

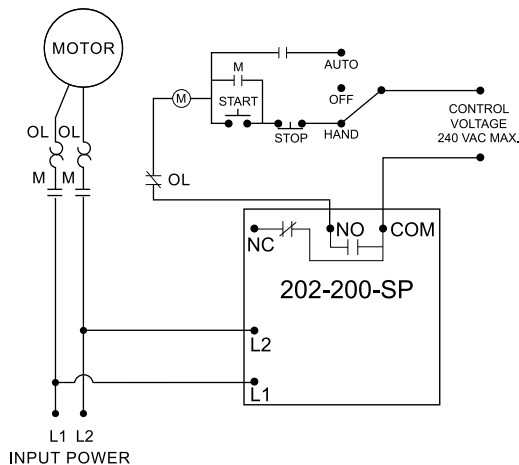
## 202-200-SP SERIES

### Single-phase voltage monitor

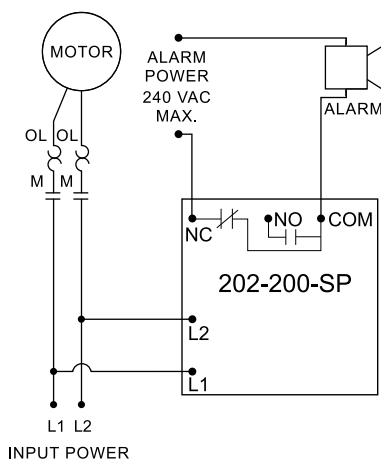


### Wiring Diagram

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

### Ordering Information

MODEL	LINE VOLTAGE	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 107%

##### Trip Delay Time:

High and Low Voltage 4 seconds

##### Restart Delay Time:

##### After a Fault or Complete

Power Loss Manual, 2-300 seconds adj.

#### 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

±1%

##### Repeatability

±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")

##### Weight

0.5 lb. (8 oz., 226.8 g)

##### Mounting Method

1/4" socket head cap screw  
(customer supplied)

\*Note: 50Hz will increase all delay timers by 20%.