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

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<th>FEATURES</th>
<th>BENEFITS</th>
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<tr>
<td>Proprietary microcontroller based circuitry</td>
<td>Constantly monitors 3 phase voltage to protect against harmful line conditions, even before the motor is started</td>
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<td>Advanced LED indication</td>
<td>Provides diagnostics which can be used for troubleshooting and to determine relay status</td>
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<td>Adjustable trip and restart delay settings</td>
<td>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</td>
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<td>Combines protection and diagnostics</td>
<td>Perfect for heavy duty applications: pump panels, commercial HVAC, and oil rigs</td>
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<td>600V rated relay contacts available on some models</td>
<td>Eliminates the need for a control transformer to step voltage down to 120 - 240V for a control circuit</td>
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Ordering Information

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<th>MODEL</th>
<th>LINE VOLTAGE</th>
<th>DESCRIPTION</th>
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<td>355200</td>
<td>190-240VAC</td>
<td>SPDT</td>
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<tr>
<td>355400</td>
<td>380-480VAC</td>
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<td>3554005</td>
<td>380-480VAC</td>
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<tr>
<td>355600</td>
<td>475-600VAC</td>
<td>SPDT</td>
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Specifications

Input Characteristics

Line Voltage

355200 190-240VAC
355400 380-480VAC
355600 475-600VAC

(Specify voltage range)

Frequency

50*/60Hz

Functional Characteristics

Low Voltage (% of setpoint)

Trip 90% ±1%
Reset 93% ±1%

High Voltage (% of setpoint)

Trip 110% ±1%
Reset 107% ±1%

Voltage Unbalance (NEMA)

Trip 2-8% adjustable
Reset Trip setting minus 1%

Trip Delay Time:

Low & High Voltage 2-30 seconds adjustable
and Unbalance

Single-phasing Faults (>25% UB) 2 seconds

Restart Delay Time

After a Fault or Power Loss Manual, 2-300 seconds adj.

General Characteristics

Temperature Range

Operating -40° to 70°C (-40° to 158°F)
Storage -40° to 80°C (-40° to 176°F)

Repeat Accuracy

±0.1%

Maximum Input Power 6 W

Terminal

Torque 7 in.-lbs.
Wire Size 12-18AWG

Transient Protection (Internal) 2500V for 10 ms

Safety Marks

UL UL508 (File #E68520)

Dimensions

H 74.42 mm (2.93”); W 133.86 mm (5.27”); D 74.93 mm (2.95”)

Weight

0.94 lb. (15.04 oz., 426.38 g)

Mounting Method

#8 screws

Special Options

Option 5 - DPDT Relay

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

Output Characteristics

Output Contact Rating

SPDT (355200) 480VA at 240VAC
General Purpose 10A

SPDT (355400, 355600) 470VA @ 600VAC

Pilot Duty DPDT (-5 Option) 470VA @ 600VAC

Pilot Duty