Star Delta Function Timer



Operating Instruction

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DIN 22.5mm

Salient features

- Star Delta
- 2 Time ranges: 30 / 60 sec
- Change over: 50 / 100 / 150 / 200ms
- LED indications: Star relay ON, Delta relay ON

Ordering information

Product code	Supply voltage	Certification
800SD-2-230V	230V AC 50/60 Hz	–
800SD-2-415V	220-415V AC 50/60 Hz	–

Caution

- This unit is not intended for outdoor use.
- The power connection cable must have a cross-section of atleast 1sq.mm and insulation capacity of atleast 1.5kV. Use lugged terminals to meet M3 screws.
- The output connections must not be loaded beyond the specified values/range.
- Avoid inflow of dust and contact of conductive material with the internal circuitry of the unit.
- Clean the equipment with a clean, soft cloth. Do not use any organic solvents.

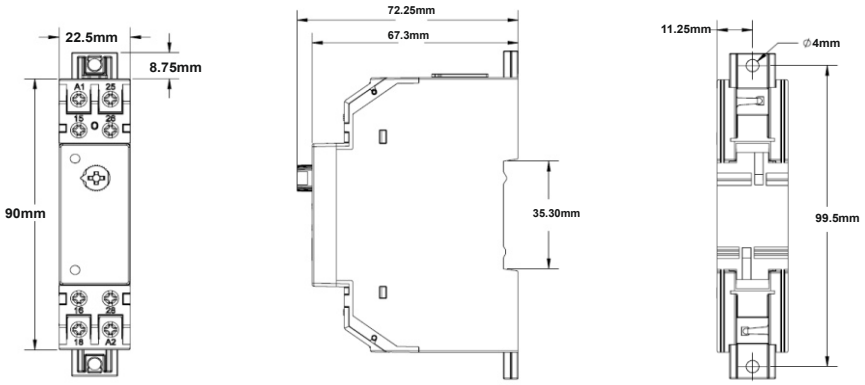
Wiring guidelines

Warning

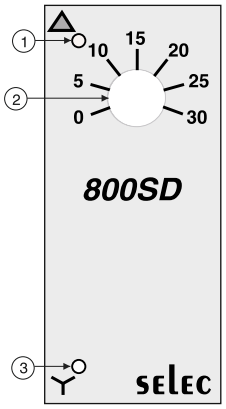
1. The Equipment is built-in type with class II construction and is protected by Reinforced Insulation. Terminals are a part of the front panel and are protected by means of finger guards. by Reinforced Insulation. Terminals are a part of the front panel and are protected by means of finger guards. Finger 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 For 800SD-2-230: 275V DC/1 & 800SD-2-415: 500V DC/1A is recommended.

Technical specifications	
Time setting range	Run up time: 30/60 sec, Pause time: 50/100/150/200 ms. (User selectable via Dip Switches)
Supply voltage	For 800SD-2-230: 230V AC,50/60Hz At 230V AC: Tolerance: ±10% For 800SD-2-415: 220-415V AC, 50/60Hz At 415V AC: Tolerance: ±10%
Power consumption	800SD-2-230:10VA 800SD-2-415: 20VA
Contact type	SPDT (1C/O)
Contact capacity	250V AC, or 24V DC 5A resistive load
Electrical life of relay	100,000 operations
Mechanical life of relay	10,00,000 operations
Accuracy setting	±5% of full scale
Repeat	±0.5% of full scale
LED indication	Star relay, Delta relay
Reset	On interruption of power. Reset time less than 100ms.
Weight	115 gms.
Connecting capacity	Rigid 1x4mm - 2x2.5mm
Flexible with ferrules	1x2.5mm - 2x1.5mm
Tightening torque	0.5 to 0.8 Nm
Size (in mm)	22.5(W) x 72.25(H) x 90(D)
Temperature	Operating: 0 to 50°C Storage: -20 to 75°C
Humidity	Up to 95%RH
Mounting	DIN rail / Wall mounting
Pollution degree	2

