

SOCKET COMPATIBLE & FLANGE MOUNT RELAYS



1.90 x 1.53 x 1.40



1.90 x 1.53 x 1.40



1.90 x 1.53 x 1.40

- ✦ SOCKET OR FLANGE MOUNT
- ✦ 0.187 QUICK CONNECT/ SOLDER PLUG-IN OR PRINTED CIRCUIT TERMINALS
- ✦ BLOW OUT MAGNET FOR SWITCHING DC VOLTAGES
- ✦ UL LISTED WHEN USED WITH 70-463-1 SOCKET

- ✦ SOCKET MOUNT OR FLANGE MOUNT
- ✦ ENLARGED 0.240 SILVER ALLOY CONTACTS FOR HIGH CURRENT
- ✦ 0.187 QUICK CONNECT / SOLDER PLUG-IN OR PRINTED CIRCUIT TERMINALS
- ✦ FLAG INDICATOR
- ✦ PUSH BUTTON
- ✦ UL LISTED WHEN USED WITH 70-463-1 SOCKET

- ✦ SOCKET MOUNT OR FLANGE MOUNT
- ✦ 3mm CONTACT GAP FOR HIGH VOLTAGE SWITCHING
- ✦ 0.187 QUICK CONNECT / SOLDER PLUG-IN OR PRINTED CIRCUIT TERMINALS
- ✦ 8mm SPACING
- ✦ PUSH BUTTON
- ✦ UL LISTED WHEN USED WITH 70-463-1 SOCKET

6, 12, 24, 110 / 120, 220 / 240
6,12, 24, 48, 110 / 125

2.75

2

Class B (130°C)

6, 12, 24, 110 / 120, 220 / 240
6,12, 24, 48, 110 / 125

2.75

2

Class B (130°C)

6, 12, 24, 110 / 120, 220 / 240
6,12, 24, 48, 110 / 125

2.75

2

Class B (130°C)

SPDT, DPDT

Silver alloy, gold flashed

50

15

240

1POLE: 10, 2POLE: 3

150, 150

1/3 @ 120 V

1/2 @ 240 V

DPDT, 3PDT

Silver alloy, gold flashed

50

2POLE: 20 / 3 POLE: 16

300 / 277

20

28

See Table

See Table

DPDT-NO, 3PDT-NO

Silver alloy, gold flashed

50

15

240

15

28

1/3 @ 120 V

1/2 @ 240 V

20

20

20

20

20

20

2000

100 @ 500

2000

100 @ 500

4000

100 @ 500

-30

+65

-30

+50

-30

+100

-30

+65

-30

+50

-30

+100

-30

+65

-30

+50

-30

+100

100,000

5,000,000

100,000

5,000,000

100,000

5,000,000

40

88

40

88

40

88

70-463-1, 70-124-1, 70-124-2, 70-178-1, 70-178-2
70-788EL, 70-788SL

70-463-1, 70-124-1, 70-124-2, 70-178-1, 70-178-2
70-788EL, 70-788SL

70-463-1, 70-124-1, 70-124-2, 70-178-1, 70-178-2
70-788EL, 70-788SL



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UL CONTACT LOAD RATINGS TABLE FOR 388J

CONTACT CONFIGURATION	CURRENT OR HORSE POWER	LOAD VOLTAGE	LOAD VOLTAGE FREQUENCY	TYPE OF LOAD
DPDT	20 AMP	300 VAC	50/60 Hz	RESISTIVE
	20 AMP	28 VDC	DC	RESISTIVE
3PDT	16 AMP	277 VAC	50/60 Hz	RESISTIVE
	16 AMP	28 VDC	DC	RESISTIVE
2 & 3 POLES	3/4 HP	120 VAC	50/60 Hz	MOTOR
	1 HP	208 - 600 VAC	50/60 Hz	MOTOR

UL
US
UL Recognized
File No. E43641



168986 for 388J
41729 for 388V



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



LISTED 367G
IND. CONT. EQ.

