

# Product data sheet

Specifications



## Controller system, Modicon TM5 Safety, Safe logic CPU, SERCOS III interface, 20 nodes

TM5CSLC300FS

### Main

Range of product	Modicon TM5
Product or component type	Controller system
Device application	Safety logic controller
Reverse polarity protection	Yes

### Complementary

Communication network type	SERCOS III Ethernet)
Transmission rate	100 Mbit/s for full duplex
Cycle time	1 ms
Realtime clock	With non-volatile memory
Number of devices	2 shielded RJ45 1 memory key slot
Function available	Support max 20 safety nodes
Maximum cable distance between devices	328.08 ft (100 m) between station
Rated voltage	24 V -15...20 %
Input protection type	Integrated fuse (not interchangeable)
Power consumption in W	4.3 W
Type of cooling	Fanless
Marking	CE
Safety level	SIL 3 IEC 61508 SIL 3 IEC 62061 PL = e ISO 13849-1 category 4
Safety reliability data	PFD < 1E-5 PFH < 1E-9 MTTFd > 100 years
Local signalling	1 LED (green or orange) for application run or machine expert - safety debug mode 1 LED (green) for authorization status 1 LED (orange) for configuration status (Ready) 1 LED (orange) for firmware status 1 LED (red) for boot status / FS status 1 LED (orange) for memory key status
Colour	Red
Width	2.5 in (62.5 mm)
Height	3.9 in (99 mm)
Depth	3.0 in (75 mm)
Net weight	0.459 lb(US) (0.208 kg)

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

## Environment

Ambient air temperature for operation	32...113 °F (0...45 °C) vertical installation) 32...131 °F (0...55 °C) horizontal installation)
Ambient air temperature for storage	-13...158 °F (-25...70 °C)
Relative humidity	5...95 % without condensation
IP degree of protection	IP20
Operating altitude	0...2000 m
Standards	EN 13849-1 IEC 61131-2 IEC 61508 IEC 61511 IEC 62061
Product certifications	cULus

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.134 in (10.500 cm)
Package 1 Width	4.528 in (11.500 cm)
Package 1 Length	6.693 in (17.000 cm)
Package 1 Weight	10.935 oz (310.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	9
Package 2 Height	11.811 in (30.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	7.379 lb(US) (3.347 kg)

## Contractual warranty

Warranty (in months)	18
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



### Environmental footprint

Total lifecycle Carbon footprint	203 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	19 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	185 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.2 kg CO2 eq.
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes
EU RoHS Directive	<a href="#">Compliant By Exemption</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</a>

## Use Longer



### Lifetime extension

Repair	No
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## Use Again

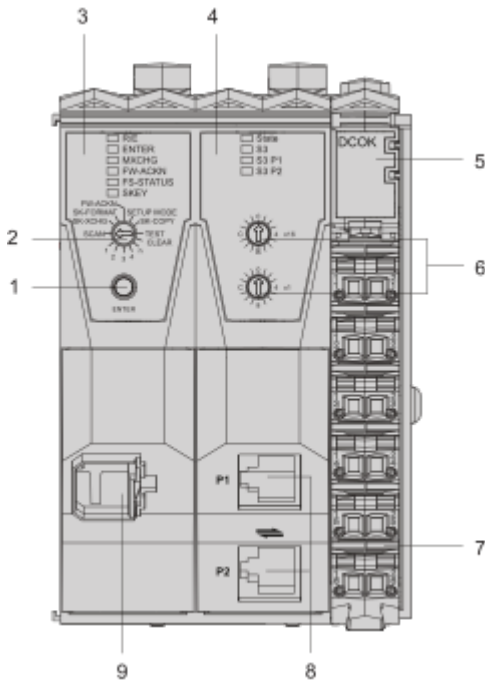


### Repack and remanufacture

Recyclability potential, in %	50
Circularity Profile	<a href="#">End of Life Information</a>
Take-back	Nej
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Presentation

