



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 Max	VAC VAC	24 240
DC	min Max	VDC VDC	24 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 Elapsed time	ms ms	≥100 ≥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

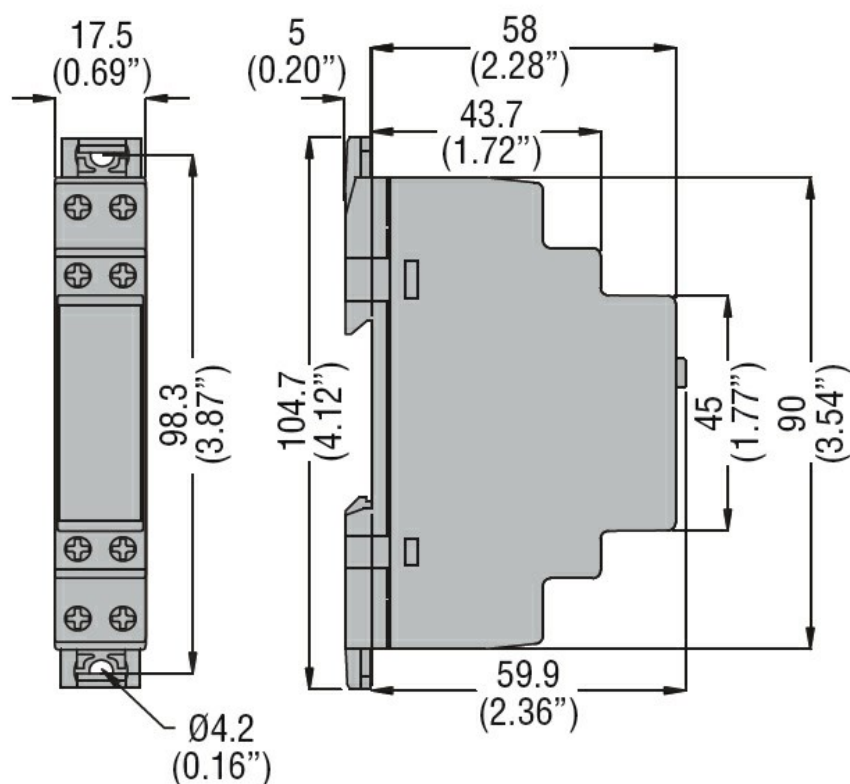
## Operations

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

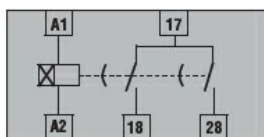
## Ambient conditions

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