WHEN USED WITH
SOCKETS 70-463-1

CURRENT LIMITED
TO RATING OF
RELAY OR SOCKET
WHICHEVER IS LESS

**MANUFACTURED
UNDER
ISO 9002
& QS 9000**

UL CONTACT LOAD RATINGS TABLE FOR 388V

CONTACT CONFIGURATION	CURRENT OR HORSE POWER	LOAD VOLTAGE	LOAD VOLTAGE FREQUENCY	TYPE OF LOAD
1 POLE THRU 3 POLES	15 AMP	240 VAC	50/60 Hz	RESISTIVE
	15 AMP	28 VDC	DC	RESISTIVE
	1/3 HP	120 VAC	50/60 Hz	MOTOR
	1/2 HP	240 VAC	50/60 Hz	MOTOR

PLUG-IN

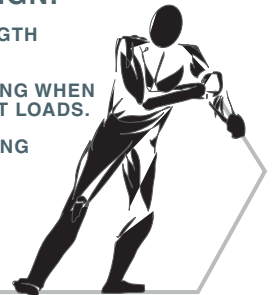
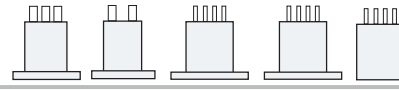
FLANGE MOUNT

OPTIONAL DIN MOUNT COVER



BENEFITS OF 3mm CONTACT GAP DESIGN:

1. HIGH DIELECTRIC STRENGTH ACROSS CONTACTS.
2. IMPROVED ARC QUENCHING WHEN BREAKING HIGH CURRENT LOADS.
3. MEETS EUROPEAN SPACING REQUIREMENTS OF 8mm ACROSS SURFACES



GENERAL SPECIFICATIONS (@ 25°C)

	UNITS	
COIL		
Pull-in Voltage AC (50/60 Hz):≤	% of nominal	85
Pull-in Voltage DC:≤	% of nominal	80
Dropout Voltage AC (50/60 Hz):≥	% of nominal	10
Dropout Voltage DC:≥	% of nominal	10
Maximum Voltage:	% of nominal	110
Resistance:	% ±	10
Coil Power AC (60 Hz):	VA	J: 2.75, V: 4
Coil Power DC:	W	2
Insulation System Per UL Standard 1446:		Class B (130 C)
Duty:		Continuous
CONTACTS		
Contact Material:		Silver alloy gold flashed
Contact Rating AC Amperes (AC1):	A	J: 2 Pole-20, 3 Pole-16 V: 15
Contact Rating AC Voltage:	V	240
Contact Rating DC Amperes (DC1):	A	J: 20, V: 15
Contact Rating DC Voltage:	V	28
Horse Power (AC):	HP	J: 3/4 @ 120 V V: 1/3 @ 120 V
Horse Power (AC):	HP	J: 1 @ 240 V V: 1/2 @ 240 V
Minimum Recommended Load:	ma	100 @ 5 VDC or 0.5 W

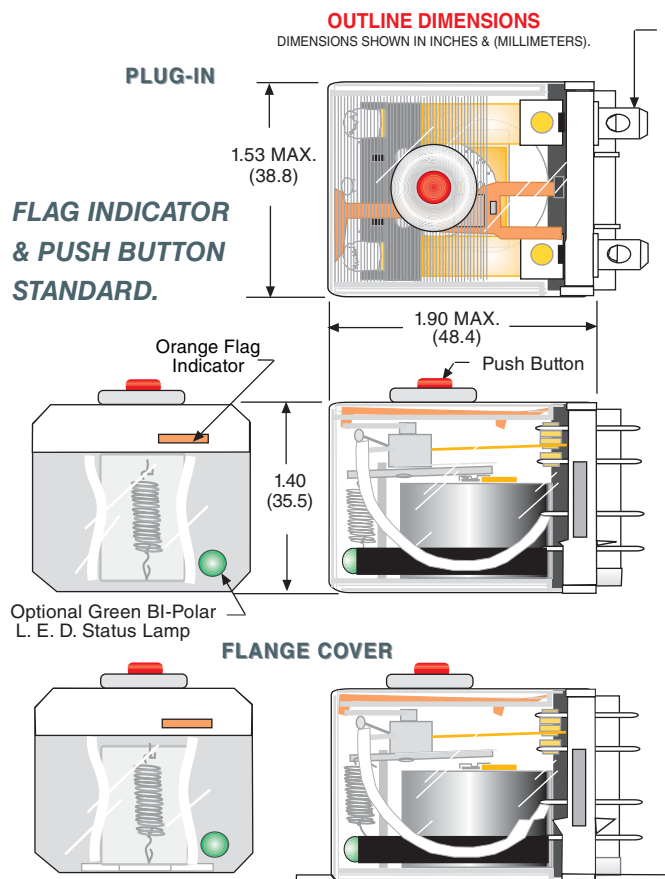
	UNITS	
DIELECTRIC STRENGTH		
Coil to Contacts:	V rms	J: 2000, V: 4000
Across Open Contacts:	V rms	J: 500, V: 1000
Pole to Pole:	V rms	2000
Contacts to Frame:	V rms	Not applicable
Insulation Resistance:	megohms minimum @ VDC	1000 @ 500
TEMPERATURE		
Operating, AC Lower:	°C	-30
Operating, AC Upper:	°C	+65
Operating, DC Lower:	°C	-30
Operating, DC Upper:	°C	+50
Storage, Lower:	°C	-30
Storage, Upper:	°C	+100
LIFE EXPECTANCY		
Electrical @ Rated Load (AC1):	operations	100,000
Mechanical @ no Load :	operations	5,000,000
MISCELLANEOUS		
Operating Position:		Any
Insulation Material:	94V-0	Molded plastic
Enclosure Material:	94V-0	Polycarbonate
Cover Protection Category:	IP	40
Terminals:	Inch (mm)	0.187x 0.020 (4.74 x 0.508)
Weight:	grams	88

