

OSI 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)



MODEL SELECTION

MODEL NUMBER

GIC-XXX Z

ORDERING INFORMATION

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

XXX	DC Range	Z	Output Type
051	±0-50Adc	B	0-±1mAdc
101	±0-100Adc	D	0-±10Vdc
151	±0-150Adc	X5	0-±5Vdc
201	±0-200Adc	E	4-20mAdc
301	±0-300Adc	EM	4/12/20mAdc
401	±0-400Adc		
501	±0-500Adc		
601	±0-600Adc		
801	±0-800Adc		
102	±0-1000Adc		
122	±0-1200Adc		
152	±0-1500Adc		

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.....-40°C to +85°C
Temperature effect..... ±0.025%/°C
Storage.....-40°C to +85°C

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 EM0-500Ω
 Model B0-10kΩ
 Models D and X5≥2kΩ
Response time (90%).....<350ms (typical)

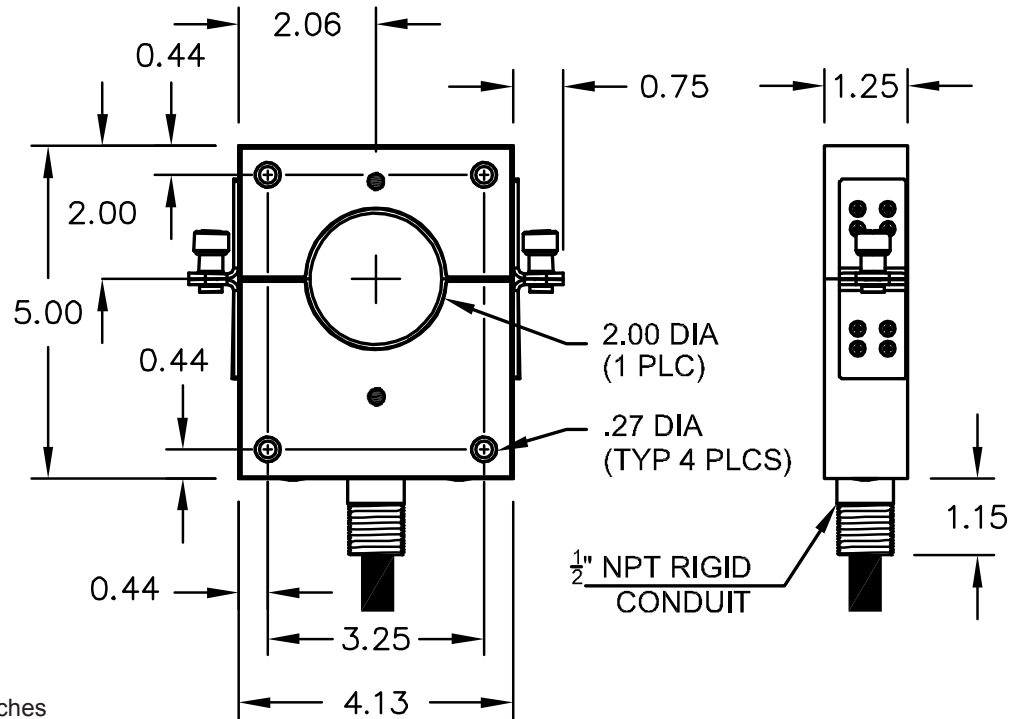
ACCURACY

Linearity, offset, setpoint and repeatability≤0.5% F.S.
Over-range residual offset0.0007A/A of input current
 (max offset = 350mA)
Linearity.....≤0.1%F.S.

PHYSICAL

Weight 2.0lbs

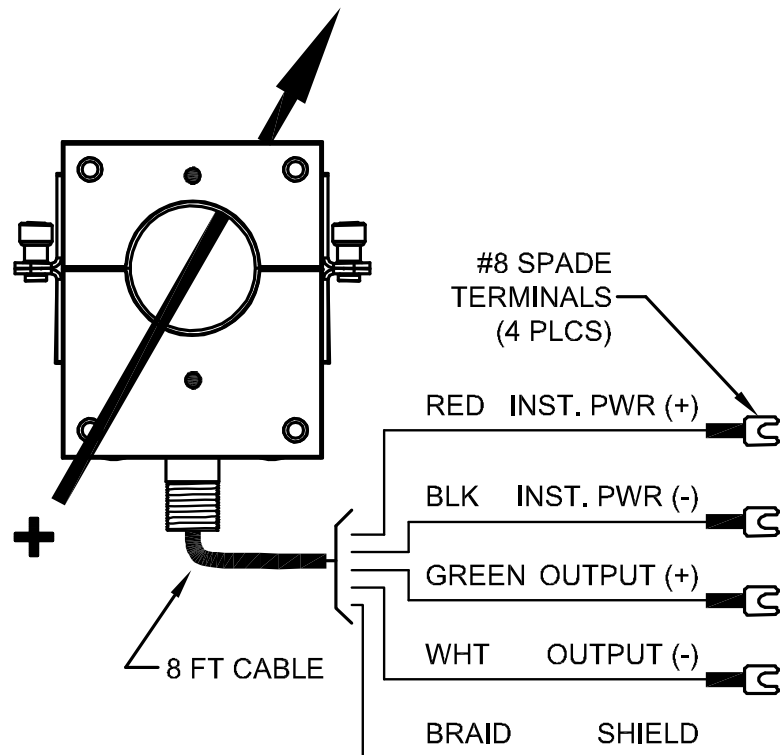
CASE DIMENSIONS



Dimensions are in inches
Tolerance is ±0.03 inches

Dwg# 0902-01051-B Rev-A

CONNECTION DIAGRAM



Dwg# 0902-01051-B Rev-B