



File No. ES2197

The 311 Series relays are sequencing (stepper) relays built on the industrial 219 style frame. Hold down clip is integral to the relay base. Double pole contacts transfer on energizing of coil or de-energizing. Dual cam movement allows contacts to operate together or separately. Works equally well with application of continuous voltage to coil or energy saving impulse. No continuous voltage required for memory. Numerous custom switching arrangements are possible over 8 steps per revolution of the cams.

GENERAL SPECIFICATIONS (@ 25° C)

Contacts:

Contact Configuration	DPDT
Contact Material	Silver Alloy
Contact Rating	
120 / 240VAC Resistive	5 Amp
28VDC Resistive	5 Amp
Contact Resistance, Initial	100 milliohms max @ 6VDC

Coil:

Coils Available	AC or DC up to 300V
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)	35mS
Release Time (max)	35mS

Dielectric Strength:

Across Open Contacts	1500Vrms
Between Mutally Insulated Points	1500Vrms
Insulation Resistance	1,000 Megohms min @ 500VDC

Temperature:

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

Life Expectancy:

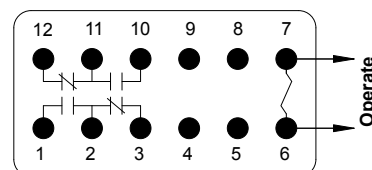
Electrical (full load operations)	100,000
Mechanical (no load operations)	5,000,000

Miscellaneous:

Mounting Position	Any
Mating Socket	27390D
Enclosure	Clear Polycarbonate
Weight	7.5oz (190 grams)



311 Wire Diagram
(Top View)



311XBXP
311XBXP*

*Transfer on release

Latching / Sequencing Relays

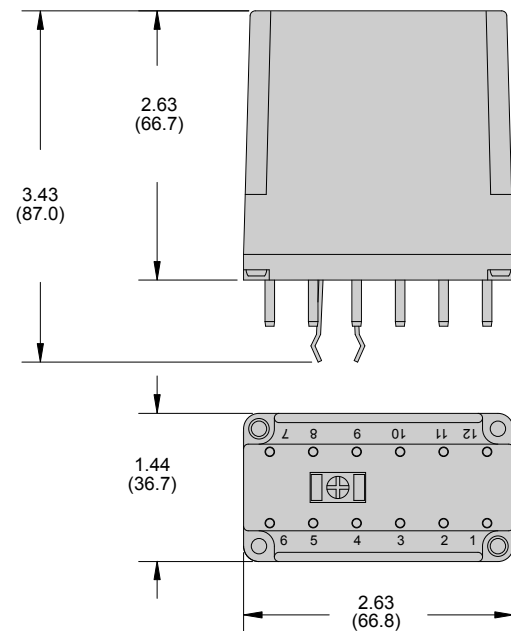
10 - 100 Amp

Coil Specifications

AC Coil, 50/60HZ		DC Coil	
Nominal voltage	Resistance ohms ±10%	Nominal voltage	Resistance ohms ±10%
6	1.1	6	15.5
12	4.2	12	63.5
24	15.5	24	250
120	540	48	970
240	1815	110-125	6200

Outline Dimensions

Dimensions Shown in inches & (millimeters)



Section 4

Ordering Code 311 XBX P R L -120VAC

Series

311

Contact Arrangement

XBX (DPDT) - (2 form C)

Standard Features

Plug-in with polycarbonate cover - CODE P

Contact Transfer

When coil is energized - NO CODE

When coil is de-energized - CODE R

Optional Features

Indicator lamp - CODE L

Coil suppression - CODE V

Coil Voltage

AC: 6, 12, 24, 120, 240 (Add VAC)

DC: 6, 12, 24, 115-125 (Add VDC)