SELEC

OP654-V04

TS2M1-2-16A-230V-CE Operating Instructions



SPECIFICATIONS SUPPLY Voltage 230V AC ± 10% Frequency 50-60Hz Power Consumption Approx. 9 Watts at 252 VAC Battery Backup TS2M1-2-16A-230V-CE : 3 years (Replaceable by user) **RELAY OUTPUT** NO. OF RELAY 2 Type of contact TS2M1-2-16A-230-CE : 1C/O (SPDT) Contact rating TS2M1-2-16A-230V-CE : 16A (NO) & (resistive load) 16A (NC) @ 250V AC Contact material AaSnO₂ Max. Switching Current Electrical life TS2M1-2-16A-230V-CE : 5x10⁵ Operations Mechanical life 1x10['] Operations FUNCTIONAL TS2M1-2-16A-230V-CE **Operation Period** 1 week For Relay 1 - Total 30 ON Steps and 30 OFF Steps 1 Program x 30 Steps 2 Programs x 15 Steps Weekly Program 3 Programs x 10 Steps 4 Programs x 07 Steps 5 Programs x 06 Steps (Same for Relay 2) Display Text LCD (Without Backlight) Character Height 5.07mm(HH:MM) & 3.39mm(SS) Minimum 1 second setting unit 16 Dates max. Holiday Settings Clock 12-hr(AM/PM) and 24-hr selection 5 Keys with 1 recessed Keys reset button Auto / Permanent Override ON / Relay Operating Mode Permanent Override OFF/MODE

6 mins a year @ 25°C

RTC accuracy

ENVIRONMENTAL

	Temperature Range	Operating : 0° to 55°C		
		Storage : -20º to 70ºC		
	Humidity	10% to 95% RH		
	Protection class	II		

ORDER CODE INFORMAT	ION	
Product	Product Certification	
	CE	CUL US LISTED
TS2M1-2-16A-230V-CE	1	_

SAFETY PRECAUTIONS

All safety related codifications, symbols and instructions that appear In this operating manual or on the equipment must be strictly followed to ensure the safety of the operating personnel as well as the instrument.

If the equipment is not used in manner specified by the manufacturer, it might impair the protection provided by the equipment. If there is physical damage to the unit then do not use it.

Read complete instructions prior to installation and operation of the unit.

The timer functions and set program are backed up by a battery. If the life of the battery expires, the display will become irregular or may fail to function. The battery can be replaced by the user. Contact your SELEC representative before doing so.

Serious injury may occasionally occur due to fire or explosion of a battery, or leakage from a battery. Never attempt to short the positive and negative terminals. recharge, disassemble, deform by applying excessive pressure, or expose the battery to fire.

CAUTION :

1. This equipment, being built-in-type, normally becomes a part of main control panel and in such case the terminals do not remain accessible to the end user after installation and internal wiring.

IMPORTANT NOTE

Select no. of Holidays on Holiday select page & then Holiday date enter page will appear for selected no. of Holidays only. If 0 no. of holidays are selected then Holiday date enter page will not appear.

ERROR NOTIFICATIONS

Below errors occur at second's place on Home Display when wrong value is entered				
Err	Туре	Valid Range		
E1	Month Out of Range Error	01 to 12		
E2	Date Out of Range Error	01 to 31		
E3	Hour Out of Range Error	00 to 23		
E4	Step Hour Out of Range Error	00 to 23		

- 2. Conductors must not come in contact with the internal circuitry of the equipment or else it may lead to a safety hazard that may in turn endanger life or cause electrical shock to the operator.
- 3. Circuit breaker or mains switch must be installed between power source and supply terminals to facilitate power 'ON' or 'OFF' function. However this switch or breaker must be installed in a convenient position normally accessible to the operator.
- 4. Inductive loads should be equipped with interference suppressors like varistors, RC snubbers.
- 5. Use of contactors is recommended if load exceeds the contact rating.

A WARNING :

- 1. To prevent risk of electric shock power supply to the equipment must be kept OFF while doing the wiring arrangement. Use lugged terminals to meet M3 screws.
- 2. Wiring shall be done strictly according to the terminal lavout with shortest connections. Conform that all connections are correct.
- 3. To eliminate electromagnetic interference use of short wire with adequate ratings and twists of the same in equal size shall be made.

MECHANICAL INSTALLATION



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TS2M1-2-16	6A-230	V-CE					
					RELAY	<u>27</u>	
	•	٠	•	16	15	18	
			1		CO	M NO	
				•	RELAY		
	L	•	N	26	25	28	
					_ co	MNO	
	230	DV AC					
SPECIAL	CONF		NS				

SPECIAL CONDITIONS			
CONDITION 1 :- Activate Step OFF ON next day :			
Set OFF time < ON time applicable only if OFF to be done within 24hrs.			
CONDITION 2 :- Activate Step OFF after 2 days :			
 A) Apply condition 1 B) Enable multiple programs with overlap time. 			

OPERATION FUNCTIONS				
FUNCTION	DESCRIPTION			
Adjusting Clock	Allows current date & time settings through day, hrs (24-hr indication and 12-hr indication), minutes, seconds settings			
Weekly Timer Operation	Controls the output according to the set time of ON and OFF for specified days of the week			
Holiday setting	Sets holidays without having to revise the existing program. Can be set 0 to 16 dates max.			
Permanent Override ON / Permanent Override OFF	Allows the output to be forcibly turned ON/OFF regardless of the control output setting.			
Keypad Lock	Allows each key to lock / unlock. When key is locked programming parameters of that key cannot be edited.			
Programmable No of steps	Allows to modify No of steps per program (Minimum Value = 6, Maximum Value = 30)			
Enable / Disable program	Allows to enable / disable particular program			

FRONT PANEL DESCRIPTION



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1	Auto : Automatic mode
	🖑 • : Permanent override
2	PRG Mode Indication (when in programming mode only)
3	Day of Week indication
4	Relay ON/OFF Indication
5	AM/PM Indication
6	Hours/minutes/seconds indication (HH:MM:SS)
7	LB → Lock All & Battery mode L → Lock All & Auxiliary mode B → Unlock All & Battery mode
8	R1 Relay 1 indication R2 Relay 2 indication
10	Holiday indication
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Doc. name : OP INST TS2M1/ TS1W1 OP654-V04 (Page 1 of 2)

SETTING THE TS2M1-2-16A-230V-CE PARAMETERS

Note: To change parameters' value use"シ A だ ": To set value use "ENT": To come out of programming use "ESC" (NOTE 1, 3 & 5) Insert Battery to Power ON the Time Switch



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