

## Features

Four adjustment pots provide versatility for numerous applications.

Universal range from 190-480VAC, 50/60Hz provides versatility to handle global applications.

Bi-color LED indicates trip status and provides simple troubleshooting.

Microcontroller-based circuitry provides better accuracy and higher reliability than analog designs.

Transient protection meets IEEE and IEC standards and permits operation under tough conditions.

Single-phase conditions are detected regardless of regenerated voltages.



**MotorSaver**  
THREE-PHASE ELECTRIC  
MOTOR PROTECTOR

## Model 201A-AU

**Three-Phase  
Voltage Monitor**

**Engineered  
Protection**

**Microcontroller  
Based**

### Protects 3-Phase Motors from:

- Loss of any phase
- Low voltage
- High voltage
- Voltage unbalance
- Phase reversal
- Rapid cycling

### Features:

- Compact design
- Standard manual, 1-500 sec. variable restart delay
- Standard 2-8% variable voltage unbalance
- Standard 1-30 sec. variable trip delay
- DIN rail mounted octal base
- Optional external manual reset
- One 10 amp general purpose form C relay
- UL and cUL listed
- CE compliant
- 5-year warranty
- Made in USA

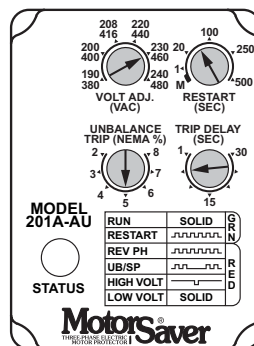
The **Model 201A-AU** is the newest, most versatile, plug-in style voltage monitor designed to protect 3-phase motors from damaging power conditions. Its wide operating range combined with UL, cUL and CE compliance enables quick access to domestic and global markets.

A unique microcontroller-based voltage and phase-sensing circuit constantly monitors the 3-phase voltages to detect harmful power line conditions. When a harmful condition is detected, the MotorSaver's output relay is deactivated after a specified trip delay. The output relay reactivates after power line conditions return to an acceptable level for the specified restart delay. The trip and restart delays prevent nuisance tripping due to rapidly fluctuating power line conditions.

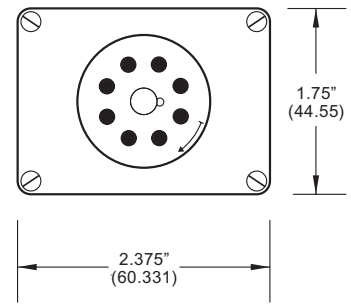
The Model 201A-AU automatically senses whether it is connected to a 190-240V, 60Hz system, a 440-480V, 60Hz system, or a 380-416V, 50Hz system. An adjustment is provided to set the nominal line voltage from 190-240 or 380-480VAC. Other variable settings include a 1-30 second trip delay, manual or 1-500 second restart delay, and 2-8% voltage unbalance trip point.

RUN	SOLID	GRN
RESTART	~~~~~	
REV PH	~~~~~	RED
UB/SP	~~~~~	
HIGH VOLT	~~~~~	
LOW VOLT	SOLID	

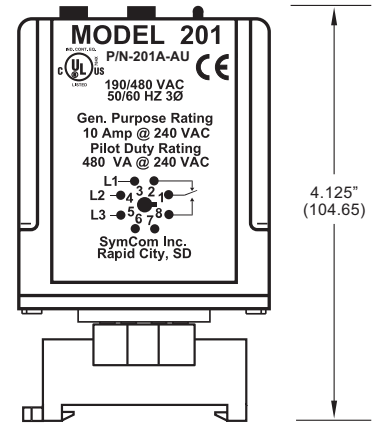
DIAGNOSTIC INDICATOR LIGHTS



## Model 201A-AU Three-Phase Voltage Monitor



**BOTTOM**



**SIDE  
WITH OT08\* SOCKET**

### Specifications

#### 3-Phase Line Voltage

- 201A-AU .....190-480VAC
- 201-600-AU .....475-600VAC

Frequency.....50/60Hz

#### 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% (5 - 8%)  
Trip setting minus .5% (2 - 4%)

#### Trip Delay Time

- Low, High and Unbalanced Voltage .....1-30 seconds adjustable
- Single-Phasing Faults.....1 second fixed

#### Restart Delay Time

- After a Fault .....Manual, 1-500 seconds adjustable
- After a Complete Power Loss.....Manual, 1-500 seconds adjustable

#### Output Contact Rating

- 1-Form C .....10A General Purpose @ 240VAC  
Pilot Duty 480VA @ 240VAC, B300

Power Consumption .....6 Watts (max.)

Weight .....14 oz.

Enclosure .....Polycarbonate

#### Safety Marks

- UL.....UL508
- cUL.....C22.2 No.14
- CE .....IEC 60947-6-2

#### Standards Passed

- Electrostatic Discharge (ESD) .....IEC 1000-4-2, Level 3, 6kV contact, 8kV air
- Radio Frequency Immunity, Radiated .....150MHz, 10V/m
- Fast Transient Burst .....IEC 1000-4-4, Level 3, 3.5kV input power & controls

#### Surge

- IEC .....IEC 1000-4-5, 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 minute)

#### Environmental

- Temperature Range.....Ambient Operating: -40° to 70°C (-40° to 158°F)  
Ambient Storage: -40° to 80°C (-40° to 176°F)
- Relative Humidity.....10-95%, non-condensing per IEC 68-2-3

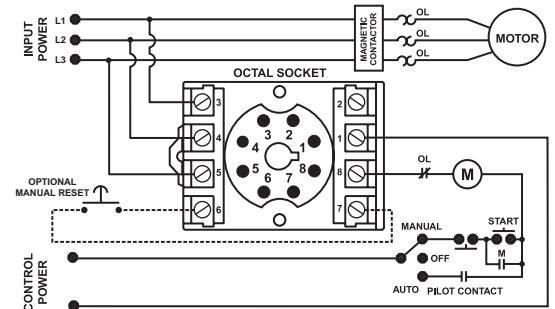
#### Special Options

- Manual Reset (Model 201A-AU-MR).....External normally-open momentary pushbutton required (not included).

\*SymCom's OT08 octal socket is 35mm DIN rail compatible.

SymCom warrants its microcontroller based products against defects in material or workmanship for a period of five (5) years from the date of manufacture. All other products manufactured by SymCom shall be warranted against defects in material and workmanship for a period of two (2) years from the date of manufacture. For complete information on warranty, liability, terms, returns, and cancellations, please refer to the SymCom Terms and Conditions of Sale document.

**TYPICAL WIRING DIAGRAM FOR MODEL 201A-AU  
WITH MOTOR CONTROL**



**TYPICAL WIRING DIAGRAM FOR MODEL 201A-AU  
WITH ALARM CONTROL**

