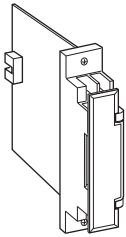


Rack-mounted Power Transducers 17-RACK**AC CONVERTER****Functions & Features**

- Converting an alternating current/voltage into a standard process signal
- True RMS sensing

Typical Applications

- Converting a large AC current in combination with a shunt resistor, or a narrow span AC voltage

**MODEL: 17AC-[1]6-R****ORDERING INFORMATION**

- Code number: 17AC-[1]6-R
- Specify a code from below for [1].
(e.g. 17AC-A16-R)
- Special input range (For codes AZ & A8)

[1] INPUT**Current**

- AA:** 0 - 10 mA AC (Input resistance 100 Ω)
AB: 0 - 50 mA AC (Input resistance 20 Ω)
AC: 0 - 100 mA AC (Input resistance 10 Ω)
AD: 0 - 500 mA AC (Input resistance 1 Ω)
AZ: Specify current (See INPUT SPECIFICATIONS)
 (0 % input must be 0 mA.)

Voltage

- A1:** 0 - 100 mV AC (Input resistance 200 kΩ min.)
A2: 0 - 500 mV AC (Input resistance 200 kΩ min.)
A3: 0 - 1 V AC (Input resistance 200 kΩ min.)
A4: 0 - 5 V AC (Input resistance 200 kΩ min.)
A5: 0 - 10 V AC (Input resistance 200 kΩ min.)
A6: 0 - 120 V AC (Input resistance 200 kΩ min.)
A7: 0 - 150 V AC (Input resistance 200 kΩ min.)
A8: Specify voltage (See INPUT SPECIFICATIONS)
 (0 % input must be 0 V.)

OUTPUT**Voltage**

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

POWER INPUT**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

Power input: Supplied from connector

Screw terminal: Nickel-plated steel

Isolation: Input to output to power

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

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

Span adjustment: 95 to 105 % (front)

INPUT SPECIFICATIONS

Frequency: 40 Hz min., 1 kHz max.

■ **AC Current:** 0 - 1 A AC; input resistor incorporated

Minimum span: 1 mA

Input resistance

Span 1 mA: 1 kΩ

Span ≤ 2 mA: 500 Ω

Span ≤ 5 mA: 200 Ω

Span ≤ 10 mA: 100 Ω

Span ≤ 20 mA: 50 Ω

Span ≤ 50 mA: 20 Ω

Span ≤ 100 mA: 10 Ω

Span ≤ 500 mA: 1 Ω

Span ≤ 1 A: 0.5 Ω

■ **AC Voltage:** 0 - 250 V AC

Minimum span: 50 mV

Input resistance: 200 kΩ min.

INSTALLATION

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: $\pm 0.4\%$

Temp. coefficient: $\pm 0.02\%/^{\circ}\text{C}$ ($\pm 0.01\%/^{\circ}\text{F}$)

Response time: ≤ 0.5 sec. (0 - 90 %)

Ripple: 0.5 %p-p max.

Line voltage effect: $\pm 0.1\%$ over voltage range

Insulation resistance: $\geq 100\text{ M}\Omega$ with 500 V DC

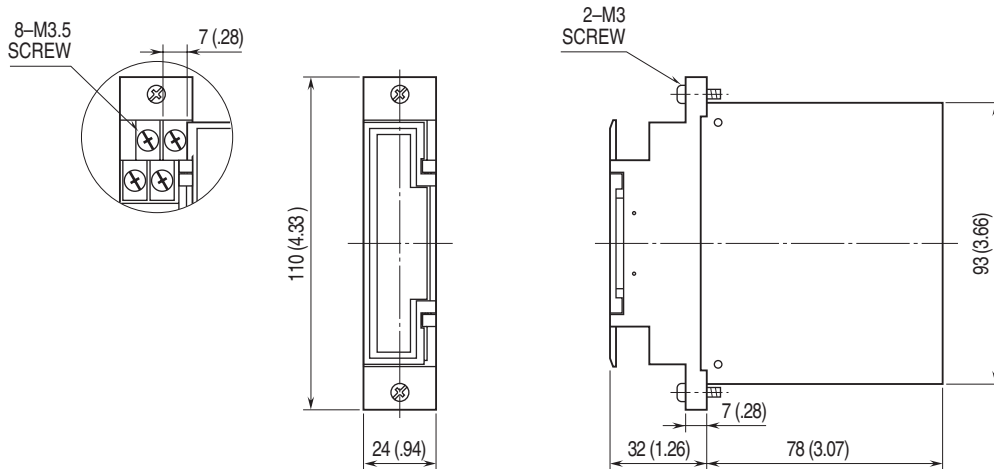
Dielectric strength: 1500 V AC @ 1 minute

(input to output or power)

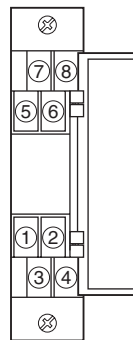
500 V AC @ 1 minute (output to power)

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

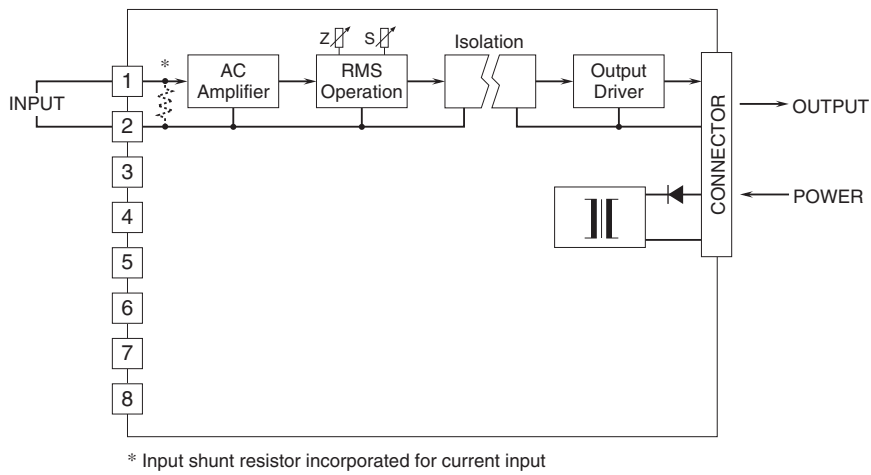
DIMENSIONS unit: mm (inch)



TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



* Input shunt resistor incorporated for current input



Specifications are subject to change without notice.