

# 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	10 Amp / 5 Amp
120 / 240VAC Resistive	10 Amp
28VDC Resistive	10 Amp
Contact Resistance, Initial	50 milliohms max @ 6vdc Min Contact Load 50mA

#### 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) <b>Purchase Separately</b> 14 PIN: 33377 (D)
(UL Listed when used)	(D) is option for DIN Rail Mount - Not UL listed



# General Purpose Relays

## UL Contact Load Ratings

Contact Configuration	Current / HP	Load Voltage	Load Frequency	Type of Load
All Styles EXCEPT Code 33	10 Amp	120 VAC	50/60Hz	Resistive
	5 Amp	240 VAC	50/60Hz	Resistive
	10 Amp	28 VDC	DC	Resistive
	0.5 Amp	125 VDC	DC	Resistive
	1/6HP	120 VAC	50/60Hz	Motor
	1/3HP	240 VAC	50/60Hz	Motor
Code 33	5 Amp	120 VAC	50/60Hz	General Purpose
	2.5 Amp	240 VAC	50/60Hz	General Purpose

Additional UL Ratings for code "69" relays incorporating a blowout magnet.

Contact Configuration	Current / HP	Load Voltage	Load Frequency	Type of Load
All Styles EXCEPT Code 33	3 Amp	125 VDC	DC	Resistive
	1Amp	250 VDC	DC	Resistive

See the next page for additional Contact Ratings

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 Cold	Milliamperes Hot	Impedance ohms	Nominal voltage	Resistance ohms ±10%	Milliamperes Cold	Milliamperes 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 115VDC relays have nameplates stamped 24/28VDC and 115/125VDC respectively. These relays operate at 80% of the lower voltages and operate within allowable temperature rises at higher voltages.