

DESCRIPTION

The CTFG- series current sensors are closed-loop Hall-Effect current sensors designed to measure ac or dc currents, or a combination of both. With allowable input current from 100A through 500A, the series provides pulse current measurement up to 100A/μs.

FEATURES

- Rugged construction
- Reduced temperature sensitivity
- High galvanic isolation

5 YEAR WARRANTY



APPLICATIONS

- Suitable for safe and reliable operation in a wide range of environmental conditions.

MODEL SELECTION

| INPUT CURRENT* | MODEL NUMBER | TURNS RATIO | OUTPUT |
|----------------|--------------|-------------|--------|
| 0 - 100A | CTFG-101 | 1000:1 | 100mA |
| 0 - 200A | CTFG-201 | 2000:1 | 100mA |
| 0 - 300A | CTFG-301 | 3000:1 | 100mA |
| 0 - 400A | CTFG-401 | 4000:1 | 100mA |
| 0 - 500A | CTFG-501 | 5000:1 | 100mA |

ORDERING INFORMATION

Example: 0-300A Input and 0-100mA Output

CTFG-301

* AC input current ratings based on 10Ω load or less.

SPECIFICATIONS

INPUT

Current (ac RMS or dc) See Table
 Over-range (w/o damage)
 Continuous 110% F.S.
 Transient 10 X F.S. for 50ms/Hr
 Bandwidth (-3dB) dc to 35kHz
 Response (di/dt correctly followed) 100A/μs

OUTPUT

Scaling/Turns Ratio See Table
 Loading (@15Vdc Instrument Power)
 100-300A Models Max 50Ω** Min 0Ω
 400-500A Models Max 40Ω** Min 0Ω
 ** Values shown are for dc/pkac. Max 10Ω for ac RMS.
 Response Delay ≤1μs

DIELECTRIC TEST (Cable through Window to Output)

60Hz, 1min. 2.2kV

INSTRUMENT POWER

Voltage ±15Vdc, ±5%
 Current Quiescent ±25mAdc
 Maximum Quiescent + Output Current

