Rack-mounted Power Transducers 17-RACK

AC CURRENT TRANSDUCER

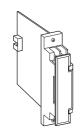
Functions & Features

- 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 \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

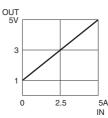
Input: M3.5 screw terminals (torque 0.8 N·m) Output: Connector Auxiliary power: Supplied from connector Screw terminal: Nickel-plated steel Isolation: Input to output to auxiliary power Input waveform: Up to 15 % of 3rd harmonic content Overrange output: 0 to 120 % Zero adjustment: -5 to +5 % (front) 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)



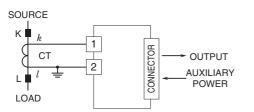
INSTALLATION

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)

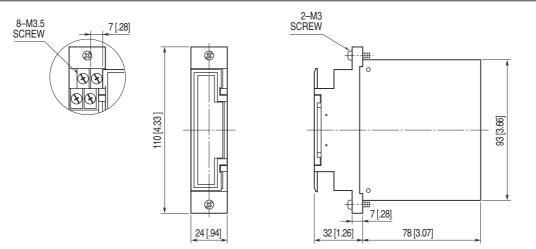
PERFORMANCE in percentage of span

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: $\geq 100 \text{ M}\Omega$ 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)

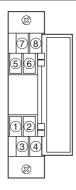
CONNECTION DIAGRAM



DIMENSIONS unit: mm (inch)



TERMINAL ASSIGNMENTS





Specifications are subject to change without notice.