

## TECHNICAL SPECIFICATIONS

CAT.No.	V0DDTS	V0DDTD															
<b>SUPPLY CHARACTERISTICS</b>																	
Nominal Supply (Un)	24 - 240 VAC / DC (50 - 60 Hz, +/-2 Hz)																
Limits	-15 % to +10% of Un																
Power Consumption (Max.)	~ 10 VA																
<b>RELAY OUTPUT CHARACTERISTICS</b>																	
Contact Arrangement	1 C/O	2 NO															
Contact Rating	240 VAC / 24 VDC @ 8A (resistive)	240 VAC / 24 VDC @ 8A (resistive)															
Contact Material	Ag Ni																
Mechanical Life Expectancy	2 x 10 <sup>7</sup>																
Electrical Life Expectancy	1 x 10 <sup>5</sup>																
Switching Frequency (Max.)	1800 Operations / hr. @ rated load																
Status Indication on panel	Red LED - Relay ON																
<b>FEATURE CHARACTERISTICS</b>																	
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	<table border="1"> <thead> <tr> <th>h:m</th> <th>m:s</th> <th>hr</th> <th>min</th> <th>sec</th> </tr> </thead> <tbody> <tr> <td>9:59</td> <td>9:59</td> <td>999</td> <td>999</td> <td>999</td> </tr> <tr> <td></td> <td></td> <td>99.9</td> <td>99.9</td> <td>99.9</td> </tr> </tbody> </table>	h:m	m:s	hr	min	sec	9:59	9:59	999	999	999			99.9	99.9	99.9	
h:m	m:s	hr	min	sec													
9:59	9:59	999	999	999													
		99.9	99.9	99.9													
Repeat Accuracy	+/-0.5% of selected range																
Variation in timing due to voltage change	+/-2%																
Variation in timing due to temperature change	+/-5%																
Temperature limits	Operating: -10 <sup>o</sup> C to +55 <sup>o</sup> C Storage: -20 <sup>o</sup> C to +65 <sup>o</sup> C																
Humidity (Non - Condensing)	93 % Rh																
Mounting	Base / Din - Rail (35 mm Sym.)																
Terminal capacity	1.5 mm <sup>2</sup> (Pin type lugs)																
<b>CERTIFICATIONS</b>																	
Vibration	IEC - 60068 - 2 - 6																
Fast Transients	IEC - 61000 - 4 - 4 LEVEL IV																
Surges	IEC - 61000 - 4 - 5 LEVEL IV																
Voltage Dips	IEC - 61000 - 4 - 29 (DC)																
Voltage Interruption	IEC - 61000 - 4 - 11 (AC)																

## SERIES : DIGICON MULTI - FUNCTION DIGITAL TIMER

Elixo™

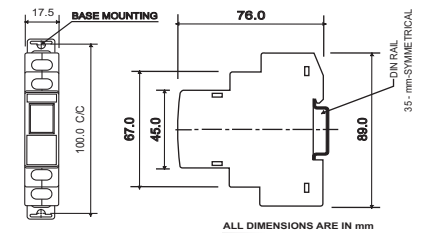
CAT. NOS.:  
V0DDTS  
V0DDTD



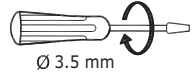

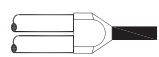
### Caution :

1. Always follow instructions stated in this product leaflet.
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.

### OVERALL DIMENSIONS

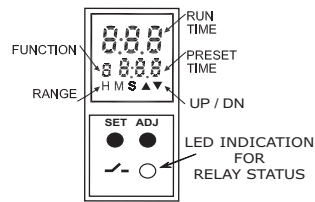


**N.B. :-** Product innovation being a continuous process. We reserve the right to alter specification without any prior notice.

	0.54 N.m (5 Lb.in)
	1 X 0.2...2.5 mm <sup>2</sup> Solid Wire / Single Wire Ferrule
	2 X 0.2...0.5 mm <sup>2</sup> Insulated Twin Wire Ferrule
AWG	1 X 23 to 13

## Features :

- 8 functions
- Wide operating voltage : 24 to 240 V AC/DC
- Multi Range : 0.1 sec to 999 hrs.
- Up / Down counting modes
- 3 Digit LCD for Preset Time 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 time while in Up counting (▲) mode it indicates the elapsed time.

