Product datasheet

Specifications

power supply module, Modicon X80, 24 to 48V DC, 31.2W, severe environment

BMXCPS3020H

Main

Range of product	Modicon X80
Product or component type	Power supply module
backplane compatibility	Not compatible with BMEXBP..02
Product specific application	For severe environments
Primary voltage	24...48 V isolated
Supply circuit type	DC
Secondary power	15 W 3.3 V DC at 0…60 °C I/O module logic power supply 31.2 W 24 V DC at 0…60 °C I/O module power supply and processor 11.3 W 3.3 V DC at -25…70 °C I/O module logic power supply 23.4 W 24 V DC at -25…70 °C I/O module power supply and processor

Complementary

Primary voltage limit	18...62.4 V
Input current	0.83 A 48 V 1.65 A 24 V
Inrush current	30 A 24 V 60 A 48 V
I²t on activation	1 A².s 24 V 3 A².s 48 V
It on activation	0.2 A.s 24 V 0.3 A.s 48 V
MTBF reliability	4600000 H
Protection type	Internal fuse not accessible for primary circuit Overload protection for secondary circuit, 24 V sensor power supply Overvoltage protection for secondary circuit, 24 V sensor power supply Short-circuit protection for secondary circuit, 24 V sensor power supply
Current at secondary voltage	1.3 A 24 V DC I/O module power supply and processor 4.5 A 3.3 V DC I/O module logic power supply
Maximum power dissipation in W	8.5 W
Status LED	1 LED (green) rack voltage OK
Control type	RESET push-button cold restart
Electrical connection	1 connector 2 pin(s)alarm relay 1 connector 5 pin(s)line supply, protective earth
Maximum cable distance between devices	10 m power supply cable copper 1.5 mm² 15 m power supply cable copper 2.5 mm²
Insulation resistance	>= 10 MOhm primary/ground >= 10 MOhm primary/secondary
Net weight	0.34 kg

Environment

Immunity to microbreaks	1 ms
Dielectric strength	1500 V primary/ground 1500 V primary/secondary
Vibration resistance	3 gn
Shock resistance	30 gn
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
Ambient air temperature for storage	-40…85 °C
Ambient air temperature for operation	-25…70 °C
Relative humidity	5…95 % at 55 °C without condensation
Protective treatment	Conformal coating
Operating altitude	0...2000 m 2000...5000 m with derating factor

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	13.8 cm
Package 1 Width	15.7 cm
Package 1 Length	15.9 cm
Package 1 Weight	485.0 g
Unit Type of Package 2	S04
Number of Units in Package 2	12
Package 2 Height	30.0 cm
Package 2 Width	40.0 cm
Package 2 Length	60.0 cm

Package 2 Weight	6.767 kg

Contractual warranty

Warranty	18 months

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.

How this information helps you

Environmental footprint

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	**457**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	**Pro-active compliance (Product out of EU RoHS legal scope)**
SCIP Number	**41745a42-b2d7-4938-80f8-0738cea8ed1d**
REACh Regulation	**REACh Declaration**
China RoHS Regulation	**China RoHS declaration**

Use Again

Repack and remanufacture

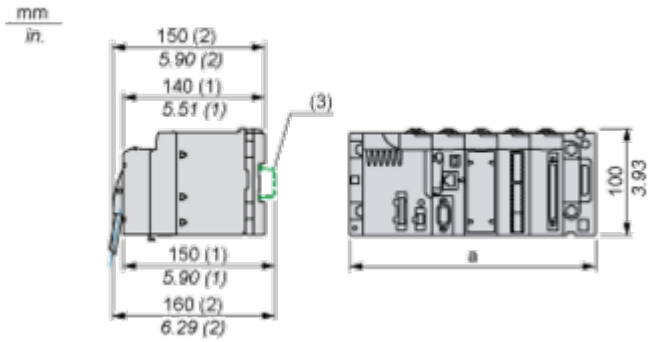
Circularity Profile	**End of Life Information**

