



Product designation			Time relay	
Product type designation			TMST	
Number of DIN modules			1	
General characteristics				
Description			Time relay for star-delta starting, multiscale and multivoltage	
Function			Star-delta	
Supply circuit				
Rated auxiliary supply voltage Us			24...48VDC; 24...240VAC	
Rated auxiliary supply voltage Us AC			min	VAC 24
			Max	VAC 240
DC			min	VDC 24
			Max	VDC 48
Rated frequency			Hz	50/60
Operating voltage range			0.85...1.1 Us	
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
Timing circuit				
Time setting range			0.1s...10min	
Setting accuracy			%	<±9
Repeat accuracy			%	<±0.5
Influence of voltage variation			%	<±0.1
Influence of temperature variation			%	<±0.2
Resetting time			During timing	ms ≥100
			Elapsed time	ms ≥50
Relay outputs				
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 Ith			A	8
UL/CSA and IEC/EN 60947-5-1 designation			B300	
Insulation (input-output)				
Rated insulation voltage Ui			V	250
Rated impulse withstand voltage Uimp			kV	4
Power frequency withstand voltage			kV	2

## Connections

Terminals type	Screw		
Tightening torque (Max)	Tightening torque Max	Nm	0.8
	Tightening torque Max	lbin	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

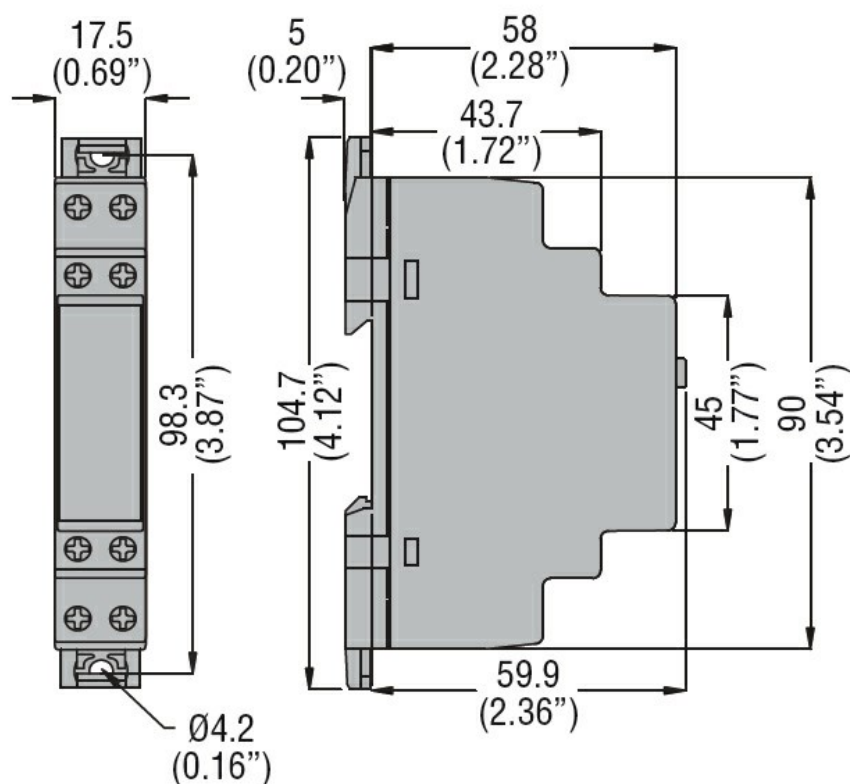
## Operations

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

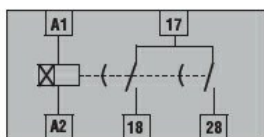
## Ambient conditions

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
<b>Housing</b>			
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