

DIELECTRIC STRENGTH CHART (V rms)

	SPDT	DPDT	3PDT	SPDT-DM,DB,DM-DB
COIL TO FRAME	1600	1600	1600	1600
ACROSS OPEN CONTACTS	1000	1000	1000	1500
CONTACT TO FRAME	1600	1600	1600	1600
COIL TO CONTACTS	2200	2200	1600	2200
POLE TO POLE	-	2200	1600	-
CONTACTS TO METAL MOUNTING PLATE (COVER INSTALLED)	2200	2200	1600	2200
COIL TO METAL MOUNTING PLATE (COVER INSTALLED)	2200	2200	2200	2200

20, 25 & 30 AMPS

UL **us**
UL Recognized
File No. E 43641

CS 168986

CE

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

FLANGE MOUNT**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:	10% of nominal voltage or more
Resistance:	± 10 % measured @ 25°C
Coil Power:	1.44 watts for DC coils, 2 VA to 3.5 VA for AC coils
Insulation System:	Class "B" Coil system. (130°C per UL standard 1446)
Max. Coil Dissipation:	2.5 watts max. DC
Duty:	Continuous

CONTACTS

Contact Material:	0.250 silver cadmium oxide, gold flashed
Contact Rating:	See next page
Contact Resistance:	50 Milliohms maximum initial resistance at rated current

TIMING

Operate Time:	20 mS max. @ nominal voltage
Release Time:	20 mS max. @ nominal voltage

DIELECTRIC STRENGTH

Dielectric Strength	See "DIELECTRIC STRENGTH CHART "
Insulation Resistance:	1,000 megohms min. @ 500 VDC

TEMPERATURE

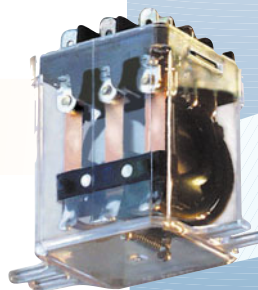
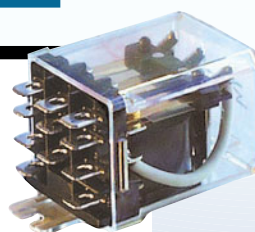
Operating:	-30°C to +50°C (AC), -30°C to +65°C (DC)
Storage:	-30°C to 100°C

LIFE EXPECTANCY

Electrical:	100,000 Operations @ rated resistive load
Mechanical:	5,000,000 Operations @ no load

MISCELLANEOUS

Operating Position:	Any
Insulation Material:	Molded plastic
Enclosure:	Polycarbonate dust cover
Terminals:	0.250 x 0.032 quick connect/solder terminals Optional printed circuit terminals. (0.090 x 0.032) available
Weight:	94 grams approx with cover



OPTIONAL P.C. TERMINAL
CONSULT FACTORY.

PRINTED CIRCUIT
TERMINAL

OPTIONAL TOP FLANGE COVER
CONSULT FACTORY.

