

Rack-mounted DCS Signal Conditioners 18-RACK

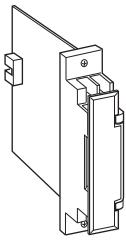
FREQUENCY TRANSDUCER

Functions & Features

- Providing two DC output signals in proportion to deviation (± 5 Hz) from center frequency (50 Hz or 60 Hz)
- DC output containing little ripple is ideal for computer input

Typical Applications

- Centralized monitoring and control of power management system in manufacturing facility or building
- Measuring frequency for UPS



MODEL: 18HZ-[1][2]66-R

ORDERING INFORMATION

- Code number: 18HZ-[1][2]66-R

Specify a code from below for each of [1] and [2].
(e.g. 18HZ-1166-R)

[1] FREQUENCY

- 1: 45 - 55 Hz
- 2: 55 - 65 Hz
- 3: 45 - 65 Hz

[2] INPUT

- 1: 110 V AC
- 2: 220 V AC

OUTPUT 1

Voltage

- 6: 1 - 5 V DC (Load resistance 5000 Ω min.)

OUTPUT 2

Voltage

- 6: 1 - 5 V DC (Load resistance 5000 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 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: Approx. -10 to +120 % at 1 - 5 V

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

Span adjustment: 95 to 105 % (front)

INPUT SPECIFICATIONS

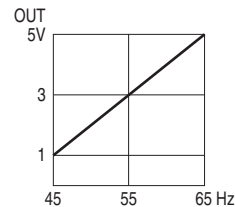
Operational range: 85 - 120 % of rating

Overload capacity: 150 % of rating for 10 sec., 120 % continuous

Input burden: Approx. 1 VA

OUTPUT SPECIFICATIONS

■ OPERATION DIAGRAM (example)



INSTALLATION

Current consumption: Approx. 60 mA

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

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

Mounting: Standard Rack 18BXx or 18KBXx

Weight: 150 g (0.33 lb)

PERFORMANCE in percentage of span

Accuracy: ± 1.0 %

Temp. coefficient: ± 0.1 %/°C (± 0.06 %/°F)

Response time: ≤ 0.5 sec. (0 - 90 %)

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

Line voltage effect: ± 0.1 % over voltage range

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

Dielectric strength: 2000 V AC @ 1 minute

(input to output 1 or output 2 or power)

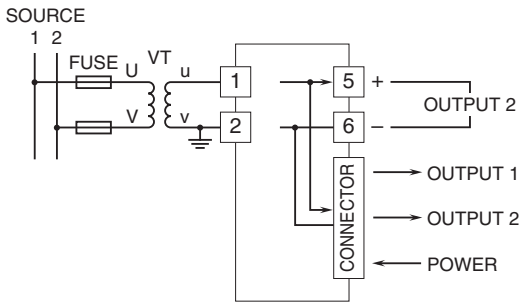
500 V AC @ 1 minute

(output 1 to output 2 to power)

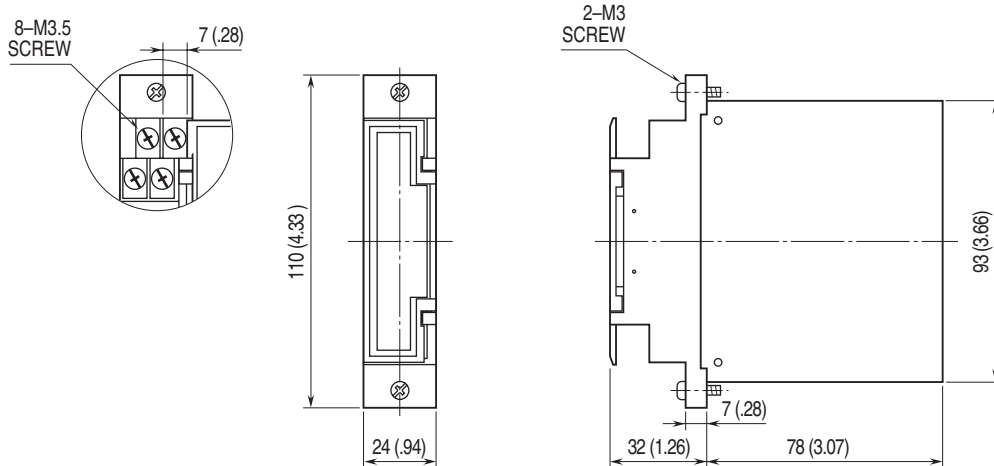
2000 V AC @1 minute

(input or output or power to ground)

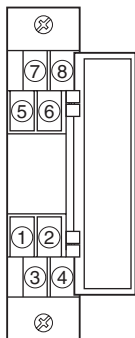
CONNECTION DIAGRAM



EXTERNAL DIMENSIONS unit: mm (inch)



TERMINAL ASSIGNMENTS





Specifications are subject to change without notice.