Digital Timer *Eliro*®

- Compact 17.5 mm
- Multi-voltage, Multi-function(8 or 17)
- 3 digit LCD for Preset time and Run time
- Option to select Up/Down counting
- Tamper proof with key lock function
- All settings accomplished with only two keys
- Up to 999 Hours

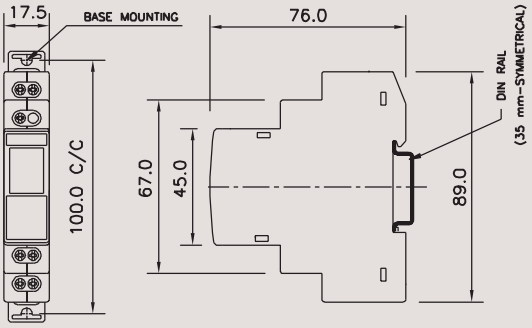


Cat. No.		V0DDTS1, V0DDTS	V0DDTD1, V0DDTD
Parameters			
Supply Voltage (⏚)		24 - 240 VAC/DC	
Supply Variation		-15% to +10% (of ⏚)	
Frequency		50 / 60 Hz, + / - 2 Hz	
Power Consumption (Max.)		10 VA	
Timing Ranges		0.1s to 999h	
Repeat Accuracy		+/- 0.5% of selected range	
Relay Output		1 C/O (SPDT)	2 NO (DPST)
Contact Rating Contact Material Electrical Life Mechanical Life Switching Frequency @ rated max load		8A (resistive) @ 240 VAC / 24 VDC $AgSnO_2$ $1x10^5$ $2x10^7$ 1800 Operations / h	
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): 2/0.22/0.1 A	
Operating Temperature Storage Temperature		-10° C to +55° C -20° C to +65° C	
LED Indication		Red LED → Relay ON	
Enclosure Dimension (W x H x D) (in mm) Weight (unpacked)		Flame Retardant UL94V0 17.5 X 89 X 76 85 g	
Mounting		Base / DIN rail	
Certification		CE	
Degree of Protection		IP 20 for Terminals, IP 30 for Enclosure	
Humidity (Non Condensing)		95% (Rh)	
EMI/ EMC Radio Interference Suppression ESD Electrical Fast Transients Surges Voltage Dips, Interruptions Vibration		 CISPR 14-1 Ed. 5.0 (2005-11) Class A IEC 61000-4-2 Ed. 1.2 (2001-04) Level II IEC 61000-4-4 Ed. 2.0 (2004-07) Level IV IEC 61000-4-5 Ed. 2.0 (2005-11) Level IV IEC 61000-4-11 Ed. 2.0 (2004-03) All 7 Levels (AC), IEC 61000-4-29 Ed. 1.0 (2000-08) All 5 Levels (DC)	

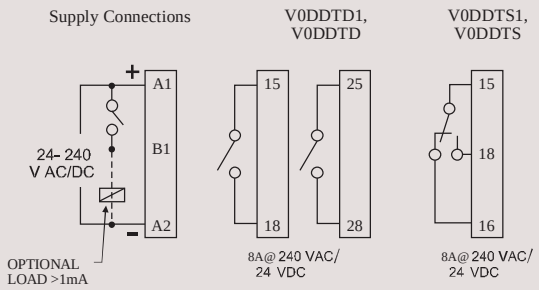
ORDERING INFORMATION

Cat. No.	Description
V0DDTS	24-240 VAC/DC, 8 Functions, 1C/O
V0DDTD	24-240 VAC/DC, 8 Functions, 2 NO
V0DDTS1	24-240 VAC/DC, 17 Functions, 1C/O
V0DDTD1	24-240 VAC/DC, 17 Functions, 2 NO

MOUNTING DIMENSION (mm)



CONNECTION DIAGRAM



TERMINAL TORQUE & CAPACITY

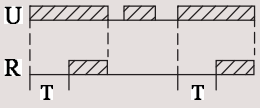
Ø3.5 mm	Torque 0.54 N.m (5 Lb. in) Terminal Screw M2.5
	1 x 0.2 - 2.5 mm^2 Solid Wire / single wire ferrule 2 x 0.2 - 0.5 mm^2 Insulated with twin ferrule
AWG	1 x 24 to 13

Digital Timer *Eliro*®



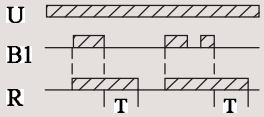
FUNCTIONAL DIAGRAMS FOR V0DDTS1 & V0DDTD1

ON DELAY [0]



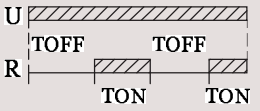
Timing commences when supply is present.R energizes at the end of the timing period.

SIGNAL OFF DELAY [9]



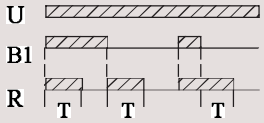
R energizes when switch B1 is closed. Timing commences after S is opened and then the relay de-energizes.

CYCLIC OFF/ON {OFF Start, (Sym, Asym)} [1]



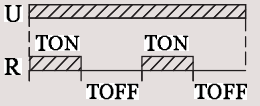
T-ON and T-OFF can be same or different. The relay(R) keeps on changing its status till power is removed.

IMPULSE ON/OFF [A]



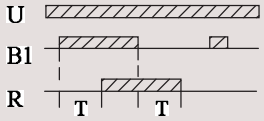
R energizes for the timing pericd when B1 is opened cr closed. When timing ocmmences, changing state of B1 dces not affect R tut resets timer.

