



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 U_s	24...48VDC; 24...240VAC		
Rated auxiliary supply voltage U_s 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 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	
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 I_{th}	A	8	
UL/CSA and IEC/EN 60947-5-1 designation	B300		
Insulation (input-output)			
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	lbin	7 / 7...9 UL
Conductor section			
AWG/Kcmil	min	24...12	
	max	12...18	
IEC	min	mm ²	0.2
	max	mm ²	4

Operations

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

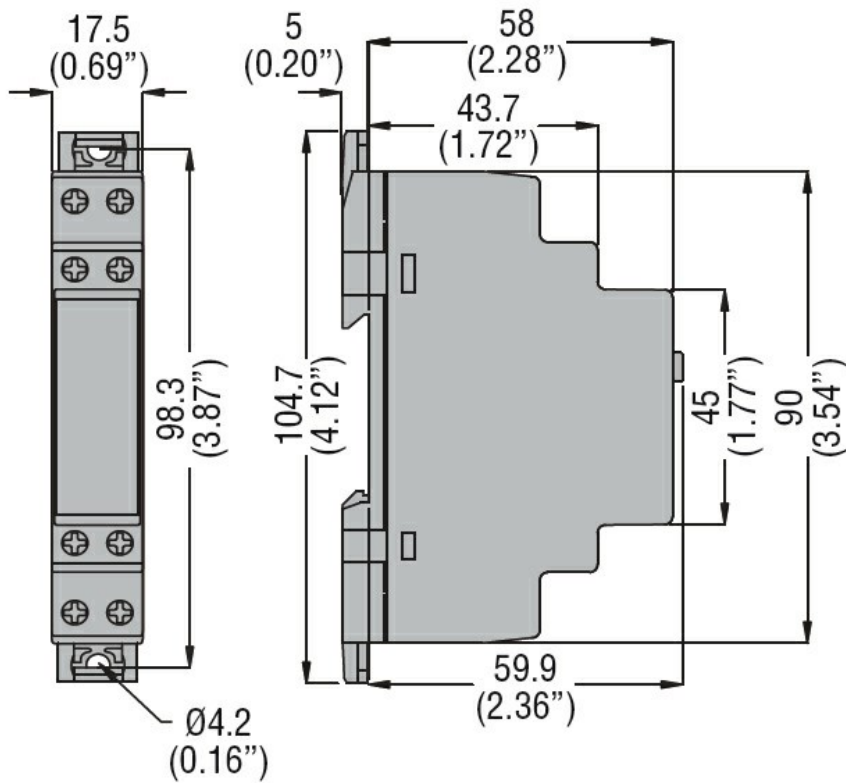
Ambient conditions

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		

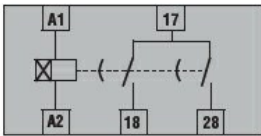
Housing

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 [mm (in)]



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