Product data sheet

Specifications



Modicon MC80, Controller, 8 DI, 12 DO, 4 AI

BMKC8020301

To be discontinued on: Dec 1, 2027

To be end-of-service on: Dec 31, 2035

To be discontinued

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Modicon MC80
Product or Component Type	Processor module
Product Specific Application	Thermo solar - parabolic through

Complementary

Product compatibility	BMXFTB20... terminal block analog input module BMXFTB28... terminal block discrete I/O module
[Us] rated supply voltage	24 V - 15...20 % DC
Current Consumption	<= 700 mA
Isolation voltage	1500 V DC
Memory description	Internal RAM 3840 kB Internal RAM 128 kB data Internal RAM 3590 kB program constants and symbols
Execution time per instruction	0.06 µs Boolean 0.08 µs mixed
Realtime clock	With
Function available	Memory retention without battery
Communication port protocol	1 non isolated serial link RJ45 RS485/RS232 0.3...19.2 kbit/s 247 1 CANopen SUB-D 9 20 kbit/s...1 Mbit/s 16 2 Ethernet RJ45 10/100 Mbit/s
Integrated connection type	USB port mini B USB
Port Ethernet	10BASE-T/100BASE-TX
Bus length	0…32.8 ft (0…10 m) serial link non isolated 0…49.2 ft (0…15 m) serial link non isolated 0…3280.8 ft (0…1000 m) serial link isolated with external isolation tap 0…65.6 ft (0…20 m) 1 Mbit/s CANopen 0…8202.10 ft (0…2500 m) 20 kbit/s CANopen 0…328.08 ft (0…100 m) Ethernet
Communication service	Read/write variables Modbus Diagnostics Modbus Send/receive character string character mode Process Data Object (PDO) CANopen Service Data Object (SDO) CANopen FDR client Ethernet SNMP Ethernet RSTP support Ethernet
Discrete input number	8 positive logic (sink)
Discrete input type	Type 3
Discrete input current	2.4 mA

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

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

Discrete input voltage	19...30 V DC
Discrete output number	12 positive
Discrete output current	2 A per output 10 A per module
Discrete output voltage	19...30 V DC
Protection type	Overload protection output Short-circuit protection output
Analogue input number	4
Analogue input type	Current - 20...20 mA Voltage - 10...10 V
Fast read cycle time for analogue input	1.3 ms + 1.3 ms x number of channels used
Nominal read cycle time for analogue input	6.5 ms for 4 channels
Analogue input resolution	16 bits

Environment

Ambient Air Temperature for Operation	-13…158 °F (-25…70 °C)
Ambient Air Temperature for Storage	-40…185 °F (-40…85 °C)
Relative humidity	0…95 %
vibration resistance	3 gn
Marking	CE
Standards	CSA C22.2 No 213 Class I Division 2 Group C CSA C22.2 No 213 Class I Division 2 Group D UL 508 IEC 61131-2 CSA C22.2 No 213 Class I Division 2 Group B CSA C22.2 No 142 CSA C22.2 No 213 Class I Division 2 Group A
Product Certifications	RCM

Ordering and shipping details

Category	US1PC3418160
Discount Schedule	PC34
GTIN	3606485432045
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	5.709 in (14.500 cm)
Package 1 Width	4.724 in (12.000 cm)
Package 1 Length	10.630 in (27.000 cm)
Package weight(Lbs)	2.639 lb(US) (1.197 kg)
Unit Type of Package 2	S03
Number of Units in Package 2	6

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	17.461 lb(US) (7.920 kg)

