

## UL CONTACT LOAD RATINGS TABLE

CONTACT CONFIGURATION	CURRENT	LOAD VOLTAGE	LOAD VOLTAGE FREQUENCY	TYPE OF LOAD
ALL STYLES	10 AMP	120 VAC	50/60 Hz	RESISTIVE
	5 AMP	240 VAC	50/60 Hz	RESISTIVE
	10 AMP	28 VDC	DC	RESISTIVE
	0.5 AMP	125 VDC	DC	RESISTIVE
	3 AMP	120 VAC	50/60 Hz	INDUCTIVE
	1 AMP	240 VAC	50/60 Hz	INDUCTIVE
	3 AMP	28 VDC	DC	INDUCTIVE
SUFFIX "69" WITH BLOWOUT MAGNET FOR DC SWITCHING (NOT UL OR CSA)				
SINGLE MAKE AND DOUBLE MAKE	1.5 AMP	125 VDC	DC	RESISTIVE
	4 AMP	125 VDC	DC	RESISTIVE
	0.5 AMP	250 VDC	DC	RESISTIVE
	1.5 AMP	250 VDC	DC	RESISTIVE
	0.5 AMP	125 VDC	DC	INDUCTIVE
	1.5 AMP	125 VDC	DC	INDUCTIVE
	150 mA	250 VDC	DC	INDUCTIVE
	0.5 AMP	250 VDC	DC	INDUCTIVE

CONTACTS CAN CLOSE ON 30 AMP LOADS AND CARRY 10 AMPS CONTINUOUSLY AT ALL VOLTAGES SHOWN

**UL** US  
UL Recognized  
File No. E13224

**SF**  
168986

**UL** US  
LISTED 225G  
IND. CONT. EQ.

WHEN USED WITH  
SOCKETS 27390D  
OR 33377D

CURRENT LIMITED  
TO RATING OF  
RELAY OR SOCKET  
WHICHEVER IS LESS

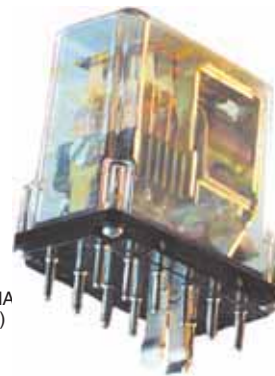
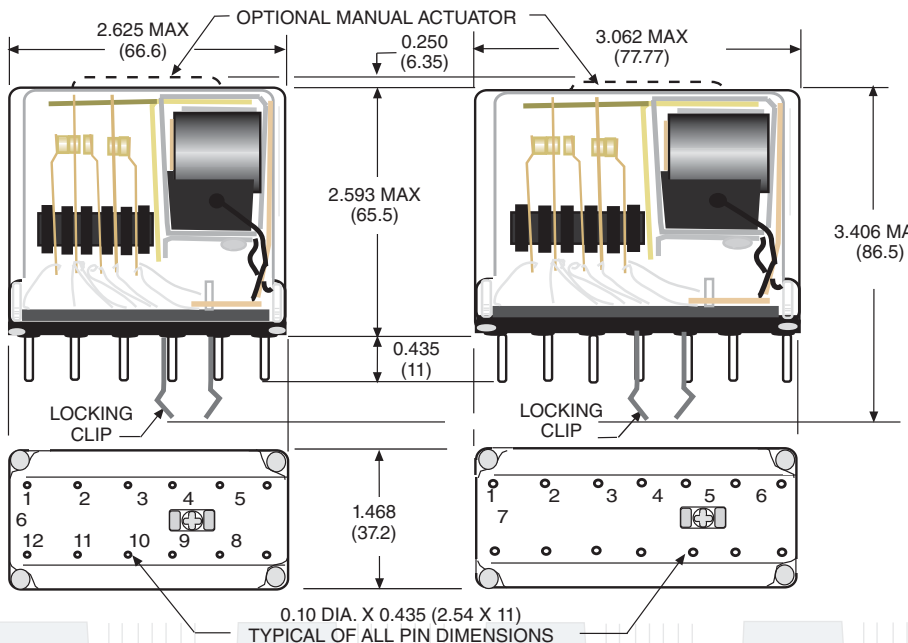
## COIL SPECIFICATIONS @ 25°C

AC RELAYS, 50/60 HZ 5 VA (COIL DATA @ 60HZ)					DC RELAYS, 1.8 WATTS (2.5 W @ 125 VDC)			
Nominal Voltage	Resistance Ohms ±10%	Milliamperes		Impedance Ohms	Nominal Voltage	Resistance Ohms ±10%	Milliamperes	
		Inrush (Open)	Sealed (Pull-In)				Cold	Hot
6	1.1	1500	840	7.2	6	15.5	385	304
12	4.2	750	410	27	12	63.5	189	147
24	15.5	375	200	120	24 / 28*	250	96	77
120	540	75	40	2700	32	375	86	62
240	2100	32	17	13,400	115/125*	6200	20	16



### OUTLINE DIMENSIONS

DIMENSIONS SHOWN IN INCHES & (MILLIMETERS).



\* 24 VDC & 110 VDC Relays Have Name Plates Stamped 24-28 & 110-125 VDC Respectively. These Relays Operate At 80% Of The Lower Voltages And Operate Within Allowable Temperature Rises At 110% Of Higher Voltages. 250 VDC: Use 125 VDC Relay And Series Resistor (6000 Ω, 5 W) Not Supplied.

