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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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102A SERIES

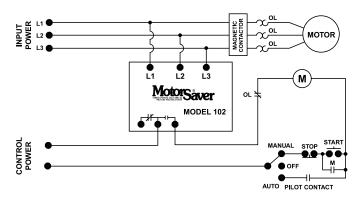
3-Phase Voltage/Phase Monitor



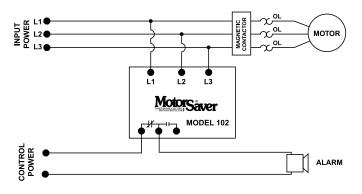


Wiring Diagram

102 WITH MOTOR CONTROL



102 WITH ALARM CONTROL



Description

The 102A is a 3-phase, auto-ranging, dual-range voltage monitor that protects 190-400VAC, 50/60Hz motors regardless of size. The product provides a user selectable nominal voltage setpoint and the voltage monitor automatically selects between the 200V and 400V range.

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 output relay is deactivated after a specified trip delay. The output relay reactivates after power line conditions return to acceptable levels. The Model 102A includes advanced single LED diagnostics. Five different light patterns distinguish between faults and normal conditions.

Features & Benefits

FEATURES	BENEFITS
Proprietary microcontroller based circuitry	Constant monitoring of single-phase, low voltage, high voltage (102A-9), voltage unbalance, phase reversal, harmful power line conditions.
Auto-sensing wide voltage range	Automatically senses system voltage between 190 - 480VAC. Saves setup time.
Advanced LED diagnostics	Quick visual indicator for cause of trip. LED indications include: normal operation, power-up restart delay, reverse-phase trip, unbalance/single-phase trip, high or low voltage trip
Adjustable trip delay (102A2)	Prevent nuisance tripping due to rapidly fluctuating power line conditions.

Ordering Information

MODEL	LINE VOLTAGE	DESCRIPTION
102A	190-480VAC	Fixed low voltage trip delay (4 sec), fixed restart delay (2 sec)
102A2	190-480VAC	Has variable restart delay (manual or adjustable 2-300 seconds)
102A3	190-480VAC	Has adjustable trip delay at 2-30 seconds (unbalance and phasing trip delays remain at 2 seconds).
102A-9	190-480VAC	Has high voltage protection. High Voltage Trip is 110% of setpoint, Reset is 107% of setpoint.
102600	475-600VAC	Fixed low voltage trip delay (4 sec), fixed restart delay (2 sec)



102A SERIES

Specifications

Frequency 50*/60Hz

Functional Characteristics Low Voltage (% of setpoint)

 Trip
 90%

 Reset
 93%

Voltage Unbalance (NEMA)

 Trip
 6%

 Reset
 4.5%

Trip Delay Time

Low/High Voltage 4 seconds (standard)

Unbalance & Phasing Faults 2 seconds

Restart Delay Time

After a Fault 2 seconds (standard)
After a Complete Power Loss 2 seconds (standard)

Output Characteristics

Output Contact Rating (SPDT - 1 Form C)

 Pilot Duty
 480VA @ 240VAC

 General Purpose
 10A @ 240VAC

General Characteristics

Ambient Temperature Range

 Operating
 -40° to 70°C (-40° to 158°F)

 Storage
 -40° to 80°C (-40° to 176°F)

Trip & Reset Accuracy $\pm 1\%$ Maximum Input Power $5\,\mathrm{W}$

Terminal

Torque 7 in.-lbs. **Wire Size** 12-18AWG

Standards Passed

Electrostatic Discharge (ESD) IEC 61000-4-2, Level 3, 6kV contact, 8kV air

Fast Transient Burst IEC 61000-4-4, Level 3, 4kV input,

2kV input/output

IEC 61000-4-5; 1995 ±6kV

Transient Protection (Internal)

Safety Marks

 UL
 UL508 (File #E68520)

 CSA
 22.2 No. 14 (File #46510)

CE IEC 60947-6-2

Dimensions H 74.4 mm (2.93"); **W** 133.9 mm (5.27");

D 74.9 mm (2.95")

Weight 1.05 lbs. (16.8 oz., 476.27 g)

Mounting Method #8 screws

^{*}Note: 50Hz will increase all delay timers by 20%.