388J HIGH CURRENT PLUG-IN & FLANGE MOUNT RELAYS

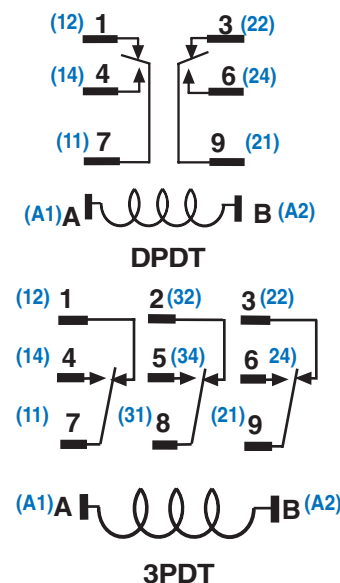
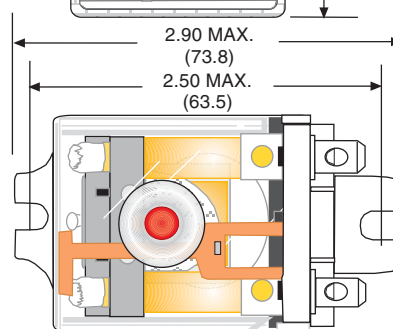
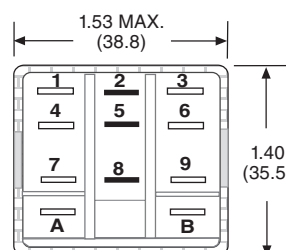


DPDT 20 AMPS & 3PDT 16 AMPS

WIRING DIAGRAM (VIEWED FROM PIN END)



QUICK CONNECT SOLDER / PLUG-IN TERMINALS



ALTERNATE NEMA
OR IEC () NUMBERS
VIEWED FROM
PIN SIDE

Mating Sockets

70-463-1: SCREW/DIN

70-124-1: SOLDER

70-178-1, 70-178-2: PRINTED CIRCUIT

70-788EL/SL-1, 70-124-2: QUICK CONNECT

See section 7

ORDERING CODE

388J XCX C1 M- 240A

CLASS: FLAG INDICATOR
STANDARD FEATURE

CONTACT CONFIGURATION:
DPDT: XBXC, 3PDT: XCXC

OPTIONAL: MAGNETIC BLOWOUT: CODE 69 (XBXC ONLY)

CONSTRUCTION STYLE:
* ENCLOSED, PLAIN COVER: CODE C
ENCLOSED, FLANGE COVER: CODE C1
ENCLOSED TOP FLANGE MOUNT: CODE C3
ENCLOSED DIN MOUNT: CODE C4

TERMINAL STYLE:
QUICK CONNECT SOLDER TERMINALS: NO CODE
PRINTED CIRCUIT TERMINALS: CODE T

OPTIONS:
BI - POLAR L.E.D. STATUS LAMP: CODE L
PUSH BUTTON: CODE M

COIL VOLTAGE:
6, 12, 24, 120, 240 ADD "A" FOR AC COILS
6, 12, 24, 48, 110 ADD "D" FOR DC COILS

* Note: Code C recommended to be used with printed circuit terminals or Plug-in applications only.

