Product data sheet

Specifications

Power distribution module, Modicon TM7, supply 24 V, 15 W

TM7SPS1A

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Modicon TM7
Product or Component Type	Power distribution module
Range Compatibility	Modicon LMC058 Modicon M258
Product Compatibility	Motion controller Logic controller
Product Specific Application	Supply 24 V DC I/O modules and bus TM7
[Us] rated supply voltage	24 V
Supply circuit type	DC
Electrical connection	1 male + 1 female connectors M8 power supply) 1 male + 1 female connectors M12 TM7 bus)

Complementary

Local signalling	2 LEDs for sensor/actuator power supply status
Nominal power	15 W
Operating position	Any position
Fixing Mode	By 2 screws
Net Weight	0.42 lb(US) (0.19 kg)

Environment

Standards	IEC 61131-2
Product Certifications	C-tick ATEX II 3g EEx nA II T5 GOST-R cURus
Marking	CE
Ambient Air Temperature for Operation	14…140 °F (-10…60 °C)
Ambient Air Temperature for Storage	-13…185 °F (-25…85 °C)
Relative humidity	5…95 % without condensation
Operating altitude	0...6561.68 ft (0...2000 m)
Storage altitude	0…9842.5 ft (0…3000 m)
Vibration resistance	7.5 mm constant amplitude (f= 2…8 Hz) conforming to IEC 60721-3-5 Class 5M3 2 gn constant acceleration (f= 8…200 Hz) conforming to IEC 60721-3-5 Class 5M3 4 gn constant acceleration (f= 200…500 Hz) conforming to IEC 60721-3-5 Class 5M3
Shock resistance	30 gn 11 ms IEC 60721-3-5 Class 5M3

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Resistance to electrostatic discharge	6 kV in contact IEC 61000-4-2 8 kV in air IEC 61000-4-2
Resistance to electromagnetic fields	9.1 V/m (10 V/m) 0.08…2 Hz IEC 61000-4-3 0.9 V/m (1 V/m) 2…2.7 Hz IEC 61000-4-3
Resistance to fast transients	2 kV IEC 61000-4-4 power supply) 1 kV IEC 61000-4-4 input/output) 1 kV IEC 61000-4-4 shielded cable)
Surge withstand	0.5 kV differential mode IEC 61000-4-5 1 kV common mode IEC 61000-4-5
Electromagnetic compatibility	EN/IEC 61000-4-6
Disturbance radiated/conducted	CISPR 11

Ordering and shipping details

Category	US1PC1222532
Discount Schedule	PC12
GTIN	3595864093239
Returnability	Yes
Country of origin	AT

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.97 in (5.000 cm)
Package 1 Width	2.32 in (5.900 cm)
Package 1 Length	4.13 in (10.500 cm)
Package weight(Lbs)	7.478 oz (212.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	11.909 lb(US) (5.402 kg)

Contractual warranty

Warranty	18 months

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

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	Pro-active compliance (Product out of EU RoHS legal scope)
REACh Regulation	REACh Declaration
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
PVC free	Yes

Use Again

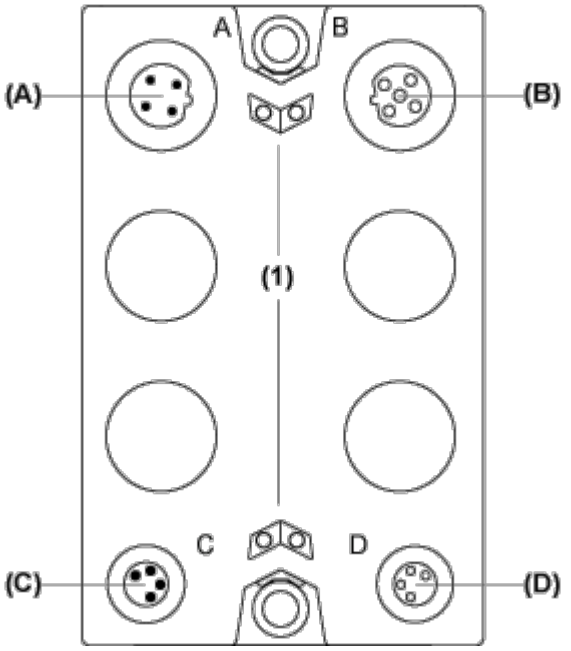
Repack and remanufacture

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

TM7 Power Distribution Block (PDB)