Contractual warranty

Warranty (in months)	18

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 Better

Materials and Substances

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

Use Longer

Lifetime extension

Repair	No

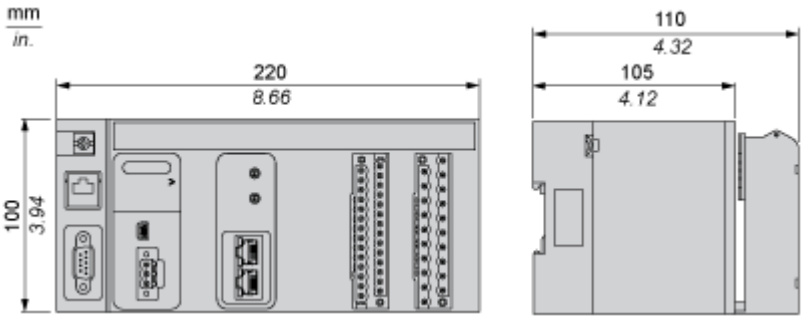
Use Again

Repack and remanufacture

Take-back	No

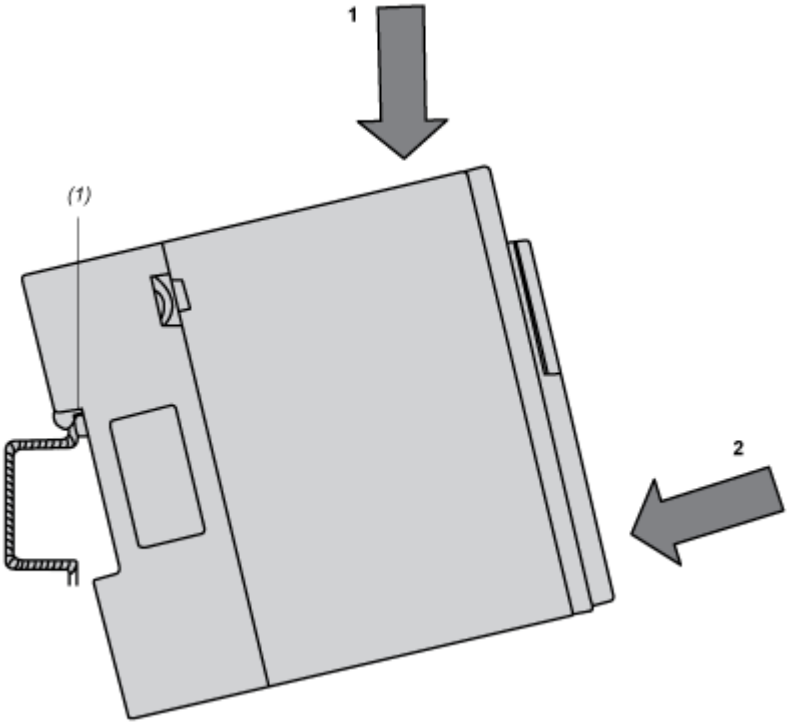
