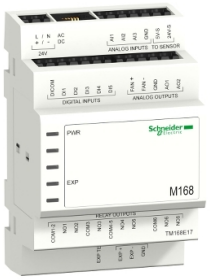
Product data sheet

Specifications



M168 electronic expansion valve driver module w expansion bus and Mod bus port

TM168BEVCMEM

Discontinued on: Jan 26, 2021

Discontinued

Main

Range of product	Modicon M168 logic controller
Product or component type	Application-specific expansion module
Product specific application	Control of electronic expansion valve
Connector type	Without connector

Complementary

Discrete input number	2 no isolated digital input 1 isolated digital input
Contacts usage	Volt-free contacts
Discrete input voltage	100...240 V
Discrete input voltage type	AC/DC
Sensor power supply	12 V AC/DC
Voltage state 1 guaranteed	100 V auxiliary input
Analogue input number	2 1
Analogue input type	Voltage 0...10 V or 0...5 V ratio Current 0...20 mA/4...20 mA Temperature probe -100...400 °C Pt 1000 Temperature probe -50...+120 °C NTC 10k
Discrete output voltage	250 V AC
Discrete output current	5000 mA
Electrical durability	100000 cycles 24 V AC 100000 cycles 24...37 V DC
Mounting support	35 mm symmetrical DIN rail
Width	2.8 in (71 mm)
Height	5.04 in (128 mm)
Depth	2.4 in (60 mm)
Net weight	0.379 lb(US) (0.172 kg)

Environment

Standards	EN 60730-1 EN 61000-6-1 EN 61000-6-3 UL 60730 2006/95/EEC

Marking	CE UL
Ambient air temperature for operation	14…140 °F (-10…60 °C)
Ambient air temperature for storage	-13…140 °F (-25…60 °C)
Relative humidity	10…90 % without condensation
IP degree of protection	IP20
Pollution degree	2
Overvoltage category	III
Operating altitude	0...2000 m

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.1 in (8.0 cm)
Package 1 Width	4.3 in (11.0 cm)
Package 1 Length	6.1 in (15.5 cm)
Package 1 Weight	10.3 oz (291.0 g)

