

**FEATURES**

**BENEFITS**

- FLAG INDICATOR:** SHOWS RELAY STATUS IN MANUAL OR POWERED CONDITION.
- L.E.D. STATUS LAMP:** SHOWS COIL "ON" OR "OFF" STATUS. IDEAL IN LOW LIGHT CONDITIONS.
- PUSHBUTTON:** ALLOWS FOR MANUAL OPERATION OF RELAY WITHOUT THE NEED FOR COIL POWER. IDEAL FOR FIELD SERVICE PERSONNEL TO TEST CONTROL CIRCUITS.
- LOCK-DOWN DOOR:** WHEN ACTIVATED, HOLDS PUSH BUTTON AND CONTACTS IN THE OPERATE POSITION. EXCELLENT FOR ANALYZING CIRCUIT PROBLEMS.
- FINGER-GRIP COVER:** ALLOWS OPERATOR TO REMOVE RELAYS FROM SOCKETS MORE EASILY THAN CONVENTIONAL RELAYS.
- I.D. TAG/WRITE LABEL:** USED FOR IDENTIFICATION OF RELAYS IN MULTI - RELAY CIRCUITS.

**DPDT & 3PDT, 12 AMPS**

**UL** us  
UL Recognized  
File No. E70550

**SP** LR40787



**UL** LISTED 367G  
IND. CONT. EQ. COMPLIES WITH REQUIREMENTS OF  
C US WHEN USED WITH SOCKETS 70-463-1

\* 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

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

**MANUFACTURED UNDER ISO 9002 & QS 9000**

**GENERAL SPECIFICATIONS**

**COIL**

Pull-in Voltage: 80% of nominal voltage or less for DC coils.  
85% 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: ±10% measured @ 25°C

Coil Power: 1.4 watts DC , 2 VA to 3.55 VA (60Hz) AC @ 25°C

Insulation System: Class "B" (130°C per UL standard 1446)

Max. Coil Dissipation: 3.0 watts DC, 3.4 VA (60Hz) AC. @ 25°C

Duty: Continuous

**CONTACTS**

Contact Material: Silver cadmium oxide, gold flashed

Contact Rating: 12 amps, 120 / 240 VAC 50/60Hz, 12 amps, 28 VDC.  
1/3Hp 120 VAC, 1/2Hp 240 VAC.

Contact Resistance: 50 milliohms max. @10 amps, 120 VAC or 24 VDC  
contacts conditioned for 50 make and break operations @ 1 second "ON" & 1 second "OFF"

**DIELECTRIC STRENGTH**

Contacts to Coil: 2500 V rms

Across Open Contacts: 1500 V rms

Pole to Pole: 2500 V rms

Contacts to Frame: 2500 V rms

Insulation Resistance: 100 megohms @ 500 VDC

**TEMPERATURE**

Operating: -40°C to +50°C. (AC), -40°C +65°C. (DC)

Storage: -40°C to +100°C

**LIFE EXPECTANCY**

Electrical: 200,000 operations @ rated resistive load

Mechanical: 5,000,000 operations @ no load

**MISCELLANEOUS**

Operating Position: Any

Insulation Material: Molded plastic

Enclosure: Polycarbonate dust cover

Weight: 88 grams approx.



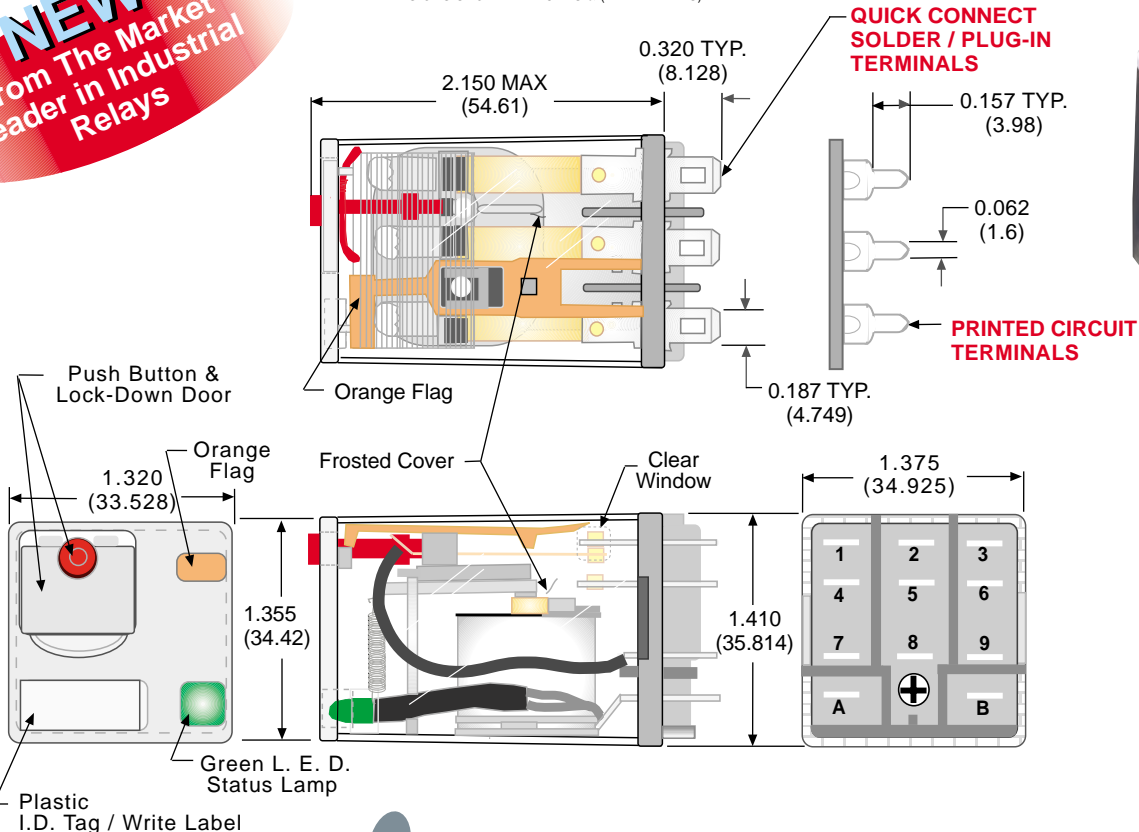
**Mating Sockets**  
70-463-1: SCREW/DIN  
70-124-1: SOLDER  
70-178-1, 70-178-2: PRINTED CIRCUIT  
70-124-2: QUICK CONNECT  
See section 8, page 16, 17



