

# 415 Series - Screw Terminal SPDT, DPDT, 15 Amps



The 415 series is a compact, 15 Amp base mounted industrial relay. It is a versatile relay that offers a variety of contact configurations and options. Excellent contact life assures long mechanical life and contact reliability on low level loads. Screw terminals are standard. Options include: high voltage or high inrush contacts, quick connect terminals, permanent magnet blowout and low power DC coils.

## GENERAL SPECIFICATIONS (@ 25° C)

### Contacts:

Contact Configuration	DPDT
Contact Material	Silver Alloy
Contact Rating	
120 / 240VAC Resistive	15 Amp
28VDC Resistive	15 Amp
Motor 120VAC 1 Phase	1/2Hp
Motor 240VAC 3 Phase	1Hp
Contact Resistance, Initial	50 milliohms max. @ 6VDC

### Coil:

Coils Available	AC and DC
Nominal Coil Power	AC: 6VA, DC: 3.5W
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)	10 mS

### Dielectric Strength:

Across Open Contacts	1,000Vrms
Between mutually insulated point	1,500Vrms
Insulation resistance	1000 Mohms min. @ 500VDC

### Temperature:

Operating	AC: -40 to 55°C (-49 to 131°F) DC: -40 to 70°C (-49 to 158°F)
Storage	-40 to 105°C (-40 to 221°F)

### Life Expectancy:

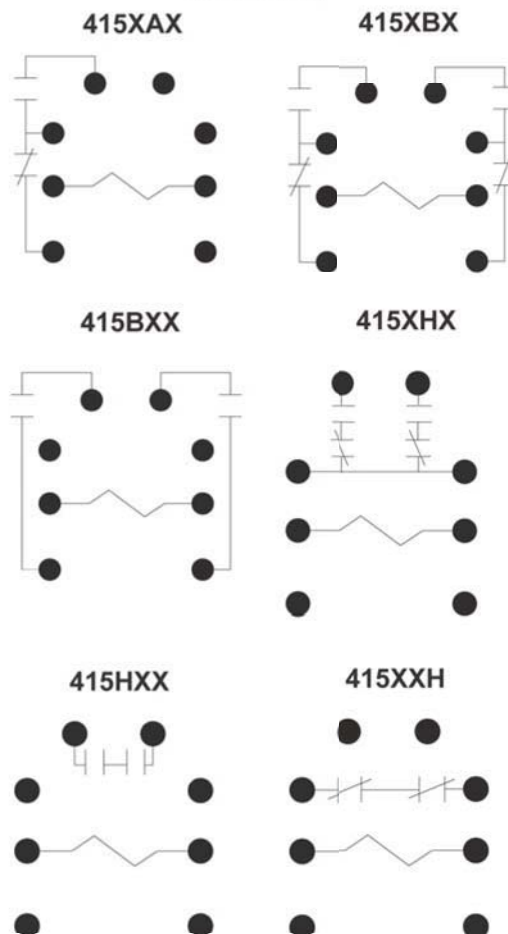
Electrical (full load)	200,000
Mechanical (no load)	20,000,000

### Miscellaneous:

Mounting Position	Vertical - Contacts Up
Enclosure	Open
Weight	4.0 oz. (113 grams)



415 Wire Diagram  
(Top View)



# General Purpose Relays

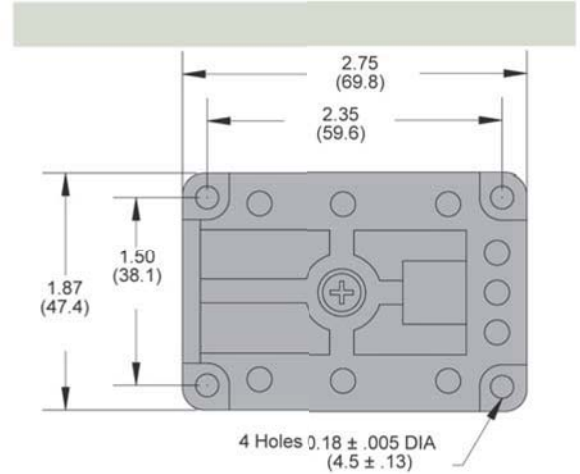
## Coil Data

415 AC Coils Specifications			
mAmps @ nominal voltage			
Nominal Voltages (VAC)	Resistance ohms ± 10%	Inrush current	Sealed coil
6	1.5	1800	1000
12	6.3	900	500
24	25	450	250
48	100	225	125
120	620	90	50
240	2500	45	25

415 DC Coils Specifications			
mAmps @ nominal voltage			
Nominal Voltages (VDC)	Resistance ohms ± 10%	Coils Cold	Coils Hot
6	10	600	500
12	40	300	250
24	155	150	125
32	390	112	95
48	620	75	62
115/125	4000	31	26

## Max Outline Dimensions

Dimensions Shown in inches & (millimeters)



**Ordering Code**    **415**    **XBX**    **18**    **-120VAC**

**Series**  
415

**Contact Arrangement**

- BXX (2P - N.O.)
- HXX (SPST-N.O. - DM)
- XAX (SPDT)
- XBX (DPDT)
- XHX (SPDT - DB - DM)
- XXH (SPST - N.C. - DB)

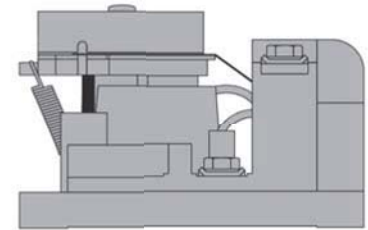
**Optional Features**

- 0.25 Inch quick connect terminals - CODE 18
- Permanent Magnet Blowout - CODE 69
- (Consult factory for other options)

**Coil Voltage**

- AC: 6, 12, 24, 48, 120, 240, (Add VAC)
- DC: 6, 12, 24, 32, 48, 115-125, (Add VDC)
- Coil voltages and frequencies must be specified

Special coils: Low power (mW), series coils  
 High inrush contacts: 10 Amps continuous, 150 Amp inrush.  
 High voltage contacts: Up to 4KV



Vertical mounting recommended with contacts up