TOP FLANGE MOUNT

OPTIONAL DIN COVER
CONSULT FACTORY.
DIN MOUNT COVER



CLASS 389 LOAD RATINGS

POLES	ENCLOSED STYLE 1, 2 AND 3 POLE			
	CURRENT OR HORSEPOWER	LOAD VOLTAGE	LOAD VOLTAGE FREQUENCY	TYPE OF LOAD
1 POLE	13A	28	DC	RESISTIVE
	20A	15	DC	RESISTIVE
	25A	300	50/60 Hz	RESISTIVE
	5A	600	50/60 Hz	RESISTIVE
	20A	277	50/60 Hz	BALLAST
	1HP	120	50/60 Hz	MOTOR
	1-1/2HP	208/240	50/60 Hz	MOTOR
	1HP	480/600	50/60 Hz	MOTOR
	660VA	120	50/60 Hz	PILOT DUTY
	915VA	208	50/60 Hz	PILOT DUTY
	960VA	240	50/60 Hz	PILOT DUTY
	765VA	480/600	50/60Hz	PILOT DUTY
	•B600		50/60Hz	PILOT DUTY
2 POLES	13A	28	DC	RESISTIVE
	20A	15	DC	RESISTIVE
	25A	300	50/60 Hz	RESISTIVE
	5A	600	50/60 Hz	RESISTIVE
	20A	277	50/60 Hz	BALLAST
	1HP	120	50/60 Hz	MOTOR
	1-1/2HP	208/240	50/60 Hz	MOTOR
	1HP	480/600	50/60 Hz	MOTOR
	660VA	120	50/60 Hz	PILOT DUTY
	915VA	208	50/60 Hz	PILOT DUTY
	960VA	240	50/60 Hz	PILOT DUTY
	765VA	460/600	50/60Hz	PILOT DUTY
	B600		50/60Hz	PILOT DUTY
3 POLES	13A	28	DC	RESISTIVE
	15A	28	DC (NO)	RESISTIVE
	20A	15	DC	RESISTIVE
	20A	150	50/60 Hz	RESISTIVE
	††15A	250	50/60 Hz	RESISTIVE
	†10A	300	50/60 Hz	RESISTIVE
	20A	150	50/60 Hz	BALLAST
	6-2/3HP	277	50/60 Hz	BALLAST
	1/2HP	120	50/60Hz	MOTOR
	1/2HP	208/240	50/60 Hz	MOTOR
	1HP	240	50/60 Hz	MOTOR
	3/4HP	120	50/60Hz	MOTOR
	470VA	120/240	50/60Hz	PILOT DUTY
	445VA	208	50/60Hz	PILOT DUTY
	B300		50/60Hz	PILOT DUTY

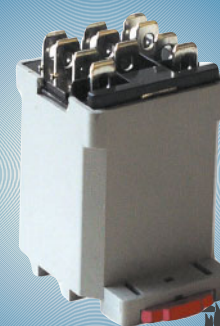
CLASS 389D LOAD RATINGS

POLE	ENCLOSED STYLE 1, 2 AND 3 POLE			
	CURRENT OR HORSE POWER	LOAD VOLTAGE	LOAD VOLTAGE FREQUENCY	TYPE OF LOAD
1 POLE	30A	28	DC	RESISTIVE
	30A	300	50/60 Hz	RESISTIVE
	10A	600	50/60 Hz	RESISTIVE
	1HP	120	50/60 Hz	MOTOR
	1-1/2HP	200 thru 600	50/60 Hz	MOTOR
	765VA	120	50/60 Hz	PILOT DUTY
	915VA	208	50/60 Hz	PILOT DUTY
	960VA	240,480,600	50/60 Hz	PILOT DUTY
	A600		50/60 Hz	PILOT DUTY

