

# 349 Series - Over/Under Voltage Sensor Relay SPDT- 4PDT, 10 Amp

Under / Over voltage sensing relay incorporating 219 series internal components coupled with an electronic module. Pull-in voltage is adjustable from 85 to 135VAC for frequencies ranging from 50 to 400 hertz. Hysteresis is typically set for a 4 volt differential but can be user adjustable from 3 to 14 volts when external connections are available.

## GENERAL SPECIFICATIONS (@ 25° C)

### Contacts:

Contact Configuration	Up to 4 pole
Contact Material	Silver Alloy Gold Diffused
Contact Rating	
120 / 240VAC Resistive	10 Amp / 10 Amp
28VDC Resistive	10 Amp
Motor 120VAC	
Motor 240VAC	
Minimum Contact Load	500mW
Contact Resistance, Initial	100 milliohms max @ 6VDC

### Coil:

Coils Available	AC
Power Consumption	5VA
Input Voltage Absolute Maximum	+60% of nominal
Pickup Voltage Range	3 to 14 volts over drop out
Dropout Voltage Range	85 to 135VAC
Transient Protection	Yes
Reverse Polarity Protection	N/A
Duty	Continuous

### Dielectric Strength:

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

### Temperature:

Operating	20 to 60°C (-4 to 140°F)
Storage	-40 to 85°C (-40 to 185°F)

### Life Expectancy:

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

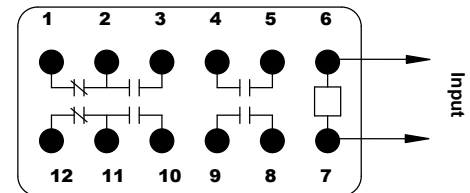
### Miscellaneous:

Mounting Position	Any
Mating Socket	27390, 27390D
Accessories	Hold down clip integral to relay
Enclosure	Clear Polycarbonate
Weight	8.6oz (244 grams)

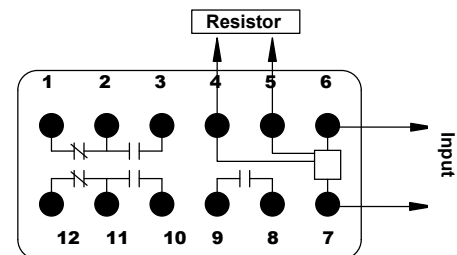


349 Wire Diagram

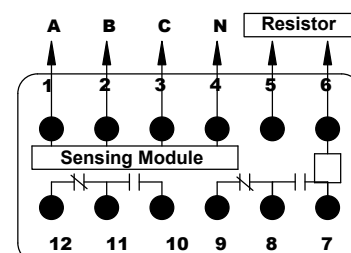
### Single Phase - 349BBX



### Single Phase - 349ABX



### Three Phase - 349XBX



# Timer / Sensor - Voltage Sensing Relay

## 10 - 14 Amp

### 349 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" permant 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

**349 ABXP & XBXP style the differential adjustment is extremely adjustable from 3 to 14 volts**

**Ordering Code** 349 BBX P L33- 88-135VAC

**Series**  
349 Over/under voltage sensor

**Contact Arrangement**  
BBX (2 Pole NO & DPDT)  
4V ± 1V Fixed  
ABX - (SPST - NO + DPDT)  
XBX (DPDT)

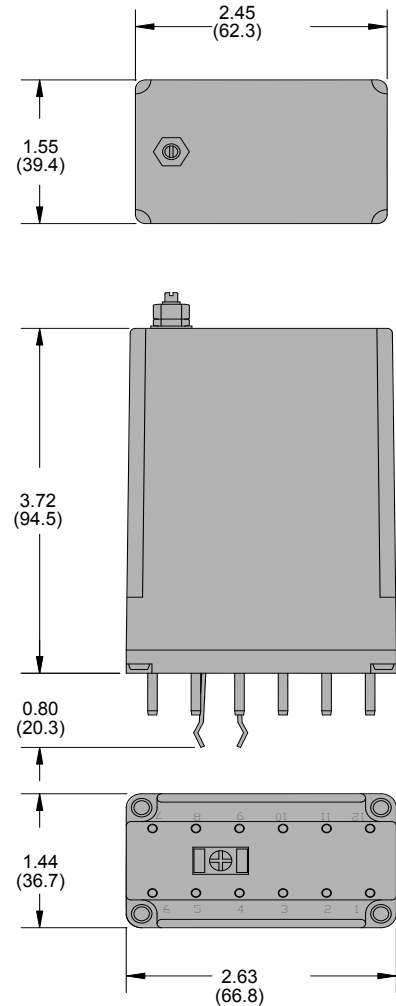
**Standard Features**  
Plug-in with polycarbonate cover - CODE P

**Optional Features**  
Indicator lamp - CODE L  
Manual actuator - CODE M  
Bifurcated contacts (5 Amps max) - CODE 33  
Permanent magnet, blowout - CODE 69

**Coil Voltage**  
AC: 85 TO 135 (Add VAC)

### Outline Dimensions

Dimensions Shown in inches & (millimeters)



**\*Externally adjustable differential 3 to 14V**