CYCLIC ON/OFF {ON start, (Sym, Asym)} [2]



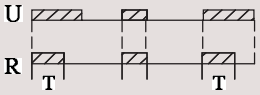
This function is quite similar to the function '1' but initially the relay(R) is ON for period T-ON after the power is applied.

SIGNAL OFF/ON [b]



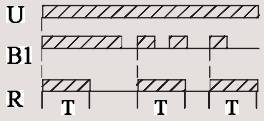
When switch B1 is closed or opened for preset time ,T, the relay changes its state after time duration T.

IMPULSE ON ENERGIZING [3]



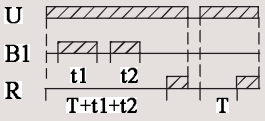
After power ON, R energizes and timing starts. R de-energizes after timing is over.

LEADING EDGE IMPULSE1 [C]



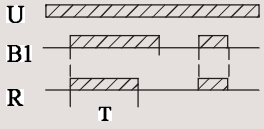
When B1 is closed, output relay energizes until timing irrespective of any further action of B1.

ACCUMULATIVE DELAY ON SIGNAL [4]



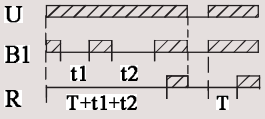
Time commences as supply is present and switch B1 is open. Closing switch B1 pauses timing. Timing resumes when switch B1 is opened again. R energizes at the end of timing.

LEADING EDGE IMPULSE2 [d]



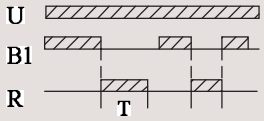
when switch B1 is closed, and remains closed output relay energizes until timing is over. If B1 is opened during timing, R resets.

ACCUMULATIVE DELAY ON INVERTED SIGNAL [5]



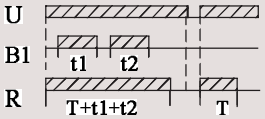
Time commences as supply is present and switch B1 is closed. Opening switch B1 pauses timing. Timing resumes when switch B1 is closed again. R energizes at end of timing.

TRAILING EDGE IMPULSE1 [E]



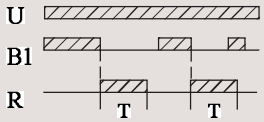
when B1 is opened, R energizes and de-energizes when timing is over. If B1 is closed during timing R resets.

ACCUMULATIVE IMPULSE ON SIGNAL [6]



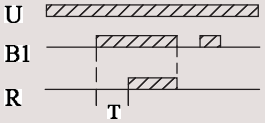
When supply is ON, R energizes. When switch B1 is closed timing is suspended and remains suspended till switch B1 is opened again. Interrupting supply resets timer.

TRAILING EDGE IMPULSE2 [F]



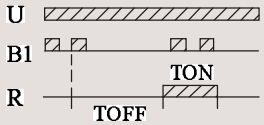
When switch B1 is opened, R energizes and will de-energize when timing is over. If B1 is pulsed during timing period it will have nc effect on R.

SIGNAL ON DELAY [7]



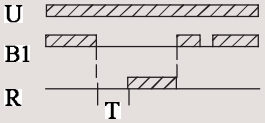
Timing starts when switch B1 is closed. R energizes at end of timing period and de-energizes when B1 is opened.

DELAYED IMPULSE [G]



when switch B1 is closed, TOFF starts. Relay energizes at the end of TOFF period. Then, TON starts irrespective of signal level and relay de-energizes at the end of TON period.

INVERTED SIGNAL ON DELAY [8]

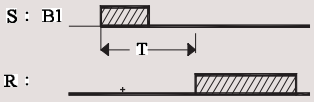
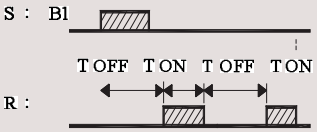
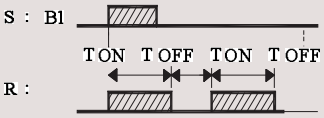
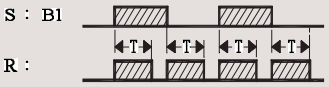
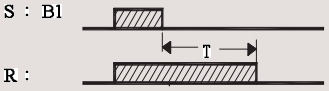
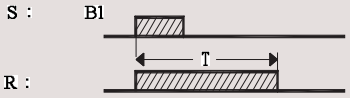
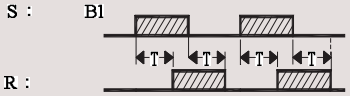
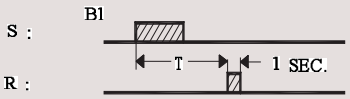


Timing will commence when supply is present and switch B1 is open. R energizes after timing .If B1 is closed during timing period, timing resets to the beginning of cycle.

Digital Timer *Eliro*®



FUNCTIONAL DIAGRAMS FOR V0DDTS & V0DDTD

	 P: Power-On operation
ON DELAY (A)	
CYCLIC OFF/ON {OFF Start, (Sym,Asym)}(b)	
CYCLIC ON/OFF {ON Start, (Sym,Asym)}(C)	
SIGNAL ON/OFF(d)	
SIGNAL OFF DELAY(E)	
INTERVAL(F)	
SIGNAL OFF / ON(G)	
ONE SHOT OUTPUT (H)	

Note: 1. For Power-On operation (P) connect the terminal B1 to A1 permanently.
2. If the Signal (S) changes during the Timer Duration (T), it does not change the output relay but re-triggering takes places and the Timer Duration is extended.