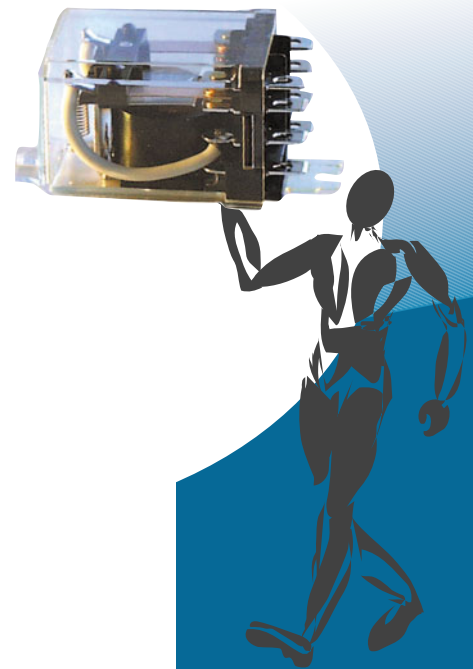
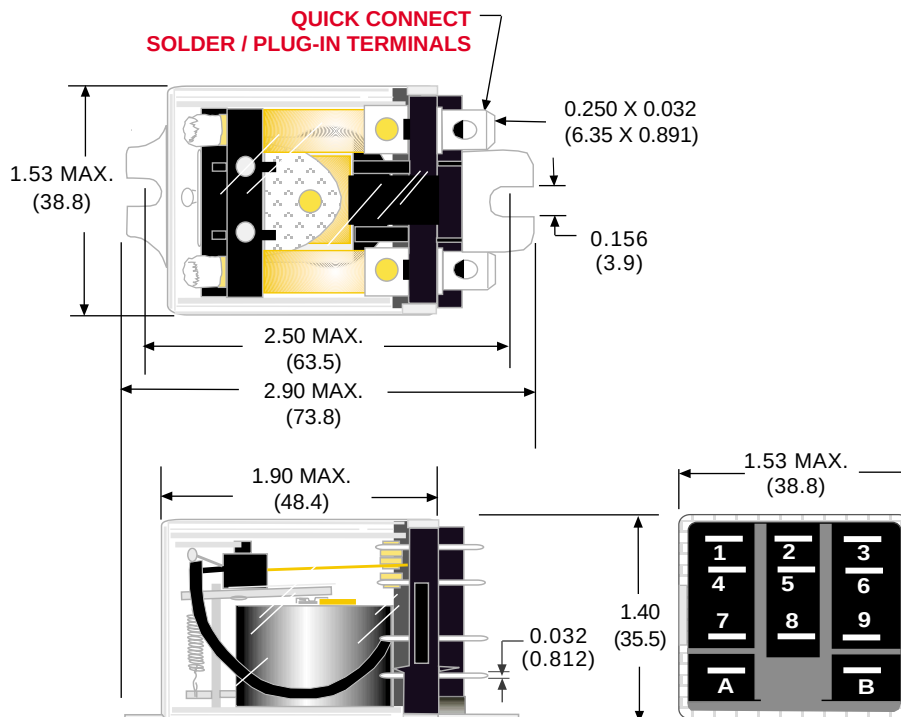
CLASS 389 BALLAST LOAD RATINGS

POLES	ENCLOSED STYLE			
SPDT	20 AMP	277 VAC	50/60Hz	
DPDT	20 AMP	277 VAC	50/60Hz	
3PDT	20 AMP	150 VAC	50/60Hz	
	6 2/3 AMP	277 VAC	50/60Hz	
DOUBLE BREAK DOUBLE MAKE (1 FORM X & Z)				
SPDT	25 AMP	277 VAC	50/60Hz	

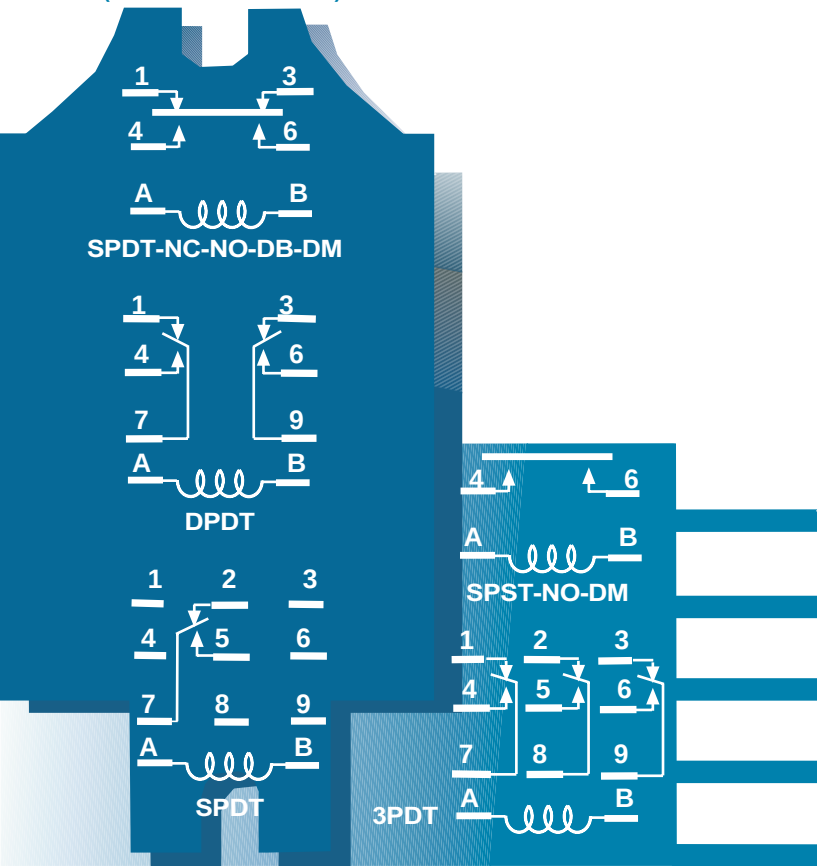
†† UL APPLIANCE
RATED. ALL OTHER
RATINGS NOT SO
MARKED ARE
INDUSTRIAL RATED
† CSA RATING ONLY,
NOT UL

