File E249019

Vol. 1

Sec. 4 and Report

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DESCRIPTION

PRODUCT COVERED:

USL, CNL, Speed Switch, Model Nos. M100, M5000, 907, 907B, 931, & 933 for use in Class I, Groups C and D, Class II, Groups E, F, and G Hazardous Locations.

USL, CNL, Speed Switch, Model Nos. M100, M5000, 907, 907B for use in Class I, Group D, Class II, Groups E, F, and G Hazardous Locations.

GENERAL:

These devices are motion sensing controls that monitor the speed of a magnetized disc. The devices are used to detect the unwanted slowdown of process equipment, such as drive trains, power-driven components, crushers, exhaust fans, screw conveyors, or tail pulleys on belt conveyors and elevators. The units receive a speed or directional signal from a magnetic sensor and energize a relay output. The devices are permanently connected to supply source.

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE)

*The letters "USL" indicates investigation in accordance with UL 508, Industrial Control Equipment, 17th Ed. and UL 1203, Explosion-Proof and Dust Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations, 4th Ed.

The letters "CNL" indicates investigation in accordance with CSA No. CSA 22.2 No. 14-95 Industrial Control Equipment; CSA 22.2 No. 30-M 1986, Explosion-Proof Enclosures for Use in Class I Hazardous Locations; CSA 22.2 No. 25-1966; and Enclosures for Use in Class II Groups E, F, and G Hazardous Locations.

MODEL SIMILARITY:

The model M100 and M5000 have identical construction with the exception of a modified resistor and capacitor on the model M5000, which allows it to be used where higher revolution measurement is necessary.

The model nos. 907 & 907B are identical in construction, XLB-3 enclosure, and the model no. 907B is provided with Listed, (QBCR), model no. XC-3 enclosure.

The model nos. 931, & 933 are identical in construction except for differences in the sensor board.

ELECTRICAL RATINGS:

Model	Voltage, V	Frequency, Hz
M100	115 VAC	60
M5000		

ENVIORNMENTAL RATINGS:

The devices have been evaluated for use in a $-25\,^{\circ}\text{C}$ to $65\,^{\circ}\text{C}$ ambient temperature range.