

**GENERAL SPECIFICATIONS**

**COIL**

Pull-in Voltage : 75% of nominal voltage or less for DC coils, 80% of nominal voltage or less for AC coils  
 Dropout Voltage: DC-10% min. AC-30% min. of nominal voltage or more  
 Max. Voltage : 110%  
 Resistance: ±15% measured @ 25°C  
 Coil Power: 0.9 - 1.1 watts DC., 1.0 - 1.2 VA (60Hz) AC. @ 25°C  
 Insulation System: Class "B" (130°C per UL standard 1446)  
 Max. Coil Dissipation: 2.3 watts DC, 2.55 VA (60Hz) AC.  
 5 minutes max @ 40°C  
 Duty: Continuous

**CONTACTS**

Contact Material: 3 amps bifurcated silver gold plated.  
 3 amps silver gold flashed,  
 5, 10 & 15 Amps,  
 Silver cadmium oxide, gold flashed  
 Contact Rating: **SPDT:** 15 Amps @ 120/240 VAC, 30 VDC, 1/3 Hp, 120 VAC. 1/2 Hp 240 VAC.  
**DPDT:** 10 Amps @ 120/240 VAC, 30 VDC. 1/3 Hp, 120 VAC. 1/2Hp 240 VAC  
**4PDT:** Bifurcated 3 Amps @ 120/240 VAC, 30 VDC. 1/16 Hp (2.8 amps FLA), 120 VAC. Pilot duty - 5 amps make, 1/2 amps break, 3 amps continuous, 120 VAC.  
**4PDT:** 3 amps @ 120 VAC, 30 VDC 1/10 Hp 120/240 VAC, C300 pilot duty  
**4PDT:** 5 amps @ 120/240 VAC, 30 VDC 1/6 Hp 120/240 VAC, C300 pilot duty

**DIELECTRIC STRENGTH**

Coil To Frame: 1500 V rms  
 Across Open Contacts: 1000 V rms  
 Contacts To Frame: 1500 V rms  
 Insulation Resistance: 100 megohms @ 500 VDC

**TEMPERATURE**

Operating: -40°C to +70°C  
 Storage: -40°C to +105°C

**VIBRATION RESISTANCE**

Functional: 5 g, 10 to 55 Hz; 1 mm (double amplitude)

**SHOCK RESISTANCE**

Functional: 20 g  
 Mechanical: 100 g

**LIFE EXPECTANCY**

Electrical: 200,000 operations @ rated resistive load  
 Mechanical: 10,000,000 operations @ no load

**MISCELLANEOUS**

Operating Position: Any  
 Insulation Material: Molded plastic  
 Enclosure: Polycarbonate dust cover  
 Weight: SPDT & DPDT 35 grams approx

**SPDT, DPDT & 4PDT, 3, 5, 10 & 15 AMPS**



**UL LISTED 367G IND. CONT. EQ.**  
**C US**  
**WHEN USED WITH SOCKETS 70-459-1 OR 70-461-1**

CURRENT LIMITED TO RATING OF RELAY OR SOCKET WHICHEVER IS LESS.

COMPLIES WITH REQUIREMENTS OF

- \* IEC STANDARDS 947-4-1 AND 947-5-1 LOW VOLTAGE DIRECTIVE
- \* IEC = INTERNATIONAL ELECTROTECHNICAL COMMISSION
- \* CE TESTING AND EVALUATION PERFORMED BY THE UNDERWRITERS LABORATORIES AS A THIRD PARTY PARTICIPANT

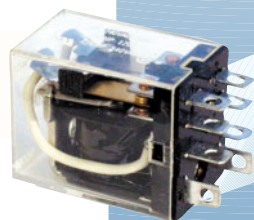
**MANUFACTURED UNDER ISO 9002 & QS 9000**



**4PDT, QUICK CONNECT SOLDER/PLUG-IN**



**4PDT, PRINTED CIRCUIT 3, 5 OR 10 AMP**



**SPDT, DPDT, QUICK CONNECT SOLDER/PLUG-IN 15 AMP**



**SPDT, DPDT, PRINTED CIRCUIT 10 OR 15 AMP**

**Mating Sockets**  
**70-782D-1, 70-459-1, 70-461-1: SCREW/DIN**  
**70-401-1, 70-378-1: SOLDER**  
**70-402-1, 70-379-1: PRINTED CIRCUIT**

