# 201A-AU SERIES

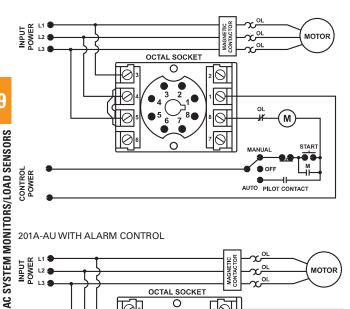
## 3-Phase Voltage/Phase Monitor



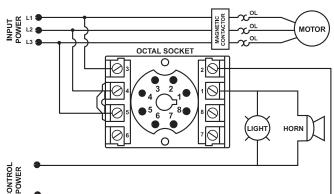


# **Wiring Diagram**

201A-AU WITH MOTOR CONTROL



201A-AU WITH ALARM CONTROL



For dimensional drawing see: Appendix, page 509, Figure 8.

### **Description**

The 201A-AU is a 3-phase, auto-ranging, dual-range voltage monitor that protects 190-480VAC, 50/60Hz motors regardless of size. The product provides a user selectable nominal voltage setpoint and the voltage monitor automatically selects between the 200V and 400V range. Additional adjustment knobs allow the user to set a 1-30 second trip delay, a manual restart or 1-500 second restart delay and a 2-8% voltage unbalance trip point. The Model 201A-AU 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-AU'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 amount or restart delay time (or manual reset).

#### **Features & Benefits**

FEATURES	BENEFITS	
Proprietary microcontroller based circuitry	Constant monitoring of loss of any phase, low voltage, high voltage, voltage unbalance, phase reversal, rapid cycling, harmful power line conditions	
Compact design for 8-pin; DIN rail or surface mount	Allows flexiblility in panel installation	
Auto-sensing wide voltage range	Automatically senses system voltage between 190 - 480VAC. Saves setup time.	
Advanced LED diagnostics	Quick visual indicator for cause of trip.	
Adjustable voltage unbalance trip setting	Allows compatibility with a variety of motors and reduces nuisance tripping.	
Adjustable trip & restart delay settings	Prevent nuisance tripping due to rapidly fluctuating power line conditions.	

#### **Accessories**



#### OT08PC Octal 8-pin Socket

8-pin 35mm DIN rail or surface mount. Rated at 10A @ 600VAC. Surface mounted with two #6 screws or snaps onto a 35 mm DIN rail.

# **Ordering Information**

MODEL	LINE VOLTAGE	DESCRIPTION
201A-AU	190-480VAC	DIN rail or surface mountable
201575-AU	475-600VAC	DIN rail or surface mountable
201A-AU-OT	190-480VAC	Sold with OTO8PC socket
201-575-AU-0T	475-600VAC	Sold with OTO8PC socket

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# 201A-AU SERIES

# **Specifications**

Frequency 50/60Hz
Functional Characteristics

Low Voltage (% of setpoint)

 Trip
  $90\% \pm 1\%$  

 Reset
  $93\% \pm 1\%$ 

Voltage Unbalance (NEMA)

**Trip** 2-8% adjustable

Reset Trip Setting Minus 1% (5-8%)
Trip Setting Minus 0.5% (2-4%)

Trip Delay Time High, Low and

Unbalanced Voltage 1-30 seconds adjustable
Single-Phasing Faults 1 second fixed

Restart Delay Time

After a Fault Manual, 1-500 seconds adj.

After a Complete

**Power Loss** Manual, 1-500 seconds adj.

Output Characteristics
Output Contact Rating

Output Contact Kating (1-Form C)

 Pilot Duty
 480VA @ 240VAC, B300

 General Purpose
 10A @ 240VAC

**General Characteristics** 

**Ambient Temperature Range** 

 $\begin{array}{lll} \textbf{Operating} & -40^{\circ} \ \text{to} \ 70^{\circ} \text{C} \ (-40^{\circ} \ \text{to} \ 158^{\circ} \text{F}) \\ \textbf{Storage} & -40^{\circ} \ \text{to} \ 80^{\circ} \text{C} \ (-40^{\circ} \ \text{to} \ 176^{\circ} \text{F}) \\ \end{array}$ 

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

**Standards Passed** 

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

Radio Frequency

**Immunity, Radiated** 150 MHz, 10V/m

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

and controls

Surge

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

Level 4, 4kV line-to-ground

**ANSI/IEEE** C62.41 Surge and Ring Wave Compliance to

a level of 6kV line-to-line

Hi-potential Test Meets UL508 (2 x rated V +1000V for 1 min.)

Safety Marks

UL (OT08PC octal

socket required)
UL508 (File #E68520)
CE
IEC 60947-6-2
Enclosure
Polycarbonate

**Dimensions H** 44.45 mm (1.75"); **W** 60.325 mm (2.375");

**D** 104.775 mm (4.125") (with socket)

Weight 0.7 lb. (11.2 oz., 317.51 g)

Mounting Method DIN rail or surface mount (plug in to OT08PC socket)

Socket Available OT08PC (UL Rating 600V)

The 600V 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 -lhs

Must use Model OT08PC socket for UL Rating!