## Rack-mounted DCS Signal Conditioners 18-RACK

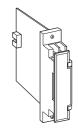
## **CT CONVERTER**

#### Functions & Features

- Converting an alternating current from a current transformer into two standard process signals
- Minimum ripple
- True RMS sensing
- Second channel output available at the front terminals and at the Standard Rack connector

### **Typical Applications**

- Centralized monitoring and control of motors, pumps or heaters by DCS
- · Monitoring power line and power supply current



MODEL: 18CE-[1]66-R

## **ORDERING INFORMATION**

Code number: 18CE-[1]66-R
 Specify a code from below for [1].
 (e.g. 18CE-166-R)

## [1] INPUT

## Current

**1**: 0 - 1 A AC **5**: 0 - 5 A AC

# **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 **Input waveform**: Up to 15 % of 3rd harmonic content **Overrange output**: Approx. 0 to 120 % at 1 – 5V

Zero adjustment: -5 to +5 % (front) Span adjustment: 95 to 105 % (front)

## INPUT SPECIFICATIONS

Frequency: 50 or 60 Hz Input burden: 0.5 VA max.

Overload capacity: 500 % of rating for 5 sec., 120 %

continuous

Operational range: 0 - 120 % of rating

### INSTALLATION

Current consumption: Approx. 35 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: ±0.4 %

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 $\Omega$  with 500 V DC Dielectric strength: 1500 V AC @ 1 minute (input to output 1 or output 2 or power)

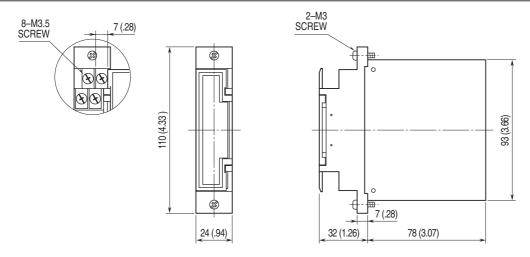
500 V AC @ 1 minute

(output 1 to output 2 to power)

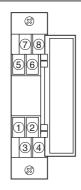
1500 V AC @ 1 minute

(input or output or power to ground)

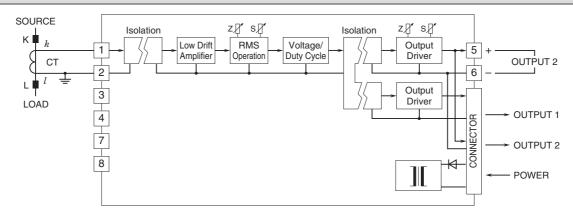
# **EXTERNAL DIMENSIONS unit: mm (inch)**



# **TERMINAL ASSIGNMENTS**



# **SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



 $\Lambda$ 

Specifications are subject to change without notice.