2 = Wide Footprint | VG (R1C4) = 10A STO | 5DC = 5 VDC | STO = Silver Alloy Contacts |
| | R1C4 = Top Mounting Bracket | VF = (RE1C2) 5A STO or 3A SIL | 6DC = 6 VDC | |
| | | VW = 10A STO | 12DC = 12 VDC | |
| | | | 24DC = 24 VDC | |

**CIRCUIT BOARD PIN SPACING**
**VIEWED FROM COMPONENT SIDE**
**(TOP VIEW)**

**RE1C1 and R1C4**



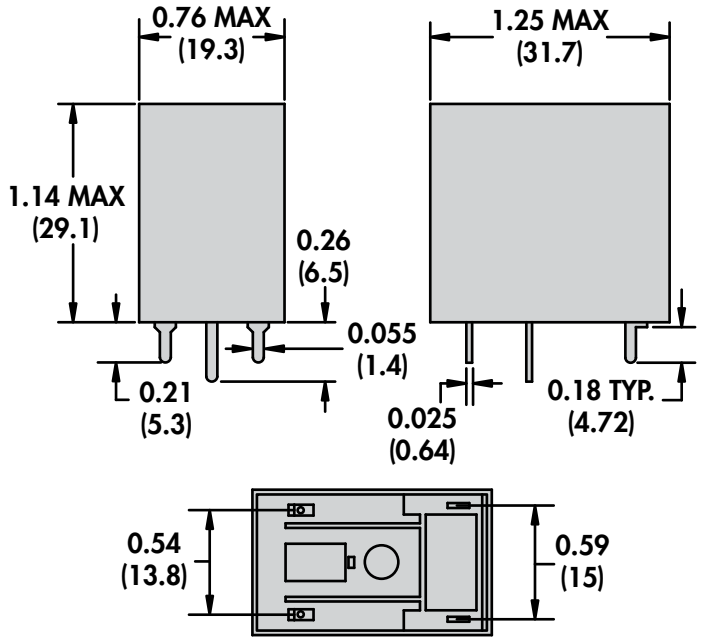

**RE1C2**



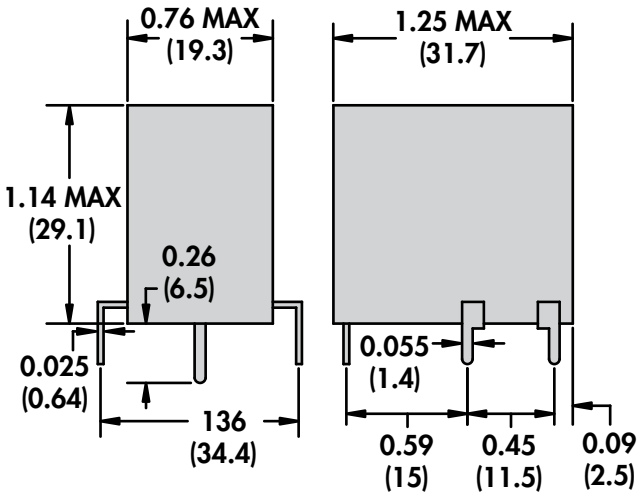

**0.1 IN GRID**
**(2.54 MM)**

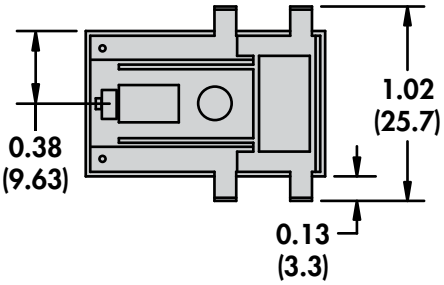
**PIN SPACINGS SHOWN AT 100% OF ACTUAL SIZE**

## STYLE RE1C1

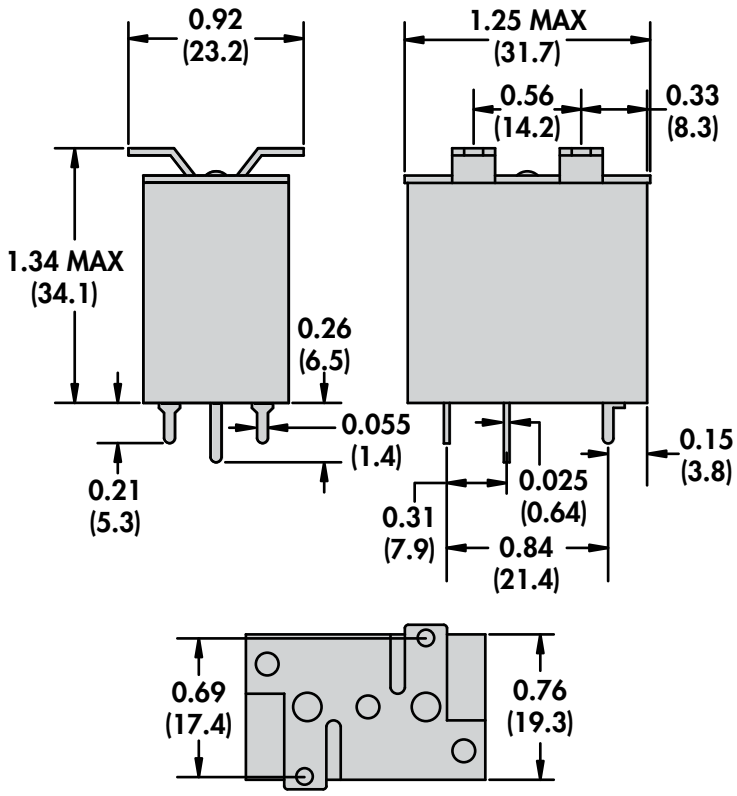



## STYLE RE1C2

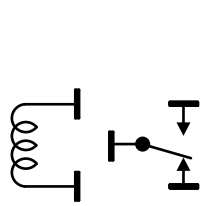


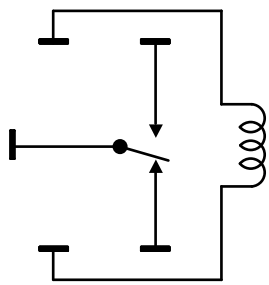

## STYLE R1C4




## WIRING DIAGRAMS
TOP VIEW



STYLE RE1C1 & R1C4



STYLE RE1C2

DRAWINGS SHOWN AT 100% OF ACTUAL SIZE