BMXCPS3020H

power supply module X80 - 24..48 V isolated DC - for severe environments





Main	
Range of product	Modicon X80
Product or component type	Power supply module
Backplane compatibility	Not compatible with BMEXBP02
Product specific application	For severe environments
Primary voltage	2448 V isolated
Supply circuit type	DC
Secondary power	15 W 3.3 V DC at 060 °C I/O module logic power supply 31.2 W 24 V DC at 060 °C I/O module power supply and processor 11.3 W 3.3 V DC at -2570 °C I/O module logic power supply 23.4 W 24 V DC at -2570 °C I/O module power supply and processor

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Co	mn	lem	nen	tar	V

Primary voltage limit	1862.4 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 A ² .S 24 V 3 A ² .s 48 V	
It on activation	0.2 A.S 24 V 0.3 A.s 48 V	
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 mm ² 15 m power supply cable copper 2.5 mm ²	
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	EN/IEC 61131-2	
	EN/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, Incartace type 1 and type 2	
	EN/IEC 60079-0	
Environmental characteristic	Gas resistant class Gx conforming to ISA S71.04	
Environmental characteristic	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	-4085 °C	
Ambient air temperature for operation	-2570 °C	
Relative humidity	595 % at 55 °C without condensation	
Protective treatment	Conformal coating	
Operating altitude	02000 m	
	20005000 m with derating factor	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	485.0 g
Package 1 Height	13.8 cm
Package 1 width	15.7 cm
Package 1 Length	15.9 cm
Unit Type of Package 2	S04
Number of Units in Package 2	12
Package 2 Weight	6.767 kg
Package 2 Height	30.0 cm
Package 2 width	40.0 cm
Package 2 Length	60.0 cm

Offer Sustainability

Green Premium product	
☑ REACh Declaration	
Pro-active compliance (Product out of EU RoHS legal scope)	
Yes	
€Yes	
China RoHS Declaration	
Product Environmental Profile	
☑ End Of Life Information	
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	

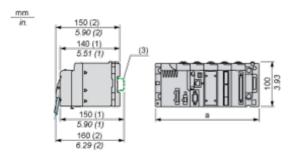
Warranty 18 months

Product data sheet Dimensions Drawings

BMXCPS3020H

Modules Mounted on Racks

Dimensions

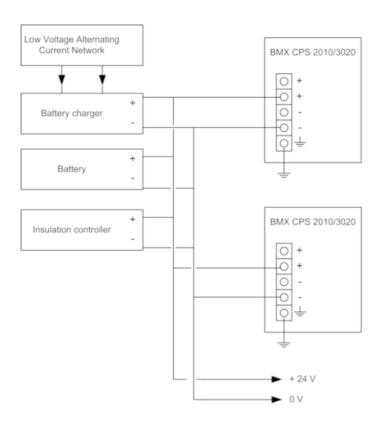


- (1) With removable terminal block (cage, screw or spring).
- (2) With FCN connector.
- (3) On AM1 ED rail: 35 mm wide, 15 mm deep. Only possible with BMXXBP0400/0400H/0600/0600H/0800/0800H rack.

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

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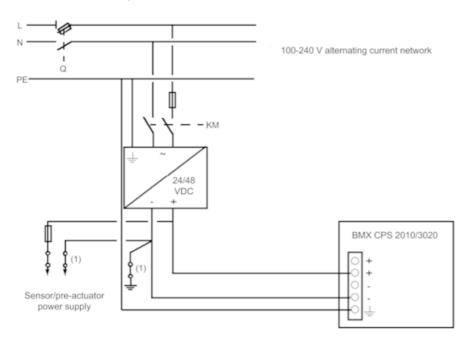
Connection of Direct Current Power Supply Modules to a 24 Vdc or 48 Vdc Floating Direct Current Network



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

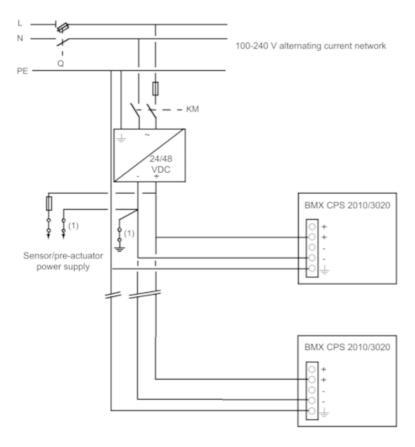


Q General isolator

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