



### Main

|                           |                            |
|---------------------------|----------------------------|
| Range of product          | Modicon M580               |
| Product or component type | Redundant processor module |

### Complementary

|                                         |                                                                                                                                                           |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of racks                         | 1                                                                                                                                                         |
| Application specific I/O                | Counter<br>Accurate time stamping<br>Serial link<br>HART<br>Motion control<br>SSI encoder                                                                 |
| Checks                                  | Process control                                                                                                                                           |
| Control channels                        | Programmable loops                                                                                                                                        |
| Integrated connection type              | 1 Ethernet TCP/IP for service port<br>2 Ethernet TCP/IP for device network<br>USB type mini B<br>1 Ethernet for HSBY port                                 |
| Number of remote I/O station            | 8 - 2 rack(s) per X80 remote drop                                                                                                                         |
| Number of distributed equipment         | 64                                                                                                                                                        |
| Communication module processor capacity | 2 Ethernet communication module<br>8 AS-Interface module                                                                                                  |
| Communication service                   | DIO scanner<br>RIO scanner                                                                                                                                |
| Memory description                      | Expandable flash, 4 GB for data storage<br>Integrated RAM, 10 kB for system memory<br>Integrated RAM, 8 MB for program<br>Integrated RAM, 768 kB for data |
| Application structure                   | 1 periodic fast task<br>1 cyclic/periodic master task                                                                                                     |
| Number of instructions per ms           | 7.5 Kinst/ms 65 % Boolean + 35 % fixed arithmetic<br>10 Kinst/ms 100 % Boolean                                                                            |
| Current consumption                     | 270 mA at 24 V DC                                                                                                                                         |
| MTBF reliability                        | 600000 H                                                                                                                                                  |
| Marking                                 | CE                                                                                                                                                        |

### Environment

|                                       |                                                  |
|---------------------------------------|--------------------------------------------------|
| Vibration resistance                  | 3 gn                                             |
| Shock resistance                      | 30 gn                                            |
| Ambient air temperature for operation | 0...60 °C                                        |
| Ambient air temperature for storage   | -40...85 °C                                      |
| Operating altitude                    | 0...2000 m<br>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<br>2014/30/EU - electromagnetic compatibility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Supply                  | Internal power supply via rack                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Status LED              | 1 LED (green)processor running (RUN)<br>1 LED (red)processor or system fault (ERR)<br>1 LED (red)I/O module fault (I/O)<br>1 LED (green)download in progress (DL)<br>1 LED (red)memory card or CPU flash fault (BACKUP)<br>1 LED (green/red)ETH MS (Ethernet port configuration status)<br>1 LED (green/red)Eth NS (Ethernet network status)<br>1 LED (green)peer processor running (REMOTE RUN)<br>1 LED (green)processor ID set to A (A)<br>1 LED (green)processor ID set to B (B)<br>1 LED (green)processor acting as Primary (PRIM)<br>1 LED (green)processor acting as Standby (STBY)<br>1 LED (green)I/O values overridden by user (FORCED IO)<br>1 LED (green)Hot standby link status (Hsby Diag) |
| Net weight              | 0.849 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

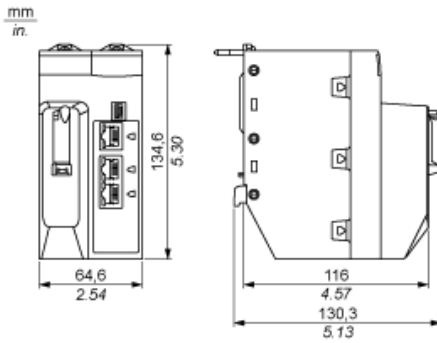
### Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Weight             | 895 g   |
| Package 1 Height             | 8.5 cm  |
| Package 1 width              | 17.5 cm |
| Package 1 Length             | 25 cm   |
| Unit Type of Package 2       | S03     |
| Number of Units in Package 2 | 6       |
| Package 2 Weight             | 5.37 kg |
| Package 2 Height             | 30 cm   |
| Package 2 width              | 30 cm   |
| Package 2 Length             | 40 cm   |

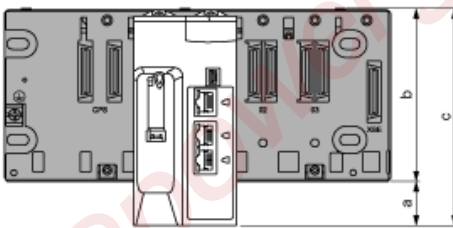
### Offer Sustainability

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                       |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                           |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>                              |
| Mercury free               | Yes                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                                                      |
| Circularity Profile        | <a href="#">End Of Life Information</a>                                                                                     |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

CPU Module Only

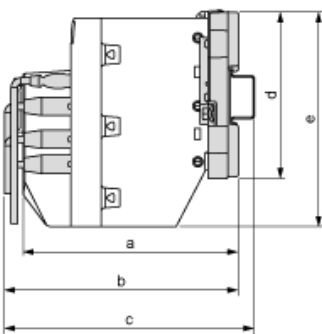


Modules Mounted on Racks



- 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.)