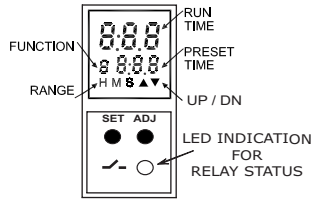
FEATURES:

- 8 functions
- Wide operating voltage : 24 to 240 VAC / DC
- Multi Range : 0.1 s to 999 h
- Up/Down counting modes
- 3Digit LCD for preset Timer and Run Time
- Clear LED indication of Relay status
- Key lock Function
- Conforms to IEC standards of EMI/EMC
- Compact size (17.5 mm single width module)



1.PRESET TIME :The Timer Duration selected by the user.
2.RUN TIME : In Down counting (▼) mode it indicates the remaining while in Up counting (▲) mode it indicates the elapsed time.
3.Up/Down (▲▼) blinks during the .Timer Duration(T).

THE KEYS:

KEY	OPERATION	RESULT
SET	Apply Power & Hold Program Mode the key for >3 sec.	
	OR	
ADJ + SET	Press both >3 sec program after power on	
SET	Press in program mode	
ADJ	Press in program mode Edit blinking parameter	
SET	Press for>3 sec. During Timer operation Reset Timer	
ADJ	Press for>3 sec. during Timer operation Select, Edit parameter Lock/Unlock Preset Time	
SET	Press during timer operation Edit Preset Time during Timer operation	

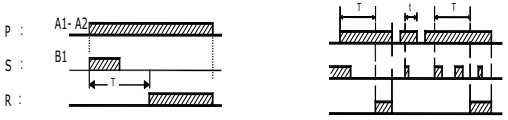
PROGRAMMING INSTRUCTIONS:

Apply power & hold the SET key for >3 sec.OR press both ADJ & SET key for >3 sec.After power ON.Now follow the steps given below

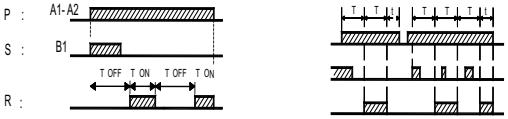
KEY	DISPLAY	RESULT
ADJ	F 5:39 HM	Press ADJ Key to select desired function (e.g F)
SET	F 5:39 HM	Confirms function then range indicator blinks
ADJ	F 5:39 HM	Press ADJ Key to select range (e,g.HM range 'HM')
SET	F 5:39 HM	Confirms range selection. 1st digit of preset time blinks.(For modes 'B' & 'C' two preset times 'on' & 'off' to be set)
ADJ	F 8:39 HM	Press ADJ key to adjust desired preset time digit (e.g. from 5 to 8)
SET	F 8:39 HM	Press Set to confirm 1st digit selection now 2nd digit blinks
ADJ	F 8:09 HM	Change with ADJ Key (e.g. from3 to 0)
SET	F 8:09 HM	Confirms 2nd digit selection ,now 3rd digit of preset Time blinks.
ADJ	F 8:06 HM	Change with ADJ Key (e.g. from9 to 6)
SET	F 8:06 HM	Now UP/DOWN Indicator blinks
ADJ	F 8:06 HM	Change with ADJ Key (e.g.from DOWN to UP)
SET	00.0 F 8:06 HM	Confirms counting mode . Program Over. Timer starts working normally.

TIMING DIAGRAMS:

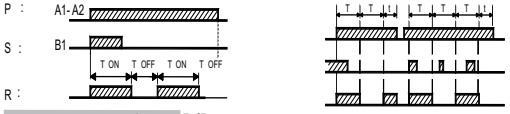
1.ON DELAY [A]



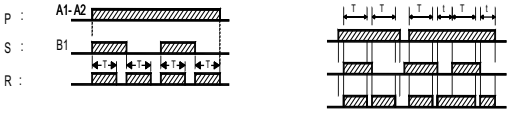
2.CYCLIC OFF/ ON {OFF START (Sym,Asym)} [b]



3.CYCLIC ON/OFF {ON START (Sym, Asym)} [E]



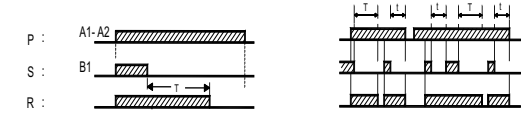
4.SIGNAL ON/OFF [d]