TM5 Safety logic Controller Module

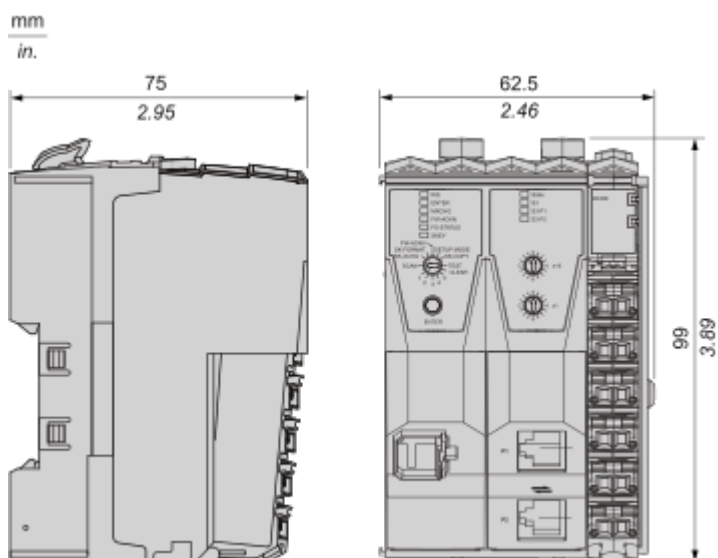


- (1) Confirmation button
- (2) Selection switch
- (3) Logic processor
- (4) SERCOS III interface
- (5) Integrated power supply
- (6) SERCOS III address switches
- (7) Terminal block for Safe Logic Controller supply
- (8) SERCOS III connection with 2 x RJ45
- (9) Memory Key slot

Dimensions Drawings

TM5 Safety logic Controller

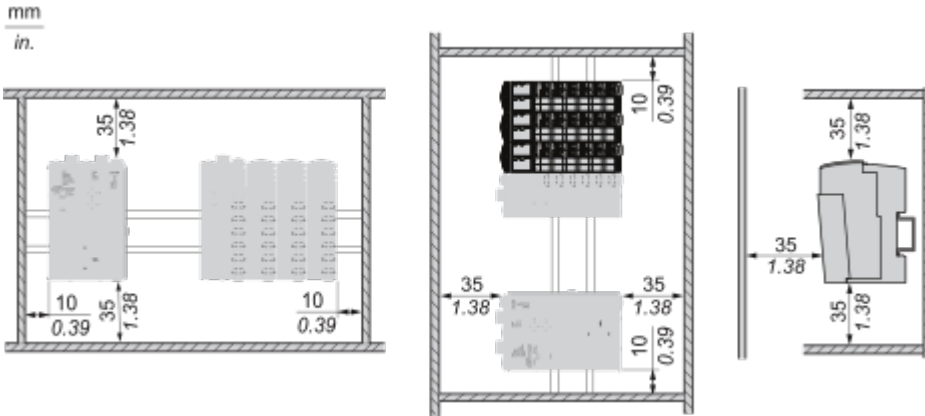
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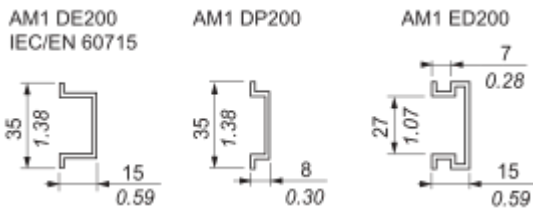
Mounting and Clearance

Mounting and Clearances

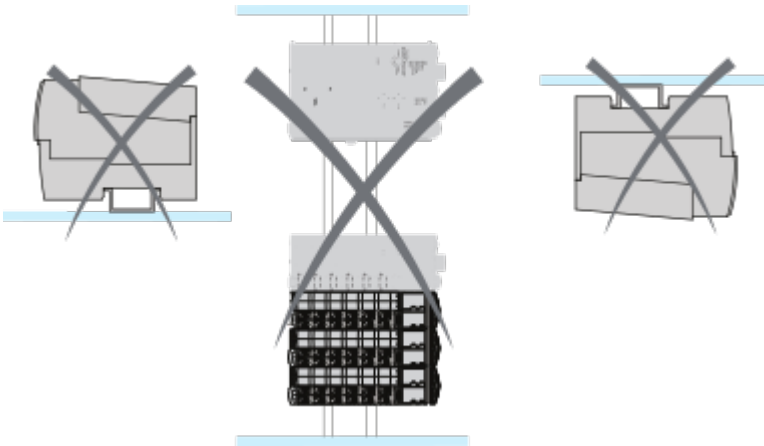
Spacing Requirements



Mounting on a DIN Rail



Incorrect Mounting

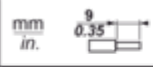






Connections and Schema

**TM5 System Wiring Recommendations**

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**Wire Sizes to Use with the Removable Spring Terminal Blocks**

				
mm <sup>2</sup>	0,08...2,5	0,25...2,5	0,25...1,5	2 x 0,25...2 x 0,75
AWG	28...14	24...14	24...16	2 x 24...2 x 18