

Rack-mounted DCS Signal Conditioners 18-RACK

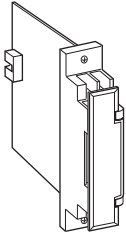
CT CONVERTER

Functions & Features

- Converting an alternating current from a current transformer into two standard process signals
- Minimum ripple
- True RMS sensing
- 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: 18CE-[1]66-R

ORDERING INFORMATION

- Code number: 18CE-[1]66-R
- Specify a code from below for [1].
(e.g. 18CE-166-R)

[1] INPUT

Current

- 1: 0 – 1 A AC
5: 0 – 5 A AC

OUTPUT 1

Voltage

- 6: 1 – 5 V DC (Load resistance 2000 Ω min.)

OUTPUT 2

Voltage

- 6: 1 – 5 V DC (Load resistance 2000 Ω min.)

POWER INPUT

DC Power

- R: 24 V DC
(Operational voltage range 24 V $\pm$ 10 %, ripple 10 %p-p max.)

GENERAL SPECIFICATIONS

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

Connection

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

Output 1: Connector

Output 2: M3.5 screw terminals (torque 0.8 N·m) and connector

Power input: Supplied from connector

Screw terminal: Nickel-plated steel

Isolation: Input to output 1 to output 2 to power

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

Overrange output: Approx. 0 to 120 % at 1 – 5V

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

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

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

Mounting: Standard Rack 18BXx or 18KBXx

Weight: 150 g (0.33 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.

Line voltage effect: ± 0.1 % over voltage range

Insulation resistance: ≥ 100 M Ω with 500 V DC

Dielectric strength: 1500 V AC @ 1 minute

(input to output 1 or output 2 or power)

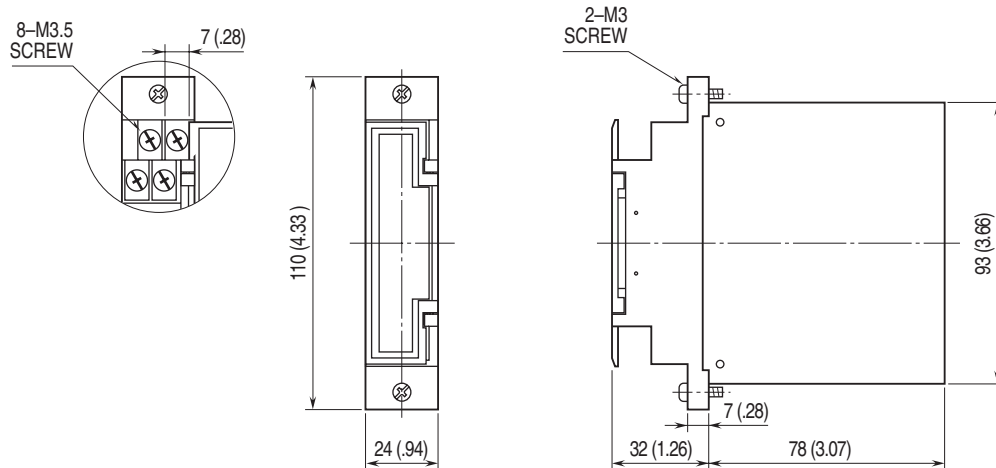
500 V AC @ 1 minute

(output 1 to output 2 to power)

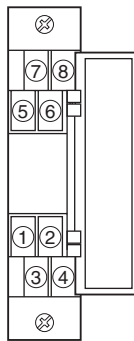
1500 V AC @ 1 minute

(input or output or power to ground)

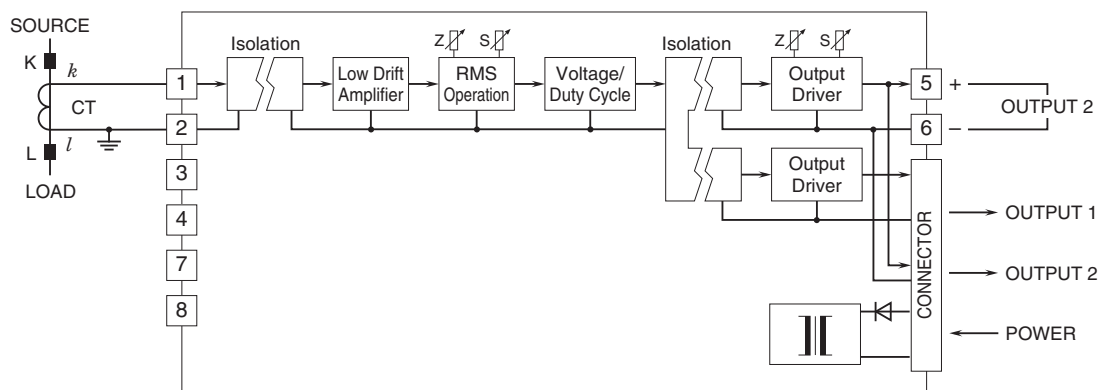
EXTERNAL DIMENSIONS unit: mm (inch)



TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.