

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

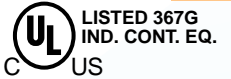
VIBRATION RESISTANCE
 Functional: 5 g, 10 to 55 Hz; 1 mm (double amplitude)

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**



WHEN USED WITH SOCKETS 70-459-1 OR 70-461-1

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



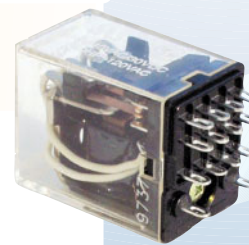
COMPLIES WITH REQUIREMENTS OF

* 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

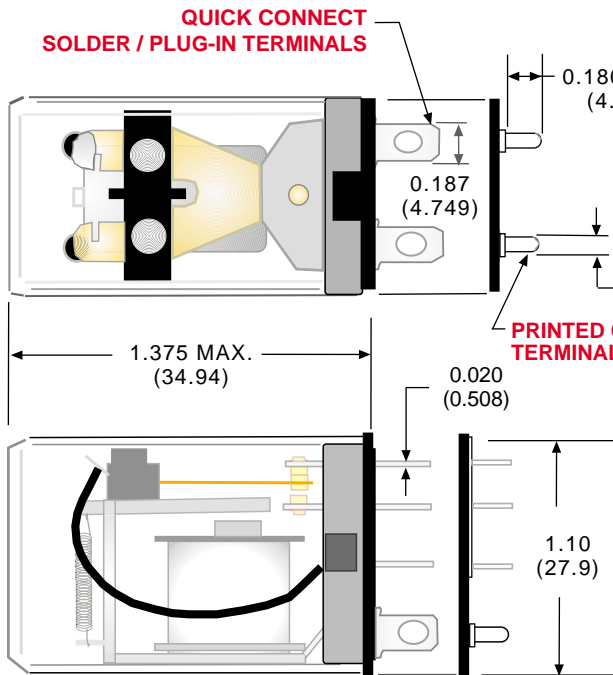
- 70-782D-1, 70-459-1, 70-461-1: SCREW/DIN
- 70-401-1, 70-378-1: SOLDER
- 70-402-1, 70-379-1: PRINTED CIRCUIT

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

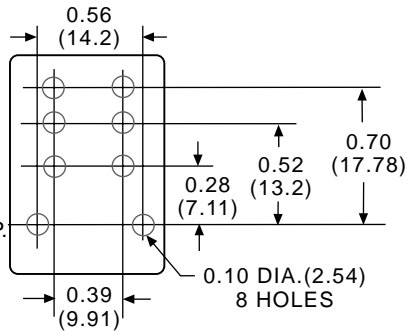


SPDT, 15 AMP

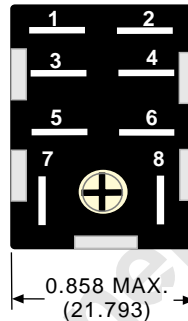
OUTLINE DIMENSIONS
DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



PRINTED CIRCUIT MOUNTING HOLE LAYOUT
(BOTTOM VIEW)



PRINTED CIRCUIT TERMINALS



DIN ADAPTER 16-782C



FLANGE ADAPTER 16-782C1

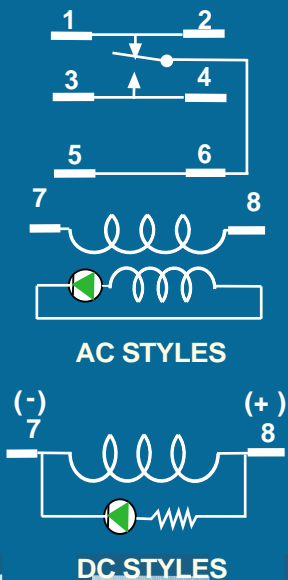


NEW SLOTTED PLAIN COVER, ALLOWS FOR INSTALLATION OF THE OPTIONAL TOP MOUNT DIN OR TOP/BOTTOM MOUNT FLANGE ADAPTERS. ADAPTERS ORDERED SEPARATELY



