

X20(c)BM12

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B&R Industrial Automation GmbH

B&R Strasse 1

5142 Eggelsberg

Austria

Telephone: +43 7748 6586-0

Fax: +43 7748 6586-26

office@br-automation.com

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Version history

B&R makes every effort to keep documents as current as possible. The most current versions are available for download on the B&R website (www.br-automation.com).

1 General information

1.1 Other applicable documents

For additional and supplementary information, see the following documents.

Other applicable documents

Document name	Title
MAX20	X20 System user's manual

1.2 Coated modules

Coated modules are X20 modules with a protective coating for the electronics component. This coating protects X20c modules from condensation and corrosive gases.

The modules' electronics are fully compatible with the corresponding X20 modules.



For simplification purposes, only images and module IDs of uncoated modules are used in this data sheet.

The coating has been certified according to the following standards:

- Condensation: BMW GS 95011-4, 2x 1 cycle
- Corrosive gas: EN 60068-2-60, method 4, exposure 21 days



1.3 Order data

Order number	Short description	Figure
	Bus modules	
X20BM12	X20 bus module, 240 VAC keyed, internal I/O power supply connected through	
X20cBM12	X20 bus module, coated, 240 VAC keyed, internal I/O power supply connected through	

Table 1: X20BM12, X20cBM12 - Order data

1.4 Module description

The bus module serves as the base for all 240 VAC X20 I/O modules. The internal I/O supply is interconnected.

- Bus module for 240 VAC I/O modules
- The internal I/O supply is interconnected
- 240 V coding for bus module, electronic module and terminal block

2 Technical description

2.1 Technical data

Order number	X20BM12		X20cBM12
Short description			
Bus module	Bus module, 240 VAC keyed, internal I/O power supply connected through		
General information			
Power consumption			
Bus	0.13 W		
Internal I/O	-		
Additional power dissipation caused by actuators (resistive) [W]	-		
Certifications			
CE	Yes		
UKCA	Yes		
ATEX	Zone 2, II 3G Ex nA nC IIA T5 Gc IP20, Ta (see X20 user's manual) FTZÚ 09 ATEX 0083X		
UL	cULus E115267 Industrial control equipment		
HazLoc	cCSAus 244665 Process control equipment for hazardous locations Class I, Division 2, Groups ABCD, T5		
DNV	Temperature: B (0 to 55°C) Humidity: B (up to 100%) Vibration: B (4 g) EMC: B (bridge and open deck)		
CCS	Yes		-
LR		ENV1	
KR		Yes	
ABS		Yes	
BV		EC33B Temperature: 5 - 55°C Vibration: 4 g EMC: Bridge and open deck	
KC	Yes		-
I/O power supply			
Nominal voltage	24 VDC		
Permissible contact load	10 A		
Operating conditions			
Mounting orientation			
Horizontal	Yes		
Vertical	Yes		
Installation elevation above sea level			
0 to 2000 m	No limitation		
>2000 m	Reduction of ambient temperature by 0.5°C per 100 m		
Degree of protection per EN 60529	IP20		
Ambient conditions			
Temperature			
Operation			
Horizontal mounting orientation	-25 to 60°C		
Vertical mounting orientation	-25 to 50°C		
Derating	-		
Storage	-40 to 85°C		
Transport	-40 to 85°C		
Relative humidity			
Operation	5 to 95%, non-condensing	Up to 100%, condensing	
Storage	5 to 95%, non-condensing		
Transport	5 to 95%, non-condensing		
Mechanical properties			
Pitch	12.5 ^{+0.2} mm		

Table 2: X20BM12, X20cBM12 - Technical data

2.2 Voltage routing

