

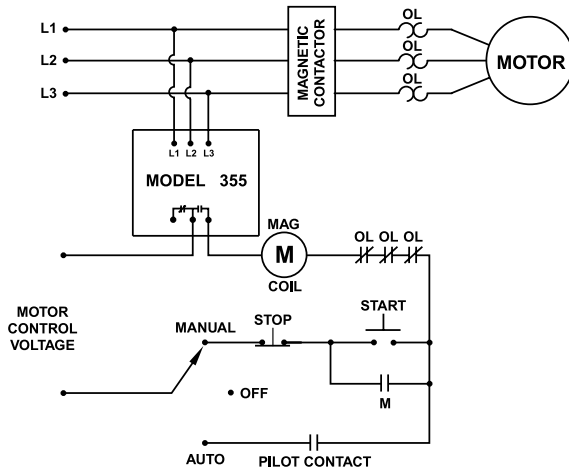
# 355 SERIES

## 3-phase voltage/phase monitor

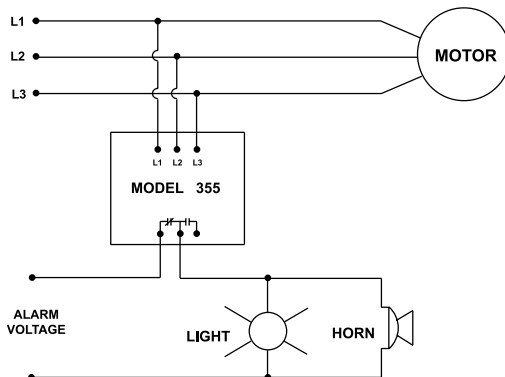


### Wiring Diagram

TYPICAL WIRING DIAGRAM FOR MODEL 355 WITH MOTOR CONTROL



TYPICAL WIRING DIAGRAM FOR MODEL 355 WITH ALARM CONTROL



### Description

The 355 Series is a 3-phase voltage monitor with adjustable trip and restart delay, adjustable voltage unbalance and multiple diagnostic lights. It is perfect for heavy-duty applications that need both protection and simple user-friendly diagnostics. Applications include pump panels, commercial HVAC, oil rigs and others.

The 355 Series uses microcontroller technology to monitor incoming voltage and de-energize its output relay if power problems exist. The 355 Series can protect motors from damage caused by single-phasing, high and low voltage, phase reversal and voltage unbalance. It has four diagnostic LEDs that clearly show overvoltage, undervoltage, voltage unbalance, reverse-phase and normal conditions.

The 355200 is equipped with a heavy-duty 10A general purpose SPDT relay. The 355400 and 355600 are equipped with a 470VA @ 600VAC pilot duty SPDT relay. A high voltage (600V) DPDT relay output option is available with the 400V model.

### Features & Benefits

FEATURES	BENEFITS
<b>Proprietary microcontroller based circuitry</b>	Constantly monitors 3 phase voltage to protect against harmful line conditions, even before the motor is started
<b>Advanced LED indication</b>	Provides diagnostics which can be used for troubleshooting and to determine relay status
<b>Adjustable trip and restart delay settings</b>	Prevent nuisance tripping due to rapidly fluctuating power line conditions and allows staggered start up of multiple motors, after a fault, to prevent a low voltage condition
<b>Combines protection and diagnostics</b>	Perfect for heavy duty applications: pump panels, commercial HVAC, and oil rigs
<b>600V rated relay contacts available on some models</b>	Eliminates the need for a control transformer to step voltage down to 120 - 240V for a control circuit

### Ordering Information

MODEL	LINE VOLTAGE	DESCRIPTION
355200	190-240VAC	SPDT
355400	380-480VAC	SPDT
3554005	380-480VAC	DPDT
355600	475-600VAC	SPDT

## 355 SERIES

### Specifications

#### Input Characteristics

##### Line Voltage

<b>355200</b>	190-240VAC
<b>355400</b>	380-480VAC
<b>355600</b>	475-600VAC

##### (Specify voltage range)

<b>Frequency</b>	50*/60Hz
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#### Functional Characteristics

##### Low Voltage (% of setpoint)

<b>Trip</b>	90% ±1%
<b>Reset</b>	93% ±1%

##### High Voltage (% of setpoint)

<b>Trip</b>	110% ±1%
<b>Reset</b>	107% ±1%

##### Voltage Unbalance (NEMA)

<b>Trip</b>	2-8% adjustable
<b>Reset</b>	Trip setting minus 1%

##### Trip Delay Time:

##### Low & High Voltage

<b>and Unbalance</b>	2-30 seconds adjustable
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##### Single-phasing Faults

<b>(&gt;25% UB)</b>	2 seconds
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##### Restart Delay Time

<b>After a Fault or Power Loss</b>	Manual, 2-300 seconds adj.
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#### Output Characteristics

##### Output Contact Rating

<b>SPDT (355200)</b>	
<b>Pilot Duty</b>	480VA at 240VAC
<b>General Purpose</b>	10A
<b>SPDT (355400, 355600)</b>	
<b>Pilot Duty</b>	470VA @ 600VAC
<b>DPDT (-5 Option)</b>	
<b>Pilot Duty</b>	470VA @ 600VAC

#### General Characteristics

##### Temperature Range

<b>Operating</b>	-40° to 70°C (-40° to 158°F)
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<b>Storage</b>	-40° to 80°C (-40° to 176°F)
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##### Repeat Accuracy

<b>Fixed Conditions</b>	±0.1%
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<b>Maximum Input Power</b>	6 W
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##### Terminal

<b>Torque</b>	7 in.-lbs.
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<b>Wire Size</b>	12-18AWG
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##### Transient Protection

<b>(Internal)</b>	2500V for 10 ms
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##### Safety Marks

<b>UL</b>	UL508 (File #E68520)
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<b>Dimensions</b>	<b>H</b> 74.42 mm (2.93"); <b>W</b> 133.86 mm (5.27");
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	<b>D</b> 74.93 mm (2.95")
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<b>Weight</b>	0.94 lb. (15.04 oz., 426.38 g)
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<b>Mounting Method</b>	#8 screws
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#### Special Options

##### Option 5 - DPDT Relay

\*Note: 50Hz will increase all delay times by 20%.