

STAIRCASE TIME RELAY



 **Lovato**
electric

ENERGY AND AUTOMATION

It is used in residential and tertiary service applications for timed stairwell light actuation.

Load switching uses **zero crossing technology** to reduce the peak load generated when the light is turned on, a very important criterion for LED lamps. This extends the life of the lamp itself and also protects the time relay's contact against sticking. The timed light switch-on and the staircase cleaning functions are both available with or without notice of shutdown.



Order code	Time of scale range	Rated auxiliary supply voltage
		[V]
TMLS L	0,5...20min	220...240VAC

General characteristics

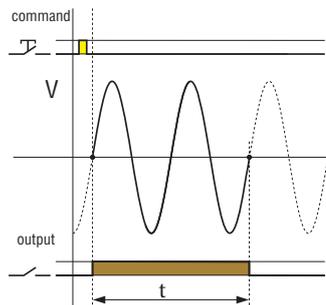
- Electronic time relay for staircase lighting single scale and single voltage
- 1 relay output with 1 powered normally open (N/O-SPST) contact
- Possible connections for 3- or 4-wire systems
- Zero crossing load switching
- Adjustable delay time on the front: 0.5...20min
- Selectable functions:
 - timed lighting + staircase cleaning
 - timed lighting with notice of shutdown + staircase cleaning
 - constant lighting
- Green LED for power presence signalling
- 1 control input can be connected to up to 150 light buttons (<1mA each)
- 1 relay output with normally open contact NO, 16A 250VAC
- LED lamp management up to 600W
- QR code for the direct connection to the LOVATO Electric website for the download of the technical manual
- Modular housing DIN 43880 (1 module), suitable for fixing on 35mm omega profile or screw fixing
- Ambient conditions:
 - operating temperature: -20...+60°C
 - storage temperature: -30...+80°C
 - relative humidity: <90%
- Degree of protection: IP40 on front (if mounted in container and/or electrical panel having IP40), IP20 on terminals.

"ZERO CROSSING" LOAD SWITCHING - IDEAL FOR LED LAMPS

The time relay for staircase TMLS L uses "zero crossing" technology for load switching, which consists in monitoring the sinusoidal mains voltage and inserting the load at the exact instant in which the voltage passes through zero.

This has several advantages:

- reduction of the inrush current generated when the lamp is activated, which can reach very high values, especially in the increasingly popular LED lamps;
- protection of the lamp and extension of the electrical life;
- protection of the time relay contact from the risk of sticking;
- reduction of consumption.

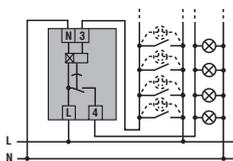


Certifications and compliance

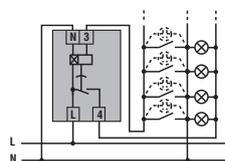
Certifications obtained: EAC.
Compliant with standards: IEC/EN/BS 61812-1, UL508, CSA C22.2 n°14.

WIRING DIAGRAMS

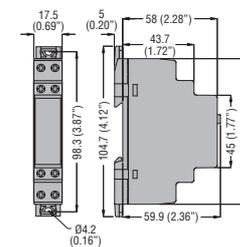
4-wire connection



3-wire connection



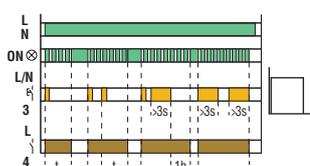
DIMENSIONS [mm(in)]



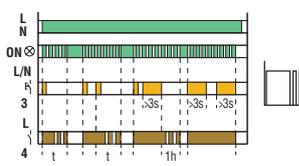
DATA SHEET



Timed lighting + staircase cleaning



Timed lighting with shutdown notice + staircase cleaning



Constant lighting

