

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. 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	4.9VA 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 Mutually Insulated Points	1500Vrms
Insulation Resistance	100 Megohms min @ 500VDC

Temperature:

Operating	-20 to 60°C (-4 to 140°F)
Storage	-40 to 105°C (-40 to 221°F)

Life Expectancy:

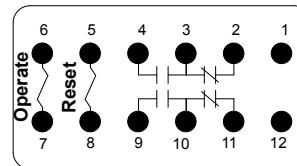
Electrical (full load operations)	100,000
Mechanical (no load operations)	10,000,000

Miscellaneous:

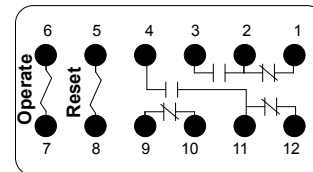
Mounting Position	Any
Mating Socket	27390D
Enclosure	Clear Polycarbonate
Weight	11.8oz (300 grams)



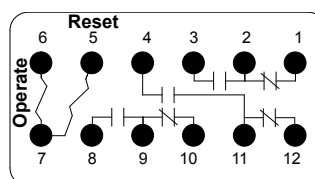
255 Wire Diagram
(Top View)



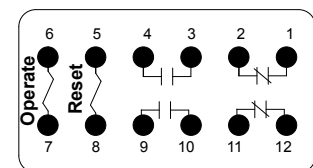
255XBX (DPDT)



255ABX (1 N.O + DPDT)



255XCX (3PDT)



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

Latching / Sequencing Relays

10 - 100 Amp

255 Contact Load Specifications

Voltage	Make	Carry	Resistive	Inductive
120VAC	30 Amp	10 Amp	10 Amp	3 Amp
240VAC	30 Amp	10 Amp	5 Amp	1 Amp
24VDC	30 Amp	10 Amp	10 Amp	5 Amp
28VDC	30 Amp	10 Amp	10 Amp	3 Amp
125VDC	30 Amp	10 Amp	0.5 Amp	0.1 Amp

For versions with suffix "69" permanent magnet blowouts

Voltage	Make	Carry	Resistive	Inductive
125VDC (SM)	30 Amp	10 Amp	1.5 Amp	0.5 Amp
125VDC (DM)	30 Amp	10 Amp	4 Amp	1.5 Amp
250VDC (SM)	30 Amp	10 Amp	0.5 Amp	150 mAmp
250VDC (DM)	30 Amp	10 Amp	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 Power (mA) ±10%	Resistance ohms	Coil Current (mA)
6	3.0	840	1.10	800
12	14.5	256	4.20	410
24	52.0	150	15.5	200
120	1450	26.5	540	45.0
240	5000	4.8	1815	13.2

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

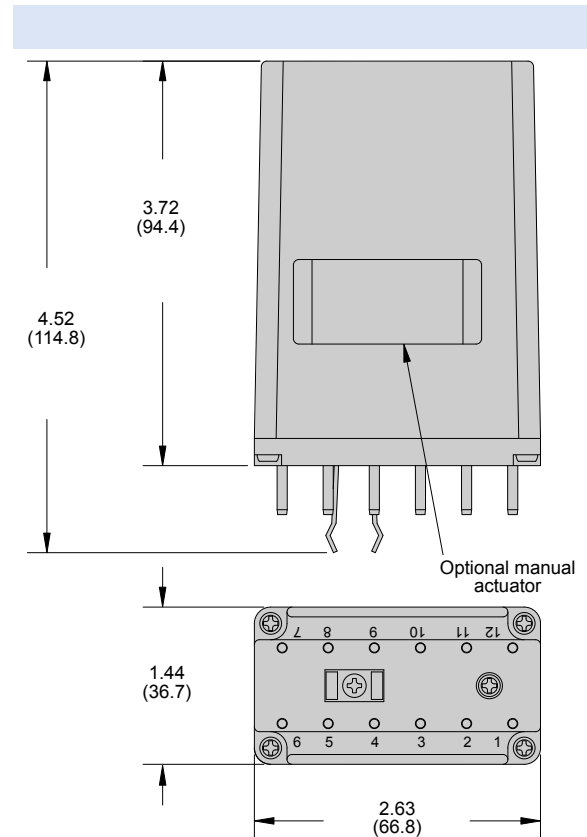
DC Coil

Reset coil (1.4W)			Operate Coil (1.8W)	
Nominal voltage	Resistance ohms ±10%	Coil Power (mA) ±10%	Resistance ohms	Coil Current (mA)
6	21.0	286	15.5	385
12	85.0	141	63.5	189
24	300	80	250	96.0
115/125	8000	14.4	6200	20.0

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

Outline Dimensions

Dimensions Shown in inches & (millimeters)



Section 4

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 (DPDT-N.O. & 2 form 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

Coil Voltage

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