

Product data sheet

Specifications



Controller system, Modicon TM5 Safety, Safe logic CPU, SERCOS III interface, 100 nodes

TM5CSLC400FS

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 100 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)
Product 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	4.252 in (10.800 cm)
Package 1 Width	4.724 in (12.000 cm)
Package 1 Length	6.772 in (17.200 cm)
Package 1 Weight	10.899 oz (309.000 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	7.478 lb(US) (3.392 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	204 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	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
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Use Again

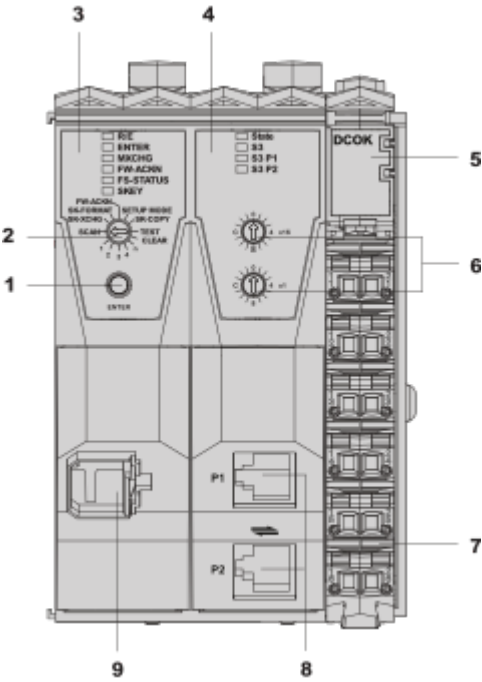


Repack and remanufacture

Circularity Profile	End of Life Information
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Presentation

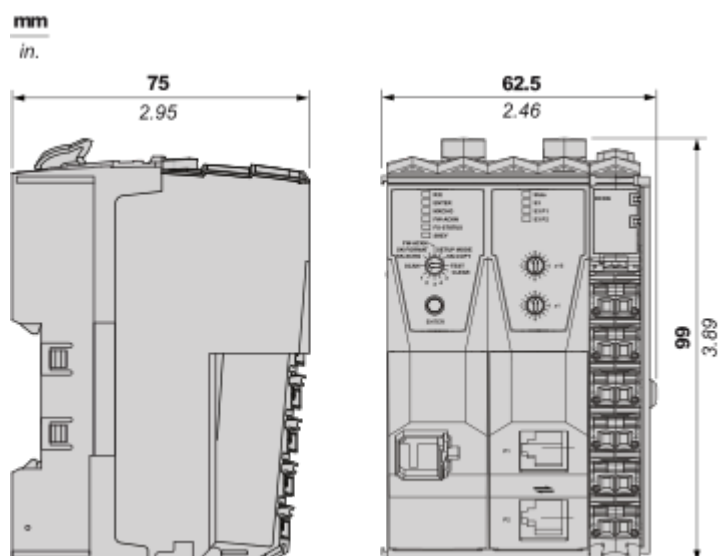
TM5 Safety logic Controller Module



- (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

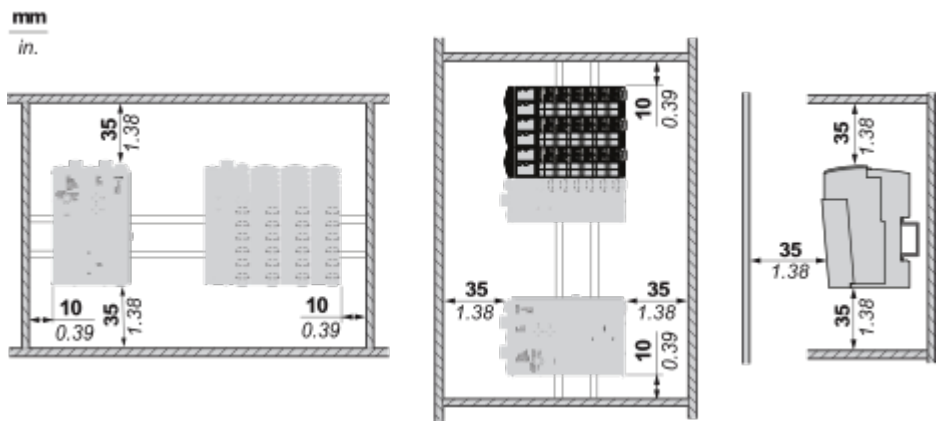
TM5 Safety logic Controller



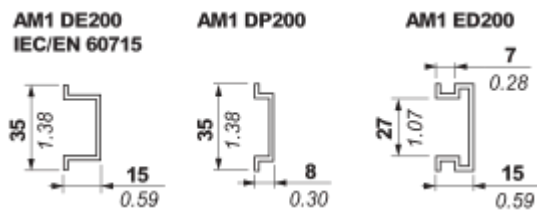
Mounting and Clearance

Mounting and Clearances

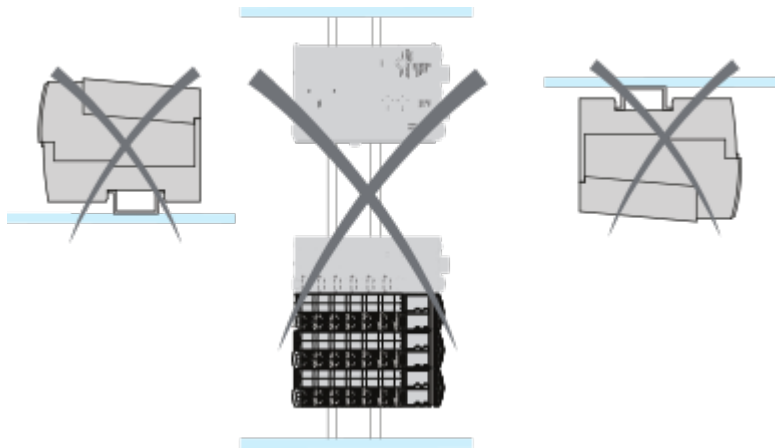
Spacing Requirements



Mounting on a DIN Rail



Incorrect Mounting



Connections and Schema

TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

mm in. 9 0.35				
mm ²	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