Panel dimensions

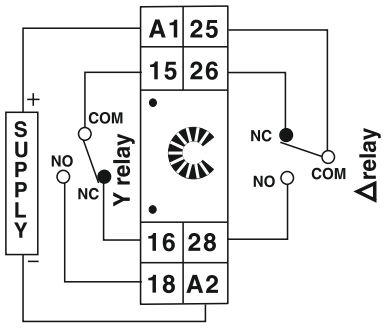


Front plate description



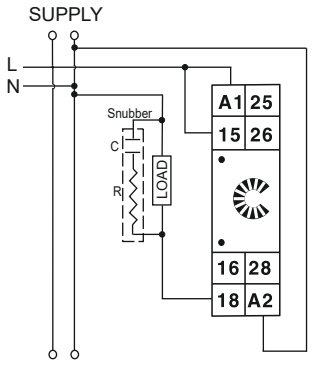
1. Red LED indicates Relay ON for Delta.
2. Knob for Run up Time Range Selection
   (The marking 0 to 30 represent timing in proportion to the full scale time range.)
3. Red LED indicated Relay ON For Star.

Terminal connections

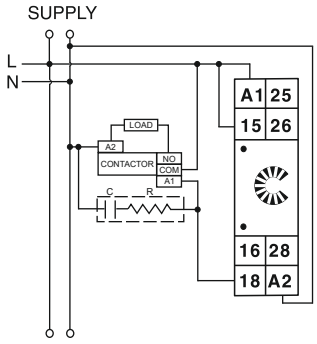


Typical load connection

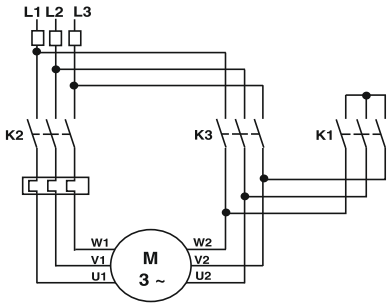
1. For load current less than 0.5A



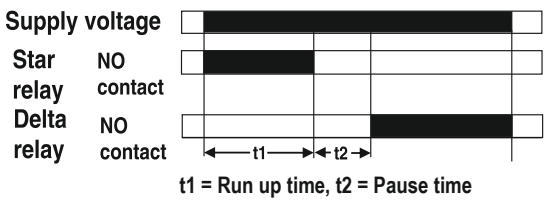
2. For bigger loads, use interposing relay/contactor.



Schematic diagram



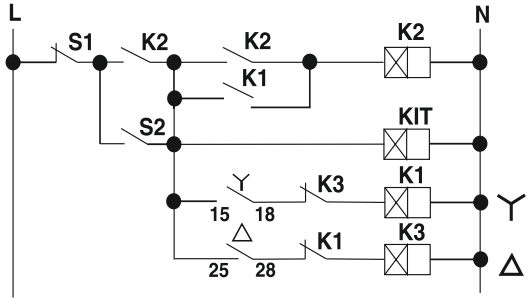
Mode of operation



t1 = Run up time, t2 = Pause time

Principle of operation

WIRING DIAGRAM

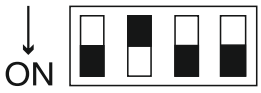
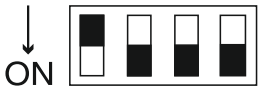
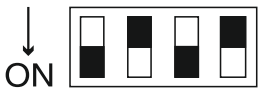
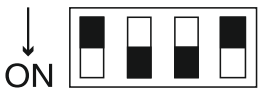
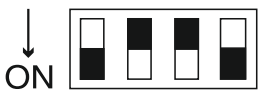
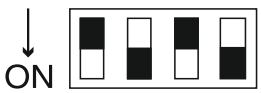
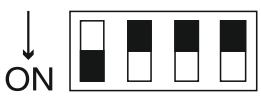
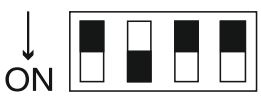


DIP switch setting for time range selection

For run up time range		
Time range	**SW1**	**SW2**
30sec	ON	OFF
60sec	OFF	ON

For pause time range		
Time range	**SW3**	**SW4**
50sec	ON	ON
100sec	ON	OFF
150sec	OFF	ON
200sec	OFF	OFF

DIP switches setting examples

For run time = 30msec	For run time = 60msec
Run-up time range - 30sec. Pause time range - 50msec 	Run-up time range - 60sec. Pause time range - 50msec 
Run-up time range - 30sec. Pause time range - 100msec 	Run-up time range - 60sec. Pause time range - 100msec 
Run-up time range - 30sec. Pause time range - 150msec 	Run-up time range - 60sec. Pause time range - 150msec 
Run-up time range - 30sec. Pause time range - 200msec 	Run-up time range - 60sec. Pause time range -200msec 

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