SPECTEC
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IS4021 Bulletin

Preamplifier for Passive Magnetic Sensor

Intrinsically Safe
2.5" Diameter

PRODUCT DESCRIPTION

SPECTEC's Intrinsically Safe preamplifier for passive magnetic VRS sensors is designed for installation in hazardous locations and to fit a Crouse-Hinds GUAL16 or similar standard explosion proof junction box. Standard and NC (with expanded noise filtering) models are offered.

INSTALLATION

CAUTION: This sensor MUST be installed with an FM approved barrier and following the details specified in the Installation Instruction Document #85051.

SPECIFICATIONS

Supply Voltage & Current:	7.5-30Vdc @ ≤ 3mA for 0-5Vo 13-30Vdc @ ≤ 12mA for 0-12Vo 3.6-30Vdc @ ≤ 20mA for 0-Vs **NC Model: 25Vdc Maximum**
Output Voltage:	See below (R Load >20kΩ)
Frequency Range:	~5 Hz to 10 kHz Up to 40 kHz with increased signal **NC Model: ~5 Hz to 5 kHz**
Input Sensitivity:	See below
Construction:	Plastic housing Solid Epoxy Encapsulation

TERMINAL CONNECTIONS

1 - Supply Voltage
2 - Common
3 - Output Signal (half freq.)
4 - Output Signal
5 - Mag Sensor (IS only)
6 - Mag Sensor (IS only)
(see IS40 & IS41)

FEATURE SELECTION

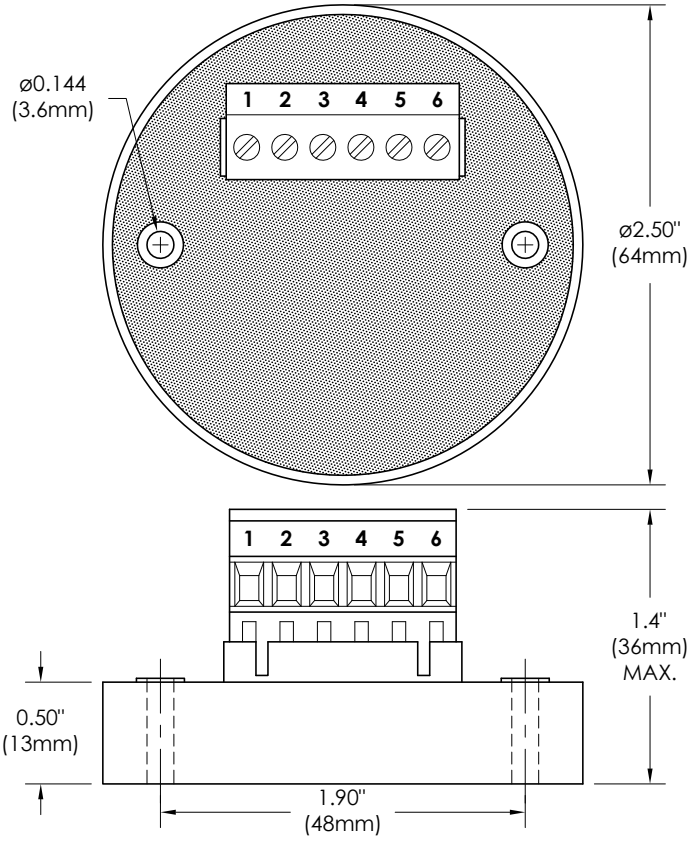
IS4021 - ☐ ☐ Mag Preamplifier (US & C cert.)
IS4021A - ☐ ☐ Mag Preamplifier (ATEX & IECEx cert.)

Output Signal: 1 - 0-5V, NPN/PNP (push-pull)
2 - 0-12V, NPN/PNP (push-pull)

Input Sensitivity: 0 - 60 mVpp
1 - 12 mVpp

For NC model add 'NC' as a suffix:
(e.g. IS4021-xxNC)
Similarly for the ATEX & IECEx version:
(e.g. IS4021A-xxNC)

For explosion proof junction box refer to bulletin 4001



CERTIFICATIONS for IS4021

USA:
Intrinsically Safe
Class I, II, III, Division 1
GROUP ABCDEFG T6...T4
Class I, Zone 0, AEx ia IIC T6...T4

Canada:
Intrinsically Safe
Class I, Division 1
GROUP ABCD T6...T4
Class I, Zone 0, Ex ia IIC T6...T4

T4 @ -40°C ≤ T_{amb} ≤ +85°C
T5 @ -40°C ≤ T_{amb} ≤ +80°C
T6 @ -40°C ≤ T_{amb} ≤ +60°C

CERTIFICATIONS for IS4021A

ATEX:
II 1 G Ex ia IIC T6...T4 Ga
FM08ATEX0068X

IECEx:
Ex ia IIC T6...T4 Ga
IECEx FMG 16.0003X

T4 @ -40°C ≤ T_{amb} ≤ +85°C
T5 @ -40°C ≤ T_{amb} ≤ +80°C
T6 @ -40°C ≤ T_{amb} ≤ +60°C

CE:
Compliance with
EN50081-1, EN50082-1

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