OBSERVE POLARITY WHEN L.E.D. STATUS LAMP IS INSTALLED ACROSS COIL (DC STYLES TYPICAL)

WIRING DIAGRAMS
(VIEWED FROM PIN END)



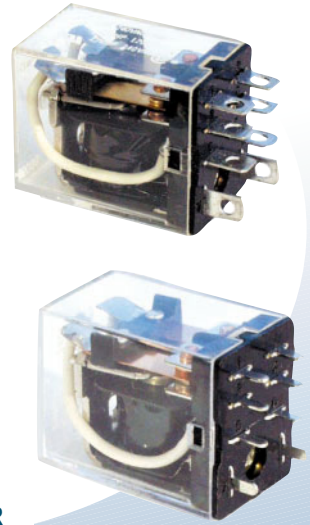
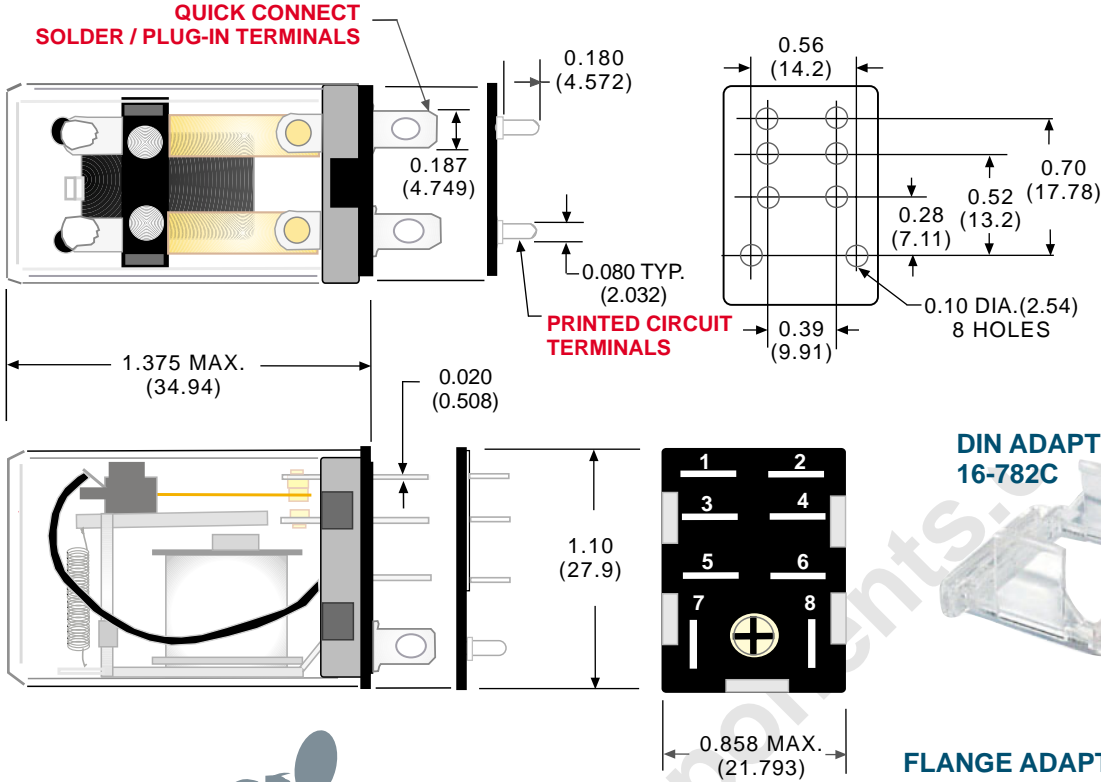
COIL MEASURED @ 25°

