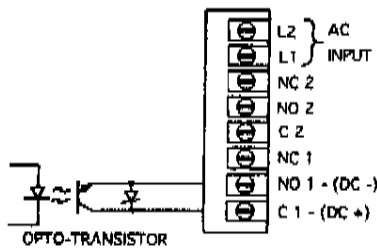
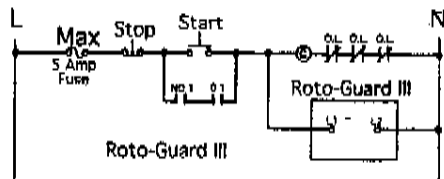


Wiring: - Solid State Output (Optional on select models)

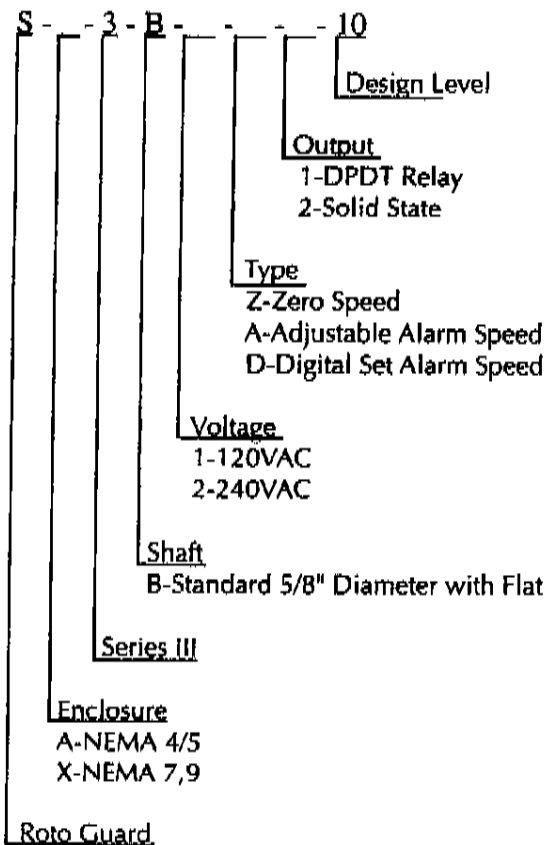
NOTE: OUTPUT IS CLOSED (ON) WHEN IN NORMAL CONDITION, & OPEN (OFF) WHEN IN ALARM.



Example Of Wiring For Startup Alarm Delay



Model Code:



Calibration:

1. Move the "Cal/Run" Jumper to the "Cal" position. This is the Blue Plastic Jumper located directly behind the terminal block near the terminal marked C1. Move the jumper towards the outside edge of the circuit board.
2. Rotate the "Alarm Delay Trimmer" fully counterclockwise. This is Potentiometer labeled R10 and has a large Black adjustment knob.
3. Rotate the "Speed Adjustment Potentiometer" counterclockwise approximately 25 turns or until a "click" is heard while rotating. This is the Blue Potentiometer labeled R6.
4. Determine the "Percent Of Full Speed" that the alarm speed will be. Example 1: An alarm is desired if there is a 10% slow-down. The "Percent of Full Speed" would be 90%. (100-10 = 90) Example 2: If the normal operating speed is 250 RPM and an alarm is desired at 200 RPM, the Percentage of Full speed is 80% (200 divided by 250 = .80)
5. Adjust the "Digital Switches" to the number determined in Step 4. These are the two Blue Switches with Red Pointers located next to the "Run/Cal" Jumper. The switch located nearest the outside edge of the circuit board is the "tens" digit. The switch towards center of the circuit boards is the "ones" digit. Example: If a setting of 85% was desired, rotate pointer of the switch at the edge (the tens) to 8. Rotate the Pointer of the inside switch (the ones) to 5.
6. Move the "Speed Range" Jumper to proper position. This is the Blue Plastic jumper labeled SWS and is located near the "Speed Adjustment" Potentiometer. If the alarm speed will be in the 2 to 40 RPM Range, position the jumper in the position marked "L". If the alarm speed will be in the 20 to 400 RPM Range, position the Jumper in the position marked "H".
7. Apply power to the Roto-Guard Unit and with input shaft running at normal speed, slowly rotate the speed adjustment Potentiometer (see step 3) clockwise until the green LED just turns off.
8. Reposition the "Cal/Run" Jumper (see step 1) to the run position (toward center of circuit board).

