



Product designation	Time relay		
Product type designation	TMST		
Number of DIN modules	1		
<b>General characteristics</b>			
Description	Time relay for star-delta starting, multiscale and multivoltage		
Function	Star-delta		
<b>Supply circuit</b>			
Rated auxiliary supply voltage $U_s$	24...48VDC; 24...240VAC		
Rated auxiliary supply voltage $U_s$ AC	min	VAC	24
	Max	VAC	240
	min	VDC	24
	Max	VDC	48
Rated frequency	Hz	50/60	
Operating voltage range	0.85...1.1 $U_s$		
Maximum power consumption / dissipation	W	1.2VA/0.8W (24...48VAC/DC), 1.6VA/0.9W (110...240VAC/DC)	
Immunity time for microbreakings	ms	=40	
<b>Timing circuit</b>			
Time setting range	0.1s...10min		
Setting accuracy	%	< $\pm$ 9	
Repeat accuracy	%	< $\pm$ 0.5	
Influence of voltage variation	%	< $\pm$ 0.1	
Influence of temperature variation	%	< $\pm$ 0.2	
Resetting time	During timing	ms	=100
	Elapsed time	ms	=50
<b>Relay outputs</b>			
Number of relays	Nr.	1	
Contact arrangement	1 with 2 N/O with common pole		
Maximum switching voltage	VAC	250	
IEC Conventional free air thermal current $I_{th}$	A	8	
UL/CSA and IEC/EN 60947-5-1 designation	B300		
<b>Insulation (input-output)</b>			
Rated insulation voltage $U_i$	V	250	
Rated impulse withstand voltage $U_{imp}$	kV	4	
Power frequency withstand voltage	kV	2	

### Connections

Terminals type	Screw		
Tightening torque (Max)	Tightening torque Max	Nm	0.8
	Tightening torque Max	Ibin	7 / 7...9 UL
Conductor section			
	AWG/Kcmil	min	24...12
		max	12...18
	IEC	min	mm <sup>2</sup> 0.2
		max	mm <sup>2</sup> 4

### Operations

Mechanical life	cycles	30000000
Electrical life (with rated load)	cycles	100000

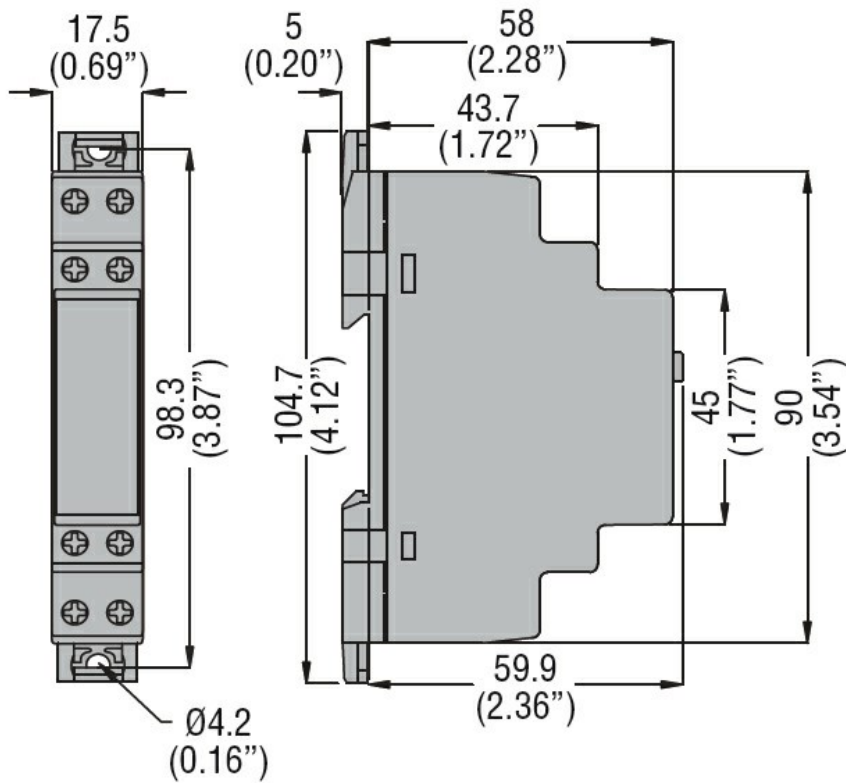
### Ambient conditions

Temperature			
	Operating temperature	min	°C -20
		max	°C +60
	Storage temperature	min	°C -30
		max	°C +80
Relative humidity		%	<90%
Maximum Pollution degree	2		
Overvoltage category	III		

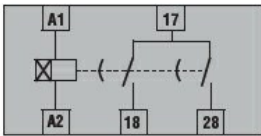
### Housing

Execution (n° of modules)	1		
Material	Self-extinguishing polyamide		
Mounting	DIN rail 35 mm		
Degree of protection	IP40 on front, IP20 terminals		
Dimensions (W x H x D)	mm	17.5 x 104.7 x 64.9	
Weight	g	90	

### Dimensions



### Wiring diagrams



### Certifications and compliance

#### Compliance

CSA C22.2 n°14  
IEC/EN 61812-1  
UL508

#### Certificates

CCC  
cULus  
EAC

### ETIM classification

ETIM 8.0

EC001439 -  
Timer relay