STANDARD PART NUMBERS SPDT	TOP FLANGE COVER	NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)
AC OPERATED - SOLDER/PLUG-IN, 15 AMP			
W78ARCSX-108	78ARCSX-33	12 VAC, 50/60 Hz	46 Ω
W78ARCSX-109	78ARCSX-34	24VAC, 50/60 Hz	180 Ω
W78ARCSX-111	78ARCSX-36	120 VAC, 50/60 Hz	4430 Ω
W78ARCSX-112	78ARCSX-37	240 VAC, 50/60 Hz	15,700 Ω
AC OPERATED - SOLDER/PLUG-IN WITH INDICATOR LAMP, 15 AMP			
W78ARNCSX-8		24 VAC, 50/60 Hz	180 Ω
W78ARNCSX-9		120VAC, 50/60 Hz	4430 Ω
W78ARNCSX-10		240 VAC, 50/60 Hz	15,700 Ω
DC OPERATED - SOLDER/PLUG-IN, 15 AMP			
W78RCSX-96	78RCSX-31	6 VDC	40 Ω
W78RCSX-97	78RCSX-32	12 VDC	160 Ω
W78RCSX-98	78RCSX-33	24VDC	650 Ω
W78RCSX-100	78RCSX-35	110 VDC	11,000 Ω
DC OPERATED - SOLDER/PLUG-IN WITH INDICATOR LAMP, 15 AMP			
W78RNCSX-10		24 VDC	650 Ω
AC OPERATED - PRINTED CIRCUIT TERMINAL, 15 AMP			
W78ARPCX-81		12 VDC	46 Ω
W78ARPCX-82		24 VDC	180 Ω
W78ARPCX-84		110 VDC	4430 Ω
DC OPERATED - PRINTED CIRCUIT TERMINAL, 15 AMP			
W78RPCX-79		12 VDC	160 Ω
W78RPCX-83		24 VDC	650 Ω
W78RPCX-85		110 VDC	11,000 Ω

OUTLINE DIMENSIONS

DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).

PRINTED CIRCUIT MOUNTING HOLE LAYOUT (BOTTOM VIEW)



DIN ADAPTER 16-782C



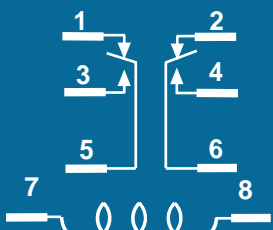
FLANGE ADAPTER 16-782C1



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

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

WIRING DIAGRAM (VIEWED FROM PIN END)



COIL MEASURED @ 25°C

STANDARD PART NUMBERS DPDT	TOP FLANGE COVER	NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)
AC OPERATED - SOLDER/PLUG-IN, 10 AMP			
W78ARCSX-7	78ARCSX-1	6 VAC, 50/60 Hz	12.2 Ω
W78ARCSX-9	78ARCSX-3	24VAC, 50/60 Hz	180 Ω
W78ARCSX-11	78ARCSX-5	120 VAC, 50/60 Hz	4430 Ω
W78ARCSX-12	78ARCSX-6	240 VAC, 50/60 Hz	15,700 Ω
DC OPERATED - SOLDER/PLUG-IN, 10 AMP			
W78RCSX-6	78RCSX-1	6 VDC	40 Ω
W78RCSX-7	78RCSX-2	12 VDC	160 Ω
W78RCSX-8	78RCSX-3	24VDC	650 Ω
W78RCSX-9	78RCSX-4	48 VDC	2,600 Ω
W78RCSX-10	78RCSX-5	110 VDC	11,000 Ω
AC OPERATED - PRINTED CIRCUIT. TERMINAL, 10 AMP			
W78ARPCX-5		120 VAC, 50/60 Hz	4430 Ω
W78ARPCX-6		240 VAC, 50/60 Hz	15,700 Ω
DC OPERATED - PRINTED CIRCUIT. TERMINAL, 10 AMP			
W78RPCX-1		6VDC	40 Ω
W78RPCX-2		12 VDC	160 Ω
W78RPCX-3		24 VDC	650 Ω

