

## 389F Power Relays/One, Two or Three Pole 20-30 Amp Rating (DC and AC)



### General Specifications - (UL 508)

Contact Characteristics		389FHXX, XHX	389FXAX, BXX, XBX	389FCXX, XCX
Number and type of contacts		SPST-NO-DM, SPDT-DM-DB	SPST, SPDT, DPST, DPDT	3PST, 3PDT
Contact materials		Silver Alloy	Silver Alloy	Silver Alloy
Thermal (carrying) current		30 A	25 A	20 A
Maximum switching voltage		600 V	600 V	300 V
Switching current @ voltage	Resistive	30 A @ 300 VAC 50/60Hz 30 A @ 28 VDC	25 A @ 300 VAC 50/60Hz 13 A @ 28 VDC	20 A @ 150 VAC 50/60Hz 13 A @ 28 VDC
	Ballast	25 A @ 277 VAC 50/60Hz	20 A @ 277 VAC 50/60Hz	20 A @ 150 VAC 50/60Hz 6.67 A @ 277 VAC 50/60Hz
	HP	1.5 @ 200-300 V 50/60Hz 1 @ 120-199 V 50/60Hz	1.5 @ 208-240 V 50/60Hz 1 @ 480-600 V 50/60Hz	0.5 @ 208-240 V 50/60Hz 0.5 @ 120 V 50/60Hz
	Pilot Duty	A600	B600	B300
Minimum switching requirement		100 mA @ 5 VDC or 0.5 W	100 mA @ 5 VDC or 0.5 W	100 mA @ 5 VDC or 0.5 W
Coil Characteristics				
Voltage range		12 to 240 VAC 12 to 110 VDC	12 to 240 VAC 12 to 110 VDC	12 to 240 VAC 12 to 110 VDC
Operating range (% of nominal)		85% to 110% AC 80% to 110% DC	85% to 110% AC 80% to 110% DC	85% to 110% AC 80% to 110% DC
Average consumption		3.5 VA 1.44 W	3.5 VA 1.44 W	3.5 VA 1.44 W
Drop-out voltage threshold		10% AC/DC	10% AC/DC	10% AC/DC
Performance Characteristics				
Electrical life (operations @ rated current)		100,000 operations	100,000 operations	100,000 operations
Mechanical life (unpowered)		5,000,000 operations	5,000,000 operations	5,000,000 operations
Operating time (response time)		20 ms	20 ms	20 ms
Dielectric strength	Between coil and contact	2000 VAC	2000 VAC	2000 VAC
	Between poles	2000 VAC	2000 VAC	2000 VAC
	Between contacts	500 VAC	500 VAC	500 VAC
Environment				
Product certifications	Standard version	UL, CE, CSA	UL, CE, CSA	UL, CE, CSA
Ambient air temperature around the device	Storage	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C
	Operation	-40 to 55 °C	-40 to 55 °C	-40 to 55 °C
Weight		88 g	88 g	88 g

### Part Number Builder

389F	XBX	C1M	-120	A
Series	Configuration	Options**	Voltage	Current Type
389F = Standard model equipped with flag indicator	<b>XAX</b> = SPDT <b>BXX</b> = DPST-NO <b>XBX</b> = DPDT <b>CXX</b> = 3PST-NO <b>XCX</b> = 3PDT <b>HXX</b> = SPST-NO-DM <b>XHX</b> = SPDT-DM-DB	<b>B</b> = Mounting base <b>C</b> = Plastic dust cover - socket mountable <b>C1</b> = Side flange mount cover <b>C3</b> = Top flange cover <b>L</b> = Indicator lamp across coil <b>M</b> = Manual operator button on case <b>T</b> = Printed circuit board terminals	Coil Voltage	<b>A</b> = AC <b>D</b> = DC

Note - Not all iterations of option codes are available and some standard parts may use different nomenclature than outlined in part number builder.

\*\*Multiple codes may be used.