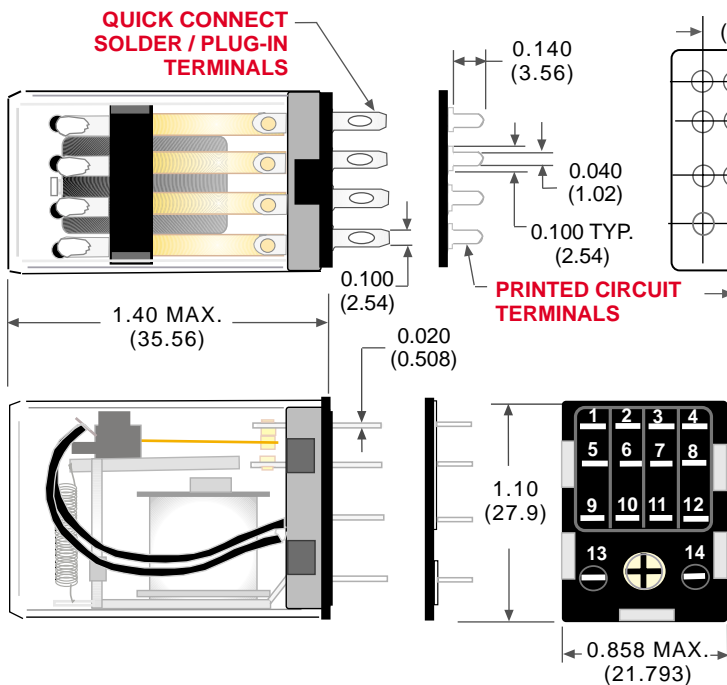
See section 8, page 13, 14, 15, 20



**4PDT, 3 & 5 AMPS**

**OUTLINE DIMENSIONS**

DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



**PRINTED CIRCUIT MOUNTING HOLE LAYOUT (BOTTOM VIEW)**



**DIN ADAPTER 16-782C**



**FLANGE ADAPTER 16-782C1**

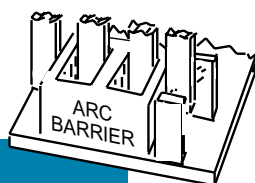


NEW SLOTTED PLAIN COVER, ALLOWS FOR INSTALLATION OF THE OPTIONAL TOP MOUNT DIN OR TOP/BOTTOM MOUNT FLANGE ADAPTERS. ADAPTERS ORDERED SEPARATELY

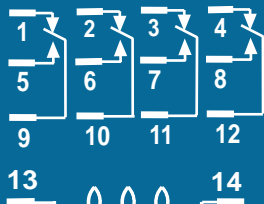


SEE CLASS 782XDX FOR PART NUMBERS WITH L.E.D. STATUS LAMP AND PUSH BUTTON

ALL 4 POLE RELAYS HAVE OPPOSITE POLARITY ARC BARRIERS AS A STANDARD FEATURE TO PROVIDE GREATER VOLTAGE PROTECTION BETWEEN ADJACENT POLES



**WIRING DIAGRAM (VIEWED FROM PIN END)**



**COIL MEASURED @ 25°C**

STANDARD PART NUMBERS 4PDT	TOP FLANGE COVER	NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)
<b>AC OPERATED - SOLDER/PLUG-IN, 3 AMP, BIFURCATED</b>			
W78ATCSX-2	78ATCSX-8	12 VAC, 50/60 Hz	46 Ω
W78ATCSX-3	78ATCSX-9	24 VAC, 50/60 Hz	180 Ω
W78ATCSX-5	78ATCSX-11	120 VAC, 50/60 Hz	4430 Ω
W78ATCSX-6	78ATCSX-12	240 VAC, 50/60 Hz	15,700 Ω
<b>DC OPERATED - SOLDER/PLUG-IN, 3 AMP, BIFURCATED</b>			
W78TCSX-1	78TCSX-6	6 VDC	40 Ω
W78TCSX-2	78TCSX-7	12 VDC	160 Ω
W78TCSX-3	78TCSX-8	24 VDC	650 Ω
W78TCSX-5	78TCSX-10	110 VDC	11,000 Ω
<b>AC OPERATED - SOLDER/PLUG-IN, 3 AMP</b>			
W78ACSX-2	78ACSX-9	12 VAC, 50/60 Hz	46 Ω
W78ACSX-3	78ACSX-10	24 VAC, 50/60 Hz	180 Ω
W78ACSX-5	78ACSX-12	120 VAC, 50/60 Hz	4430 Ω
W78ACSX-6	78ACSX-13	240 VAC, 50/60 Hz	15,700 Ω
<b>DC OPERATED - SOLDER/PLUG-IN, 3 AMP</b>			
W78CSX-1	78CSX-8	6 VDC	40 Ω
W78CSX-2	78CSX-9	12 VDC	160 Ω
W78CSX-3	78CSX-10	24 VDC	650 Ω
W78CSX-6	78CSX-12	110 VDC	11,000 Ω
<b>AC OPERATED PRINTED CIRCUIT, 3 AMP</b>			
W78APCX-3		24 VAC, 50/60 Hz	180 Ω
W78APCX-5		120 VAC, 50/60 Hz	4430 Ω
<b>DC OPERATED PRINTED CIRCUIT, 3 AMP</b>			
W78PCX-2		12 VDC	160 Ω
W78PCX-3		24 VDC	650 Ω
W78PCX-6		110 VDC	11,000 Ω
<b>AC OPERATED - SOLDER/PLUG-IN, 5 AMP</b>			
W78KACSX-15		24 VAC, 50/60 Hz	180 Ω
W78KACSX-17		120 VAC, 50/60 Hz	4430 Ω
W78KACSX-18		240 VAC, 50/60 Hz	15,700 Ω
<b>DC OPERATED - SOLDER/PLUG-IN, 5 AMP</b>			
W78KCSX-12		12 VDC	160 Ω
W78KCSX-13		24 VDC	650 Ω