![Lovato electric - ENERGY AND AUTOMATION]

Product designation				Time relay
Product type designation				L48M
General characteristics				
Description				Multifunction time relay, multiscale and multivoltage
Function				Multifunction
Supply circuit				
Rated auxiliary supply voltage Us				24…240VAC/DC
Rated auxiliary supply voltage Us				
AC				
	min	VAC	24	
	Max	VAC	240	
DC				
	min	VDC	24	
	Max	VDC	240	
Rated frequency		Hz	50/60	
Operating voltage range			0.85...1.1 Us	
Maximum power consumption / dissipation		W	6VA	
Immunity time for microbreakings		ms	≤40	
Timing circuit				
Time setting range			0.05s…10min	
Setting accuracy		%	±5	
Repeat accuracy		%	±0.5	
Influence of voltage variation		%	±0.5	
Resetting time				
	During timing	ms	≥100	
	Elapsed time	ms	≥65	
Relay outputs				
Number of relays		Nr.	2	
Contact arrangement			2 delayed C/O	
Maximum switching voltage		VAC	250	
IEC Conventional free air thermal current Ith		A	5	
UL/CSA and IEC/EN 60947-5-1 designation			B300	
Insulation (input-output)				
Rated insulation voltage Ui		V	250	
Power frequency withstand voltage		kV	2	
Operations				
Mechanical life		cycles	30000000	
Electrical life (with rated load)		cycles	100000	
Ambient conditions				
Temperature				
Operating temperature				
	min	°C	-10	
	max	°C	+60	

Storage temperature			
	min	°C	-30
	max	°C	+80

Housing

Material	Self-extinguishing polyamide
Mounting	Plug-in housing with 11-pin socket
Degree of protection	IP40 on front, IP20 terminals

Dimensions (W x H x D)		mm	48 x 48 x 90
Weight		g	135

Dimensions [mm (in)]
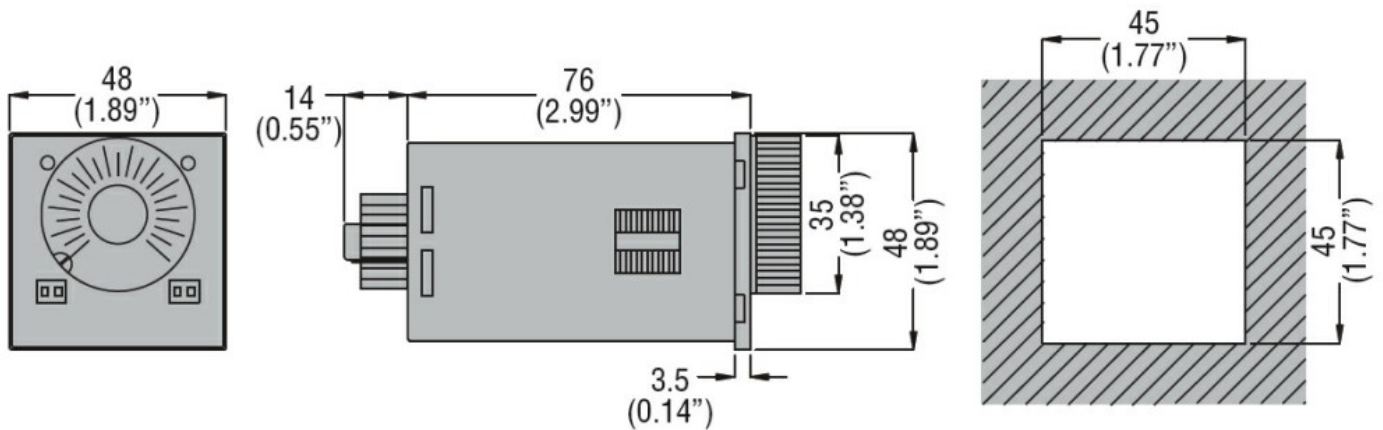
Wiring diagrams
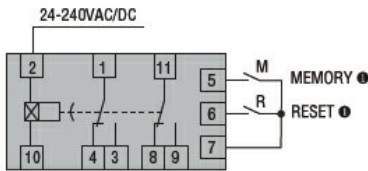
T (preset time) = T1+T2
❶ Contacts "M" and "R" are to be volt free (dry).

Certifications and compliance

Compliance	
	CSA C22.2 n°14
	IEC/EN 61812-1
	UL508
Certificates	
	cURus
	EAC

ETIM classification

ETIM 8.0	EC001439 - Timer relay