ACCURACY

With F.S. Input @ 25°C ±0.5% F.S.
 Linearity ±0.1% F.S.
 Offset @ 25°C ±0.25mA

TEMPERATURE & ENVIRONMENTAL

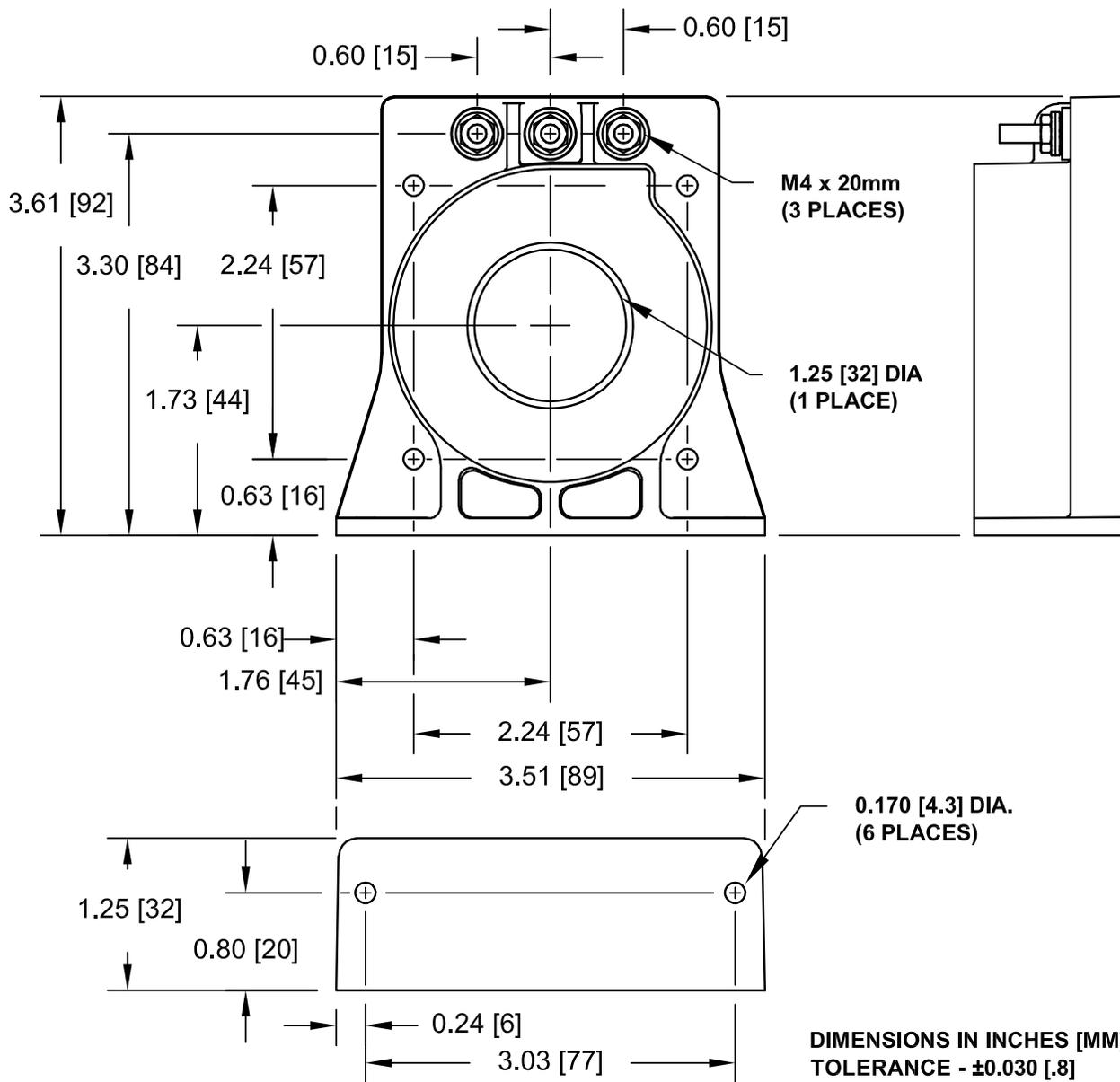
Operating Range -20 to 70°C
 Effect -20°C to 0°C ±20μA/°C
 0°C to 70°C ±6μA/°C
 Storage Range -25 to 85°C
 Operating Humidity 0-95% non-condensing

PHYSICAL

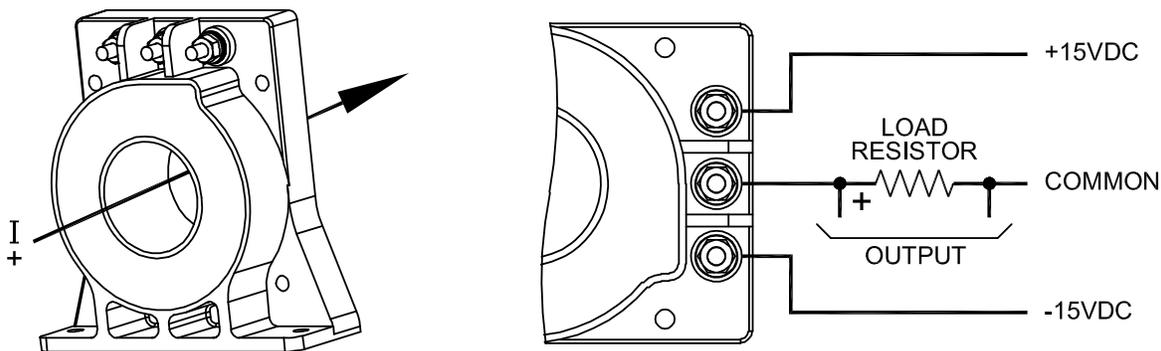
Weight 11.3oz.
 Enclosure Material Noryl SE1X
 Flammability UL 94 V-1
 Color Black
 Connections
 Instrument Power & Output M4 Stud
 Primary Conductor 1.25 in.(32mm) dia. window

NOTE: CTA800 signal conditioners provide the instrument power that the CTFG requires, as well as amplifying the low-level (mA) signal into a more typical signal. See CTA800 spec sheet for details.

CASE DIMENSIONS



CONNECTION DIAGRAMS



Dwg# 0902-00855-B