PRODUCT DESCRIPTION

SPECTEC's directional preamplifier for passive magnetic VRS sensors is designed to convert the sinusoidal signals from two matching magnetic VR type sensors into stable square wave pulses. It provides relative directional data from the two sensors through the signal out terminal and LED indicators. For proven applications, an (x2) output is provided, which is derived from the input of Coils A & B. It is designed to fit a GAUL-16 or similar standard explosion proof junction box.

For Class I, II, III, Division 1 applications refer to IS4033.
For Class I, Division 2 applications refer to N4033.

SPECIFICATIONS

Supply Voltage: 7.5-36Vdc @ ≤ 3mA for 0-5Vo
13-36Vdc @ ≤ 12mA for 0-12Vo
3.6Vdc min. @ ≤ 20mA for 0-Vs

Output Voltage: See options below
(≤ 20mA sink)

Frequency Range: ~5 Hz to 10 kHz
Up to 40 kHz with increased signal

Input Sensitivity: See options below

Output Mode: A or B: Only Channel A provides a signal in Forward Direction, and only Channel B provides a signal in Reverse Direction
A and B: Both Channel A & B always provide a signal

Direction: Forward (A before B): 0 Vdc
Reverse (B before A): 5 Vdc

Rise/Fall Time: .03 µs nominal

Temperature Range: -40° to 185°F (-40° to 85°C)

Construction: Plastic housing
Solid Epoxy Encapsulation

Compliance: CE: EN55011, EN50022-2

FEATURE SELECTION

4033
- 4033 Mag Preamp Directional

Signal Options
1 - Standard (A or B Output Mode)
2 - Standard (A or B Output Mode) w/ LED
3 - Selectable Output Mode
4 - Selectable Output Mode w/ LED

Output Signal 1 - 0-5V, NPN
2 - 0-12V, NPN
3 - 0-Vs, NPN OC

Input Signal 0 - 40 mVpp (Standard)
1 - 12 mVpp (High)

TERMINAL CONNECTIONS

1 - Supply Voltage
2 - Common
3 - Direction
4 - Output Signal A
5 - Output Signal B
6 - Output Signal x2
7 - Coil A +(white)
8 - Coil A - (black)
9 - Coil B +(white)
10 - Coil B - (black)

SENSOR POSITIONING

Position sensors relative to target electrically 90° (±30°) out of phase.

TERMINAL CONNECTIONS

1 - Supply Voltage
2 - Common
3 - Direction
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5 - Output Signal B
6 - Output Signal x2
7 - Coil A +(white)
8 - Coil A - (black)
9 - Coil B +(white)
10 - Coil B - (black)