**1, 2 & 3 POLE NEMA PILOT DUTY CONTACT RATINGS**

NEMA CONTACT CODE DESIGNATION	THERMAL CONTINUOUS TEST CURRENT AMPERES	MAXIMUM CURRENT, AMPERES									
		120 VOLTS 50/60Hz		240 VOLTS 50/60Hz		480 VOLTS 50/60Hz		600 VOLTS 50/60Hz		MAXIMUM VOLT-AMPERES	
		MAKE	BREAK	MAKE	BREAK	MAKE	BREAK	MAKE	BREAK	MAKE	BREAK
A600	10	60	6.00	30	3.00	15	1.50	12	1.20	7200	720
B300	5	30	3.00	15	1.50					3600	360
B600	5	30	3.00	15	1.50	0.75	0.75	0.6	0.6	3600	360

20, 25 & 30 AMPS**OUTLINE DIMENSIONS**
DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).**WIRING DIAGRAMS**

(VIEWED FROM PIN END)

**COIL MEASURED @ 25°C**

STANDARD PART NUMBERS	CONTACT CONFIGU- RATION	NOMINAL INPUT VOLTAGE	NOMINAL RESISTANCE (OHMS)
AC OPERATED FLANGE MOUNT, 30AMP			
W389ADCX-4	SPST-NO (DM)	120 VAC,50/60Hz	1100 Ω
W389ADCX-5	SPST-NO (DM)	220/240 VAC,50/60Hz	4300 Ω
W389ADZCX-3	SPDT-NO-NC (DM-DB)	24 VAC,50/60Hz	44 Ω
W389ADZCX-4	SPDT-NO-NC (DM-DB)	120 VAC,50/60Hz	1100 Ω
DC OPERATED FLANGE MOUNT, 30 AMP			
W389DCX-2	SPST-NO (DM)	12 VDC	100 Ω
W389DCX-3	SPST-NO (DM)	24 VDC	400 Ω
W389DZCX-2	SPST-NO-NC (DM-DB)	12 VDC	100 Ω
W389DZCX-3	SPST-NO-NC (DM-DB)	24VDC	400 Ω
AC OPERATED FLANGE MOUNT, 25 AMP			
W389ACX-4	SPDT	120 VAC,50/60Hz	1700 Ω
W389ACX-8	DPDT	24 VAC,50/60Hz	72 Ω
W389ACX-9	DPDT	120 VAC,50/60Hz	1700 Ω
W389ACX-10	DPDT	220/240 VAC,50/60Hz	7200 Ω
AC OPERATED FLANGE MOUNT, 20 AMP			
W389ACX-14	3PDT	120 VAC,50/60Hz	1200 Ω
W389ACX-15	3PDT	220/240 VAC,50/60Hz	4600 Ω
DC OPERATED FLANGE MOUNT, 25 AMP			
W389CX-2	SPDT	12 VDC	100 Ω
W389CX-3	SPDT	24VDC	400 Ω
W389CX-7	DPDT	12 VDC	100 Ω
W389CX-8	DPDT	24VDC	400 Ω
DC OPERATED FLANGE MOUNT, 20 AMP			
W389CX-12	3PDT	12 VDC	100 Ω
W389CX-13	3PDT	24VDC	400 Ω

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