Dimensions Drawings

Dimensions

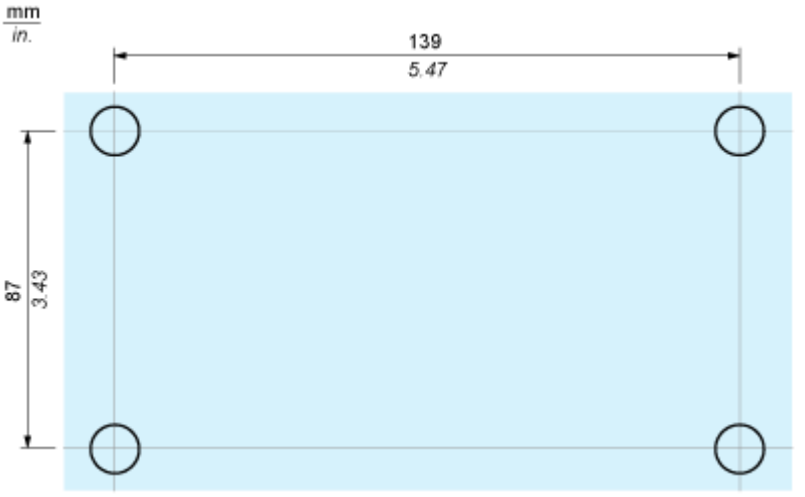


Mounting and Clearance

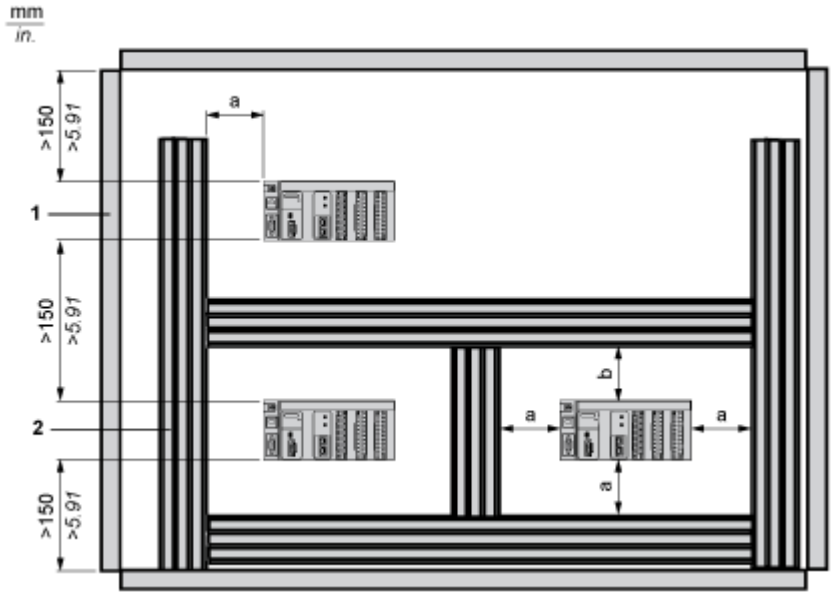
Mounting on DIN Rails



Mounting on Panels



Clearance



a : Greater than or equal to 60 mm (2.36 inch)

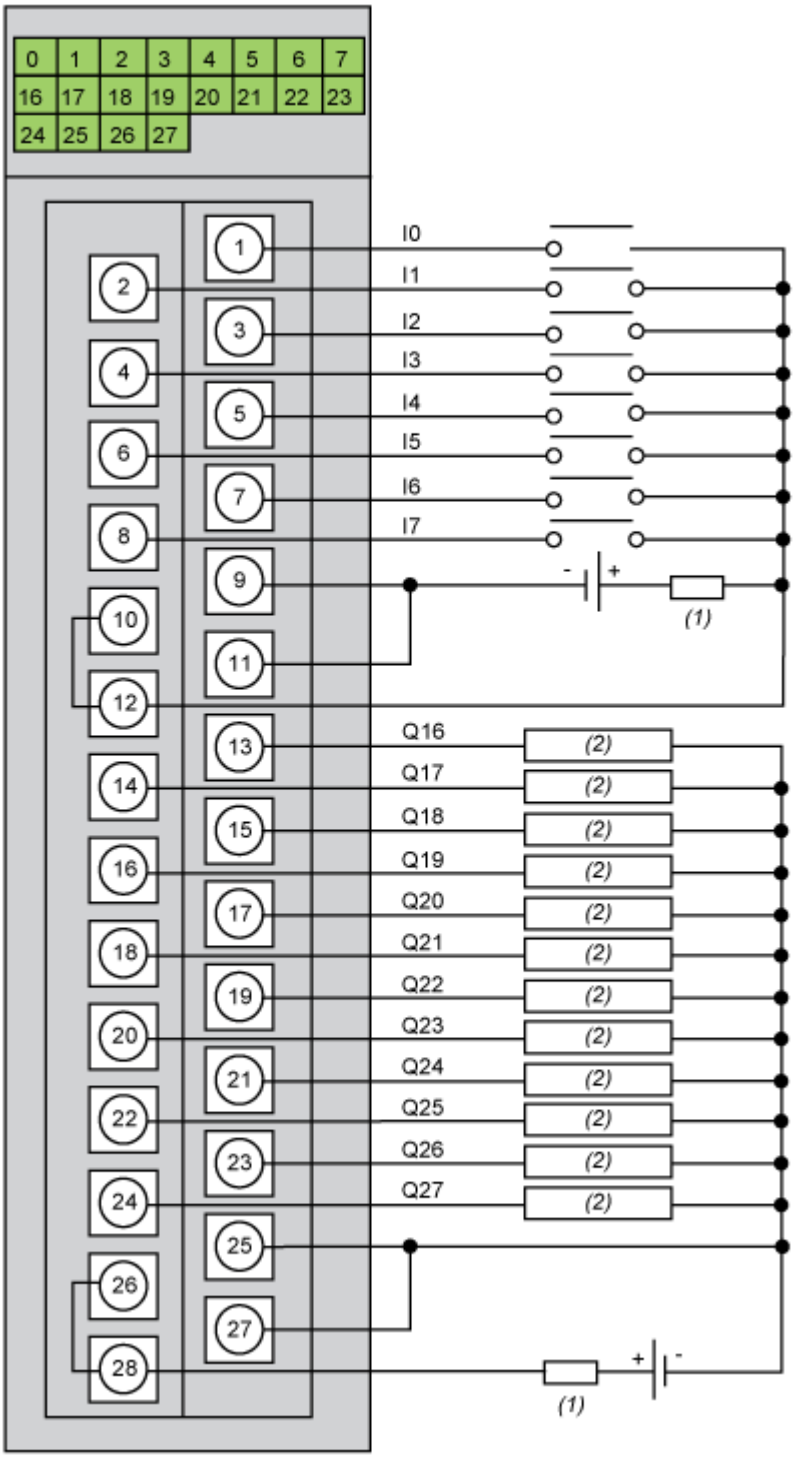
b : Greater than or equal to 80 mm (3.15 inch)

