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# PRODUCT INFORMATION BULLETIN

## EAGLE 3 Triple Channel Critical Speed Switch MODEL 12-7000ALS SERIES

### DESCRIPTION

The EAGLE 3, Model 12-7000ALS series monitors speed and detects motion in all types of rotating electrical apparatus. Three independent channels allow a variety of control functions to meet virtually any application requirement for underspeed, overspeed or zero speed detection. The ALS series monitor speed ranges from one RPM up to 200 RPMs in three models. With its rugged NEMA enclosure, The Eagle 3 is well-suited to meet the environmental challenges of any industry. Ideal for conveyors, crushers, fans, motors and other rotating apparatus.

### INSTALLATION

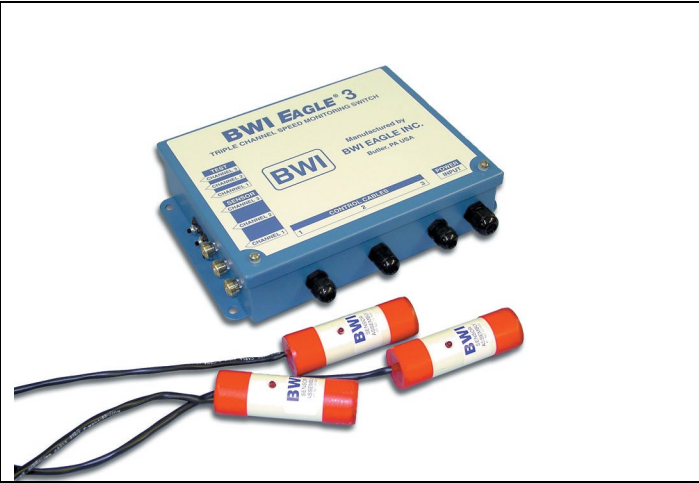
DISCONNECT AC Power before proceeding with instructions.

1. Mount the EAGLE 3 control unit in a convenient location.
2. Make the following connections:
  - A. Connect power cable to 120 VAC.
  - B. Connect control cables to proper terminals in the motor control circuit.
  - C. Connect EAGLE PROX SENSOR cables to the sensor connectors on the control unit.
3. Install sensors at rollers. See sensor installation sheet.

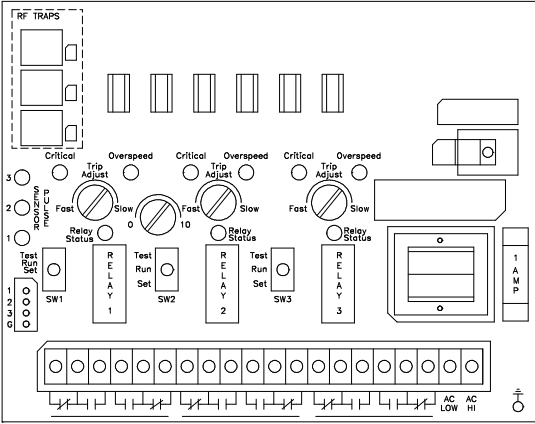
### SETUP AND TESTING

Final calibration should be performed with the belt loaded and running at normal speed.

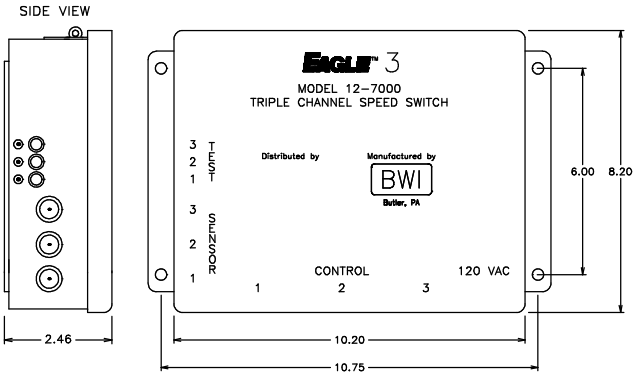
1. Turn SPEED 1 control CCW until it stops. (Approximately 7 o'clock)
2. Hold TEST/SET switch (SW1) in the SET position to energize relay (RY1).
3. Turn SPEED 1 control CW SLOWLY, until CRITICAL LED (LED 3) stays on continuously.
4. Continue turning SPEED 1 control until MARGIN LED (LED 4) stays on continuously.
5. Turn SPEED control CCW until MARGIN LED (LED 4) begins to blink at the same rate as the SENSOR LED.
6. After the RELAY STATUS LED (LED 1) is illuminated, return the TEST/SET switch (SW1) to the RUN (center) position.
7. A momentary TEST position is provided to simulate the loss of sensor signal which releases the control relay.
8. Repeat steps 1 through 7 for calibration of Channel 2.
9. Repeat steps 1 through 7 for calibration of Channel 3.



### CONTROLS AND INDICATORS



### DIMENSIONS



# EAGLE 3

## Triple Channel Critical Speed Switch

### MODEL 12-7000ALS SERIES

#### SPECIFICATIONS

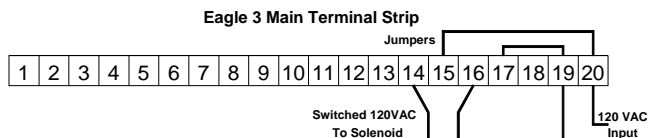
AC Input	120 VAC 15 W
Fuse Protected	1 amp
Operating Temperature	-40°C - +60°C (-40° - +140°F)
Speed Ranges	
ALS-1	1 - 30 RPM
ALS-6	6 - 60 RPM
ALS-15	15 - 100 RPM
ALS-25	25 - 200 RPM
Relay Contacts	DP/DT 8 amp @ 120 VAC
On-Time Delay - Ch. 1	0 - 10 Seconds, Adjustable
On-Time Delay - Chs. 2 & 3	5 Seconds
Response Time	1 Second or Less
Housing	NEMA 12 Standard

#### REPLACEMENT AND OPTIONAL PARTS

P.C. Board	12-7002ALS-1, 6, 15 or 25
Proximity Sensor, General Mount	10-7135
Proximity Sensor, Thread or Bracket Mount	10-7139
Relay	99-REL-0001
Strain Relief (Power Input)	99-CON-0011
Strain Relief (Control)	99-CON-0012

#### DUST SUPPRESSION MODIFICATION PROCEDURE

1. Control cable #3 has been installed at the factory on terminals 14 and 15 for slip/sequence operation.
2. Move the wire on terminal 15 to terminal 16 and install jumpers (enclosed) as shown for Dust Suppression Valve use.
3. Valve must be 120VAC operation



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