Start-up Alarm Delay Adjustment:

The start-up alarm delay feature allows time for conveyers, etc. to come up to speed before the Roto-Guard III's output alarms. Adjustment from 0 to 60 seconds is possible from the R10 trimmer. This delay occurs only after initial power up of the Roto-Guard III. The Roto-Guard III must be unpowered approximately 10 seconds for reset of the start-up delay.

Adjust R10 fully CCW (counterclockwise) for zero delay and fully CW (clockwise) for 60 second delay. 1/4 turn is approximately 20 seconds.



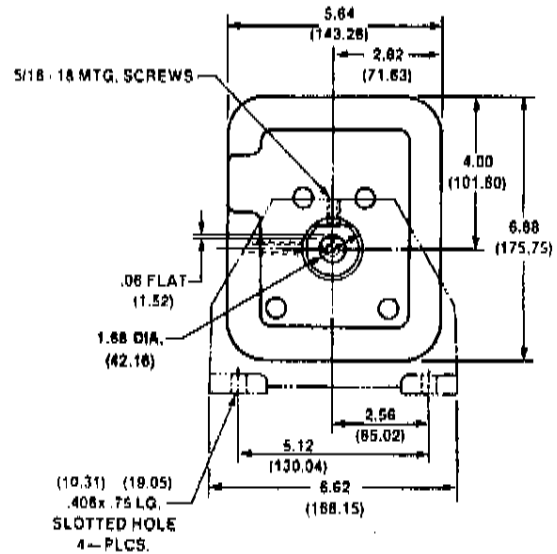
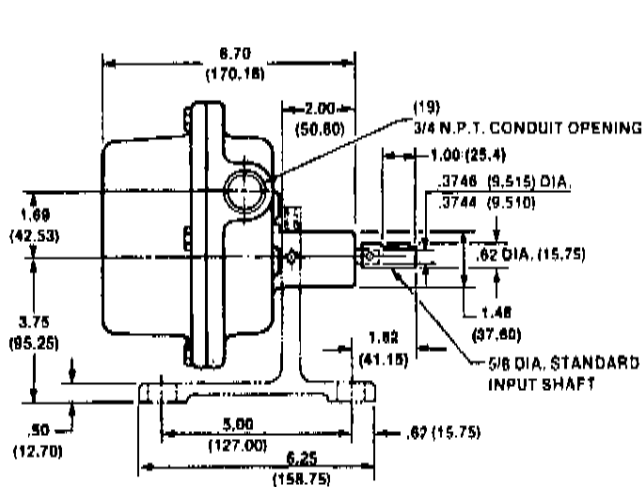
P.O. BOX 386
 PUTNAM, CT 06280
 860-928-6551
 800-745-6551
 FAX 860-928-9450

ROTO-GUARD® III

Models S - * - 3 - * - * - A - *

Specifications And Wiring Instructions For "Adjustable Alarm Speed" Model

PLEASE NOTE: THIS MODEL REPLACES ALL ROTO-GUARD II MODELS.



NOTE: BRACKETED () DIMS. ARE IN MILLIMETERS.

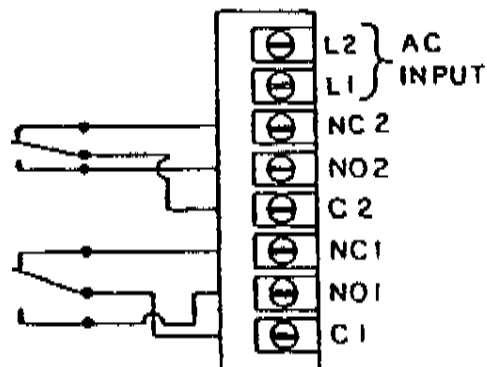
Specifications:

Housing:	Polyester Coated Alum. Casting
Input Shaft	
Speed Range:	1-300 RPM
Input Voltage:	120VAC or 240VAC at 50/60 Hz Factory Selectable
Output Relay:	DP/DT 5 Amp @ 120VAC, 240VAC or 24VDC
Solid State Output (Optional):	100mA @ 24VDC-Isolated Signal Switch
Temperature Range:	-40° F. To + 160° F. (-40° C. to +71° C.)
Power Consumption:	3 Watts
Shaft Dimensions:	5/8" dia. With flat suitable for flexible K— Coupling
Conduit:	3/4" NPT opening
NEMA Rating:	NEMA 4/5 Weatherproof Dusttight or NEMA 7, 9 Explosionproof On Specific Models (Note: Input Shaft speed must not exceed 100 RPM on NEMA 7/9 Models.)
Alarm Point:	15% change in operating speed*
Startup Delay:	0-60 Seconds

*The unit has been designed to provide an alarm with approximately a 15% change in speed.