Side Flange Cover Option C1



Plain Cover Option C



389 Relay with the 70-788EL11-1 Socket

Standard Part Numbers

BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED

Nominal Input Voltage	Coil Resistance	Part Number	Contact Configuration
<b>25 Amp, AC Operated Flange Mount with Push Button</b>			
220/240 VAC, 50/60 Hz	7200 Ω	389FBXC1M-240A	DPDT
110/120 VAC, 50/60 Hz	1700 Ω	389FBXC1M-120A	DPDT
<b>20 Amp, AC Operated Flange Mount with Push Button</b>			
220/240 VAC, 50/60 Hz	4600 Ω	389FCXC1M-240A	3PDT
110/120 VAC, 50/60 Hz	1200 Ω	389FCXC1M-120A	3PDT
<b>25 Amp, DC Operated Flange Mount with Push Button</b>			
12 VDC	100 Ω	389FBXC1M-12D	DPDT
24 VDC	400 Ω	389FBXC1M-24D	DPDT
<b>20 Amp, DC Operated Flange Mount with Push Button</b>			
12 VDC	100 Ω	389FCXC1M-12D	3PDT
24 VDC	400 Ω	389FCXC1M-24D	3PDT
<b>30 Amp, AC Operated Flange Mount</b>			
110/120 VAC 50/60 Hz	1100 Ω	389FHXC1-120A	SPST-NO-DM
220/240 VAC 50/60 Hz	4300 Ω	389FHXC1-240A	SPST-NO-DM
24 VAC 50/60 Hz	44 Ω	389FHXC1-24A	SPDT-DM-DB
110/120 VAC 50/60 Hz	1100 Ω	389FHXC1-120A	SPDT-DM-DB
<b>30 Amp, DC Operated Flange Mount</b>			
12 VDC	100 Ω	389FHXC1-12D	SPST-NO-DM
24 VDC	400 Ω	389FHXC1-24D	SPST-NO-DM
12 VDC	100 Ω	389FHXC1-12D	SPDT-DM-DB
24 VDC	400 Ω	389FHXC1-24D	SPDT-DM-DB
<b>25 Amp, AC Operated Flange Mount</b>			
110/120 VAC 50/60 Hz	1700 Ω	389FAXC1-120A	SPDT
24 VAC 50/60 Hz	72 Ω	389FBXC1-24A	DPDT
110/120 VAC 50/60 Hz	1700 Ω	389FBXC1-120A	DPDT
220/240 VAC 50/60 Hz	7200 Ω	389FBXC1-240A	DPDT
<b>20 Amp, AC Operated Flange Mount</b>			
110/120 VAC 50/60 Hz	1200 Ω	389FCXC1-120A	3PDT
220/240 VAC 50/60 Hz	4600 Ω	389FCXC1-240A	3PDT
<b>25 Amp, DC Operated Flange Mount</b>			
12 VDC	100 Ω	389FAXC1-12D	SPDT
24 VDC	400 Ω	389FAXC1-24D	SPDT
12 VDC	100 Ω	389FBXC1-12D	DPDT
24 VDC	400 Ω	389FBXC1-24D	DPDT
<b>20 Amp, DC Operated Flange Mount</b>			
12 VDC	100 Ω	389FCXC1-12D	DPDT
24 VDC	400 Ω	389FCXC1-24D	DPDT
<b>25 Amp, AC Operated Socket Compatible</b>			
220 / 240 VAC 50/60 Hz	7200 Ω	<b>389FBXC-240A</b>	DPDT
110 / 120 VAC 50/60 Hz	1700 Ω	<b>389FBXC-120A</b>	DPDT
24 VAC 50/60 Hz	72 Ω	<b>389FBXC-24A</b>	DPDT
<b>25 Amp, DC Operated Socket Compatible</b>			
110/125 VDC	8000 Ω	389FBXC-110/125D	DPDT
24 VDC	400 Ω	<b>389FBXC-24D</b>	DPDT
<b>20 Amp, AC Operated Socket Compatible</b>			
220/240 VAC 50/60 Hz	4600 Ω	389FCXC-240A	DPDT
110/120 VAC 50/60 Hz	1200 Ω	<b>389FCXC-120A</b>	DPDT
24 VAC 50/60 Hz	46 Ω	<b>389FCXC-24A</b>	DPDT
<b>20 Amp, DC Operated Socket Compatible</b>			
110/125 VDC	8000 Ω	389FCXC-110/125D	DPDT
24 VDC	400 Ω	<b>389FCXC-24D</b>	DPDT

# 389F Power Relays/One, Two or Three Pole 20-30 Amp Rating (DC and AC) *continued*



## WIRING DIAGRAMS BOTTOM VIEW

## NEMA IEC



**PLAIN/PUSH BUTTON COVER STYLE**

**Option C**



**TOP FLANGE COVER STYLE**

**Option C3**



**SIDE FLANGE COVER STYLE**

**Option C1**