**THE 219 COIL IS ENCAPSULATED IN THERMO-SET EPOXY FOR PROTECTION. THE BUILT-IN LOCKING CLIP ELIMINATES THE NEED FOR ANY EXTERNAL HOLD-DOWN DEVICE. NUCLEAR QUALIFIED VERSIONS ARE AVAILABLE. PLEASE CONSULT FACTORY.**

# 219 PLUG-IN RELAY WITH INTEGRAL LOCKING CLIP



## 12 & 14 PIN, 10 AMPS

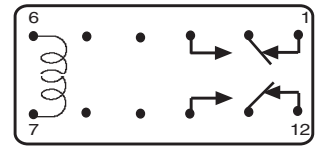
### WIRING DIAGRAM (TOP VIEW)



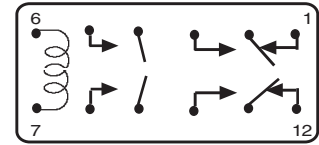
**Mating Sockets**  
27390D, 33377D:  
SCREW/PANEL/DIN  
See section 7

## GENERAL SPECIFICATIONS (@ 25°C)

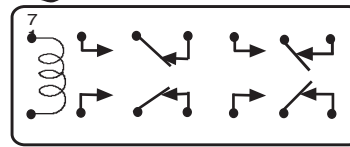
	UNITS	
<b>COIL</b>		
Pull-in Voltage AC (50/60 Hz):≤	% of nominal	85
Pull-in Voltage DC:≤	% of nominal	80
Dropout Voltage AC (50/60 Hz):≥	% of nominal	10
Dropout Voltage DC:≥	% of nominal	10
Maximum Voltage:	% of nominal	110
Resistance:	% ±	10
Insulation System Per UL Standard 1446: Duty:		Class B (130°C) Continuous
<b>CONTACTS</b>		
Contact Configuration:		to 6PDT
Contact Material:		Silver alloy, gold diffused
Contact Rating AC Amperes (AC1):	A	10/5
Contact Rating AC Voltage:	V	120 / 120
Contact Rating DC Amperes (DC1):	A	10/5
Contact Rating DC Voltage:	V	28 / 28
Minimum Recommended Load:	ma	100 @ 5 VDC or 0.5 W
<b>TIMING</b>		
Operate Time:	ms	25
Release Time:	ms	20
<b>DIELECTRIC STRENGTH</b>		
Coil to Contacts:	V rms	1500
Across Open Contacts:	V rms	1500
Pole to Pole:	V rms	1500
Contacts to Frame:	V rms	1500
Insulation Resistance:	megohms minimum @VDC	1000 @ 500
<b>VIBRATION RESISTANCE</b>		
Functional:	g's	10
<b>SHOCK RESISTANCE</b>		
Functional:	g's	20
<b>TEMPERATURE</b>		
Operating, AC Lower:	°C	-40
Operating, AC Upper:	°C	+80
Operating, DC Lower:	°C	-40
Operating, DC Upper:	°C	+80
Storage, Lower:	°C	-40
Storage, Upper:	°C	+130
<b>LIFE EXPECTANCY</b>		
Electrical @ Rated Load (AC1):	operations	100,000
Mechanical @ no Load :	operations	10,000,000
<b>MISCELLANEOUS</b>		
Operating Position:		Any
Insulation Material:	94V-0	Molded plastic
Enclosure Material:	94V-0	polycarbonate
Cover Protection Category:	IP	40
Weight:	grams	241



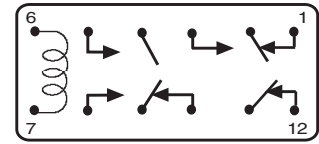
**219XBP**  
DPDT



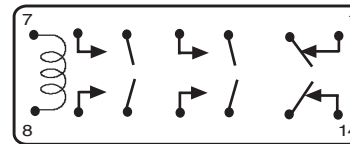
**219BBXP**  
DPDT+2 NO



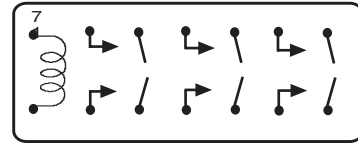
**219DXBP**  
4PDT



**219ABAP**  
DPDT+1NO & 1NC



**219DXBP**  
4P-NO+2P-NC



**219FXXP**  
6P-NO

### ORDERING CODE

**219** **XBX** **P** **L** **-24D**

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

**CONTACT CONFIGURATION:**

- DPDT: **XBX**
- DPDT +1 POLE: NO & 1 POLE NC: **ABA**
- 2 POLE: NO & DPDT: **BBX**
- 4 PDT: **DXD**
- 6 POLE: NO: **FXX**
- 4 POLE: NO & 2 POLE: NC: **DXB**

**OPTIONAL MAGNETIC BLOWOUT:** \_\_\_\_\_

**CODE 69**

**OPTIONAL BIFURCATED CONTACTS:** \_\_\_\_\_

**CODE 33**

**STANDARD FEATURES:** \_\_\_\_\_

POLYCARBONATE COVER: **CODE P**

**OPTIONAL FEATURES:** \_\_\_\_\_

STATUS LAMP: **CODE L**

MANUAL ACTUATOR: **CODE M**

**COIL VOLTAGE:** \_\_\_\_\_

6, 12, 24, 120, 240 **ADD "A" FOR AC COILS**

6, 12, 24, 48, 110 /125 **ADD "D" FOR DC COILS**

**COIL VOLTAGES & FREQUENCIES MUST BE SPECIFIED.**

*Make before break and other contact configurations available,*