Description



(A) TM7 bus IN connector

(B) TM7 bus OUT connector

(C) 24 Vdc power IN connector

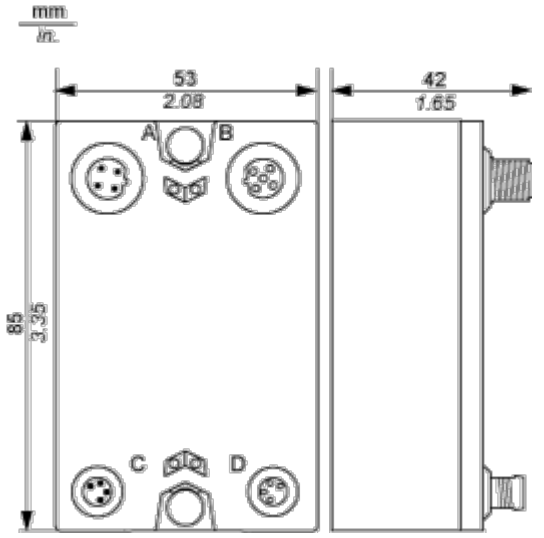
(D) 24 Vdc power OUT connector

(1) Status LEDs

Dimensions Drawings

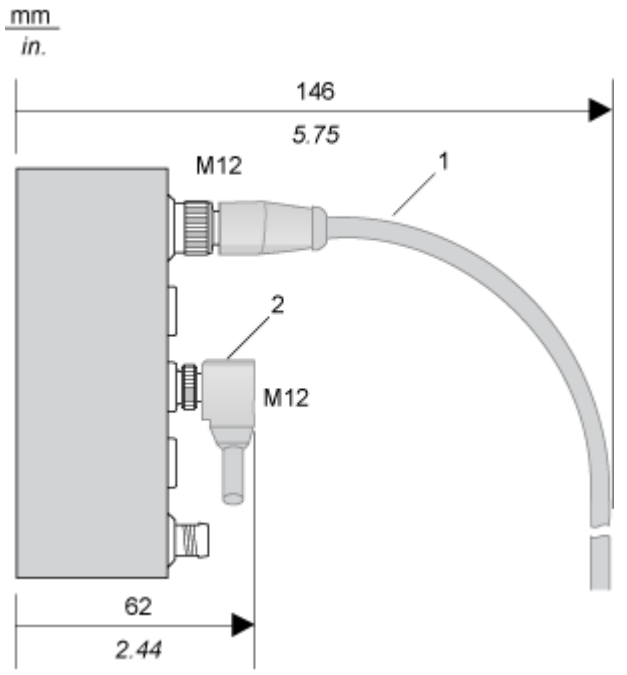
TM7 Block, Size 1

Dimensions



Mounting and Clearance

Spacing Requirements

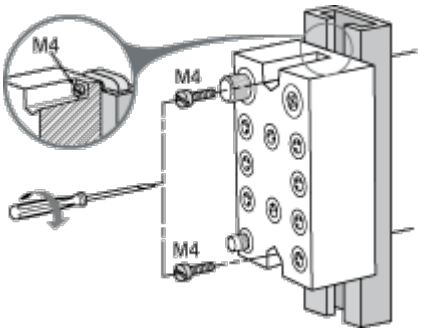


1 Straight cable

2 Elbowed cable

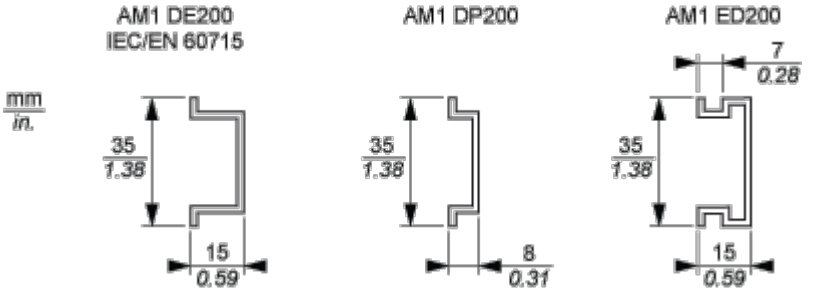
Installation Guidelines

TM7 Block on an Aluminium Frame



NOTE: Maximum torque to fasten the required M4 screws is 0.6 N.m (5.3 lbf-in).

