## 202-200-SP SERIES

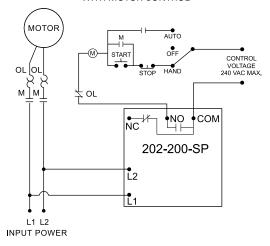
## Single-phase voltage monitor



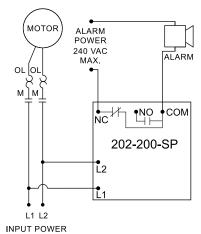


### **Wiring Diagram**

TYPICAL WIRING DIAGRAM FOR MODEL 202-200-SP WITH MOTOR CONTROL



# TYPICAL WIRING DIAGRAM FOR MODEL 202-200-SP WITH ALARM CONTROL



### **Description**

The 202-200-SP Series voltage monitor is designed to protect single-phase motors regardless of size. It can be used with 190V-240VAC, 50/60Hz motors to prevent damage caused by incoming power problems.

A unique microcontroller-based voltage-sensing circuit constantly monitors the voltage 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 and a specified amount of time has elapsed (restart delay). The trip delay prevents nuisance tripping due to rapidly fluctuating power line conditions.

#### **Features & Benefits**

| FEATURES   | BENEFITS   |
|--|--|
| Proprietary<br>microcontroller<br>based circuitry            | Constant monitoring of voltage to detect harmful power line conditions, even before a motor starts |
| Fixed trip delay 4s  | Prevents nuisance tripping due to rapidly fluctuating power line conditions                        |
| Adjustable restart delay (Manual, 2-300s)                    | Allows staggered start up of multiple motors, after a fault, to prevent a low voltage condition    |
| Advanced LED indication                                      | Provides diagnostics which can be used for troubleshooting and to determine relay status           |
| One screw mounting and standard 1/4" quick connect terminals | Fast installation and compact size perfect for panel assembly or OEM applications                  |
| connect terminals  | parior assortiony or other applications  |

### **Ordering Information**

| MODEL          | LINE VOTAGE | DESCRIPTION                           |
|----------------|-------------|---------------------------------------|
| 202-200-SP     | 190-240VAC  | SPDT, high and low voltage protection |
| 202-200-SP-NHV | 190-240VAC  | SPDT, low voltage protection only     |



## 202-200-SP SERIES

## **Specifications**

**Input Characteristics** 

Line Voltage:

**202-200-SP, 202-200-SP-NHV** 190-240VAC **Frequency** 50\*/60Hz

**Functional Characteristics** 

Low Voltage (% of setpoint)

Trip 90%
Reset 93%
High Voltage (% of setpoint)
(not available on -NHV model)
Trip 110%

Reset Trip Delay Time:

High and Low Voltage 4 seconds

Restart Delay Time: After a Fault or Complete

Power Loss Manual, 2-300 seconds adj.

107%

**Output Characteristics** 

**Output Contact Rating (SPDT)** 

 Pilot Duty
 480VA @ 240VAC

 General Purpose
 10A @ 240VAC

#### **General Characteristics**

**Temperature Range** -40° to 70°C (-40° to 158°F)

Trip & Reset Accuracy  $\pm 1\%$ Repeatability  $\pm 0.5\%$ 

Input to Output Dielectric 1480 Vrms (min.)

**Termination** 0.25" male quick connect

Maximum Input Power 5 W

**Relative Humidity** 95%, non-condensing **Transient Protection** IEC 61000-4-5, ±4kV

Safety Marks

**UL, UL Recognized** UL508 (File #E68520)

**Dimensions H** 63.5 mm (2.5"); **W** 63.5 mm (2.5");

**D** 35.56 mm (1.4") 0.5 lb. (8 oz., 226.8 g)

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(customer supplied)

<sup>\*</sup>Note: 50Hz will increase all delay timers by 20%.