

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 4 to 12 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	10 Amp / 10 Amp
120 / 240VAC Resistive	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	4 to 12 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:

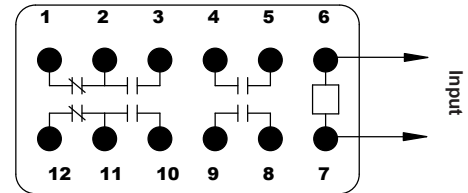
Electrical (full load operations)	100,000
Mechanical (no load operations)	10,000,000

Miscellaneous:

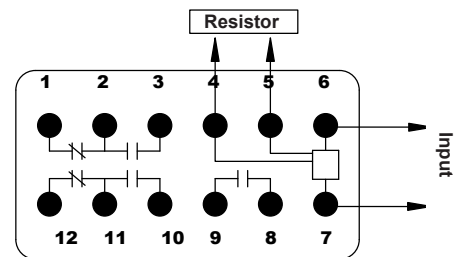
Mounting Position	Any
Mating Socket	27390, 27390D
Accessories	Hold down clip integral to relay
Enclosure	Clear Polycarbonate
Weight	8.6oz (244 grams)

349 Wire Diagram

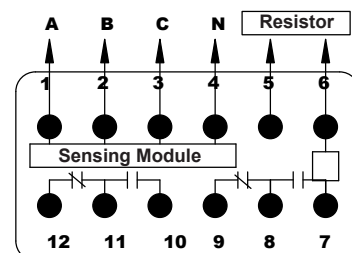
Single Phase - 349BBX



Single Phase - 349ABX



Three Phase - 349XBX



Timer / Sensor - Voltage Sensing Relay

10 - 14 Amp

UL Contact Load Ratings

Contact Configuration	Current / HP	Load Voltage	Load Frequency	Type of Load
All Styles EXCEPT Code 33	10 Amp	120 VAC	50/60Hz	Resistive
	5 Amp	240 VAC	50/60Hz	Resistive
	10 Amp	28 VDC	DC	Resistive
	0.5 Amp	125 VDC	DC	Resistive
	1/6HP	120 VAC	50/60Hz	Motor
Code 33	1/3HP	240 VAC	50/60Hz	Motor
	5 Amp	120 VAC	50/60Hz	General Purpose
Code 33	2.5 Amp	240 VAC	50/60Hz	General Purpose

Additional UL Ratings for code "69" relays incorporating a blowout magnet.

Contact Configuration	Current / HP	Load Voltage	Load Frequency	Type of Load
All Styles EXCEPT Code 33	3 Amp	125 VDC	DC	Resistive
	1 Amp	250 VDC	DC	Resistive

See the next page for additional Contact Ratings

Use Code "33" for bifurcated contacts when switching low level current below 50mA.

349 ABXP & XBXP style the differential adjustment is extremely adjustable from 4 to 12 volts

Ordering Code 349 BBX 69PLM33 85-135VAC

Series _____
349 Over/under voltage sensor

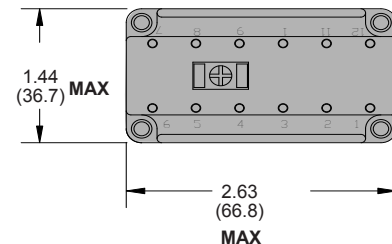
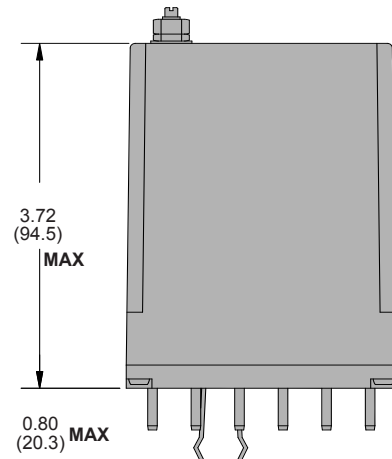
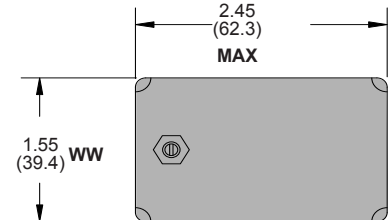
Contact Arrangement _____
BBX (2 Pole NO & DPDT) 4V ± 1V Fixed
ABX - (SPST - NO + DPDT)
XBX (DPDT)

Optional Features _____
Magnetic blowout - CODE 69
Polycarbonate Cover - CODE P (Standard)
Indicator lamp - CODE L
Manual actuator - CODE M
Bifurcated contacts (5 Amps max) - CODE 33

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

Outline Dimensions

Dimensions Shown in inches & (millimeters)



*Externally adjustable differential 3 to 14V