Product datasheet

Specifications

standalone processor, Modicon M580, 24MB, 61 Ethernet devices, 31 remote IO racks of X80 and Quantum, conformal coating

BMEP585040C

Main

Range of product	Modicon M580
Product or component type	Processor module
Impregnation material	Conformal coated

Complementary

Number of racks	8
Local I/O processor capacity (discrete)	5120 I/O
Local I/O processor capacity (analog)	1280 I/O
Number of application specific channel (local rack)	180
Application specific I/O	Accurate time stamping Motion control Serial link HART SSI encoder Counter
Checks	Process control
Control channels	Programmable loops
Integrated connection type	1 Ethernet TCP/IP for service port 2 Ethernet TCP/IP for device network USB type mini B
Number of remote I/O station	31 - 2 rack(s) per remote drop
Number of distributed equipment	64
Communication module processor capacity	16 AS-Interface module 6 Ethernet communication module
Communication service	RIO scanner DIO scanner
Memory description	Expandable flash, 4 GB for data storage Integrated RAM, 10 kB for system memory Integrated RAM, 24 MB for program Integrated RAM, 4096 kB for data
Application structure	1 periodic fast task 2 auxiliary tasks 128 event tasks 1 cyclic/periodic master task
Number of instructions per ms	40 Kinst/ms 65 % Boolean + 35 % fixed arithmetic 50 Kinst/ms 100 % Boolean
Current consumption	300 mA at 24 V DC
MTBF reliability	775000 H
Marking	CE

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Environment

Vibration resistance	3 gn
Shock resistance	30 gn
Ambient air temperature for operation	-25…60 °C
Ambient air temperature for storage	-40…85 °C
Operating altitude	0...2000 m 2000...5000 m with derating factor
Relative humidity	5…95 % at 55 °C without condensation
IP degree of protection	IP20
Directives	2014/35/EU - low voltage directive 2014/30/EU - electromagnetic compatibility 2014/34/EU - ATEX directive
Product certifications	CE UL CSA RCM EAC Merchant Navy ATEX zone 2/22 IECEx zone 2/22
Standards	IEC 61131-2 IEC 61010-2-201 UL 61010-2-201 CSA C22.2 No 61010-2-201 IACS E10 EN/IEC 61000-6-5, interface type 1 and type 2 EN/IEC 61850-3, location G IEC 60079-0
Environmental characteristic	Gas resistant class Gx conforming to ISA S71.04 Gas resistant class 3C4 conforming to IEC 60721-3-3 Dust resistant class 3S4 conforming to IEC 60721-3-3 Sand resistant class 3S4 conforming to IEC 60721-3-3 Salt resistant level 2 conforming to IEC 68252 Mold growth resistant class 3B2 conforming to IEC 60721-3-3 Fungal spore resistant class 3B2 conforming to IEC 60721-3-3 Hazardous location class I division 2
Protective treatment	Conformal coating
Supply	Internal power supply via rack
Status LED	1 LED (green) processor running (RUN) 1 LED (red) processor or system fault (ERR) 1 LED (red) I/O module fault (I/O) 1 LED (green) download in progress (DL) 1 LED (red) memory card or CPU flash fault (BACKUP) 1 LED (green/red) ETH MS (Ethernet port configuration status) 1 LED (green/red) Eth NS (Ethernet network status) 1 LED (green) I/O values overridden by user (FORCED IO)
Net weight	0.849 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.500 cm
Package 1 Width	17.500 cm
Package 1 Length	25.000 cm
Package 1 Weight	880.000 g
Unit Type of Package 2	S03

Number of Units in Package 2	6
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.730 kg

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

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	**249**
Environmental Disclosure	**Product Environmental Profile**

Use Better
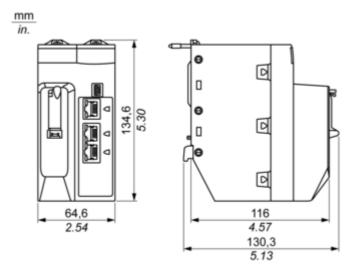
Materials and Substances

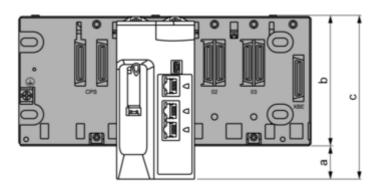|	
Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
EU RoHS Directive	**Pro-active compliance (Product out of EU RoHS legal scope)**
SCIP Number	**4eb70ab0-978b-4773-a441-0cc20d6144a1**
REACh Regulation	**REACh Declaration**

Use Again

Repack and remanufacture

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

Dimensions Drawings
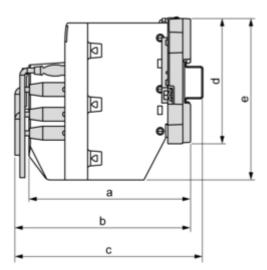
CPU Module Only

Modules Mounted on Racks

a: additional space below the rack to accommodate the height of the CPU. For an X Bus rack, the value is 30.9 mm (1.217 in.); for an Ethernet rack, the value is 29.49 mm (1.161 in.).
b: the height of the rack. For an X Bus rack, the height is 103.7 mm (4.083 in.); for an Ethernet rack, the height is 105.11 mm (4.138 in.).
c: the height of the main local rack, 134.6 mm (5.299 in.)

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Modules and Cables Mounted in an Enclosure

a: enclosure depth: 135 mm (5.315 in.)
b: wiring + module depth: > 146 mm (5.748 in.)
c: wiring + module + DIN rail depth: > 156 mm (6.142 in.)
d: rack height: for an X Bus rack 103.7 mm (4.083 in.); for an Ethernet rack, 105.11 mm (4.138 in.)
e: module height: 134.6 mm (5.299 in.)