3. Up/Down (▲▼) blinks during the Timer Duration (T)

## THE KEYS

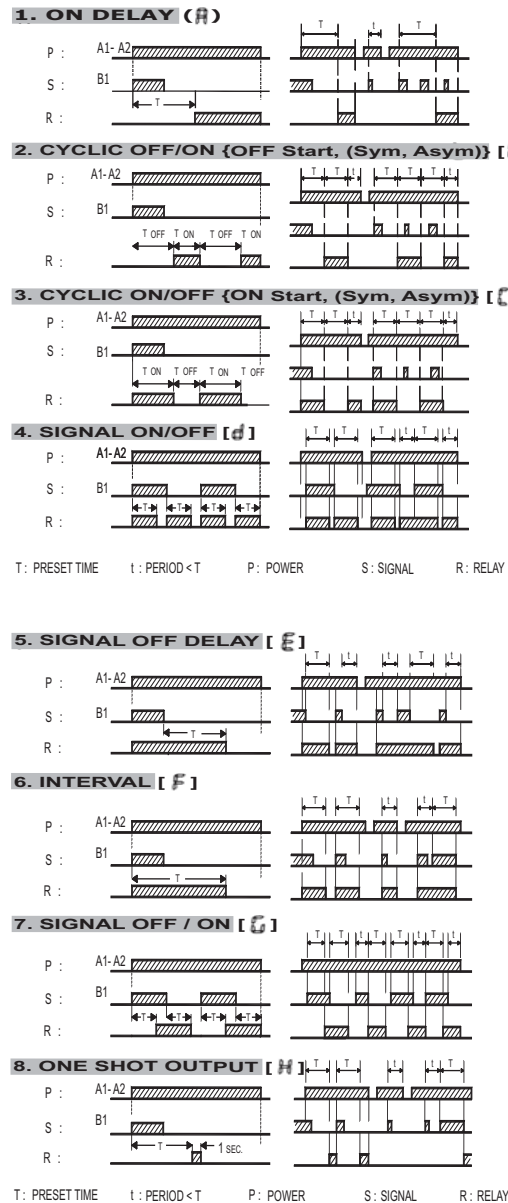
KEY	OPERATION	RESULT
	Apply Power & Hold the key for >3 sec.	Program Mode
OR		
	Press both > 3 sec after power on	Program Mode
	Press in Program mode	Select, Edit parameter
	Press in Program mode	Edit blinking parameter
	Press for > 3 sec. during Timer operation	Reset Timer
	Press for > 3 sec. during Timer operation	Lock / Unlock Preset Time
	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
	F 5:39 HM ▼	Press ADJ key to select desired function (e.g. F)
	F 5:39 HM ▼	Confirms function Then Range indicator blinks
	F 5:39 HM ▼	Press ADJ key to select range (e.g. HM range 'HM')
	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)
	F 8:39 HM ▼	Press ADJ key to adjust desired preset time digit (e.g. from 5 to 8)
	F 8:39 HM ▼	Press Set to confirm 1st digit selection, now 2nd digit selection
	F 8:09 HM ▼	Change with ADJ Key (e.g. from 3 to 0)
	F 8:09 HM ▼	Confirms 2nd digit selection, now 3rd digit of Preset Time blinks.
	F 8:06 HM ▼	Change with ADJ Key (e.g. from 9 to 6)
	F 8:06 HM ▼	Now UP / DOWN Indicator blinks
	F 8:06 HM ▼	Change with ADJ Key (e.g. from DOWN to UP)
	00.0 F 8:06 HM ▼	Confirms counting mode. Program Over. Timer starts working normally.

## Timing Diagrams



## 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 Time (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)} [c]**  
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) whenever the Signal(S) is applied or removed. (Refer Note: 2)
5. **SIGNAL OFF DELAY [e]**  
Output relay becomes ON when Signal (S) is applied. The Timer Duration(T) starts when Signal (S) is removed. At the end of Timer Duration (T) the output relay goes OFF. Signal (S), if applied during the Timer Duration(T) 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 Note : 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 permanently connected.
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

