Product data sheet

Specifications



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

BMXCPS3020H

Product availability: Stock - Normally stocked in distribution facility

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 32…140 °F (0…60 °C) I/O module logic power supply 31.2 W 24 V DC 32…140 °F (0…60 °C) I/O module power supply and processor 11.3 W 3.3 V DC -13…158 °F (-25…70 °C) I/O module logic power supply 23.4 W 24 V DC -13…158 °F (-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 primary circuit Overload protection secondary circuit, 24 V sensor power supply Overvoltage protection secondary circuit, 24 V sensor power supply Short-circuit protection 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 alarm relay 1 connector 5 line supply, protective earth
Maximum cable distance between devices	32.8 ft (10 m) power supply cable copper 0.002 in² (1.5 mm²) 49.2 ft (15 m) power supply cable copper 0.004 in² (2.5 mm²)
Insulation resistance	>= 10 MOhm primary/ground >= 10 MOhm primary/secondary
Net Weight	0.75 lb(US) (0.34 kg)

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

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 ISA S71.04 Gas resistant class 3C4 IEC 60721-3-3 Dust resistant class 3S4 IEC 60721-3-3 Sand resistant class 3S4 IEC 60721-3-3 Salt resistant level 2 IEC 68252 Mold growth resistant class 3B2 IEC 60721-3-3 Fungal spore resistant class 3B2 IEC 60721-3-3 Hazardous location class I division 2
Ambient Air Temperature for Storage	-40…185 °F (-40…85 °C)
Ambient Air Temperature for Operation	-13…158 °F (-25…70 °C)
Relative humidity	5…95 % 131 °F (55 °C) without condensation
Protective treatment	Conformal coating
Operating altitude	0...6561.68 ft (0...2000 m) 2000...5000 m with derating factor

Ordering and shipping details

Category	US1PC3418160
Discount Schedule	PC34
GTIN	3595864029771
Returnability	Yes
Country of origin	US

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	5.433 in (13.800 cm)
Package 1 Width	6.181 in (15.700 cm)

Package 1 Length	6.260 in (15.900 cm)
Package weight(Lbs)	19.189 oz (544.000 g)
Unit Type of Package 2	S04
Number of Units in Package 2	12
Package 2 Height	11.811 in (30.000 cm)
Package 2 Width	15.748 in (40.000 cm)
Package 2 Length	23.622 in (60.000 cm)
Package 2 Weight	16.036 lb(US) (7.274 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 >

Environmental footprint

Total lifecycle Carbon footprint	**457 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**6 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.1 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.2 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**451 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.7 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**41745a42-b2d7-4938-80f8-0738cea8ed1d**
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 Again

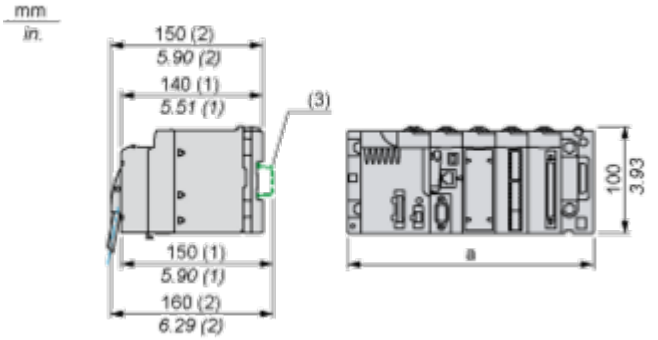
Repack and remanufacture

Recyclability potential, in %	**1**
Circularity Profile	**End of Life Information**
Take-back	**No**