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 >

Use Longer

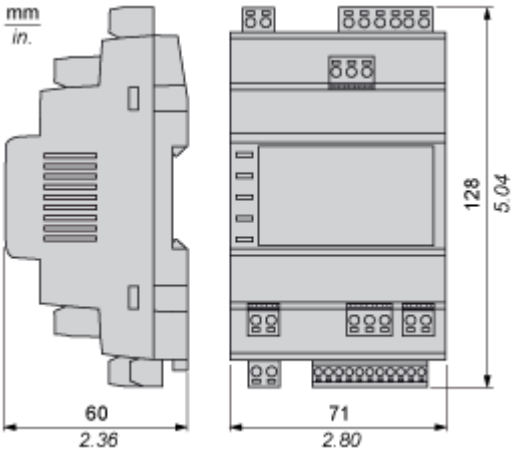
Lifetime extension

Repair	No

Dimensions Drawings

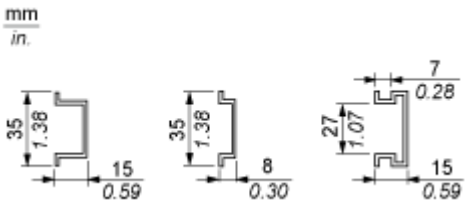
Electronic Expansion Valve Module

Dimensions

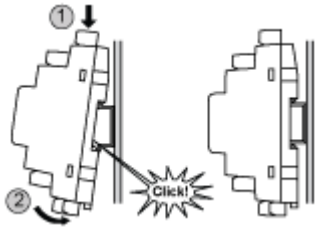


Mounting and Clearance

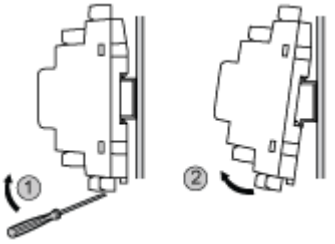
Mounting and Clearance



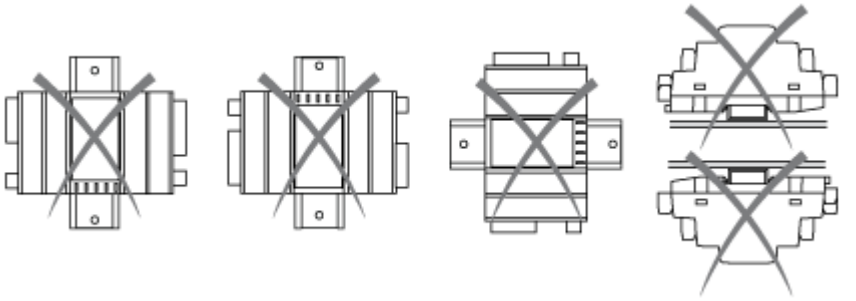
Mounting



Dismounting



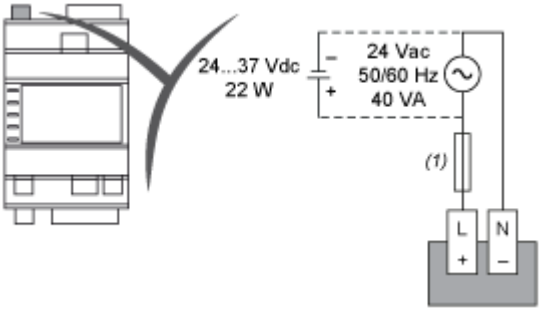
Misplacement



Connections and Schema

Power Supply

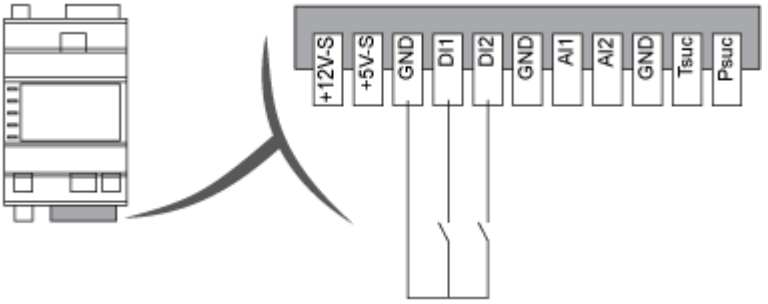
Wiring Diagram



(1) 2 A Type T 250 V AC

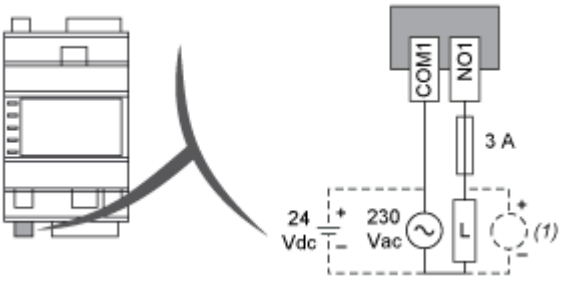
Dry Contact Digital Inputs

Wiring Diagram



Digital Outputs

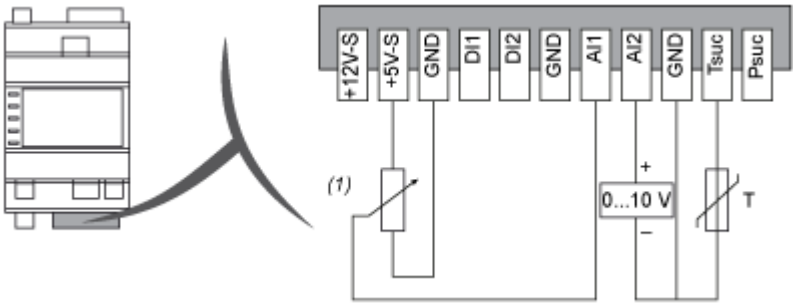
Wiring Diagram



(1) Protection for inductive load

Analog Inputs

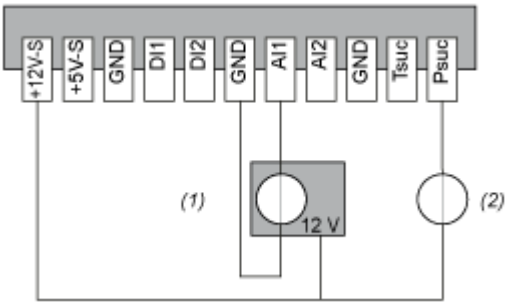
Temperature and Voltage Sensing



(1) Ratio

Analog Inputs

Current Sensing

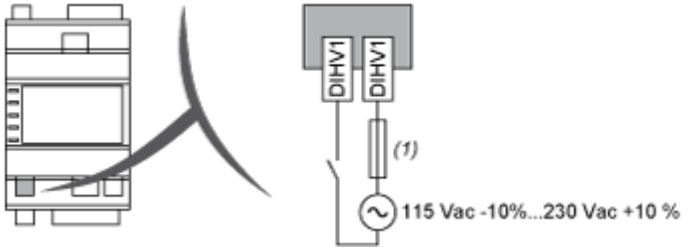


(1) 20 mA 3-wire Sensor

(2) 20 mA 2-wire Sensor

115/230 V AC Digital Input

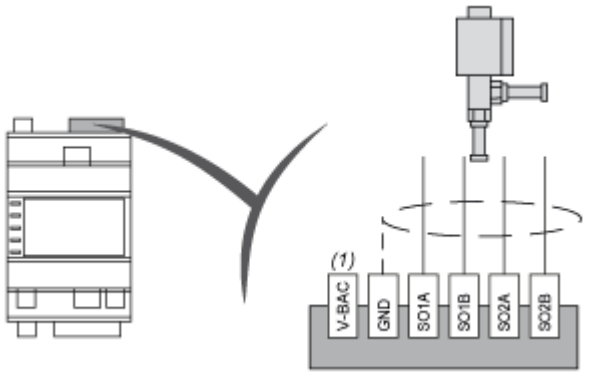
Wiring Diagram



(1) 2.5 mA Type T

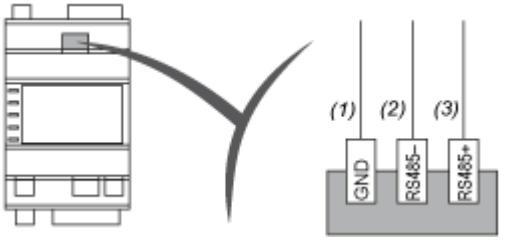
Bipolar Stepper Motor Digital Outputs

Electronic Expansion Valve



(1) Reserved for the backup power supply module

Modbus Serial Line Communication



(1) BR - Brown

(2) WH - White / BL - Blue

(3) BL - Blue

Wiring Requirements

Cable Types and Wire Sizes

mm / in				
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

Use copper conductors only. Use shielded cables for Modbus.