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

Dimensions Drawings

Modules Mounted on Racks

Dimensions

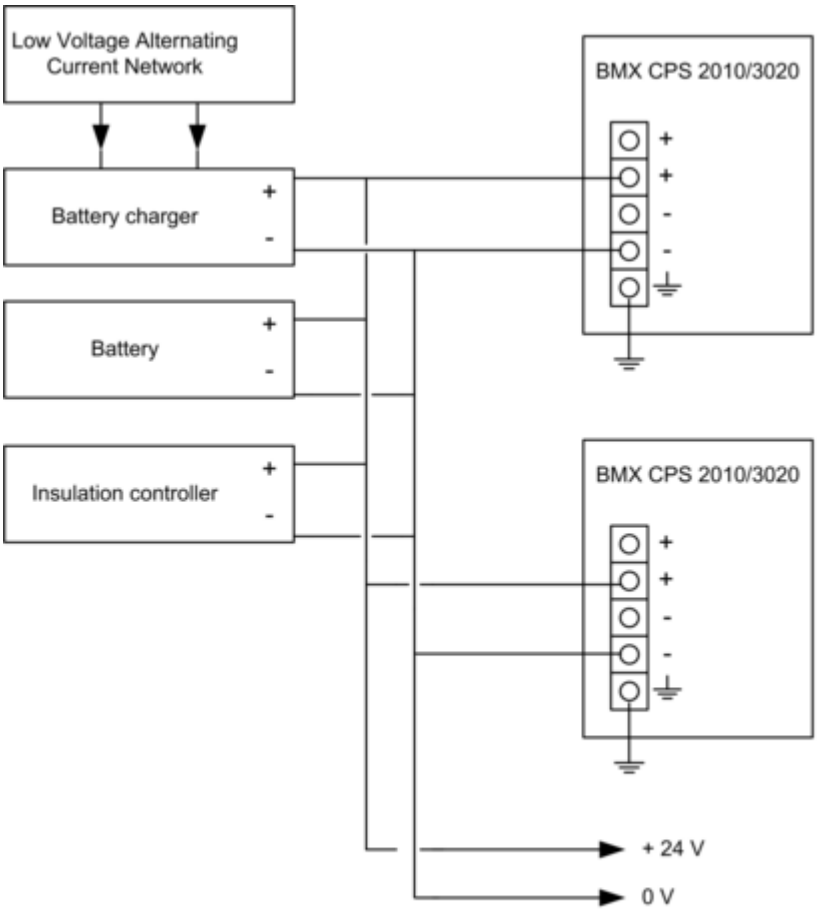


(1) With removable terminal block (cage, screw or spring).
(2) With FCN connector.
(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

Rack references	a in mm	a in in.
BMXXBP0400 and BMXXBP0400H	242.4	09.54
BMXXBP0600 and BMXXBP0600H	307.6	12.11
BMXXBP0800 and BMXXBP0800H	372.8	14.68
BMXXBP1200 and BMXXBP1200H	503.2	19.81

