



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		
Function	Star-delta		
<b>Supply circuit</b>			
Rated auxiliary supply voltage Us	380...440VAC		
Rated auxiliary supply voltage Us AC	min	VAC	380
	Max	VAC	440
Rated frequency		Hz	50/60
Operating voltage range	0.85...1.1 Us		
Maximum power consumption / dissipation		W	19VA/1.7W (380...440VAC)
Immunity time for microbreakings		ms	≤30
<b>Timing circuit</b>			
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
<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 <sub>th</sub>	A	8	
UL/CSA and IEC/EN 60947-5-1 designation	B300		
<b>Insulation (input-output)</b>			
Rated insulation voltage U <sub>i</sub>	V	250	
Rated impulse withstand voltage U <sub>imp</sub>	kV	4	
Power frequency withstand voltage	kV	2	
<b>Connections</b>			
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	
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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

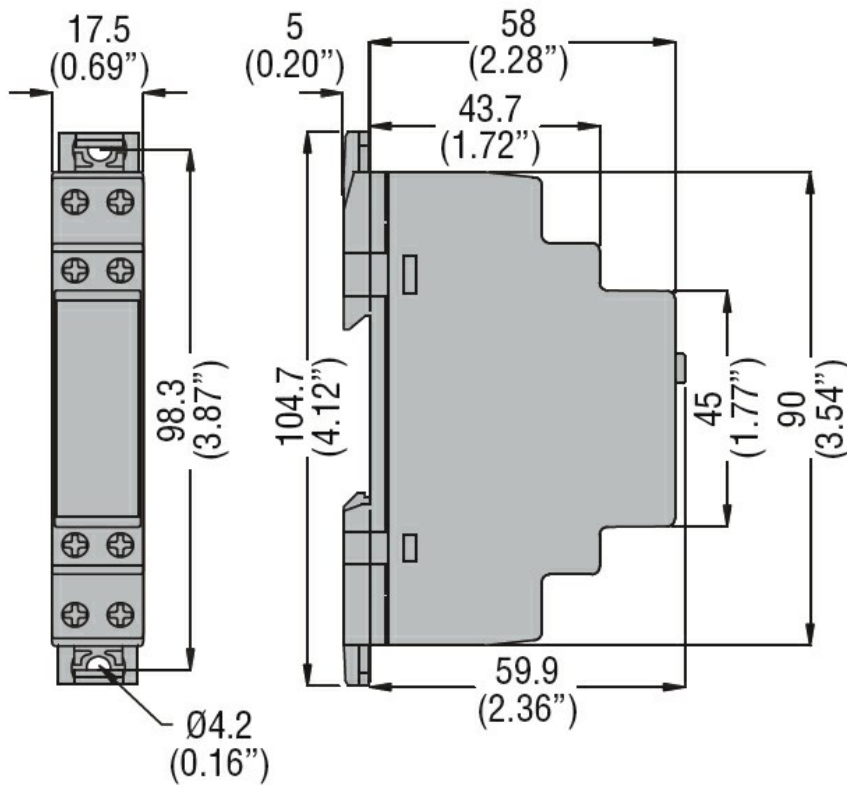
min	°C	-30
max	°C	+80

Relative humidity	%	<90%
Maximum Pollution degree		2
Overvoltage category		III

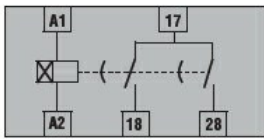
### Housing

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