Dimensions Drawings

Modules Mounted on Racks

Dimensions

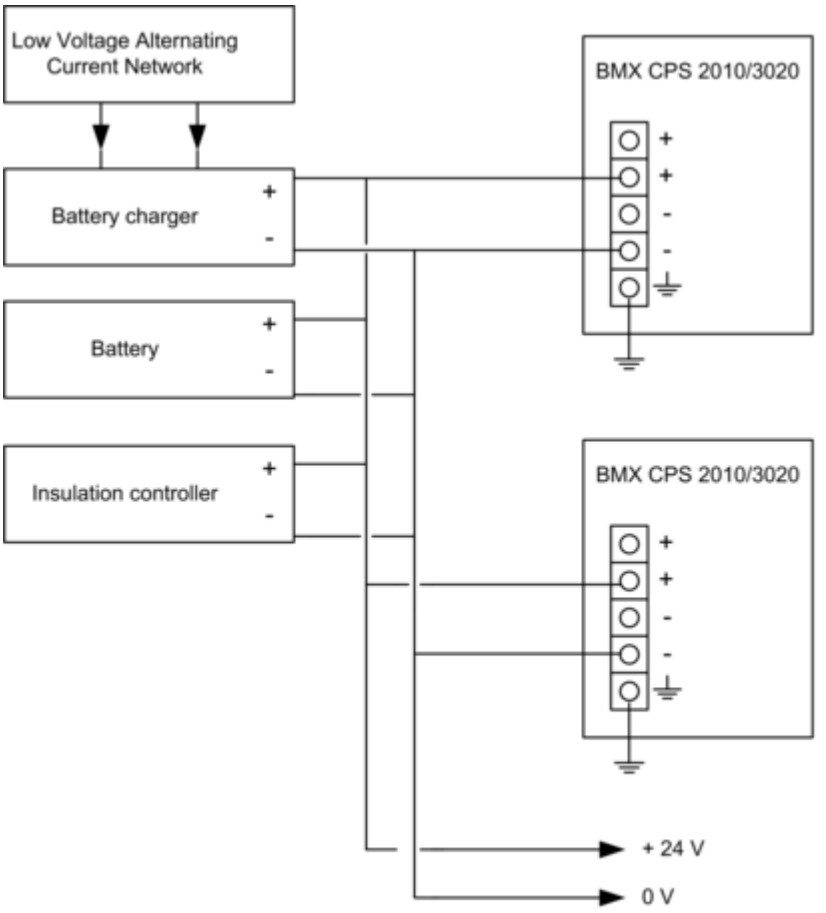


(1) With removable terminal block (cage, screw or spring).
(2) With FCN connector.
(3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

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

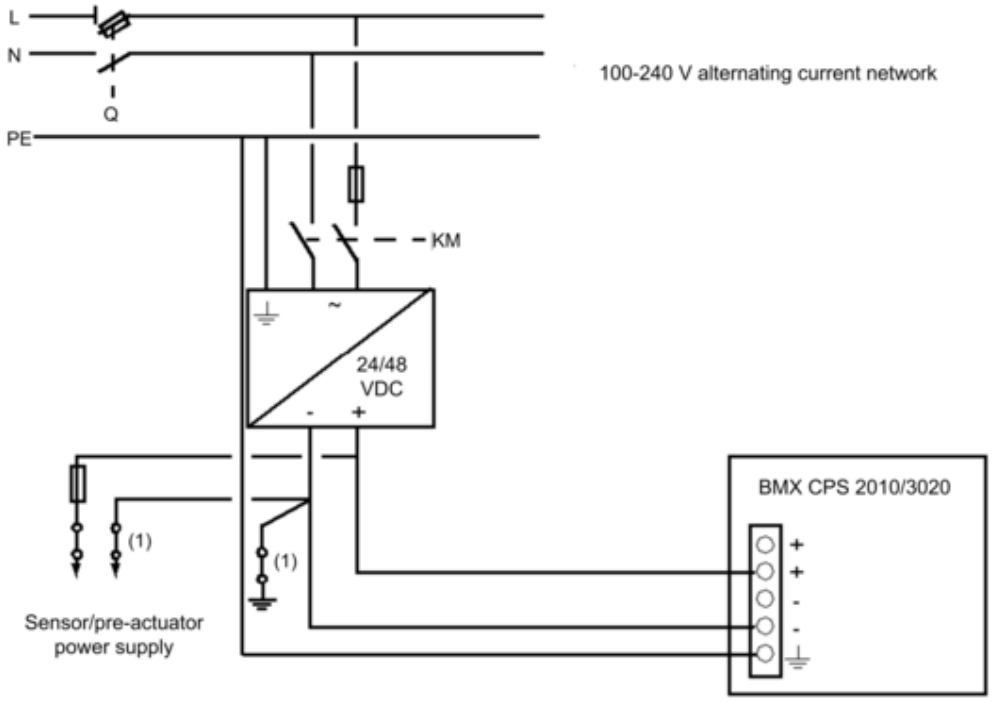
Connection of Direct Current Power Supply Modules to a 24 Vdc or 48 Vdc Floating Direct Current Network



