

## Rack-mounted DCS Signal Conditioners 18-RACK

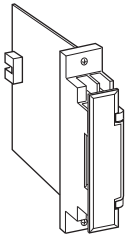
### TACHOGENERATOR CONVERTER

#### Functions & Features

- Converting an AC voltage from a tachogenerator (tachometer) into two standard process signals
- Second channel output available at the front terminals and at the Standard Rack connector

#### Typical Applications

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



## MODEL: 18TG-[1]66-R

### ORDERING INFORMATION

- Code number: 18TG-[1]66-R
- Specify a code from below for [1]  
(e.g. 18TG-166-R)
- Special input range (For code U)

#### [1] INPUT

##### Voltage

- 1: 0 - 35 V AC (Input resistance 200 k $\Omega$  min.)  
U: Specify voltage (0 % input must be 0 V.)

#### OUTPUT 1

##### Voltage

- 6: 1 - 5 V DC (Load resistance 2000  $\Omega$  min.)

#### OUTPUT 2

##### Voltage

- 6: 1 - 5 V DC (Load resistance 2000  $\Omega$  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

**Overrange output:** 0 to 120 % at 1 - 5 V

**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 $\Omega$  minimum

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

### INSTALLATION

#### Power consumption

- DC: Approx. 35 mA

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

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

**Mounting:** Standard Rack 18BX or 18KBX

**Weight:** 150 g (0.33 lbs)

### PERFORMANCE in percentage of span

**Accuracy:**  $\pm$ 0.2 % (excluding  $\leq$  15 Hz)

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

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

**Ripple:** 0.5 %p-p max. (100/120 Hz)

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

**Insulation resistance:**  $\geq$  100 M $\Omega$  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

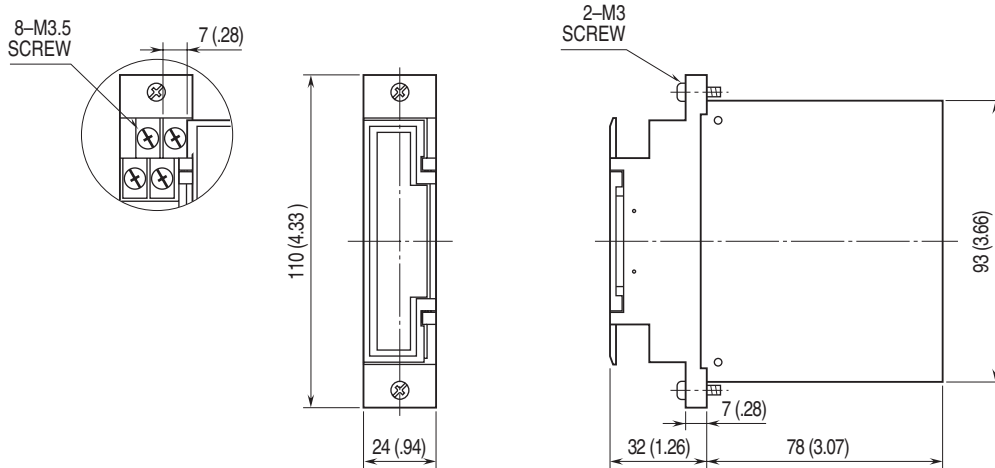
(output 1 to output 2 to power)

1500 V AC @ 1 minute

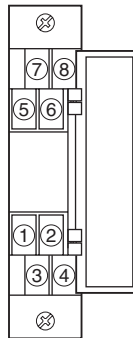
(input or output or power to ground)



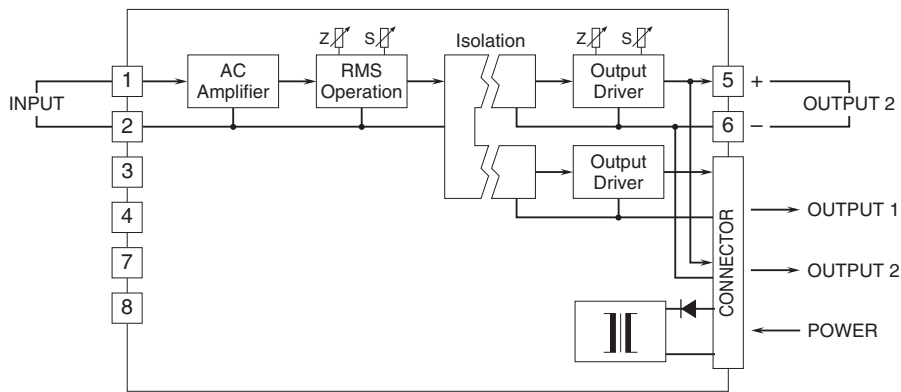
**DIMENSIONS unit: mm (inch)**




**TERMINAL ASSIGNMENTS**



**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



 Specifications are subject to change without notice.