

Digital Timer *Eliro*[®]




- Compact 17.5 mm Wide
- Multi Function: (8 or 18) Non Signal & Signal based functions
- Multi-Voltage: 24 - 240 VAC/DC
- Wide Timing Range: 0.1s to 999 Hr
- 3 Digit LCD for Preset time and Run time
- Option to select Up/Down counting
- Tamper proof with key lock feature



Cod. NDU

0504001GI

Parameters

Timer Description	Multi Function Digital Timer	
Functions	1) ON Delay 2) Cyclic OFF/ON 3) Cyclic ON/OFF 4) Signal ON/OFF 5) Signal OFF Delay 6) Interval 7) Signal OFF/ON 8) One Shot Output	
Supply Voltage (φ)	24 - 240 VAC/DC	
Supply Variation	-15% to +10% (of φ)	
Frequency	50/60 Hz	
Power Consumption (Max.)	10 VA	
Timing Range	0.1s to 999h	
Reset Time	200 ms (Max.)	
Repeat Accuracy	± 0.5%	
Output	Relay Output	1 C/O
	Contact Rating	8A @ 240 VAC / 24 VDC (Resistive)
	Electrical Life	1x10 ⁵
	Mechanical Life	2x10 ⁷
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	-10° C to +55° C	
Storage Temperature	-20° C to +65° C	
Humidity (Non Condensing)	95% (Rh)	
LED Indication	Red LED → Relay ON	
Enclosure	Flame Retardant UL94-V0	
Dimension (W x H x D) (in mm)	17.5 X 89 X 76	
Weight (unpacked)	85 g	
Mounting	Base / DIN Rail	
Certification	  	
Degree of Protection	IP 20 for Terminals, IP 30 for Enclosure	
EMI / EMC		
Harmonic Current Emissions	IEC 61000-3-2	Ed. 3.2 (2009-04) Class A
ESD	IEC 61000-4-2	Ed. 2.0 (2008-12) Level II
Radiated Susceptibility	IEC 61000-4-3	Ed. 3.2 (2010-04) Level III
Electrical Fast Transients	IEC 61000-4-4	Ed. 3.0 (2012-04) Level IV
Surges	IEC 61000-4-5	Ed. 2.0 (2005-11) Level IV
Conducted Susceptibility	IEC 61000-4-6	Ed. 3.0 (2008-10) Level III
Voltage Dips & Interruptions (AC)	IEC 61000-4-11	Ed. 2.0 (2004-03) All 7 Levels
Voltage Dips & Interruptions (DC)	IEC 61000-4-29	Ed. 1.0 (2000-08) All 5 Levels
Conducted Emission	CISPR 14-1	Ed. 5.2 (2011-11) Class A
Radiated Emission	CISPR 14-1	Ed. 5.2 (2011-11) Class B
Environmental		
Cold Heat	IEC 60068-2-1	Ed. 6.0 (2007-03)
Dry Heat	IEC 60068-2-2	Ed. 5.0 (2007-07)
Vibration	IEC 60068-2-6	Ed. 7.0 (2007-12) 5g
Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 40g, 6ms
Non-Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 30g, 15ms

ORDERING INFORMATION

Cat. No.	Description
V0DDTS	24 - 240 VAC/DC, Multi Function Digital Timer - Eliro (8 Functions), 1 C/O

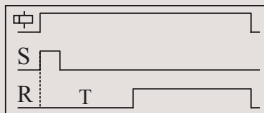


FUNCTIONAL DIAGRAMS FOR V0DDTS & V0DDTD

⏻ : Supply Voltage, S: Input Signal, R: Relay Output
 T: Preset Time, TON: Preset ON Time, TOFF: Preset OFF Time

ON DELAY (A)

On application of supply voltage, the preset time duration (T) starts. On completion of the preset time, the output is switched ON and remains ON till the supply voltage is present



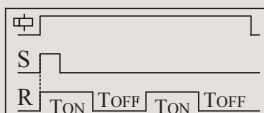
CYCLIC OFF/ON {OFF Start, (Sym, Asym)} (b)

On application of supply voltage, the output is initially switched OFF for the preset 'OFF' time duration (TOFF) after which it is switched ON for the preset 'ON' time duration (TON). This cycle repeats and continues till the supply is present.



