

High-density Signal Conditioners 10-RACK**CT TRANSMITTER**

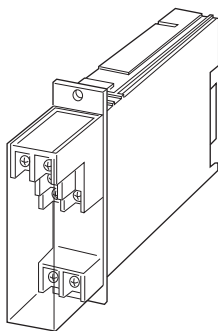
(Average sensing, RMS calibrated)

Functions & Features

- Converting an alternating current from a current transformer into two standard process signals
- Minimum ripple
- Optional second channel output available at the front terminals and at the Standard Rack connector

Typical Applications

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

**MODEL: 10CA-[1][2][3]-R[4]****ORDERING INFORMATION**

- Code number: 10CA-[1][2][3]-R[4]
Specify a code from below for each [1] through [4].
(e.g. 10CA-1A6-R/Q)
- Specify the specification for option code /Q
(e.g. /C01)

[1] INPUT (sine wave)**Current**

- 1: 0 – 1 A AC
5: 0 – 5 A AC

[2] OUTPUT 1**Current**

- A: 4 – 20 mA DC (Load resistance 600 Ω max.)
B: 2 – 10 mA DC (Load resistance 1200 Ω max.)
C: 1 – 5 mA DC (Load resistance 2400 Ω max.)
D: 0 – 20 mA DC (Load resistance 600 Ω max.)
E: 0 – 16 mA DC (Load resistance 750 Ω max.)

F: 0 – 10 mA DC (Load resistance 1200 Ω max.)G: 0 – 1 mA DC (Load resistance 12 k Ω max.)**Voltage**

- 1: 0 – 10 mV DC (Load resistance 10 k Ω min.)
2: 0 – 100 mV DC (Load resistance 100 k Ω min.)
3: 0 – 1 V DC (Load resistance 100 Ω min.)
4: 0 – 10 V DC (Load resistance 1000 Ω min.)
5: 0 – 5 V DC (Load resistance 500 Ω min.)
6: 1 – 5 V DC (Load resistance 500 Ω min.)

[3] OUTPUT 2

0: None

Voltage6: 1 – 5 V DC (Load resistance 5000 Ω min.)**POWER INPUT****DC Power**

R: 24 V DC

(Operational voltage range 24 V $\pm$ 10 %, ripple 10 %p-p max.)**[4] OPTIONS**

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q**COATING (For the detail, refer to M-System's web site.)**

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

GENERAL SPECIFICATIONS

Construction: Rack-mounted; terminal access via screw terminals at the front and via card-edge connector at the rear; terminal cover provided

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

Output: Card-edge connector and M3.5 screw terminals (torque 0.8 N·m)

Power input: Supplied from card-edge connector**Screw terminal:** Nickel-plated steel**Housing material:** Flame-resistant resin (black)**Isolation:** Input to output 1 to output 2 to power**Input waveform:** Sine wave**Overrange output:** 0 to 120 % at 1 – 5 V**Zero adjustment:** -5 to +5 % (front)**Span adjustment:** 95 to 105 % (front)**INPUT SPECIFICATIONS****Frequency:** 50 or 60 Hz**Input burden:** 0.5 VA max.

Overload capacity: 500 % of rating for 5 sec., 120 % continuous

Operational range: 0 - 120 % of rating

INSTALLATION

Current consumption: Approx. 35 mA with voltage output 1

Approx. 55 mA with current output 1

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

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

Mounting: Standard Rack 10BXx

Weight: 200 g (0.44 lb)

PERFORMANCE in percentage of span

Accuracy: ± 0.4 %

Temp. coefficient: ± 0.02 %/°C (± 0.01 %/°F)

Response time: ≤ 0.5 sec. (0 - 90 %)

Ripple: 0.5 %p-p max. (100/120 Hz)

Line voltage effect: ± 0.1 % over voltage range

Insulation resistance: ≥ 100 M Ω with 500 V DC

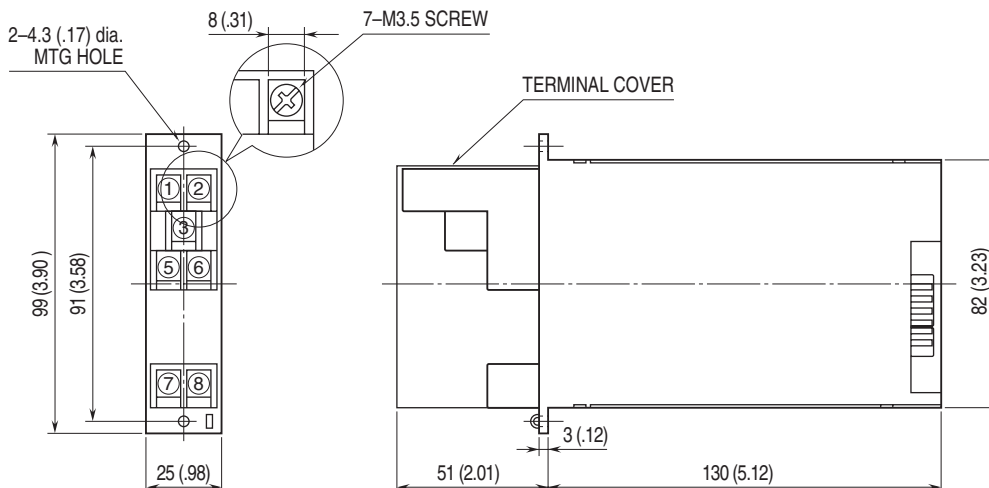
Dielectric strength:

2000 V AC @ 1 minute (input to output 1 or output 2 or power)

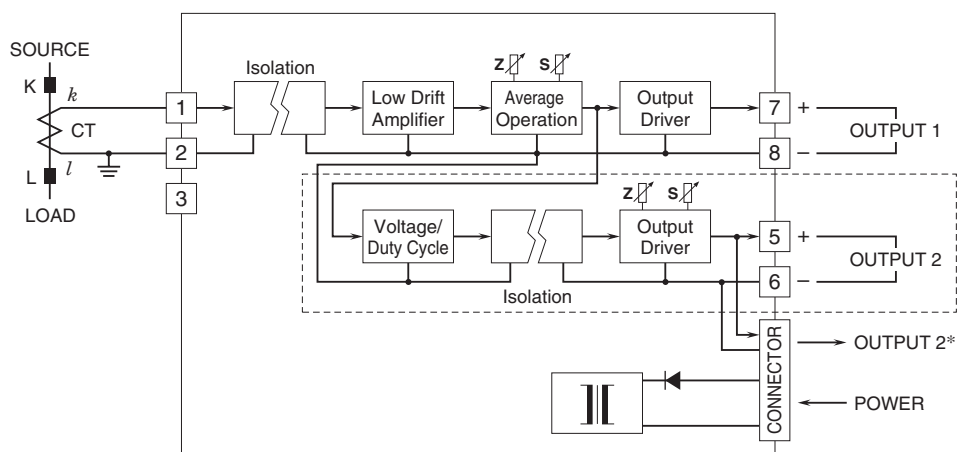
500 V AC @ 1 minute (output 1 to output 2 to power)

1500 V AC @ 1 minute (input or output or power to ground)

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*1 output type has the output 1 connected to the card-edge connector in parallel.
Remark 1) The section enclosed by broken line is only for 2nd output channel.



Specifications are subject to change without notice.