Connections and Schema

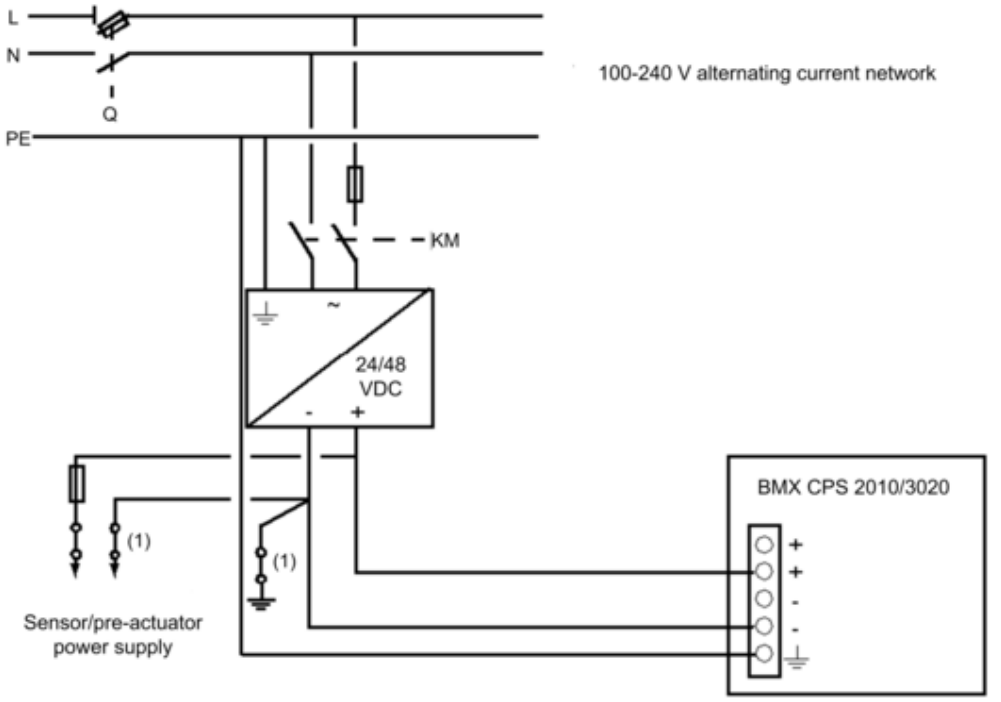
Connection of Direct Current Power Supply Modules to a 24 Vdc or 48 Vdc Floating Direct Current Network



24 VDC floating network for the power supply of sensors, actuators and input/out modules.

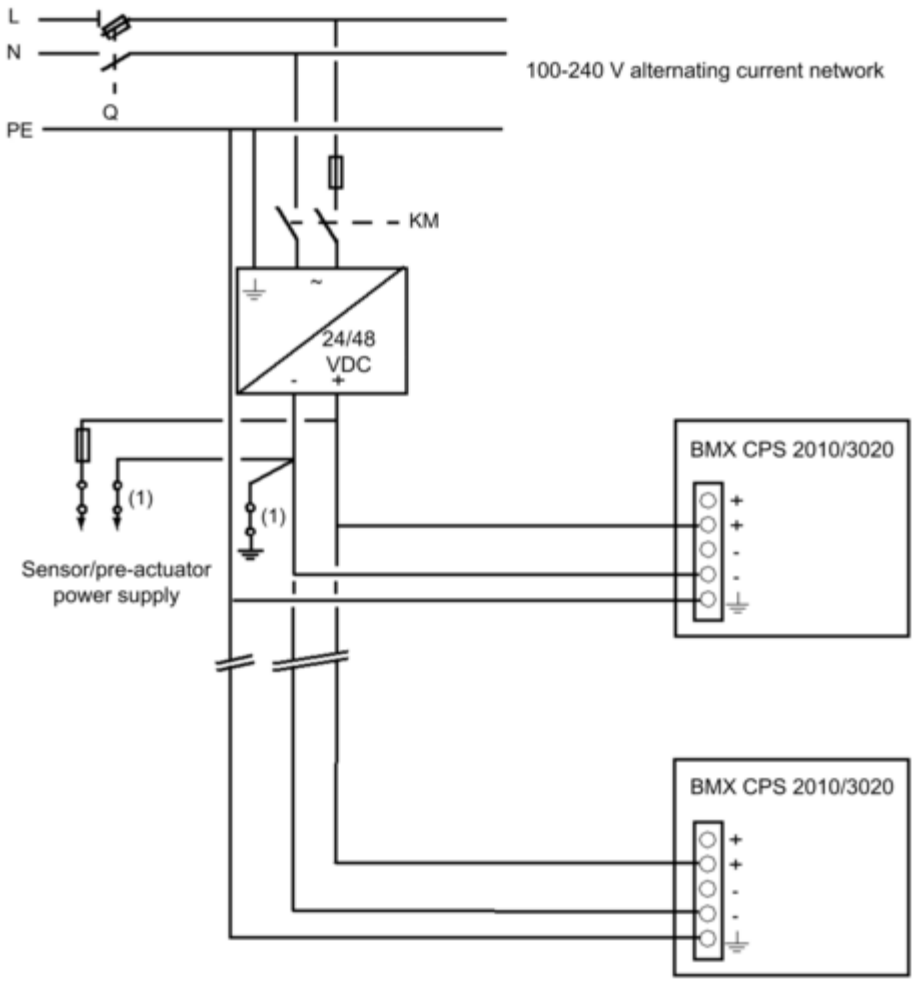
Connection of Direct Current Power Supply Modules to an Alternating Current Network

