

## Rack-mounted DCS Signal Conditioners 18-RACK

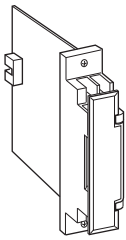
### FREQUENCY TRANSDUCER

#### Functions & Features

- Providing two DC output signals in proportion to deviation ( $\pm 5$  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  $\Omega$  min.)

#### OUTPUT 2

Voltage

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

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

**Span adjustment:** 95 to 105 % (front)

#### INPUT SPECIFICATIONS

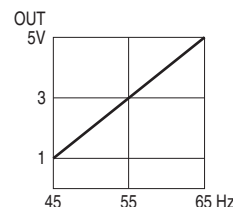
**Operational range:** 85 - 120 % of rating

**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:**  $\pm 1.0$  %

**Temp. coefficient:**  $\pm 0.1$  %/°C ( $\pm 0.06$  %/°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:**  $\geq 100 \text{ M}\Omega$  with 500 V DC

**Dielectric strength:** 2000 V AC @ 1 minute

(input to output 1 or output 2 or power)

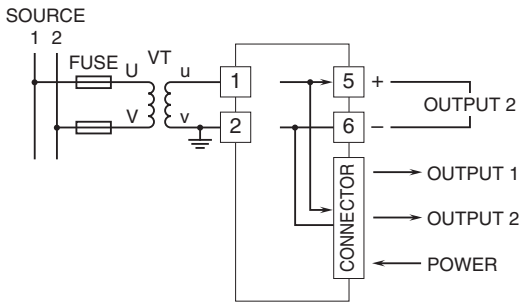
500 V AC @ 1 minute

(output 1 to output 2 to power)

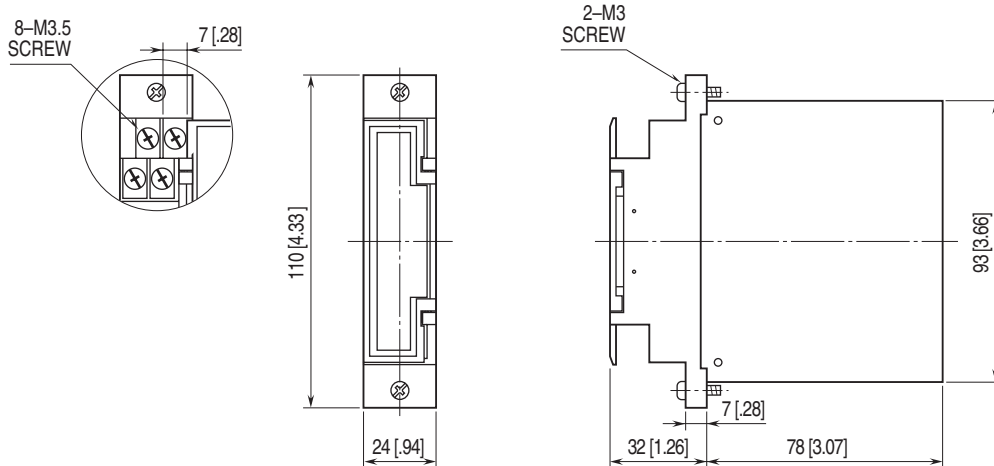
2000 V AC @1 minute

(input or output or power to ground)

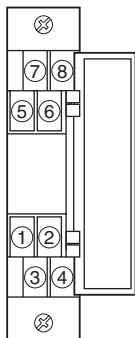
## CONNECTION DIAGRAM



## EXTERNAL DIMENSIONS unit: mm [inch]



## TERMINAL ASSIGNMENTS





Specifications are subject to change without notice.