STANDARD PART NUMBERS	CONTACT CONFIGU- RATION	COIL MEASURED @ 25 °C	
		NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)
AC OPERATED FLANGE MOUNT WITH PUSH BUTTON, 20 AMP			
388JXBXC1M-240A	DPDT	220/240 VAC,50/60Hz	9100 Ω
388JXBXC1M-120A	DPDT	110/120 VAC,50/60Hz	2250 Ω
DC OPERATED FLANGE MOUNT WITH PUSH BUTTON, 20 AMP			
388JXBXC1M-12D	DPDT	12 VDC	120 Ω
388JXBXC1M-24D	DPDT	24 VDC	470 Ω
AC OPERATED PLUG-IN WITH PUSH BUTTON, 20 AMP			
388JXBXC1M-240A	DPDT	220/240 VAC,50/60Hz	9100 Ω
388JXBXC1M-120A	DPDT	110/120 VAC,50/60Hz	2250 Ω
DC OPERATED PLUG-IN WITH PUSH BUTTON, 20 AMP			
388JXBXC1M-12D	DPDT	12 VDC	120 Ω
388JXBXC1M-24D	DPDT	24 VDC	470 Ω
AC OPERATED FLANGE MOUNT WITH PUSH BUTTON, 16 AMP			
388JXCXC1M-240A	3PDT	220/240 VAC,50/60Hz	7200 Ω
388JXCXC1M-120A	3PDT	110/120 VAC,50/60Hz	1700 Ω
DC OPERATED FLANGE MOUNT WITH PUSH BUTTON, 16 AMP			
388JXCXC1M-12D	3PDT	12 VDC	120 Ω
388JXCXC1M-24D	3PDT	24 VDC	470 Ω
AC OPERATED PLUG-IN WITH PUSH BUTTON, 16 AMP			
388JXCXC1M-240A	3PDT	220/240 VAC,50/60Hz	7200 Ω
388JXCXC1M-120A	3PDT	110/120 VAC,50/60Hz	1700 Ω
DC OPERATED PLUG-IN WITH PUSH BUTTON, 16 AMP			
388JXCXC1M-12D	3PDT	12 VDC	120 Ω
388JXCXC1M-24D	3PDT	24 VDC	470 Ω

RETROFITS SCHRACK RM. SEE END OF SECTION 1 FOR CROSS REFERENCE
CADMIUM-FREE CONTACTS AVAILABLE, CONTACT FACTORY FOR DETAILS

9/04

1...33

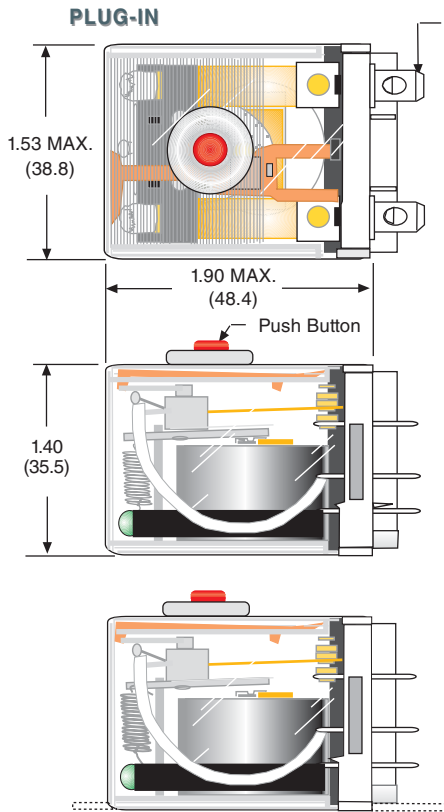
388V HIGH VOLTAGE PLUG-IN & FLANGE MOUNT RELAYS



