Rack-mounted Power Transducers 17-RACK

AC CURRENT TRANSDUCER

Functions & Features

- Converting an alternating current from a current transformer into a standard process signal
- Minimum ripple
- True RMS sensing

Typical Applications

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



MODEL: 17CE-[1]6-R

ORDERING INFORMATION

• Code number: 17CE-[1]6-R Specify a code from below for [1].

(e.g. 17CE-56-R)

[1] INPUT

Current

1: 0 - 1 A AC

5: 0 - 5 A AC

OUTPUT

Voltage

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

AUXILIARY POWER SUPPLY

DC Power

R: 24 V DC

(Operational voltage range 24 V ±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: Connector

Auxiliary power: Supplied from connector

Screw terminal: Nickel-plated steel

Isolation: Input to output to auxiliary power

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

Overrange output: 0 to 120 %

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

Span adjustment: 95 to 105 % (front)

INPUT SPECIFICATIONS

Frequency: 50 or 60 Hz

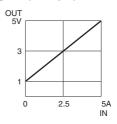
Input burden: 0.1 VA (input 0 – 1 A), 0.5 VA (input 0 – 5 A) Overload capacity: 400 % of rating for 1 sec., 120 %

continuous

Operational range: 0 - 120 % of rating

OUTPUT SPECIFICATIONS

• Operation Diagram (example)



INSTALLATION

Auxiliary power supply

Current consumption: Approx. 35 mA

Operating temperature: -5 to +55°C (23 to 131°F)
Operating humidity: 40 to 85 % RH (non-condensing)

Mounting: Standard Rack 17BXE

Weight: 150 g (0.33 lb)

PERFORMANCE in percentage of span

Accuracy: ±0.4 % (at 23°C ±10°C or 73.4°F ±18°F, 45 - 65

Hz)

Response time: ≤ 1 sec. (0 - 100 % ± 1 %)

Ripple: 1 %p-p max.

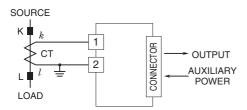
Line voltage effect: ± 0.1 % over voltage range Insulation resistance: ≥ 100 M Ω with 500 V DC Dielectric strength: 500 V AC @ 1 minute (output to

auxiliary power)

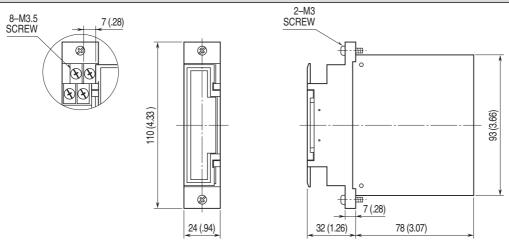
1500 V AC @ 1 minute (input to output or auxiliary power to

ground)

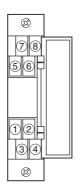
CONNECTION DIAGRAM



DIMENSIONS unit: mm (inch)



TERMINAL ASSIGNMENTS



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Specifications are subject to change without notice.