

# 202-200-SP SERIES

## Single-phase voltage monitor



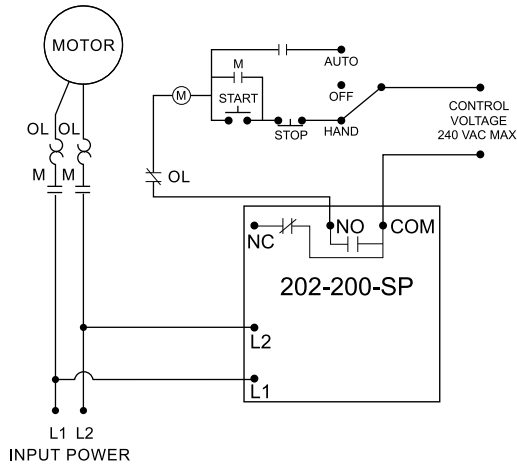
### Description

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.

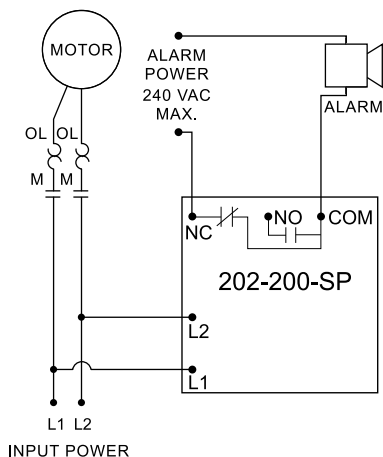
A unique microcontroller-based voltage-sensing circuit constantly monitors the voltage to detect harmful power line conditions. When a harmful condition is detected, the MotorSaver's output relay is deactivated after a specified trip delay. The output relay reactivates after power line conditions return 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.

### Wiring Diagram

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



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



### 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

<b>Line Voltage:</b>	190-240VAC
<b>202-200-SP, 202-200-SP-NHV</b>	190-240VAC
<b>Frequency</b>	50*/60Hz

#### Functional Characteristics

<b>Low Voltage (% of setpoint)</b>	
<b>Trip</b>	90%
<b>Reset</b>	93%
<b>High Voltage (% of setpoint)</b> (not available on -NHV model)	
<b>Trip</b>	110%
<b>Reset</b>	107%
<b>Trip Delay Time:</b>	
<b>High and Low Voltage</b>	4 seconds
<b>Restart Delay Time:</b>	
<b>After a Fault or Complete Power Loss</b>	Manual, 2-300 seconds adj.

#### Output Characteristics

<b>Output Contact Rating (SPDT)</b>	
<b>Pilot Duty</b>	480VA @ 240VAC
<b>General Purpose</b>	10A @ 240VAC

### General Characteristics

<b>Temperature Range</b>	-40° to 70°C (-40° to 158°F)
<b>Trip &amp; Reset Accuracy</b>	±1%
<b>Repeatability</b>	±0.5%
<b>Input to Output Dielectric Termination</b>	1480 Vrms (min.) 0.25" male quick connect
<b>Maximum Input Power</b>	5 W
<b>Relative Humidity</b>	95%, non-condensing
<b>Transient Protection</b>	IEC 61000-4-5, ±4kV
<b>Safety Marks</b>	
<b>UL, UL Recognized</b>	UL508 (File #E68520)
<b>Dimensions</b>	<b>H</b> 63.5 mm (2.5"); <b>W</b> 63.5 mm (2.5"); <b>D</b> 35.56 mm (1.4")
<b>Weight</b>	0.5 lb. (8 oz., 226.8 g)
<b>Mounting Method</b>	1/4" socket head cap screw (customer supplied)

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