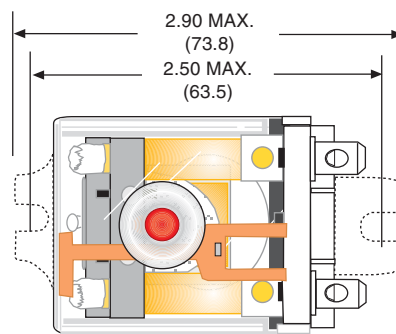
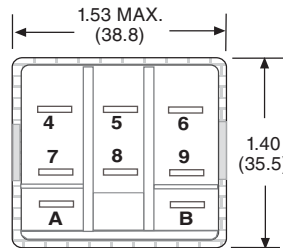
DPST-NO & 3PST-NO 15 AMPS

OUTLINE DIMENSIONS

DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).

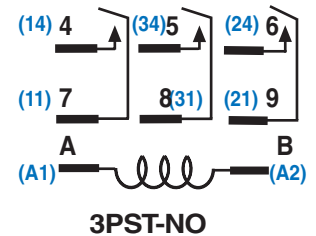
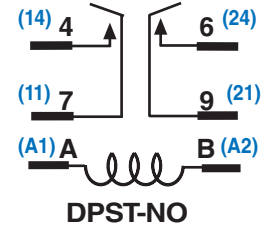


QUICK CONNECT SOLDER / PLUG-IN TERMINALS



OPTIONAL FLANGE COVER

WIRING DIAGRAM (VIEWED FROM PIN END)



ALTERNATE NEMA
OR IEC () NUMBERS
VIEWED FROM
PIN SIDE

**3 MILLIMETER CONTACT GAP.
PUSH BUTTON STANDARD.**

ORDERING CODE

388V **CXX** **C1** **M-** **240A**

CLASS:

CONTACT CONFIGURATION:

DPST-NO: **BXX**
3PST-NO: **CXX**

OPTIONAL:

MAGNETIC BLOWOUT: CODE 69 (BXX ONLY)

CONSTRUCTION STYLE:

* ENCLOSED, PLAIN COVER: CODE C
ENCLOSED, FLANGE COVER: CODE C1
ENCLOSED TOP FLANGE MOUNT: CODE C3
ENCLOSED DIN MOUNT: CODE C4

TERMINAL STYLE:

QUICK CONNECT SOLDER/PLUG-IN TERMINALS:
NO CODE
PRINTED CIRCUIT TERMINALS: CODE T

OPTIONS:

BI - POLAR L.E.D. STATUS LAMP: CODE L
PUSH BUTTON: CODE M

COIL VOLTAGE:

6, 12, 24, 120, 220/240 ADD "A" FOR AC COILS
6, 12, 24, 48, 110 ADD "D" FOR DC COILS

* Note: Code C recommended to be used with printed circuit terminals or Plug-in applications only.



Mating Sockets

70-463-1: SCREW/DIN

70-124-1: SOLDER

70-178-1, 70-178-2: PRINTED CIRCUIT
0-788EL/SL-1, 70-124-2: QUICK CONNECT

See section 7

STANDARD PART NUMBERS	CONTACT CONFIGU- RATION	COIL MEASURED @ 25 °C	
		NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)
AC OPERATED PLUG-IN WITH PUSH BUTTON 3mm GAP, 15 AMP			
388VCXXCM-220/240A	3PST-NO	220/240 VAC,50/60Hz	9100 Ω
388VCXXCM-120A	3PST-NO	110/120 VAC,50/60Hz	1100 Ω
388VCXXCM-24A	3PST-NO	24 VAC,50/60Hz	75 Ω
388VBXXCM-220/240A	DPST-NO	220/240 VAC,50/60Hz	9100 Ω
388VBXXCM-120A	DPST-NO	110/120 VAC,50/60Hz	1100 Ω
388VBXXCM-24A	DPST-NO	24 VAC,50/60 Hz	75 Ω
DC OPERATED PLUG-IN WITH PUSH BUTTON 3mm GAP, 15 AMP			
388VCXXCM-24D	3PST-NO	24 VDC	240 Ω
388VCXXCM-12D	3PST-NO	12 VDC	120 Ω
388VBXXCM-24D	DPST-NO	24 VDC	240 Ω
388VBXXCM-12D	DPST-NO	12 VDC	120 Ω

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