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

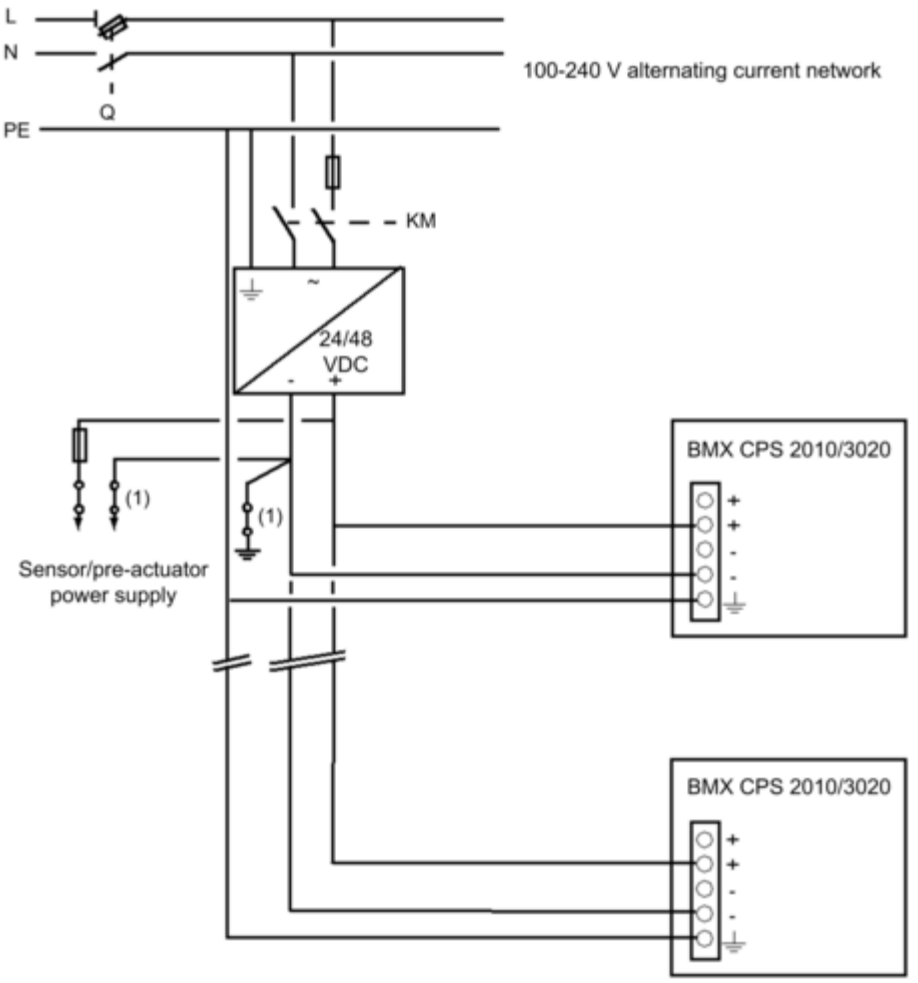
Connection of Direct Current Power Supply Modules to an Alternating Current Network

Connection of a Single Rack PLC Station



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

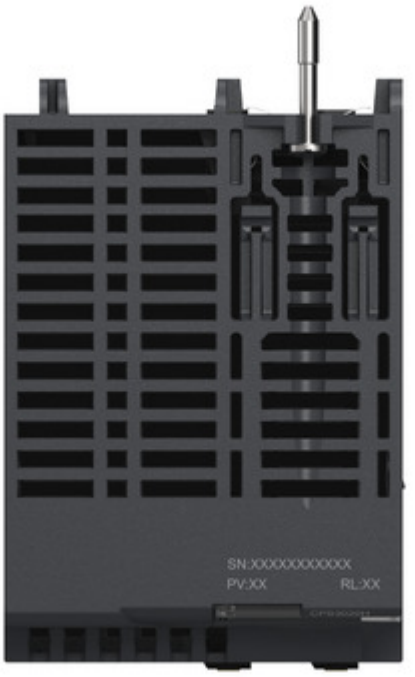
Connection of a Multi-Rack PLC Station



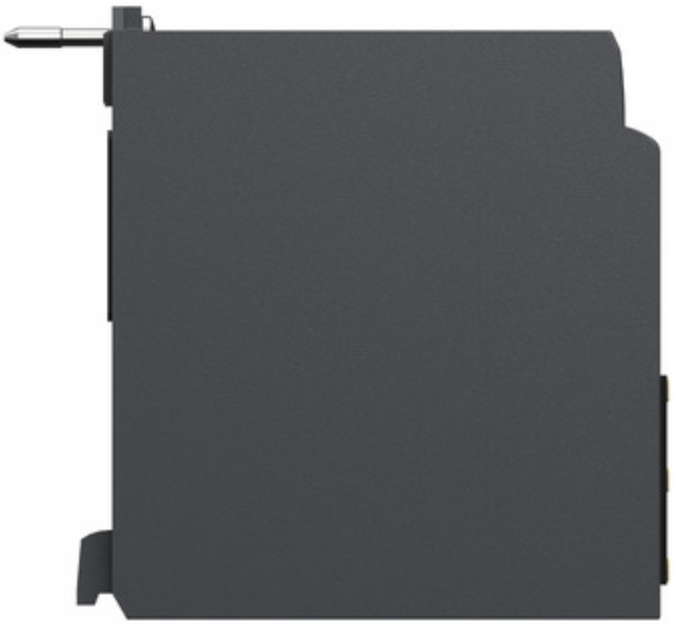
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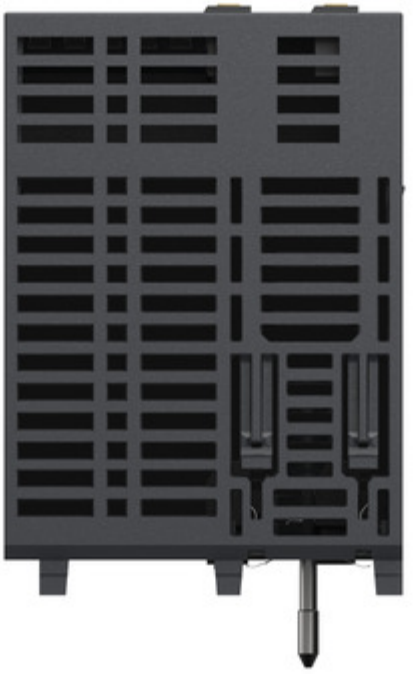
Image of product / Alternate images

Alternative












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