

## 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:

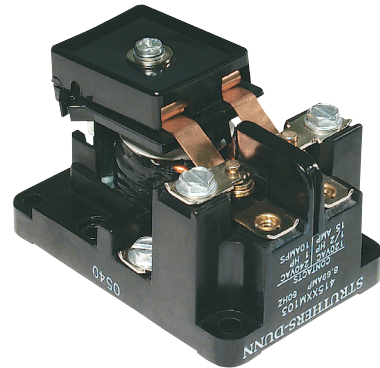
Operating	AC: -40 to 55°C (-49 to 131°F) DC: -40 to 70°C (-49 to 158°F)
Storage	-40 to 105°C (-40 to 221°F)

#### Life Expectancy:

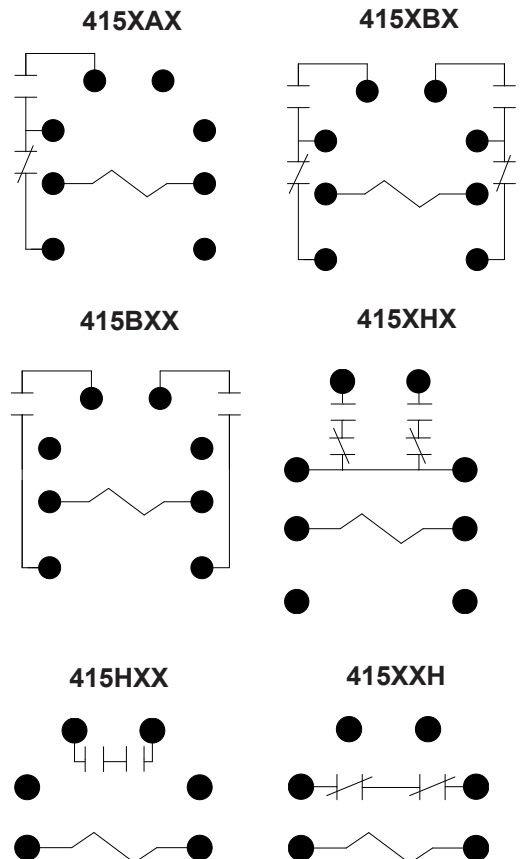
Electrical (full load)	200,000
Mechanical (no load)	20,000,000

#### 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

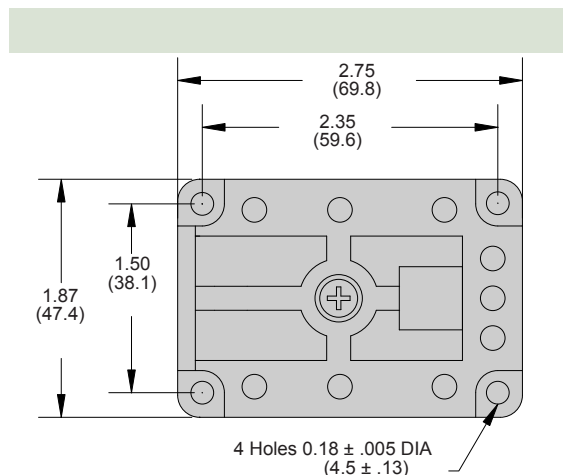
Nominal Voltages (VAC)	Resistance ohms $\pm 10\%$	Inrush current mAmps @ nominal voltage	Sealed coil
6	1.5	1800	1000
12	6.3	900	500
24	25	450	250
48	100	225	125
120	620	90	50
240	2500	45	25

### 415 DC Coils Specifications

Nominal Voltages (VDC)	Resistance ohms $\pm 10\%$	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

## 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)

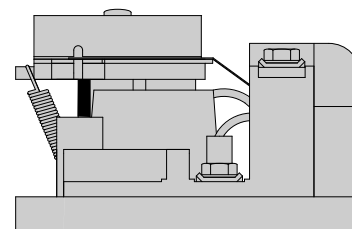
#### Optional Features

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



UP

Vertical mounting recommended  
with contacts up