Wiring—Relay Output

NOTE: USE COPPER CONDUCTORS ONLY,
 60/75° C. INSULATION RATING. TORQUE
 POWER CONNECTIONS TO 7 Lb. In.



CONTACTS SHOWN
 WITH RELAY DE-ENERGIZED
 (ALARM STATE)

Wiring: - Solid State Output (Optional on select models)

NOTE: OUTPUT IS CLOSED (ON) WHEN IN NORMAL CONDITION, & OPEN (OFF) WHEN IN ALARM.

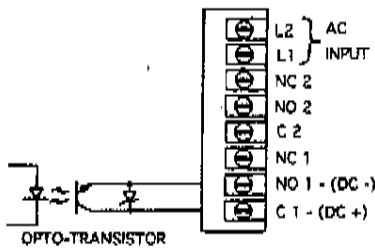


Figure 1

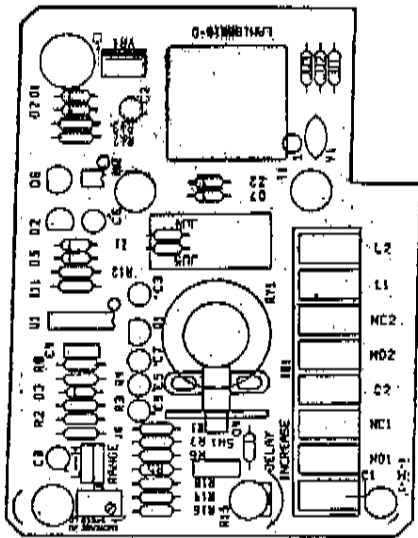
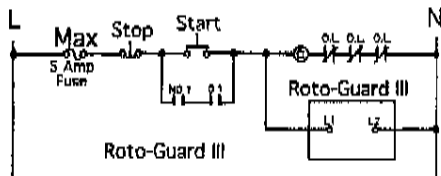


Figure 2

Example Of Wiring For Startup Alarm Delay



BEFORE CALIBRATION:

The Roto-Guard III contains a field selectable range adjustment. The two selectable ranges are: 1-25 rpm and 20-300 rpm. To adjust, simply move the jumper to the position that most closely approximates the normal shaft rotation speed (see fig. 2), and then continue with the calibration procedure in the following manner:

CALIBRATION:

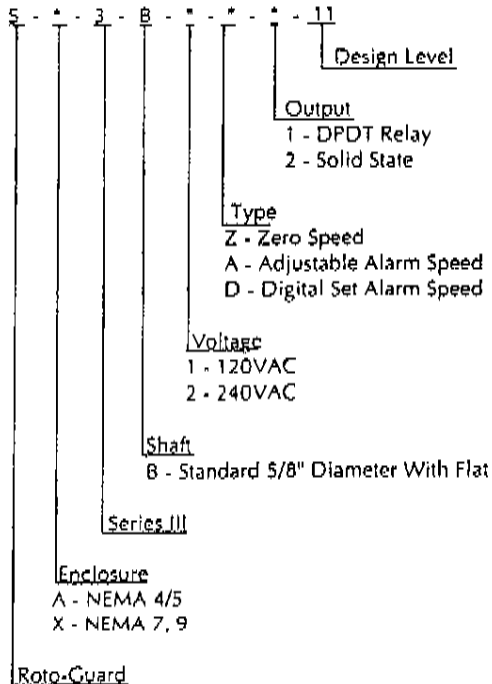
Under Speed Calibration:

At the start of calibration, the shaft should be rotating at its normal operating speed and alarm delay trimmer (R15) fully **counterclockwise**. Then turn the alarm speed potentiometer (R-9) fully **clockwise** (maximum alarm speed). The LED indicator should go off which indicates that the relay is de-energized. Slowly turn the alarm speed pot (R-9) **counterclockwise** to the point where the relay energizes and the LED indicator comes on (non-alarm condition). The calibration is now complete. A decrease in shaft speed of approximately 15% will cause an alarm signal (relay and LED off).

