



### Main

Range of product	Modicon M580
Product or component type	Processor module
Supply	Internal power supply via rack

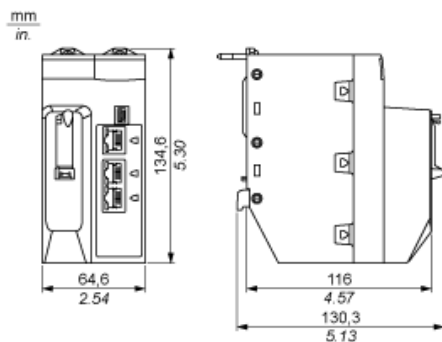
### Complementary

Number of racks	8
Local I/O processor capacity (discrete)	6144 I/O
Local I/O processor capacity (analog)	1536 I/O
Number of application specific channel (local rack)	216
Application specific I/O	Accurate time stamping Counter Serial link Motion control HART SSI encoder
Checks	Process control
Control channels	Programmable loops
Integrated connection type	1 Ethernet TCP/IP service port 2 Ethernet TCP/IP 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	6 Ethernet communication module 24 AS-Interface module
Communication service	DIO scanner RIO scanner
Memory description	Expandable flash 4 GB data storage Integrated RAM 10 kB system memory Integrated RAM 64 MB program and data
Application structure	1 cyclic/periodic master task 1 periodic fast task 128 event tasks 2 auxiliary tasks
Number of instructions per ms	40 Kinst/ms 100 % Boolean 60 Kinst/ms 65 % Boolean + 35 % fixed arithmetic
Current consumption	295 mA 24 V DC
MTBF reliability	600000 H
Marking	CE
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)
Product weight	0.849 kg

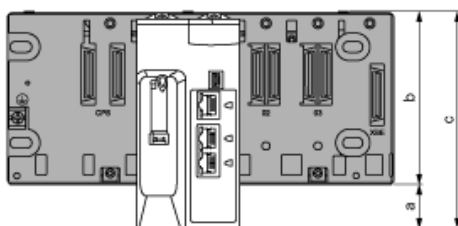
## Environment

Ambient air temperature for operation	0...60 °C
Ambient air temperature for storage	-40...85 °C
Operating altitude	0...2000 m
Relative humidity	5...95 %
IP degree of protection	IP20
Standards	CSA C22.2 No 142 EN/IEC 61131-2 UL 508 LWD 2006/95/EC EMC 2004/108/EC CSA C22.2 No 213 Class I Division 2 EN/IEC 60079-0 EN/IEC 60079-31 EN/IEC 60079-15
Product certifications	GOST RCM WEEE directive 2002/96/EC Merchant Navy EAC REACH directive 1907/2006/EC RoHS directive 2011/65/EU ATEX II 3 Gas & Dust zone 2/22

## CPU MODULE ONLY

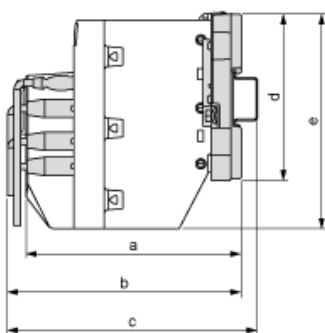


## Modules Mounted on Racks



- 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.)

## 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.)