

X20BM15

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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 (<u>www.br-automation.com</u>).

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 Order data

Order number	Short description	Figure
	Bus modules	
X20BM15	X20 bus module, with node number switch, 24 VDC keyed, internal I/O power supply connected through	

Table 1: X20BM15 - Order data

1.3 Module description

The bus modules have node number switches that can be used to set permanent addresses. Placing one of these modules at the beginning of an X20 block ensures a unique address. The addresses of subsequent modules are automatically set in ascending order starting at this address. This simple feature greatly increases the flexibility of applications.

Another advantage: Addresses can be set independently of which specific I/O modules are used. All that is required are the respective bus modules. This provides logistical advantages with respect to cost and the variety of parts.

- The bus module is the base for all X20 24 VDC I/O modules
- The internal I/O supply is interconnected
- Manual node number assignment
- Independent of electronics module
- · Manual and automatic addressing can be combined as desired

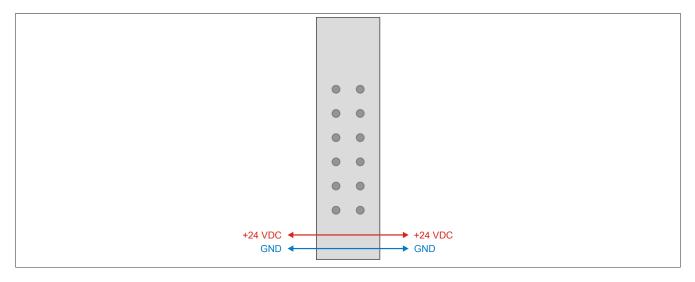
2 Technical description

2.1 Technical data

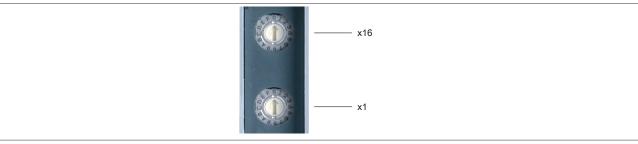
Order number	X20BM15
Short description	
Bus module	Bus module, with node number switch, 24 VDC keyed, internal I/O power supply connected through
General information	
Power consumption	
Bus	0.13 W
Internal I/O	· ·
Additional power dissipation caused by actua-	
tors (resistive) [W]	
Certifications	
CE	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
D111/	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
DV	Temperature: 5 - 55°C
	Vibration: 4 g
	EMC: Bridge and open deck
кс	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	IP20
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
Storage	5 to 95%, non-condensing
Transport	5 to 95%, non-condensing
Mechanical properties	
Pitch	12.5* ^{0,2} mm

Table 2: X20BM15 - Technical data

2.2 Voltage routing



2.3 Node number switches



The X2X Link address of the module is set using the node number switches (0x01 to 0xFD).

Setting node number 0x00 causes the X2X Link address to be assigned automatically.

2.4 Bus modules with node number switches

Symbols are printed on the locking lever of bus modules with node number switches. This provides a way to see from outside that the X20 system mounted in this slot is using node number switches.