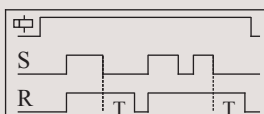
CYCLIC ON/OFF {ON Start, (Sym, Asym)} (C)

On application of supply voltage, the output is initially switched ON for the preset 'ON' time duration (TON) after which it is switched OFF for the preset 'OFF' time duration (TOFF). This cycle repeats and continues till the supply is present.



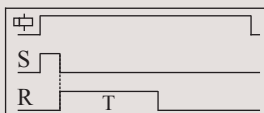
SIGNAL ON/OFF (d)

On application of signal the preset time (T) starts. After this preset time has elapsed, output is switched ON. If signal is removed then output is switched ON immediately and OFF delay is started. Once this time period has elapsed the output is switched OFF. During this OFF delay if signal is reapplied the output switched OFF immediately and ON Delay restarted.



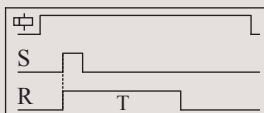
SIGNAL OFF DELAY (E)

On application of supply voltage and input signal, the output is switched ON. When the signal is removed the preset time duration commences & the output is switched OFF at the end of the time duration.



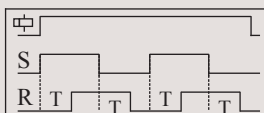
INTERVAL (F)

When supply power is applied to the timer, the output is instantly switched ON. On completion of the preset time, the output is switched OFF



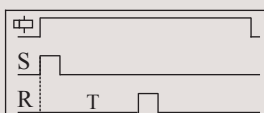
SIGNAL OFF / ON (G)

On application of input signal, the preset delay time period (T) starts. On completion of the preset time, the output is switched ON. On removal of input signal, the preset time period starts again and the output is switched ON when the preset time duration is complete.



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)



- Note:
1. For Power-On operation, 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.

Programacion

Este rele multifuncion puede alimentarse con voltaje alterno o continuo desde 24V a 250V, posee 8 funciones seleccionables y salida via rele combinado SPDT con carga máxima de 8A (resistivo)

- A: ON DELAY
- B: OFF/ON Ciclico (inicia en OFF)
- C: ON/OFF Ciclico (Inicia en ON)
- D: Conmutacion ON/OFF por Señal con tiempo (la salida se activa por el tiempo fijado cada vez que la señal de control se conecta o desconecta)
- E: OFF delay por señal (es un off delay, pero el tiempo comienza a correr cuando se interrumpe la señal de control)
- F: INTERVALO la señal de salida se activa junto con la de entrada y dura el tiempo prefijado.
- G: Conmutacion OFF/ON Por señal; la salida cambia de estado al conectar la señal de control luego de transcurrido el tiempo prefijado y dura el tiempo prefijado.
- H: Salida de PULSO; Al aplicar la señal de control se inicia el conteo del tiempo prefijado y al terminar se activa la salida por un segundo.

El rele esta diseñado para operar con una señal de control. Cuando esta no se usa debe mantenerse siempre conectada (puentada) con A1. en este estado el rele iniciara su conteo en modo activo.

Programacion

1. Ingreso al modo de programación: Presionar simultáneamente los botones SET y ADJ, el indicador de modo quedara parpadeando
2. Seleccione la función que realizara el timer. Presione ADJ las veces que sea necesario para seleccionar el modo deseado (a,b,c,d,e,f,g,h) Acepte presionando SET. El indicador de unidad de tiempo quedara parpadeando
3. Seleccione la unidad de tiempo con que operara el timer, Las opciones son Horas, Horas:minutos, Minutos, Minutos:segundos y segundos. presione ADJ las veces necesarias para seleccionar la opción que necesite. Confirmar presionando SET, Quedara parpadeando el primer dígito del indicador de tiempo.
4. Presionando ADJ ingrese el primer digito del indicador de tiempo, Acepte con SET y repita el proceso para el segundo y tercer dígito, Quedara parpadeando el indicador de de dirección de conteo. Este conteo puede ser ascendente o descendente.
5. Presionando ADJ Para seleccionar conteo ascendente (▲) o descendente (▼) Presione SET para Aceptar. con esto se sale del modo de programación y se finaliza.