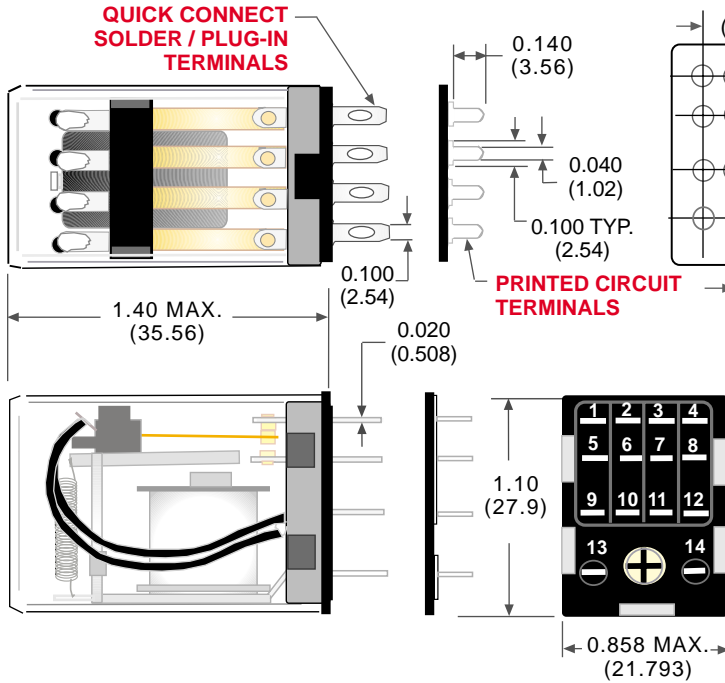
RETROFITS POTTER & BRUMFIELD K10. SEE END OF SECTION 1 FOR CROSS REFERENCE

CLASS 78

ICE CUBE STYLE SOLDER/PLUG-IN OR PRINTED CIRCUIT BOARD RELAY

4PDT, 3 & 5 AMP

OUTLINE DIMENSIONS
DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



DIN ADAPTER 16-782C



FLANGE ADAPTER 16-782C1

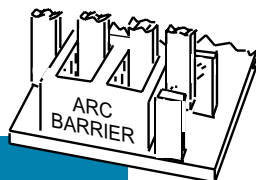


NEW SLOTTED PLAIN COVER, ALLOWS FOR INSTALLATION OF THE OPTIONAL TOP MOUNT DIN OR TOP/BOTTOM MOUNT FLANGE ADAPTERS. ADAPTERS ORDERED SEPARATELY

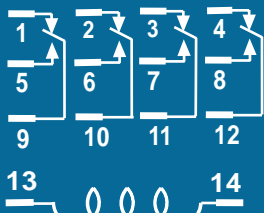


SEE CLASS 782XDX FOR PART NUMBERS WITH L.E.D. STATUS LAMP AND PUSH BUTTON

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)
AC OPERATED - SOLDER/PLUG-IN, 3 AMP, BIFURCATED			
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
DC OPERATED - SOLDER/PLUG-IN, 3 AMP, BIFURCATED			
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
AC OPERATED - SOLDER/PLUG-IN, 3 AMP			
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
DC OPERATED - SOLDER/PLUG-IN, 3 AMP			
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
AC OPERATED PRINTED CIRCUIT, 3 AMP			
W78APCX-3		24 VAC, 50/60 Hz	180 Ω
W78APCX-5		120 VAC, 50/60 Hz	4430 Ω
DC OPERATED PRINTED CIRCUIT, 3 AMP			
W78PCX-2		12 VDC	160 Ω
W78PCX-3		24 VDC	650 Ω
W78PCX-6		110 VDC	11,000 Ω
AC OPERATED - SOLDER/PLUG-IN, 5 AMP			
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
DC OPERATED - SOLDER/PLUG-IN, 5 AMP			
W78KCSX-12		12 VDC	160 Ω
W78KCSX-13		24 VDC	650 Ω

RETROFITS POTTER & BRUMFIELD KHAU.
SEE END OF SECTION 1 FOR CROSS REFERENCE