Powertek DC CURRENT SENSOR (GEOMAGNETICALLY INDUCED CURRENTS)

DESCRIPTION GIC-xxxz transducers are able to measure DC currents in the presence of higher levels of AC. This enables accurate measurement of Geomagnetically Induced Currents (GIC) on power grids, and of the DC components potentially present in Photo-Voltaic system and inverters. The device operates over a wide dynamic range and maintains low-level accuracy even after a large over-range. The GIC's inherently low residual effect eliminates the need to degauss in all but extreme circumstances. The split-core enclosure, with captive hardware and outdoor rating, makes installation easy and does not require circuit interruption.

FEATURES

- High resolution (1000:1)
- Low residual offset
- Split-core
- Bidirectional
- Non-contact
- Input/Output isolation
- Low power consumption
- Outdoor installation
- Wide temperature range
- Conduit attachment (Rigid 1/2" NPT)

2011/65/EU • RoHS COMPLIANT

MODEL SELECTION

MODEL NUMBER

GIC – XXX Z

ORDERING INFORMATION

Example:
600Adc Input 0-±1mAdc Outputs
GIC-601B

XXX	DC Range
051	±0-50Adc
101	±0-100Adc
151	±0-150Adc
201	±0-200Adc
301	±0-300Adc
401	±0-400Adc
501	±0-500Adc
601	±0-600Adc
801	±0-800Adc
102	±0-1000Adc
122	±0-1200Adc
152	±0-1500Adc

Z	Output Type
B	0-±1mAdc
D	0-±10Vdc
X5	0-±5Vdc
E	4-20mAdc
EM	4/12/20mAdc

SPECIFICATIONS

INPUT

Current Range ..... See model selection
Over-range (w/o damage) ..... >8000A
Bandwidth.. (1.5Hz low pass filter on output) .. dc to 1.5Hz

DIELECTRIC TEST

Input window.....2200Vac
Inst. Power to output.....1kVdc
Insulation class.....600Vac

INSTRUMENT POWER

Standard ..... 24Vac/24Vdc, ±10%
Option "-12" ..... 12Vac/12Vdc, ±10%
Current....nominal 80mA
maximum 100mA

TEMPERATURE

Operating range..... -40ºC to +85ºC
Temperature effect..... ±0.025%/ºC
Storage ..... -40ºC to +85ºC

OUTPUT

Scaling...Models B, D, X5 ... 0 to ±FS dc in = 0 to ±FS out
Model EM
-FS dc/0/+FS dc in = 4/12/20mAdc out
Model E (unidirectional)
0-FS dc in = 4-20mAdc out
Loading...Models E and EM 0-500Ω
Model B 0-10kΩ
Models D and X5 ..... ≥2kΩ
Response time (90%)..... <350ms (typical)

ACCURACY

Linearity, offset, setpoint and repeatability ..... ≤0.5% F.S.
Over-range residual offset ....0.0007A/A of input current
(max offset = 350mA)
Linearity..... ≤0.1%F.S.

PHYSICAL

Weight 2.0lbs

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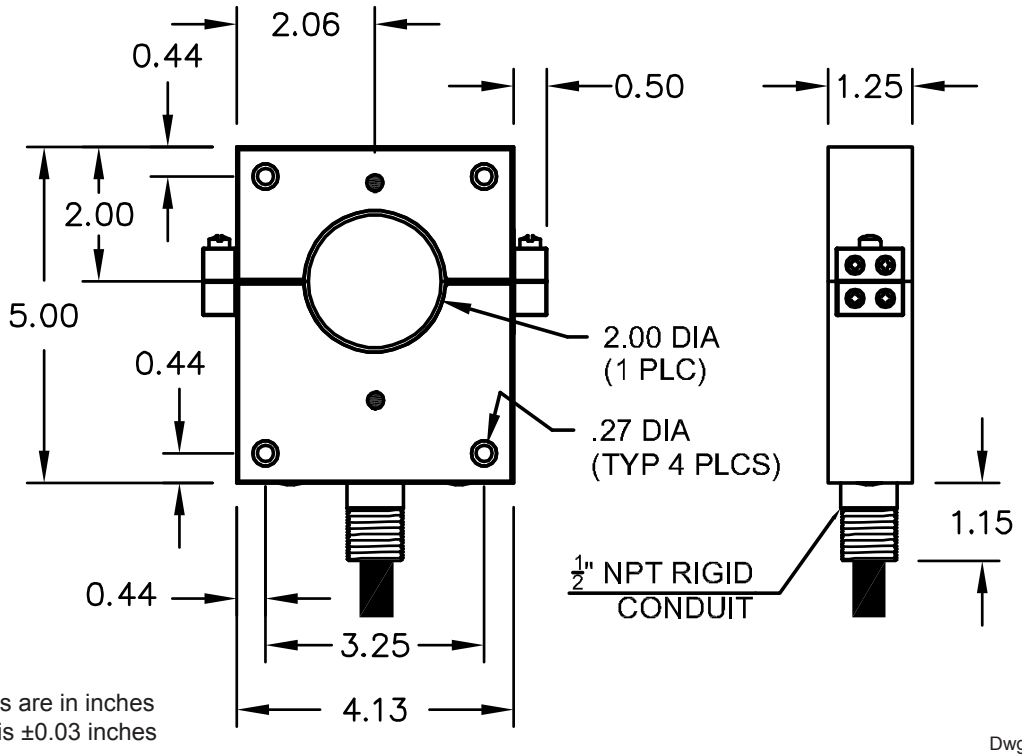
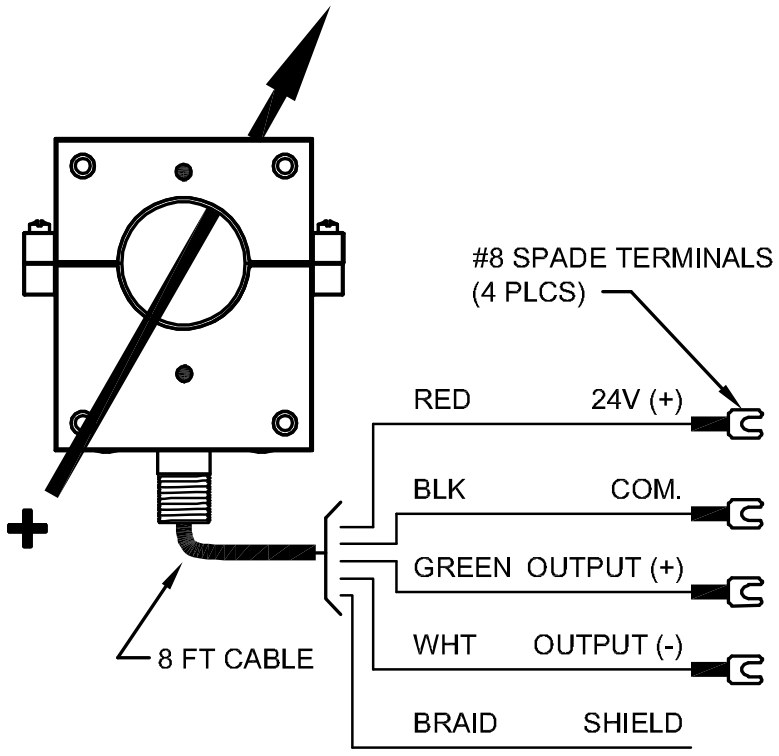
CASE DIMENSIONS



Dimensions are in inches
Tolerance is ±0.03 inches

Dwg# 0902-01051-B Rev-B

CONNECTION DIAGRAM



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