255 Series - Industrial Latching Relays
3PDT or 4PST, 10 Amp

File No. E13224

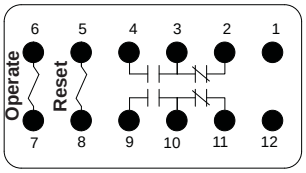
The 255 Series is a two coil latching version of the general purpose type 219 relay. When the operate coil is momentarily energized, contacts transfer and remain so even after coil power is removed. The second coil when momentarily energized, provides electrical reset of the contacts. There is an optional manual reset actuator. All contacts operate from a common armature to prevent contact overlapping. Coils are rated for continuous duty. Both coils can be energized at the same time with no damage. The operate coil is dominant.

GENERAL SPECIFICATIONS (@ 25° C)

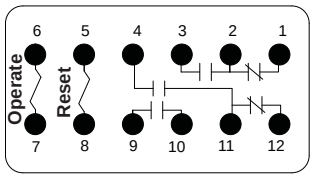
Contacts:	
Contact Configuration	Up to 3PDT or 4PST
Contact Material	Silver Alloy Gold Diffused
Contact Rating	
120 / 240VAC Resistive	10 Amp / 5 Amp
28VDC Resistive	10 Amp
Contact Resistance, Initial	100 milliohms max @ 6VDC
Coil:	
Coils Available	AC and DC
Nominal Coil Power	5VA 1.8W
Input Voltage 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)	25mS
Release Time (max)	20mS
Dielectric Strength:	
Across Open Contacts	1500Vrms
Between Mutally Insulated Points	1500Vrms
Insulation Resistance	1000 Megohms min @ 500VDC
Temperature:	
Operating	-20 to 60°C (-4 to 140°F)
Storage	-40 to 105°C (-40 to 221°F)
Life Expectancy:	
Electrical (full load operations)	100,000
Mechanical (no load operations)	10,000,000
Miscellaneous:	
Mounting Position	Any
Mating Socket	27390D
Enclosure	Clear Polycarbonate
Weight	11.8oz (300 grams)



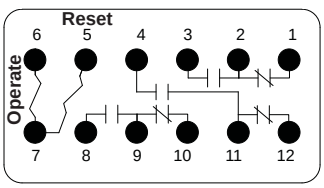
255 Wire Diagram (Top View)



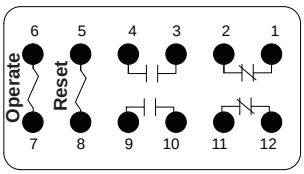
255XBX (DPDT)



255ABX (1 N.O + DPDT)



255XCX (3PDT)



255BXB (2 N.O. + 2 N.C.)

255 Contact Load Specifications

Load

Voltage	Resistive	Inductive
120VAC	10 Amp	3 Amp
240VAC	5 Amp	1 Amp
24VDC	10 Amp	3 Amp
28VDC	10 Amp	3 Amp
125VDC	0.5 Amp	0.1 Amp

For versions with suffix “69” permanent magnet blowouts

Voltage	Resistive	Inductive
125VDC (SM)	1.5 Amp	0.5 Amp
125VDC (DM)	4 Amp	1.5 Amp
250VDC (SM)	0.5 Amp	150 mAmp
250VDC (DM)	1.5 Amp	0.5 Amp

Note: SM = Single make
DM = Double make

Coil Specifications

****AC Coil, 50/60HZ***

Reset coil (3VA)			Operate Coil (5VA)	
Nominal voltage	Resistance ohms ±10%	Coil Current (mA) ±10%	Resistance ohms	Coil Current (mA)
6	6	1000	1.10	5454
12	21	571	4.20	2857
24	85	282	15.5	527
120	2250	53	540	222
240	9110	26	2150	112

Current inrush on all AC coils is less than twice the listed milliamperes ratings as shown in the AC coil data table. *Currents shown in table measured at 60Hz

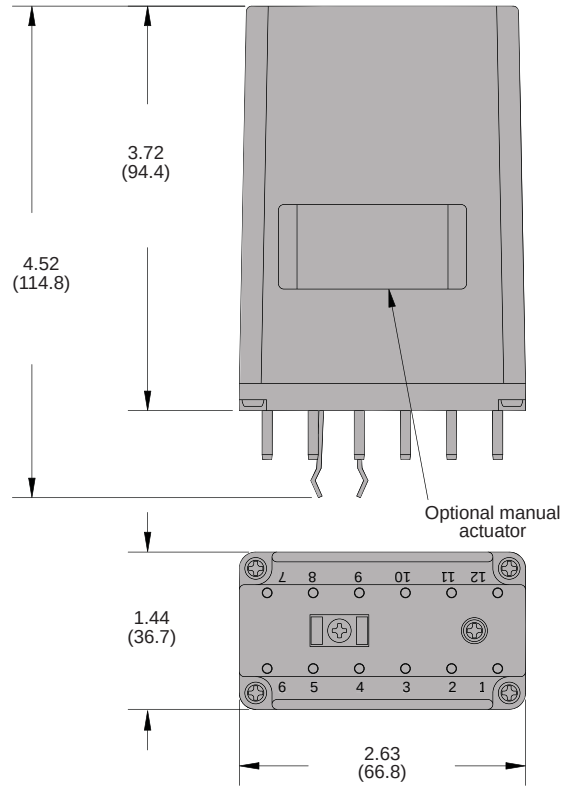
DC Coil

Reset coil (1.4W)			Operate Coil (1.8W)	
Nominal voltage	Resistance ohms ±10%	Coil Current (mA) ±10%	Resistance ohms	Coil Current (mA)
6	32.1	187	15.5	385
12	120	100	63.5	189
24	360	67	250	96.0
48	1800	26.7	975	49.2
115/125	8000	14.4	6200	20.0
250	24,600	10.2	27,777	9.0

DC relays, 1.8 Watts (2.5 Watts @ 125VDC)

Outline Dimensions

Dimensions Shown in inches & (millimeters)



Ordering Code **255** **XCX** **P** **LM-**

Series
255

Contact Arrangement
XBX (DPDT) - (2 form C)
XCX (3PDT) - (3 form C)
ABX (DPDT & 1 N.O. contact)
BXB (DPST - N.O. & DPST - N.C.)

Standard Features
Polycarbonate cover - CODE P

Optional Features
Permanent magnet blowout - CODE 69
Indicator lamp across both coils - CODE L
Manual actuator - CODE M
Bifurcated contacts - CODE 33

Coil Voltage
AC: 6, 12, 24, 120, 240 (Add VAC)
DC: 6, 12, 24, 48, 115-125, 250 (Add VDC)