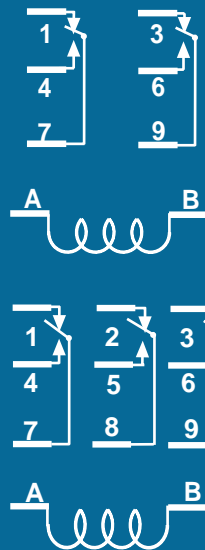
**DPDT & 3PDT, 12 AMPS**

**NEW**  
From The Market  
Leader in Industrial  
Relays

**OUTLINE DIMENSIONS**  
DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



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



**BI - POLAR  
L.E.D. STATUS LAMP  
ALLOWS FOR REVERSE  
POLARITY APPLICATIONS**

**ORDERING CODE FOR RELAYS**

**788**    **XBX**    **M4L - 120A**

**CLASS:** \_\_\_\_\_

**CONTACT CONFIGURATION:** \_\_\_\_\_  
DPDT: **XBX**  
3PDT: **XCX**

**TERMINAL STYLE:** \_\_\_\_\_  
SOLDER PLUG-IN TERMINALS: **NO CODE**  
PRINTED CIRCUIT TERMINALS: **CODE T**

**STANDARD FEATURES:** \_\_\_\_\_  
PUSH BUTTON & LOCK DOWN DOOR: **CODE M4**  
L.E.D. STATUS LAMP: **CODE L**

**OPTIONAL FEATURES:** \_\_\_\_\_  
PUSH BUTTON WITHOUT LOCK DOWN DOOR: **CODE M**

**COIL VOLTAGE:** \_\_\_\_\_  
6, 12, 24, 120, 220 / 230, 240    **ADD "A" FOR AC COILS**  
6, 12, 24, 48, 110    **ADD "D" FOR DC COILS**

STANDARD PART NUMBERS	CONTACT CONFIGURATION	COIL MEASURED @ 25°C	
		NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)
<b>AC OPERATED - SOLDER/PLUG-IN, 12 AMP</b>			
788XBXM4L-24A	DPDT	24 VAC, 50/60Hz	72 Ω
788XBXM4L-120A	DPDT	120 VAC, 50/60Hz	1,700 Ω
788XBXM4L-240A	DPDT	240 VAC, 50/60Hz	9,100 Ω
<b>DC OPERATED - SOLDER/PLUG-IN, 12 AMP</b>			
788XBXM4L-12D	DPDT	12 VDC	120 Ω
788XBXM4L-24D	DPDT	24 VDC	470 Ω
788XBXM4L-110D	DPDT	110 VDC	10,000 Ω
<b>AC OPERATED - SOLDER/PLUG-IN, 12 AMP</b>			
788XCXM4L-24A	3PDT	24 VAC, 50/60Hz	72 Ω
788XCXM4L-120A	3PDT	120 VAC, 50/60Hz	1,700 Ω
788XCXM4L-240A	3PDT	240 VAC, 50/60Hz	9,100 Ω
<b>DC OPERATED - SOLDER/PLUG-IN, 12 AMP</b>			
788XCXM4L-12D	3PDT	12 VDC	120 Ω
788XCXM4L-24D	3PDT	24 VDC	470 Ω
788XCXM4L-110D	3PDT	110 VDC	10,000 Ω

CADMIUM-FREE CONTACTS AVAILABLE,  
CONTACT FACTORY FOR DETAILS