

219 Series - Industrial Relays

DPDT, up to 6PST, 10 Amps



Versatile. Rugged. Proven. These are but a few words used by customers to describe the 219 series. When long life and cost of down time / service are important the 219 solves the problem. It's a standard throughout industrial applications which many other relays are measured against. Capable of up to four poles double throw or six poles single throw. Contact arrangements are easily customized for special applications. NUCLEAR versions are available that utilize special platings and materials to minimize wear. All 219s are built with materials that meet the UL 94-V0 requirements.

GENERAL SPECIFICATIONS (@ 25° C)

Contacts:

Contact Configuration	Up to 4PDT or 6PST
Contact Material	Silver Alloy-Gold Diffused
Contact Rating	
120 / 240VAC Resistive	10 Amp / 5 Amp
28VDC Resistive	10 Amp
Contact Resistance, Initial	50 milliohms max @ 6vdc

Coil:

Coils Available	AC and DC
Nominal Coil Power	AC 5VA DC 1.8-2.5W
Input Voltage Tolerance - AC	85% to 110% of nominal
Input Voltage Tolerance - DC	80% to 110% of nominal
Drop-out voltage	10% of nominal
Duty	Continuous

Timing:

Operate Time (max)	25 mS
Release Time (max)	20 mS

Dielectric Strength:

Across Open Contacts	500Vrms
Between mutually insulated point	1500Vrms
Insulation resistance	1,000 Mohms min @ 500VDC

Temperature:

Operating	AC = -20 to 60°C (-4 to 140°F) DC = -20 to 70°C (-4 to 158°F)
Storage	-40 to 105°C (-40 to 221°F)

Life Expectancy:

Electrical (full load)	100,000
Mechanical (no load)	10,000,000

Miscellaneous:

Mounting Position	Any
Enclosure	Clear Polycarbonate
Weight	8.5oz (241 grams)
Mating socket	12 PIN: 27390 (D) 14 PIN: 33377 (D)
(UL Listed when used)	(D) is option for DIN Rail Mount



General Purpose Relays

Ordering Code **219** **XBX** **PL** **-24VDC**

Series
219

Contact Arrangement

XBX (DPDT)
ABA (1 Pole N.O. + DPDT + 1 Pole N.C.)
BBX (2 Pole NO & DPDT)
XDX (4PDT)
FXX (6 Pole-NO)
DXB (4 Pole - NO & 2 Pole-NC)

Optional Features

Permanent Magnet Blowout - CODE 69
Polycarbonate covers - CODE P
Indicator Lamp - CODE L
Manual Actuator - CODE M
Bifurcated Contacts - CODE 33

Coil Voltage

AC: 12, 24, 120, 240, (Add VAC)
DC: 6, 12, 24/28, 32, 48, 115/125, 250 (Add VDC)

Coil voltages and frequencies must be specified

Contact Load Ratings

Highest Load for Standard Contacts

(Current - A, Resistive unless otherwise noted)

Voltage	Make	Carry	Break
28 VDC, "69"	10A		
	10A		
	10A		
48 VDC, "69"	10A		
	5A		
	5A		
125 VDC, "69"	10A		
	4A		
	3A		
250 VDC, "69"	4A		
	2A		
	1A		
120 VAC	10A*, 3A Inductive, 1/6HP*		
	10A*, 3A Inductive, 1/6HP*		
	10A*, 3A Inductive, 1/6HP*		
240 VAC	10A, 5A*, 1/3HP*		
	10A, 5A*, 1/3HP*		
	10A, 5A*, 1/3HP*		
277 VAC	10A		
	7A		
	4.5A		

Contact ratings which include an " * " are UL Approved.

Use Code "69" for blowout magnet when switching voltages above 40VDC. (NOT UL OR CSA APPROVED)

Use Code "33" for bifurcated contacts when switching low level current below 50mA.

219 Coil Specifications

AC Coils, 50/60HZ					DC Coils			
Nominal voltage	Resistance ohms ±10%	Milliamperes		Impedance ohms	Nominal voltage	Resistance ohms ±10%	Milliamperes	
		Cold	Hot				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	2,700	32	375	86	62
240	2100	32	17	13,400	37.5	375	100	80
					48	975	49	39
					115/125*	6200	20	16
					250	27777	9	7

Note: Stock 24VDC and 115VAC relays have nameplates stamped 24/28VDC and 115/125VAC respectively. These relays operate at 80% of the lower voltages and operate within allowable temperature rises at higher voltages.