

Rack-mounted Power Transducers 17-RACK

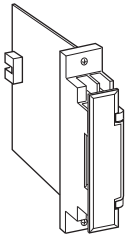
TACHOGENERATOR CONVERTER

Functions & Features

- Converting an AC voltage from a tachogenerator (tachometer) into a standard process signal
- Wide input range

Typical Applications

- Measuring rotating or moving speed of multispeed motors, belt conveyers, metering pumps



MODEL: 17TG-[1]6-R

ORDERING INFORMATION

- Code number: 17TG-[1]6-R
- Specify a code from below for [1].
(e.g. 17TG-16-R)
- Special input range (For code U)

[1] INPUT

Voltage

- 1: 0 – 35 V AC (Input resistance 200 k Ω min.)
- 2: 0 – 50 mV AC (Input resistance 200 k Ω min.)
- 3: 0 – 60 mV AC (Input resistance 200 k Ω min.)
- 4: 0 – 100 mV AC (Input resistance 200 k Ω min.)
- 5: 0 – 1 V AC (Input resistance 200 k Ω min.)
- 6: 0 – 10 V AC (Input resistance 200 k Ω min.)
- 7: 0 – 100 V AC (Input resistance 200 k Ω min.)
- 8: 0 – 110 V AC (Input resistance 200 k Ω min.)
- 9: 0 – 150 V AC (Input resistance 200 k Ω min.)
- A: 0 – 200 V AC (Input resistance 200 k Ω min.)
- B: 0 – 250 V AC (Input resistance 200 k Ω min.)
- U: 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 $\pm$ 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

Power input: Supplied from connector

Screw terminal: Nickel-plated steel

Isolation: Input to output to power

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

Span adjustment: 95 to 105 % (front)

INPUT SPECIFICATIONS

Input: 0 – 250 V AC

Minimum span: 50 mV

Input resistance: 200 k Ω minimum

Frequency: 15 Hz min., 1 kHz max. with 100 % input

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: $\pm$ 0.3 %

Temp. coefficient: $\pm$ 0.02 %/°C ($\pm$ 0.01 %/°F)

Response time: $\leq$ 0.5 sec. (0 – 90 %)

Ripple: 0.5 %p-p max.

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

Insulation resistance: $\geq$ 100 M Ω with 500 V DC

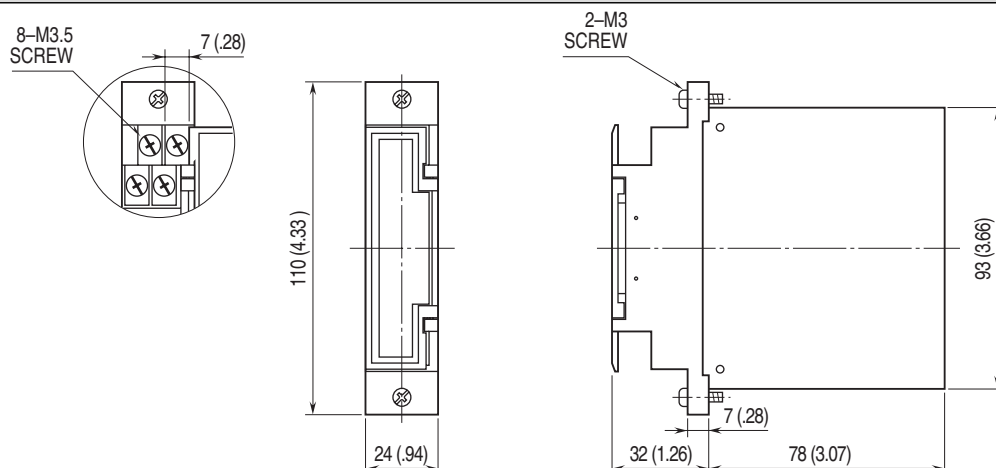
Dielectric strength: 1500 V AC @ 1 minute

(input to output or power)

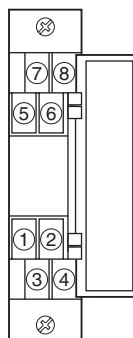
500 V AC @ 1 minute (output to power)

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

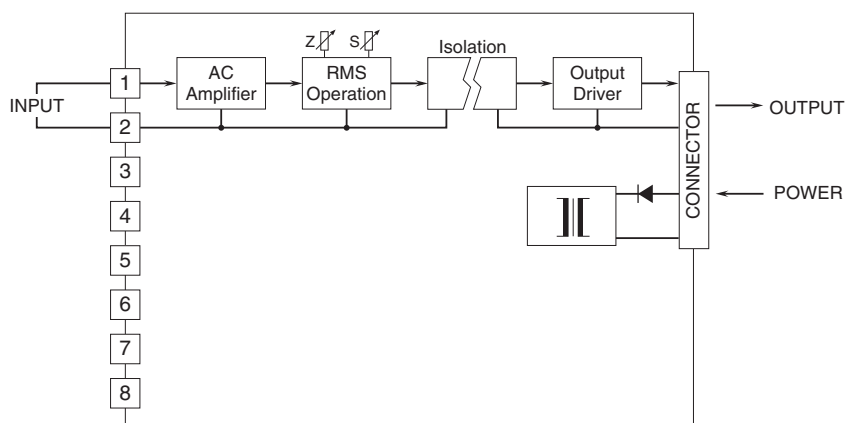
DIMENSIONS unit: mm (inch)



TERMINAL ASSIGNMENTS



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM





Specifications are subject to change without notice.