Description
The 201A is a 3-phase, auto-ranging, dual-range voltage monitor that protects 190-480 V ac, 50/60 Hz motors regardless of size. The product provides a user selectable nominal voltage setpoint and the voltage monitor automatically selects between the 200 V and 400 V range. The 201A includes advanced single LED diagnostics, where color and light patterns distinguish between faults and normal conditions.
This unique microcontroller-based voltage and phase-sensing device constantly monitors the 3-phase voltages to detect harmful power line conditions. When a harmful condition is detected, the 201A’s output relay is deactivated after a specified trip delay. The output relay reactivates after power line conditions return to acceptable levels for a specified restart delay time.

Features & Benefits

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<th>FEATURES</th>
<th>BENEFITS</th>
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<tr>
<td>Proprietary microcontroller based circuitry</td>
<td>Constant monitoring of single-phase, low voltage, voltage unbalance, phase reversal, harmful power line conditions. High voltage monitoring optional.</td>
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<tr>
<td>Compact design for 8-pin; DIN rail or surface mount</td>
<td>Allows flexibility in panel installation</td>
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<tr>
<td>Auto-sensing wide voltage range</td>
<td>Automatically senses system voltage between 190 - 480 V ac. Saves setup time.</td>
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<tr>
<td>Advanced LED diagnostics</td>
<td>Quick visual indicator for cause of trip. LED indications include: normal operation, power-up restart delay, reverse-phase trip, unbalance/single-phase trip, high/low voltage trip</td>
</tr>
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</table>

Accessories

<table>
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<tr>
<th>OT08PC Octal 8-pin Socket</th>
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<tr>
<td>8-pin 35 mm DIN rail or surface mount. Rated at 10 A @ 600 V ac. Surface mounted with two #6 screws or snaps onto a 35 mm DIN rail.</td>
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</table>

Ordering Information

<table>
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<tr>
<th>MODEL</th>
<th>LINE VOLTAGE</th>
<th>DESCRIPTION</th>
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<tr>
<td>201A</td>
<td>190–480VAC</td>
<td>DIN rail or surface mountable</td>
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<tr>
<td>201A-9</td>
<td>190–480VAC</td>
<td>Includes high voltage detection. DIN rail or surface mountable</td>
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</table>
Specifications

Frequency  50/60 Hz

Functional Characteristics

Low Voltage (% of setpoint)

Trip  90 % ±1 %
Reset  93 % ±1 %

Voltage Unbalance (NEMA)

Trip  6 %
Reset  4.5 %

Optional High Voltage (% of setpoint)

Trip  110 % ±1 %
Reset  107 % ±1 %

Trip Delay Time
High/Low Voltage Fault  4 seconds
Unbalance & Phasing Faults  2 seconds
Restart Delay Time
After a Fault  2 seconds
After a Complete Power Loss  2 seconds

Output Characteristics

Output Contact Rating (SPDT)
480 VA @ 240 V ac

General Purpose
10 A @ 240 V ac

General Characteristics

Temperature Range -20° to 70°C (-4° to 158°F)

Trip & Reset Accuracy ±1%

Maximum Input Power 5 W

Relative Humidity 10–95%, non-condensing per IEC 68-2-3

Terminal Torque 12 in.-lbs. (for OT08-PC socket)

Wire Gauge 12-22 AWG solid or stranded

Transient Protection (Internal) 2500 V for 10 ms

Standards Passed

Electrostatic Discharge (ESD)  IEC 61000-4-2, Level 3, 6 kV contact, 8 kV air

Radio Frequency Immunity (RFI), Radiated  150MHz, 10 V/m

Fast Transient Burst  IEC 61000-4-4, Level 3, 3.5 kV input power & controls

Surge Immunity IEC  IEC 61000-4-5, Level 3, 4 kV line-to-line;
Level 4, 4 kV line-to-ground

ANSI/IEEE C62.41 Surge and Ring Wave Compliance to a level of 6 kV line-to-line
Meets UL508 (2 x rated V + 1000V for 1 min.)

Hi-potential Test

Safety Marks

UL (OT08PC octal socket required)

Dimensions

UL 508 (File #E68520)
H 44.45 mm (1.75”); W 60.33 mm (2.38”);
D (with socket) 104.78 mm (4.13”)
0.7 lbs. (11.2 oz., 317.51 g)

Weight

Mounting Method DIN rail or surface mount

Socket Available

Model OT08PC (UL Rating 600 V)

The 600 V socket can be surface mounted or installed on DIN Rail.

Note: Manufacturer’s recommended screw terminal torque for the OT Series Octal Sockets is 12 in.-lbs.

Must use Model OT08PC socket for UL Rating!