Start-up Alarm Delay Adjustment:

The start-up alarm delay feature allows time for conveyers, etc. to come up to speed before the Roto-Guard III's output alarms. Adjustment from 0 to 60 seconds is possible from the R15 trimmer. This delay occurs only after initial power up of the Roto-Guard III. The Roto-Guard III must be unpowered approximately 10 seconds for reset of the start-up delay.

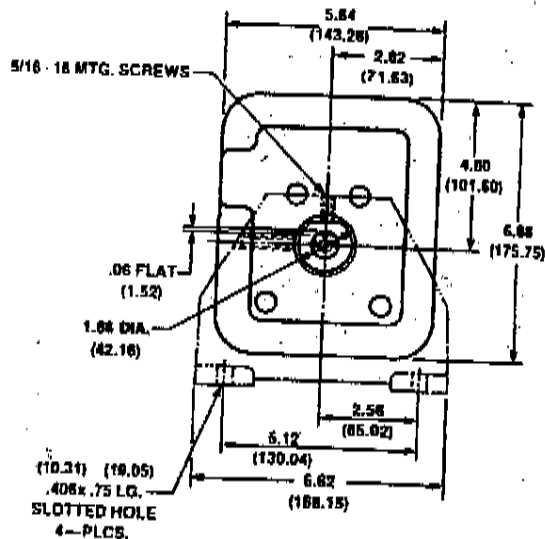
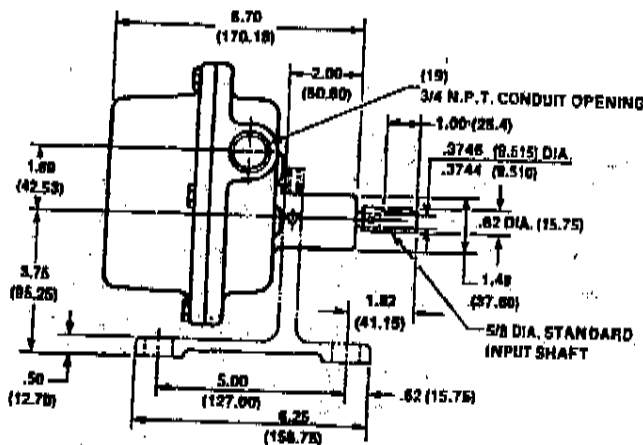
Adjust R15 fully CCW (counterclockwise) for zero delay and fully CW (clockwise) for 60 second delay. 1/4 turn is approximately 20 seconds.



ROTO-GUARD® III

Models S - * - 3 - * - * - Z - * -

Specifications And Wiring Instructions For "Zero Set" Model



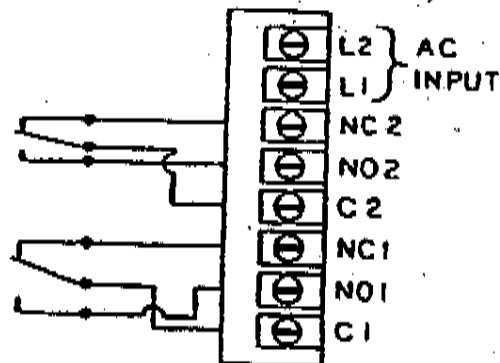
NOTE: BRACKETED () DIMS. ARE IN MILLIMETERS.

