Digital Timers, $\mathcal{E}\mathit{liro}$



FEATURES

- 8 mode multifunction facility for complete flexibility and wide range applications.
- Timing from 0.1 second to 999 hours.
- Selectable up/down counting modes to show elapsed/remaining time.
- 3 digit LC display for preset time and run time.
- Wide operating range for supply voltage.

SPECIFICATIONS

Cat No.	V0DDT0	
Nominal	110-240V AC or 24V AC/DC	
Voltage (Ur)	(selectable)	
Operating Range	-15% to +10% of Ur	
Frequency	50/60 Hz	
Modes	On delay, Cyclic off/on, Cyclic on/off, Signal on/off Signal off Delay, Interval, Signal off/on, One shot output.	
Timing	h:m m:s hr min sec 9:59 9:59 999 999 999 99.9 99.9 99.9	
Repeat Accuracy	± 50 ms	
Max. Reset Time	100 msec	
Max. Switching Rate, at max./min. load	360/1000 per hour	
Output Contacts	1 C/O, AgNi 90/10 (Cadmium free)	
Output Contact Rating (resistive)	5A @ 240 V AC / 28 V DC	
Electrical Life	1 × 10 ⁵ operations	
Mechanical Life	5 × 10 ⁶ operations	
Power Consumption	15 VA	
Dimension (WxDxH)	17.5 × 76 × 89 (mm)	
Terminal Capacity	2.5 mm ² max.	
Mounting	Base/DIN rail (Sym.35mm)	
Weight	85 gms approx (unpacked)	

FRONT DISPLAY



- Easy front settings.
- Tamper-proof with key lock function.
- Confirms to IEC standards for EMI / EMC, with **CE** mark.
- Compact and standard size of 1 module space.
- Optional base or DIN 35 Rail mounting.

FUNCTIONS

P: A1-A2	Power Supply Pulse
(A) S: B1 R: 15-18	1. On Delay : The Timer Starts when both Power (P) & Signal (S) are applied. The relay is energized at the end of Preset Time (T) & remains On till Power is removed.
(B) S: B1	2. Cyclic Off/On (Off Start [Sym, Asym]) : TON and TOFF can be same or different. The relay keeps on changing its status till the power is removed
(C) S: B1 R: 15-18	3.Cyclic On/Off (On Start [Sym, Asym]) : This function is quite similar to the function (b) but initially the relay is on for period TON after the power is applied.
(D) S: B1 (T) (T) (T) (T) R: 15-18	4. Signal On/Off : The output relay is turned on for Preset Time (T) whenever the Signal (S) is applied or removed.
(E) S: B1 R: 15-18	5. Signal Off Delay : Output relay becomes on when Signal (S) is applied. 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.
(F) S: B1 R: 15-18 (F) S: B1 (F) S:	6. Interval : 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).
(G) S: B1 (T) (T) (T) (T) R: 15-18	7. Signal Off/On : When Signal (S) is applied or removed, the relay changes its state after Timer duration (T).
(H) S: B1 R: 15-18 T→ ←1 SEC.	8. One shot Output : 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.

Notes : P = POWER, S = SIGNAL, R = RELAY.

STANDARDS AND CERTIFICATION

Certification

Environmental	CE	
Temperature Limits	Operating -10° to +50°C Storage -20° to +65°C	
Humidity	93% Rh	
Installation Category	II	IEC1010 - 1 1990 + 2nd Amendment 1995
Pollution Degree	II	IEC1010 - 1 1990 + 2nd Amendment 1995
Degree of Protection	IP 30	IEC Pub 947 - 1(1998) / IS 13947 Part I 1993
Electromagnetic Comp	patibility (EMC)	
Vibration	F = 10 to 55 Hz, A = 0.35mm or 5gm	IS 9000 (Part VIII-1981); IS 9001 (Part XIII-1981)
 Electrostatic Discharge Level III (Air 8KV / Contact 6KV) 		IEC 1000 - 4 - 2, First Edition 1995 - 01
Fast Transients	Level III 2KV (Peak) Tr / Th = 5 / 50 Rep. Freq. = 5KHz	IEC 1000 - 4 - 4, First Edition 1995 - 01
Surges	Level IV Tr / Th = 8/20µs Common Mode : 4KV Differential Mode : 2KV	IEC 1000 - 4 - 5, First Edition 1995 - 02
 Voltage Dips 	30% reduction / 10 ms, 60% reduction / 100 ms	IEC 1000 - 4 - 11, First Edition 1994 - 06
 Voltage Interruption 	>95% reduction / 5000 ms	IEC 1000 - 4 - 11, First Edition 1994 - 06
Immunity (EMC)		
Port - Enclosure	80 - 1000 MHz 10V / m (unmodulated rms) 80%AM (1KHz)	EN 50082 - 2 : 1995
Port - AC Mains	0.15MHz - 80MHz 10 V/m (unmodulated ms) 80%AM (1KHz)	EN 50082 - 2 : 1995
Radiated (EMC)		
Port - Enclosure	30MHz - 230 MHz 30 dBµ V/m Quasi Peak Measured at 30 m distance	EN 50081 - 2 : 1994
	230MHz - 1000 MHz 37 dBµ V/m Quasi Peak Measured at 30 m distance	
Conducted Emission		
Port - AC Mains	0.15MHz - 0.5MHz 79 dBµ V Quasi Peak, 66 dBµ V Average 0.50MHz - 30MHz 73 dBµ V Quasi Peak, 60 dBµ V Average	EN 50081 - 2 : 1994

DIMENSIONS



Overall Dimensions (DxHxW) : 76.0 x 89.0 x 17.5 mm