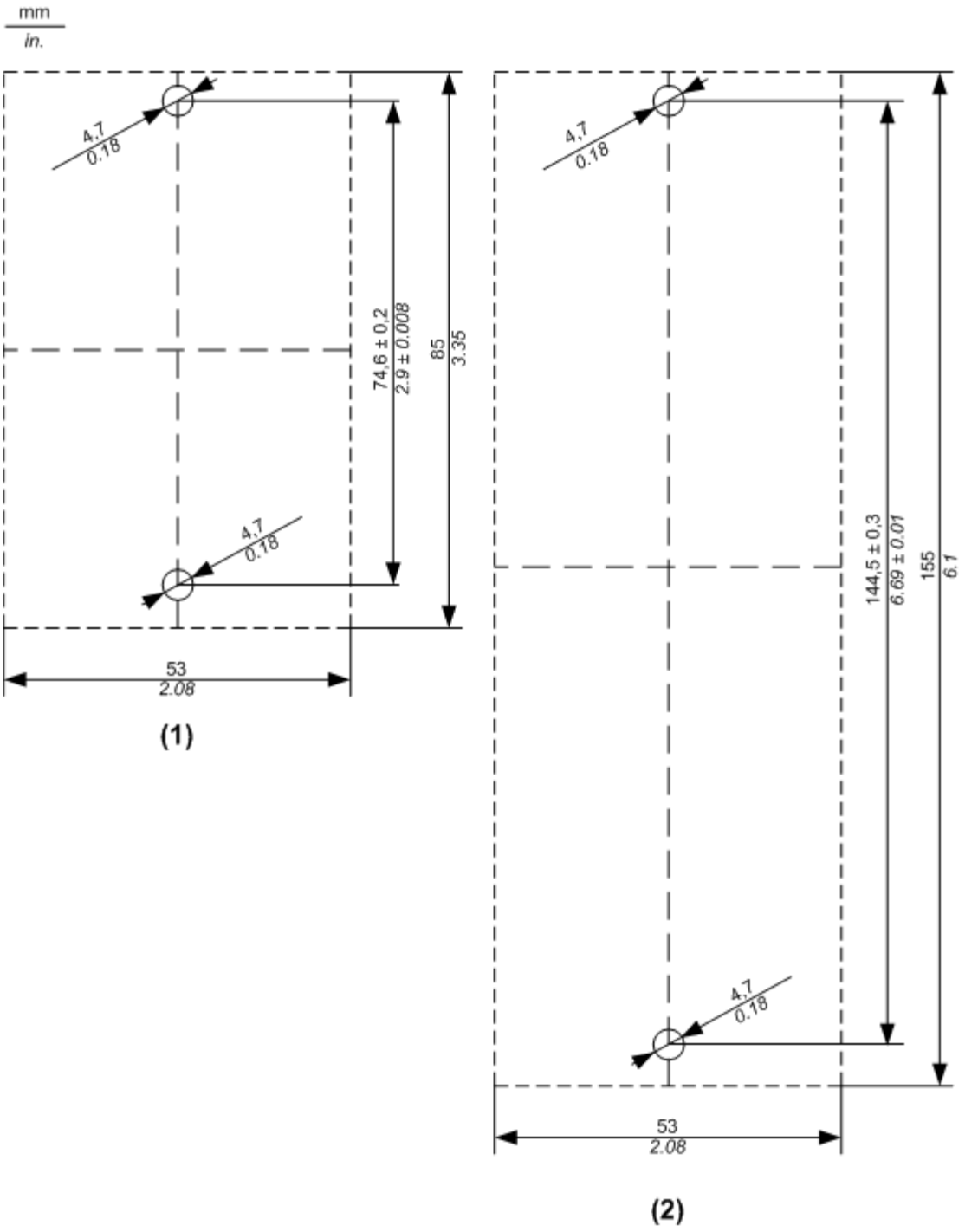
TM7 Block on a DIN Rail



NOTE: Only size 1 (smallest) blocks can be installed on DIN rail with the TM7ACMP mounting plate.