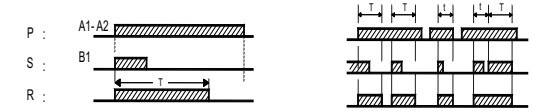
T : PRESET TIME T : PERIOD < T

P : POWERS : SIGNAL R : RELAY

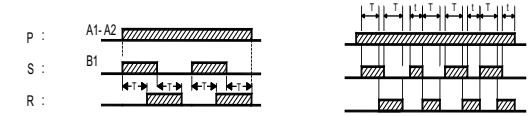
5.SIGNAL OFF DELAY [E]



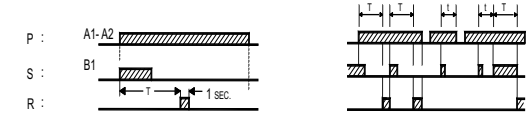
6.INTERVAL [F]



7.SIGNAL OFF/ON [G]



8. ONE SHOT OUTPUT [H]



T : PRESET TIME T : PERIOD < T

P : POWERS : SIGNAL R : RELAY

FUNCTIONAL DESCRIPTION:

1.ON DELAY [A]

The Timer starts when both power (p) and signal (s) are applied .The relay is energized at the end of preset Timer (T) and remains on till power is removed.

2.CYCLIC OFF/ ON {OFF START (Sym,Asym)} [b]

T-ON and T-OFF can be same or different .The relay keeps on changing its status till the power is removed.

3.CYCLIC ON/OFF {ON START (Sym, Asym)} [E]

This function is quite similar to the function "b" but Initially the relay is ON for period T-ON after the power is applied.

4.SIGNAL ON/OFF [d]

The output relay is turned ON for preset Time (T) When ever the signal (S)is applied or removed .(Refer Note :2)

5.SIGNAL OFF DELAY [E]

Output relay become on when signal (S) is applied. The Timer duration (S) is removed. At the end of timer Duration (T) the output relay goes OFF. Signal (S), if applied during the timer duration (S) will re -trigger The timer and the total duration will be extended.

6.INTERVAL [F]

When Signal (S) is applied ,the Timer Starts and the output relay is energized .The output relay becomes OFF at the end of timer duration (T).

7.SIGNAL OFF/ON [G]

When Signal (s) is applied or removed, the relay changes . Its state after timer duration (T) (Refer Nots : 2)

8.ONE SHOT OUTPUT [H]

When Signal (s) is applied ,the timer duration (T) Starts. At the end of Timer duration (T), the relay gets energized for approximately 1 sec.(Refer Note:2)

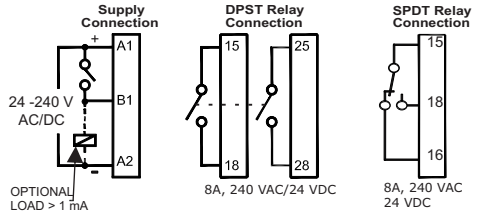
1.For power -on operation the terminal B1 and A1 must be present.

2.In case of all modes except mode G a change in Signal (s) status during the Timing Duration (T),does not affect output status but resets timing and re-triggers timing.

3.Output de-energises when device enters PROGRAM MODE and starts new cycle after coming out of. PROGRAM MODE.

4.Loads which have current requirement 1mA,can only be used as Optional Load . For e.g Contactor coil ,AC Relay Coil, etc,

CONNECTIONS:



Note:

Product innovation being a continuous process. We reserve the right to alter specification without any prior notice.

