

Space-saving Two-wire Signal Conditioners B-UNIT

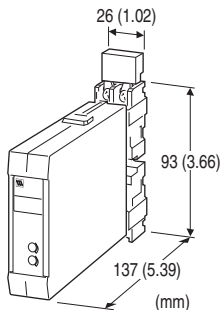
CT TRANSMITTER

Functions & Features

- Converting an alternating current from a current transformer into an isolated 4 - 20 mA DC signal
- Minimal ripple
- True RMS sensing
- CT Protector provided for open-circuit protection
- Monitor terminals
- High-density mounting

Typical Applications

- Centralized monitoring and control of motors, pumps or heaters by DCS
- Monitoring power line and power supply current



MODEL: BCT-[1][2]

ORDERING INFORMATION

- Code number: BCT-[1][2]
- Specify a code from below for each of [1] and [2].
(e.g. BCT-1/Q)
- Specify the specification for option code /Q
(e.g. /C01/S01)

[1] INPUT

Current

- 1: 0 - 1 A AC
- 5: 0 - 5 A AC

[2] OPTIONS

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q (multiple selections)

COATING (For the detail, refer to M-System's web site.)

- /C01: Silicone coating
- /C02: Polyurethane coating

/C03: Rubber coating

TERMINAL SCREW MATERIAL

/S01: Stainless steel

GENERAL SPECIFICATIONS

Construction: Plug-in

Connection: M3.5 screw terminals (torque 0.8 N·m)

Screw terminal: Nickel-plated steel (standard) or stainless steel

Housing material: Flame-resistant resin (black)

Isolation: Input to output

Input waveform: Up to 15 % of 3rd harmonic content

Zero adjustment: -5 to +5 % (front)

Span adjustment: 95 to 105 % (front)

INPUT SPECIFICATIONS

Frequency: 50 or 60 Hz

Input burden: 0.5 VA maximum

Overload capacity: 1000 % of rating for 3 sec., 200 % for 10 sec., 120 % continuous

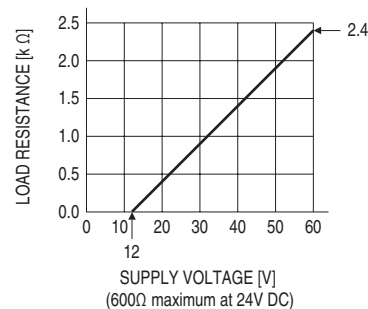
Operational range: 0 - 120 % of rating

OUTPUT SPECIFICATIONS

Output: 4 - 20 mA DC

Load resistance vs. supply voltage:

Load Resistance (Ω) = (Supply Voltage (V) - 12 (V)) ÷ 0.02 (A) (including leadwire resistance)



INSTALLATION

Supply voltage: 12 - 60 V DC

Operating temperature: -5 to +55°C (23 to 131°F)

Operating humidity: 30 to 90 %RH (non-condensing)

Mounting: Surface or DIN rail; Standard Rack Mounting

Frame BX-16H available

Weight: 160 g (0.35 lb)

PERFORMANCE in percentage of span

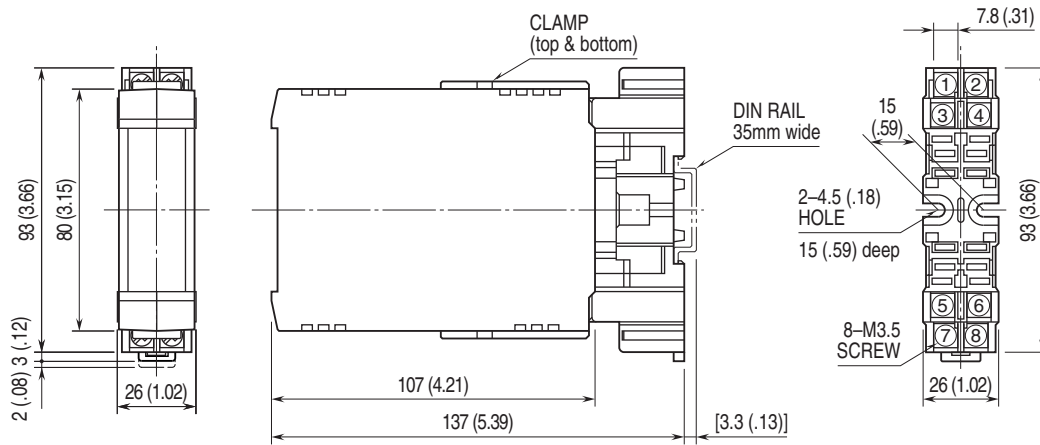
Accuracy: ±0.3 %

Temp. coefficient: ±0.03 %/°C (±0.02 %/°F)

Response time: ≤ 0.5 sec. (0 - 90 %)

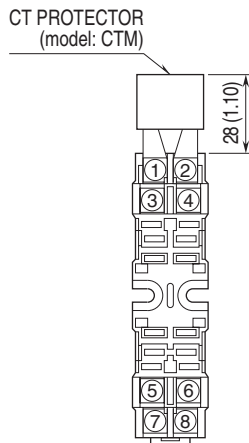
Ripple: 0.5 %p-p max. (100/120 Hz)
Insulation resistance: $\geq 100 \text{ M}\Omega$ with 500 V DC
Dielectric strength: 2000 V AC @ 1 minute (input to output)
 1500 V AC @ 1 minute (input or output to ground)

EXTERNAL DIMENSIONS unit: mm (inch)

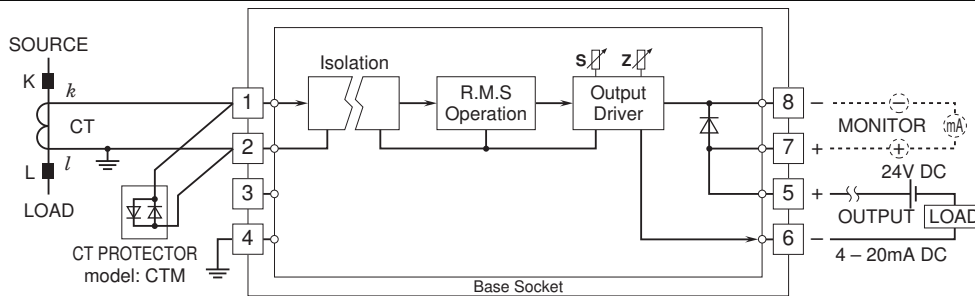


•When mounting, no extra space is needed between units.

TERMINAL ASSIGNMENTS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM





Specifications are subject to change without notice.