



Product designation
Product type designation
Number of DIN modules

Time relay
TMST
1

General characteristics

Description

Time relay for
star-delta starting,
multiscale

Function

Star-delta

Supply circuit

Rated auxiliary supply voltage U_s

380...440VAC

Rated auxiliary supply voltage U_s
AC

min	VAC	380
Max	VAC	440

Rated frequency

Hz 50/60

Operating voltage range

0.85...1.1 U_s

Maximum power consumption / dissipation

W 19VA/1.7W
(380...440VAC)

Immunity time for microbreakings

ms ≤ 30

Timing circuit

Time setting range

0.1s...10min

Setting accuracy

% $\leq \pm 9$

Repeat accuracy

% $\leq \pm 0.5$

Influence of voltage variation

% $\leq \pm 0.1$

Influence of temperature variation

% $\leq \pm 0.2$

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	Ibin	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
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Electrical life (with rated load)	cycles	100000
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Ambient conditions

Temperature

Operating temperature

min	°C	-20
max	°C	+60

Storage temperature

min	°C	-30
max	°C	+80

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

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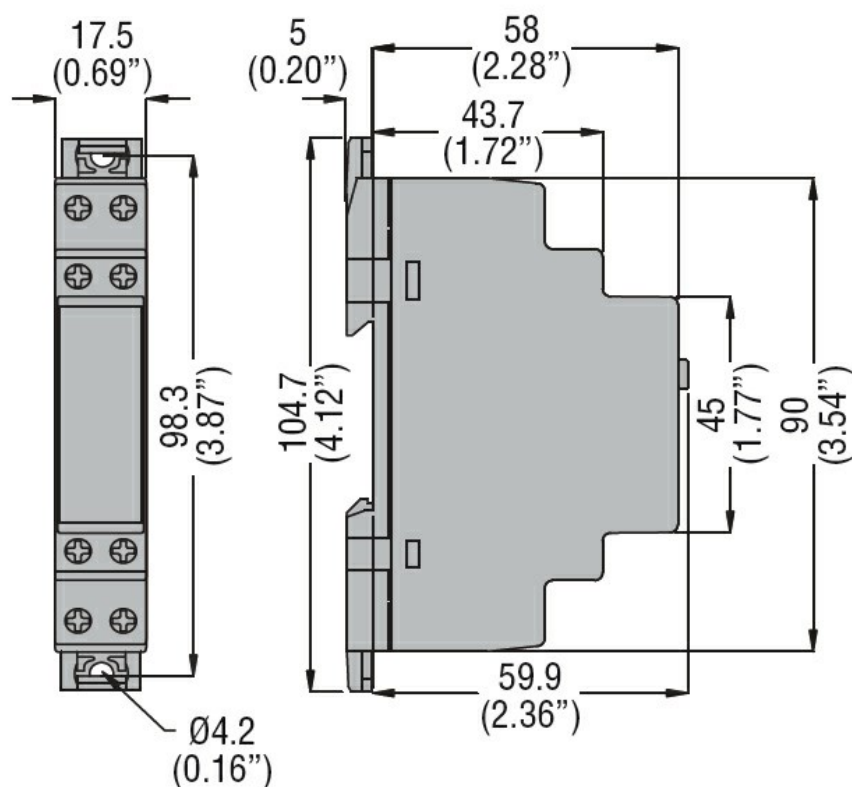
Mounting		DIN rail 35 mm
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Degree of protection		IP40 on front, IP20 terminals
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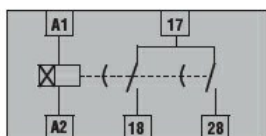
Dimensions (W x H x D)	mm	17.5 x 104.7 x 64.9
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Weight	g	90
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Dimensions



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