TECHNICAL SPECIFICATIONS

CAT.No.		V0DDTS	V0DDTD
SUPPLY CHARACTERISTICS			
Nominal Supply (⎓)		24 - 240 VAC / DC (50 to 60 Hz, ± 2 Hz)	
Limits		-15 % to +10 % of ⎓	
Power Consumption (Max.)		0.5 VA (@ 24/48 VAC), 4VA (@ 110 to 265 VAC/DC)	
RELAY OUTPUT CHARACTERISTICS			
Contact Arrangement		1 C/O	2 NO
Contact Rating		8A (Resistive) @ 240 VAC / 24 VDC	
Contact Material		$AgSnO_2$	
Mechanical Life Expectancy		2×10^7	
Electrical Life Expectancy		1×10^5	
Switching Frequency (Max.)		1800 Operations / hr. @ rated load	
Status Indication on panel		Red LED - Relay ON	
FEATURE CHARACTERISTICS			
Modes Available		1. ON Delay(⏱) 2. Cyclic OFF/ON (Sym, Asym) (⏲) 3. Cyclic ON/OFF(Sym, Asym) (⏲) 4. Signal ON/OFF (⏲) 5. Signal Off Delay (⏲) 6. Interval (⏲) 7. Signal OFF/ON (⏲) 8. One Shot Output (⏲)	
Timing Ranges		h:m 9:59 / m:s 9:59 / hr 999 99.9 / min 999 99.9 / sec 999 99.9	
Signal Sensing Time		20 ms Max. (DC High), 40 ms Max. (AC High), 100 ms Max. (Low)	
Signal Impedance		300 k	
Repeat Accuracy		± 0.5% of selected range	
Utilization Category	AC-15	Rated Voltage (Ue): 125/240 V, Rated Current (Ie) : 3/1.5 A	
	DC-13	Rated Voltage (Ue): 125/250 V, Rated Current (Ie) : 0.22/0.1 A	
Dimension (W X H X D) (in mm)		17.5 x 89 x 76	
Weight		85 g (unpacked)	
Variation in timing due to voltage change		± 0.2 %	
Variation in timing due to temperature change		± 1 %	
Operating Temperature		-10° C to + 55° C	
Storage Temperature		-20° C to + 65° C	
Humidity (Non - Condensing)		93 % Rh	
Mounting		Base / DIN-Rail (35 mm Sym.)	
Terminal capacity		1.5 mm^2 (Pin type lugs)	
EMI/EMC			
Harmonic Current Emissions		IEC 61000-3-2 Class A	
ESD		IEC 61000-4-2 Level II	
Radiated Susceptibility		IEC 61000-4-3 Level III	
Electrical Fast Transient		IEC 61000-4-4 Level IV	
Surge		IEC 61000-4-5 Level IV	
Conducted Susceptibility		IEC 61000-4-6 Level III	
Voltage Dips & Interruptions(AC)		IEC 61000-4-11	
Voltage Dips & Interruptions(DC)		IEC 61000-4-29	
Conducted Emission		CISPR 14-1 Class B	
Radiated Emission		CISPR 14-1 Class B	
Safety			
Test Voltage Between I/P & O/P		IEC 60947-5-1 2 kV	
Impulse Voltage Between I/P & O/P		IEC 60947 - 5-1 Level IV	
Single Fault		IEC 61010-1 Level IV	
Insulation Resistance		UL 508 <2000MΩ	
Leakage Current		UL 508 <3.5mA	
Degree of Protection		IP 20 for Terminal; IP-40 for Housing	
Pollution Degree		II	
Type of Insulation		Reinforced	
Environmental			
Cold Heat		IEC 60068-2-1	
Dry Heat		IEC 60068-2-2	
Vibration		IEC 60068-2-6 5g	
Repetitive Shock		IEC 60068-2-27 40g, 6ms	
Non-repetitive Shock		IEC 60068-2-27 30g, 15ms	

SERIES : DIGICON
MULTI FUNCTION DIGITAL TIMER

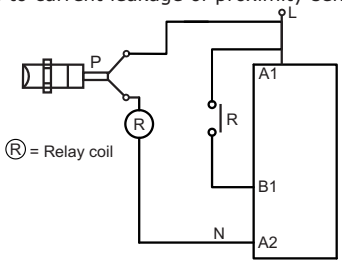
Eliro™

CAT. NOS.:
V0DDTS
V0DDTD

CE RoHS

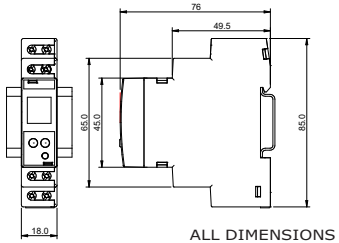
▲ CAUTIONS:

1.Always follow instructions stated in this product.
2.Before installation, check to ensure that the specifications agree with the intended application.
3.Installation to be done by skilled electrician.
4.Automation & Control devices must be properly installed so that they are protected against any risk of involuntary actuations.
5.Using of AC 2 wire Type Proximity Sensor: Please add input relay to prevent false signal sensing due to current leakage of proximity sensor as below.



Use relay coil Voltage of the same Voltage using for Proximity sensor. [Relay coil current should not exceed the maximum current Specified by Proximity sensor.]

OVERALL DIMENSIONS



ALL DIMENSIONS ARE IN mm

TERMINAL DETAILS:

Ø3.5....4.0mm	0.6 N.m (6 Lb.in)
	1 x 4.0mm² Solid/Stranded Wire
AWG	1 x 20 to 10