

# OPERATING INSTRUCTIONS

## Cat. No. ETR-D22SS



**Please retain these instructions and review them prior to using the unit:**

**⚠ Warning :**

- 1.The Equipment is built-in type with Class II construction and is protected by Reinforced Insulation. Terminals are a part of the front panel and are protected by means of finger guards. Finger guards are not to be removed during wiring, installation, operation or maintenance.
  - 2.The power should be turned off while wiring and maintenance to prevent the risk of electric shock. Do not touch any terminals when the power is ON.
  3. Wiring shall be done strictly according to the terminal layout with shortest connections.
  - 4.Fuse Protection: The equipment does not have Built-in fuse. External fuse of rating 275 VDC/1 A is recommended.
- ⚠ Caution:**
1. This unit is not intended for outdoor use.
  2. The power connection cable must have a cross-section of atleast 18 AWG (1mm<sup>2</sup>)and insulation capacity of atleast 1.5kV.Use lugged terminals to accept M3 (No. 6) screws.

3. The output connections must not be loaded beyond the specified values/range.
- 4.Avoid inflow of dust and contact of conductive material with the internal circuitry of the unit.
- 5.Clean the equipment with a clean, soft cloth. Do not use any organic solvents like Isopropyl alcohol for cleaning.

### SPECIFICATIONS

#### Supply Voltage

- 110V AC (90V ~ 150V AC)
- 230V AC (190V ~ 270V AC)
- 415V AC (370V ~ 500V AC)
- 50 or 60 Hz

#### Output Contact

SPDT (1 Changeover) contact each for star (Wye) & Delta relay.  
(Rated at 5A @ 250 VAC/24 VDC, resistive.)

#### LED Indication

Star (Wye) relay, Delta relay.

#### Time Range

Run up time: 30/60 sec.  
Change over time: 50/100 ms.  
(User selectable via DIP switches).

#### Accuracy

Setting: ± 5% of full scale.  
Repeat: ± 0.5% or 50 ms  
(whichever is greater)

#### Reset

On interruption of power.  
Reset time less than 100 ms.

### Mounting

DIN rail / Screw mounting.

### Housing

Flame retardant plastic.

### Temperature

Operating: 0 to +50 °C (32 to 122 °F)  
Storage: -20 to +75 °C (-4 to 167 °F)

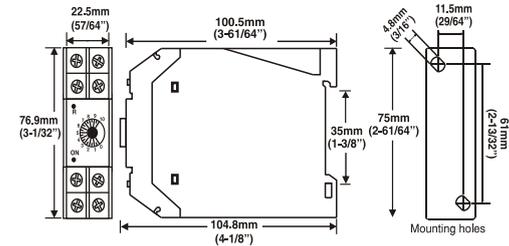
### Humidity (Non-condensing)

95% RH.

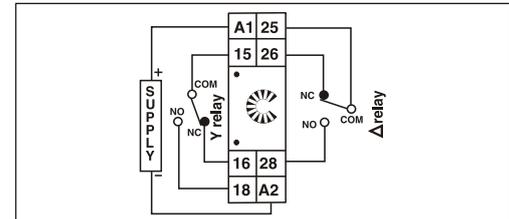
### Weight

130g (4.6 oz.)

### PANEL DIMENSIONS:



### TERMINAL CONNECTIONS



TERMINAL	DESCRIPTION
A1	Timer Supply (L)
A2	Timer Supply (N)
15	Y relay COM
16	Y relay NC
18	Y relay NO
25	Δ relay COM
26	Δ relay NC
28	Δ relay NO

### DIP switch setting for time range selection

#### For Run time range

TIME RANGE	SW1	SW2
30sec	ON	OFF
60sec	OFF	ON

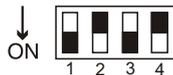
#### For Pause time range

TIME RANGE	SW3	SW4
50msec	ON	OFF
100msec	OFF	ON

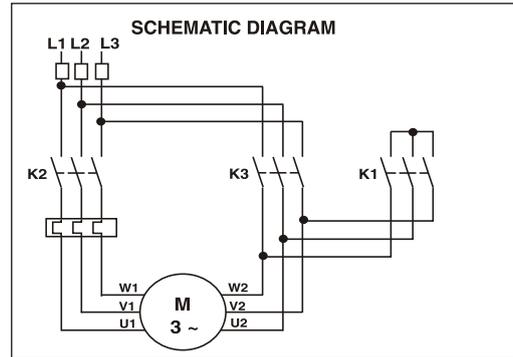
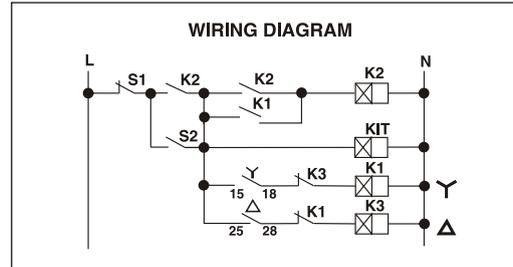
### Switch setting example

Run-up time range - 30sec.

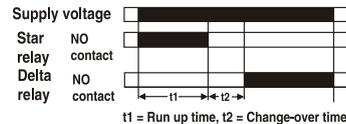
Pause time range - 50msec



## PRINCIPLE OF OPERATION



## MODE OF OPERATION



**c3controls**

PO Box 496  
Beaver, PA 15009  
800.560.8560  
www.c3controls.com

Note: Specifications subject to change without notice.  
Refer to website for product updates.

Operating/0905/ETR-D22SS/OP096-VO2-NS144

Page 2 of 2