1 : Installation or casing

2 : Wiring duct or tray

Connections and Schema

Discrete I/O Connection

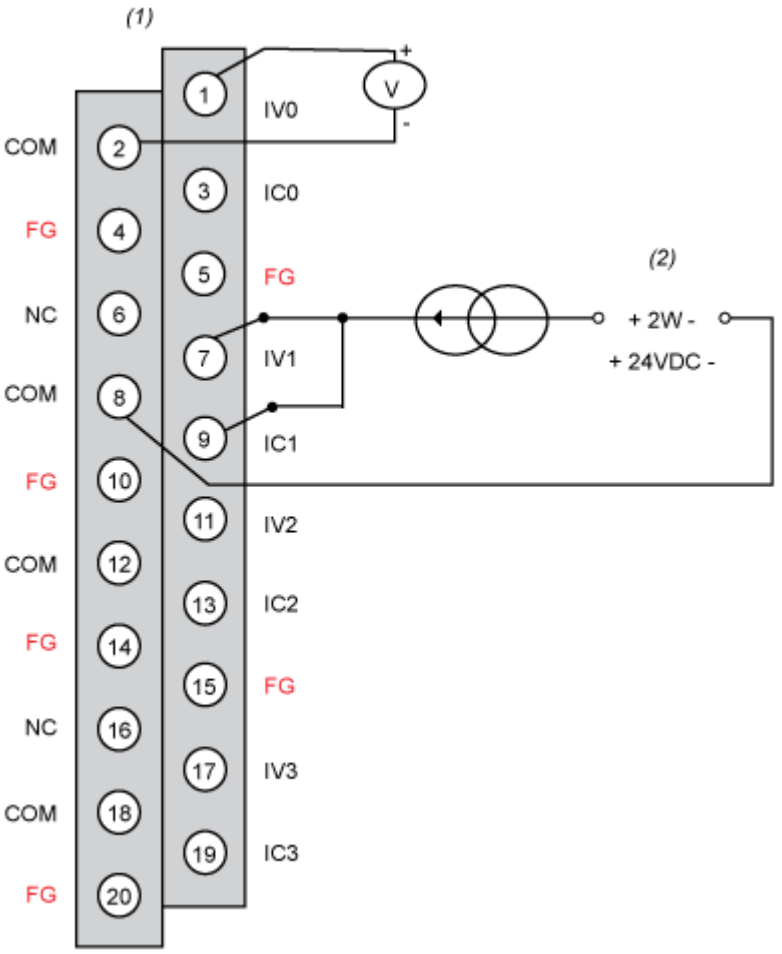


(1) : Fuse

(2) : Pre-actuator

Power supply: 24 Vdc
Input fuse: fast blow fuse of 0.5 A
Output fuse: fast blow fuse of 12 A

Analog Input Connection



(1) : Cabling view

(2) : Loopsupply

COM : Common pin for each channel

IVx : Pole input for channel x

ICx: Current reading resistor + input

FG: Functional ground