



## OPERATION & MAINTENANCE

# WATCH DOG

Caution: As with any electrical equipment, the Magnetic Speed Switch should be installed by trained personnel using appropriate safety practices per the National Electric Code, including electrical disconnect and lockout practices, reference ANSI Z244.1.

### GENERAL

The Watch Dog timer relay is a single pole, double throw relay with a field adjustable timed input trigger. The relay is designed to monitor a pulse stream received from a speed monitoring device such as the PPI Magnetic Speed Switch and provide a continuously open or closed relay connection. Upon receiving the first high voltage pulse on the input connection, the relay will energize. As long as each proceeding pulse is received within the amount of time specified on the field adjustable timer, the relay will remain energized. If the selected time passes without receiving a pulse, the relay will de-energize until the next pulse is received.

This device is not intended for use in hazardous areas as defined by the NEC, articles 500-504. An intrinsically safe Watch Dog is not presently available.

### WIRING INSTRUCTIONS

1. Read and understand all wiring instructions prior to installation.
2. Disconnect and lock out power before starting wiring procedure.
3. The Watch Dog is not weatherproof and must be mounted in a suitable enclosure. It can be mounted on a DIN rail.
4. Make the connections according to the appropriate schematic below.

### OPERATING INSTRUCTIONS

1. The LED will blink to indicate each time a pulse is received from the speed switch
2. Set the timer to a value greater than the amount of time between the pulses received and the relay will remain energized continuously during normal operation. The time between pulses can be calculated with the following formula:  $60 / \text{Shaft RPM} / \text{Speed Switch pulses per revolution}$ . The Watch Dog timer can be adjusted from 0.5 – 10 seconds between pulses.

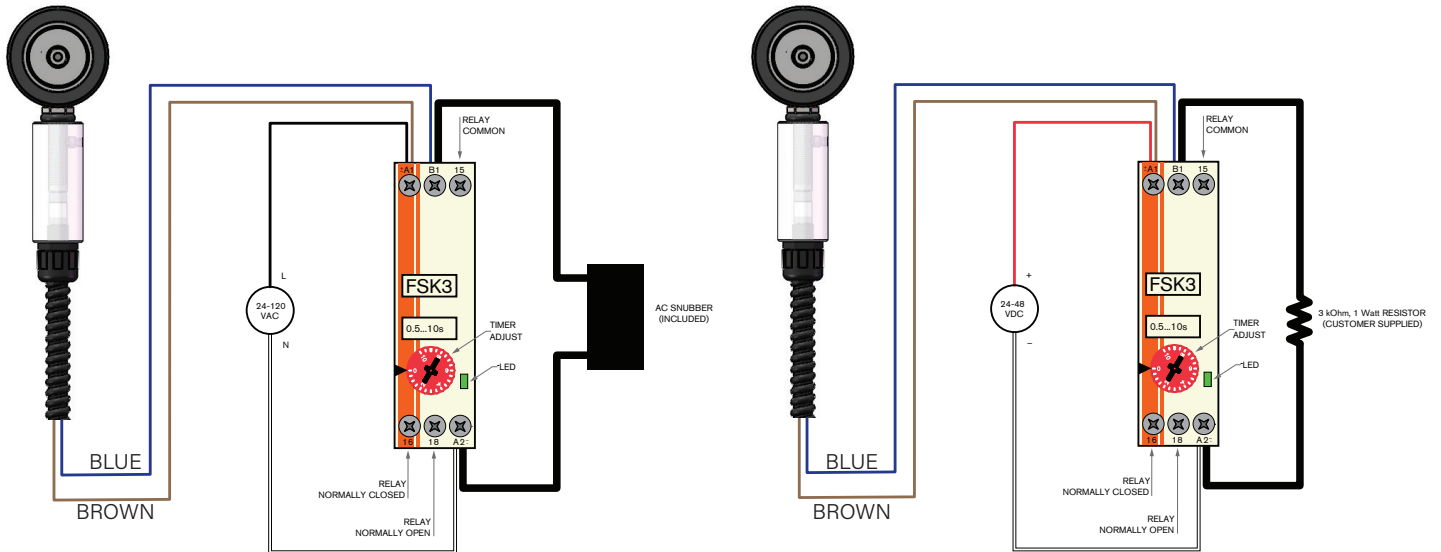
# SPECIFICATIONS AND SCHEMATICS

## TECHNICAL SPECIFICATIONS

Power	24-48 VDC 24-120 VAC 50/60 Hz
Minimum Input Pulse Duration	≥30 ms DC ≥50 ms AC
Maximum Pulse Period	0.5 - 10 s
Relay Switching Capacity	1.5 A, 250 VAC 3 A, 120 VAC
Ambient Temperature	Open: -13°F - 140°F Enclosed: -13°F - 113°F

## CONNECTIONS

A1	L / DC+
A2	N / DC-
B1	Signal Input
15	Relay Common
16	Relay NC
18	Relay NO



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