Specifications:

Housing:	Polyester Coated Alum. Casting
Input Shaft:	
Speed Range:	.5-300 RPM
Input Voltage:	120VAC or 240VAC at 50/60 Hz
Output Relay:	Factory Selectable DP/DT 5 Amp @ 120VAC, 240VAC or 24VDC
Solid State Output (Optional):	100mA @ 24VDC-Isolated Signal Switch
Temperature Range:	-40° F. To + 160° F. (-40° C. to +71° C.)
Power Consumption:	3 Watts
Shaft Dimensions:	5/8" dia. With flat suitable for flexible K- Coupling
Conduit:	3/4" NPT opening
NEMA Rating:	NEMA 4/5 Weatherproof and/ or NEMA 7,9 Explosionproof On Specific Models (Note: Input Shaft speed must not exceed 100 RPM on NEMA 7/9 Models.)
Alarm Point:	Less than 1 RPM
Startup Delay:	0-60 Seconds

Wiring—Relay Output

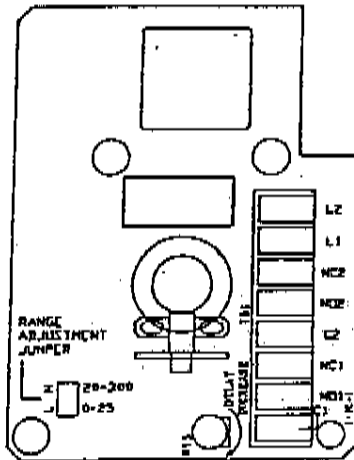
NOTE: USE COPPER CONDUCTORS ONLY,
 60/75° C. INSULATION RATING. TORQUE
 POWER CONNECTIONS TO 7 Lb. In.



CONTACTS SHOWN
 WITH RELAY DE-ENERGIZED
 (ALARM STATE)

Calibration:

No adjustment or calibration is needed. As long as input shaft speed exceeds 1 RPM the output will be in the unalarm position.



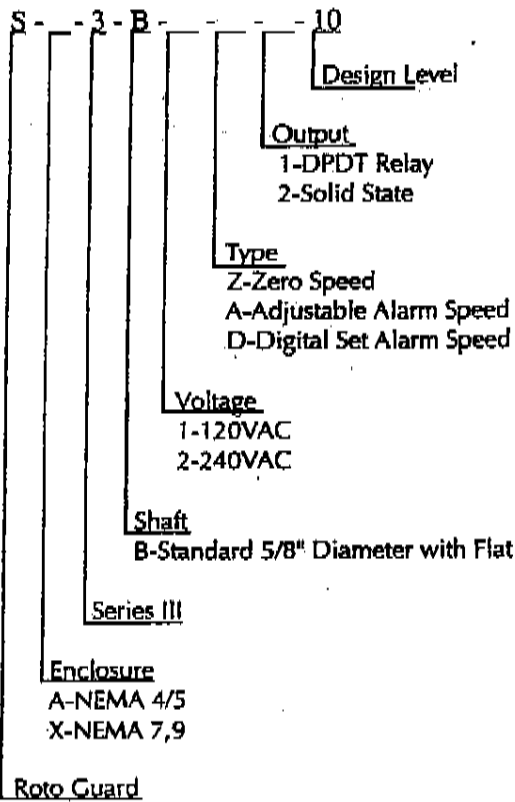
Start-up Alarm Delay Adjustment:

The start-up alarm delay feature allows time for conveyors, cc. To come up to speed before the Roto-Guard III's output alarms. Adjustment from 0 to 60 seconds is possible from the R10 trimmer. This delay occurs only after initial power-up of the Roto-Guard III. The Roto-Guard III must be unpowered approximately 10 seconds for the reset of the start-up delay.

Adjust R15 fully CCW (counterclockwise) for zero delay and fully CW (clockwise) for 60 second delay. A 1/4 turn is approximately 20 seconds.

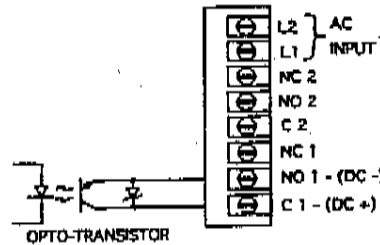
IMPORTANT!
DO NOT DISPOSE OF THE CARTON OR PACKING UNTIL THE UNIT HAS BEEN INSPECTED FOR DAMAGE. IF THE UNIT IS RECEIVED DAMAGED, NOTIFY THE CARRIER OR FACTORY FOR INSTRUCTIONS. FAILURE TO DO SO MAY VOID YOUR WARRANTY.
THANK YOU!

Model Code:



Wiring: - Solid State Output
 (Optional on select models)

NOTE: OUTPUT IS CLOSED (ON) WHEN IN NORMAL CONDITION, & OPEN (OFF) WHEN IN ALARM.



Example Of Wiring For Startup Alarm Delay