Connection of a Single Rack PLC Station



Q General isolator
KM Line contactor or circuit breaker
(1) Insulation connector bar for locating grounding errors

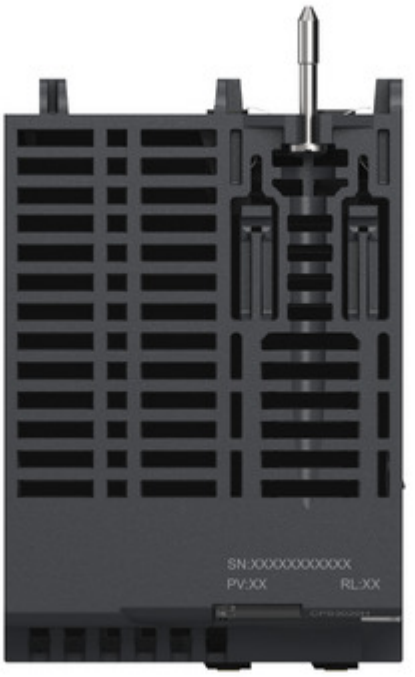
Connection of a Multi-Rack PLC Station

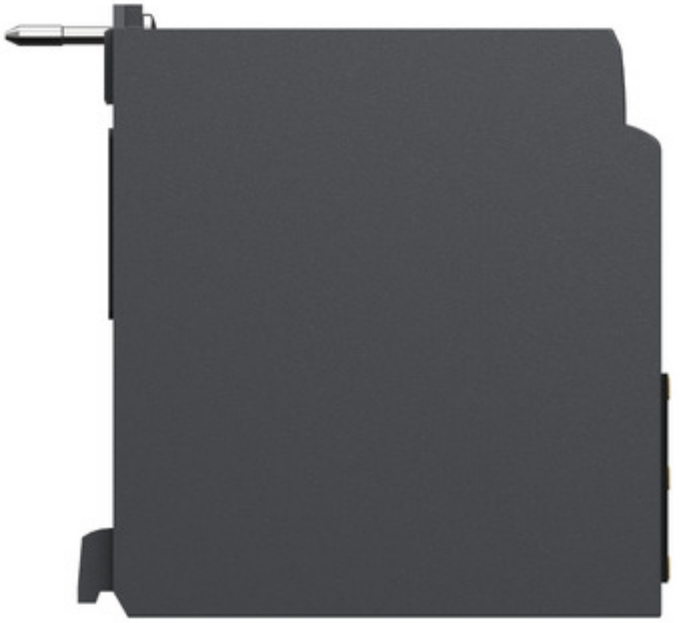


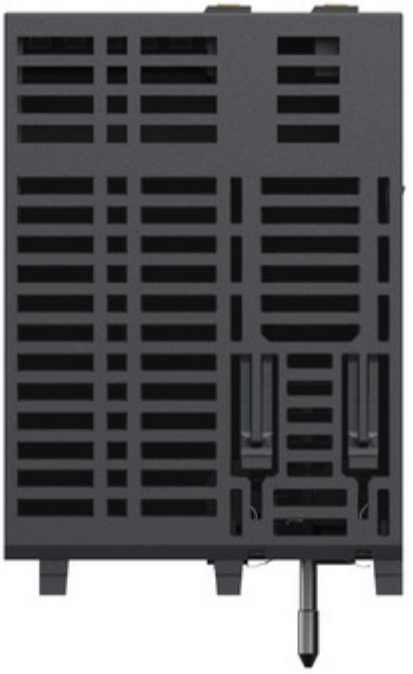
Q General isolator
KM Line contactor or circuit breaker
(1) Insulation connector bar for locating grounding errors

Image of product / Alternate images

Alternative








CPS3020H
Schneider Electric
DC In
24-48V
FG
DC Power
Reset