

## 3-Phase Voltage/Phase Monitor

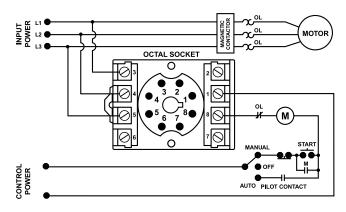


## (JL)

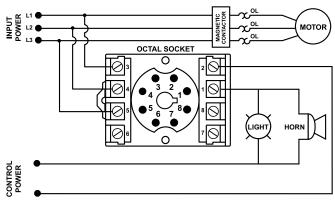


## Wiring Diagram

201A-AU WITH MOTOR CONTROL



201A-AU WITH ALARM CONTROL



## Description

The 201A-AU 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. 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	r 8-pin; mount Allows flexiblility in panel installation	
Auto-sensing wide voltage range	Automatically senses system voltage between 190–480 V ac. 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 35 mm DIN rail or surface mount. Rated at 10A @ 600 V ac. Surface mounted with two #6 screws or snaps onto a 35 mm DIN rail.

## **Ordering Information**

MODEL	LINE VOLTAGE	DESCRIPTION
201A-AU	190–480 V ac	DIN rail or surface mountable
201575-AU	475–600 V ac	DIN rail or surface mountable
201A-AU-OT	190–480 V ac	Sold with OT08PC socket
201-575-AU-OT	475–600 V ac	Sold with OTO8PC socket

# 201A-AU SERIES



IEC 61000-4-2, Level 3, 6 kV contact, 8 kV air

IEC 61000-4-4, Level 3, 3.5 kV input power

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

C62.41 Surge and Ring Wave Compliance to

Meets UL 508 (2 x rated V +1000 V for 1 min.)

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

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

Level 4, 4 kV line-to-around

a level of 6 kV line-to-line

UL 508 (File #E68520)

0.7 lb. (11.2 oz., 317.51 g)

DIN rail or surface mount

(plug in to OT08PC socket)

OT08PC (UL Rating 600 V)

Polycarbonate

150 MHz, 10 V/m

and controls

## Specifications

Frequency Functional Characteristics Low Voltage (% of setpoint) Trip Reset High Voltage (% of setpoint) Trip Reset Voltage Unbalance (NEMA) Trip Reset

Trip Delay Time High, Low and Unbalanced Voltage Single-Phasing Faults Restart Delay Time After a Fault After a Complete Power Loss Output Characteristics Output Contact Rating

(1-Form C) Pilot Duty General Purpose General Characteristics

#### Ambient Temperature Range Operating Storage Trip & Reset Accuracy Maximum Input Power Relative Humidity Terminal Torque Wire Gauge

50/60 Hz

90 % ±1 % 93 % ±1 % 110 % ±1 % 107 % ±1 %

> 2–8 % adjustable Trip Setting Minus 1 % (5–8%) Trip Setting Minus 0.5 % (2–4%)

1–30 seconds adjustable 1 second fixed

Manual, 1-500 seconds adj.

Manual, 1-500 seconds adj.

480 VA @ 240 V ac, B300 10 A @ 240 V ac

-40° to 70°C (-40° to 158°F) -40° to 80°C (-40° to 176°F) ±1 % 5 W 10–95 %, non-condensing per IEC 68-2-3 12 in.-Ibs. (for OT08-PC socket) 12-22 AWG solid or stranded

### Standards Passed

Electrostatic Discharge (ESD) Radio Frequency Immunity, Radiated Fast Transient Burst

Surge IEC

ANSI/IEEE

**Hi-potential Test** 

Safety Marks UL (0T08PC octal socket required) Enclosure Dimensions

Weight Mounting Method

#### Socket Available

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!

# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

201A-AU-OT 201A-AU 201575-AU 201-575-AU-OT