TM7 Block Directly on the Machine

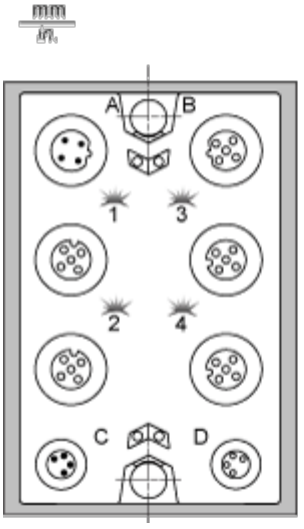
Drilling template of the block:

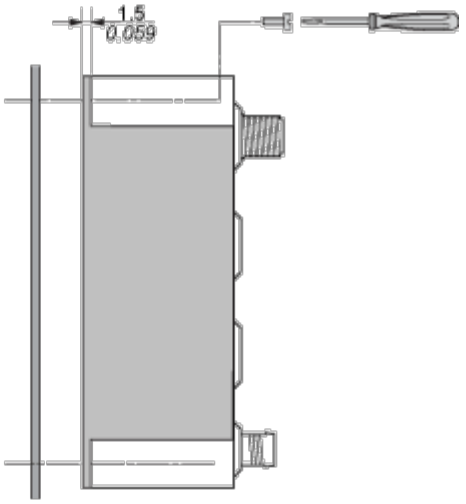


(1) Size 1

(2) Size 2

The thickness of the base plate should be taken into consideration when defining the screw length.



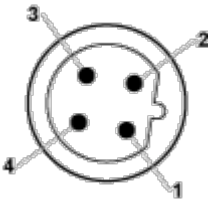
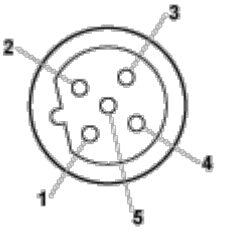


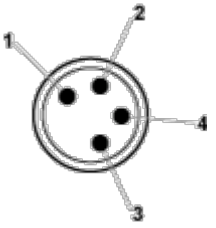
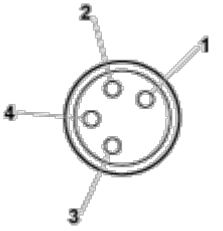
NOTE: Maximum torque to fasten the required M4 screws is 0.6 N.m (5.3 lbf-in).

Connections and Schema

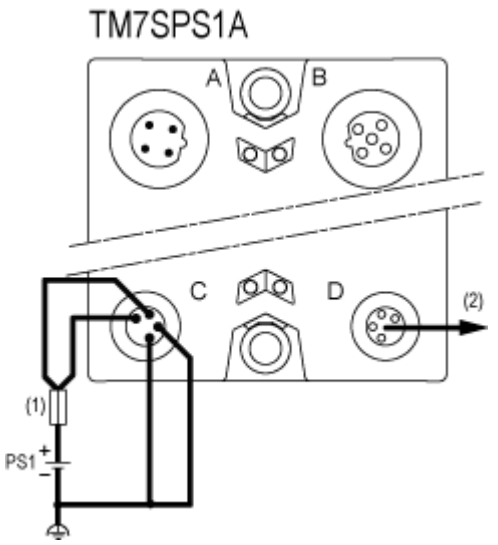
Wiring Diagram

Pin Assignments

TM7 bus IN connector (A)	Pin	Designation	TM7 bus OUT connector (B)
	1	TM7 V+	
	2	TM7 Bus Data	
	3	TM7 0V	
	4	TM7 Bus Data	
	5	N.C.	

Power IN connector (C)	Pin	Designation	Power OUT connector (D)
	1	24 Vdc Main power	
	2	24 Vdc Main power	
	3	0 Vdc	
	4	0 Vdc	

Wiring the Power Supply



(1) External fuse, Type T slow-blow, 1 A minimum, 4 A maximum, 250 V

(2) Maximum current 4 A

PS1 External isolated main power supply, 24 Vdc