

X20BB81

Data sheet 2.39 (February 2025)



Publishing information

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

Disclaimer

All information in this document is current as of its creation. The contents of this document are subject to change without notice. B&R Industrial Automation GmbH assumes unlimited liability in particular for technical or editorial errors in this document only (i) in the event of gross negligence or (ii) for culpably inflicted personal injury. Beyond that, liability is excluded to the extent permitted by law. Liability in cases in which the law stipulates mandatory unlimited liability (such as product liability) remains unaffected. Liability for indirect damage, consequential damage, business interruption, loss of profit or loss of information and data is excluded, in particular for damage that is directly or indirectly attributable to the delivery, performance and use of this material.

B&R Industrial Automation GmbH notes that the software and hardware designations and brand names of the respective companies used in this document are subject to general trademark, brand or patent protection.

Hardware and software from third-party suppliers referenced in this document is subject exclusively to the respective terms of use of these third-party providers. B&R Industrial Automation GmbH assumes no liability in this regard. Any recommendations made by B&R Industrial Automation GmbH are not contractual content, but merely non-binding information for which no liability is assumed. When using hardware and software from third-party suppliers, the relevant user documentation of these third-party suppliers must additionally be consulted and, in particular, the safety guidelines and technical specifications contained therein must be observed. The compatibility of the products from B&R Industrial Automation GmbH described in this document with hardware and software from third-party suppliers is not contractual content unless this has been separately agreed in individual cases; in this respect, warranty for such compatibility is excluded in any case, and it is the sole responsibility of the customer to verify this compatibility in advance.

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).

2 X20BB81 Data sheet V 2.39

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

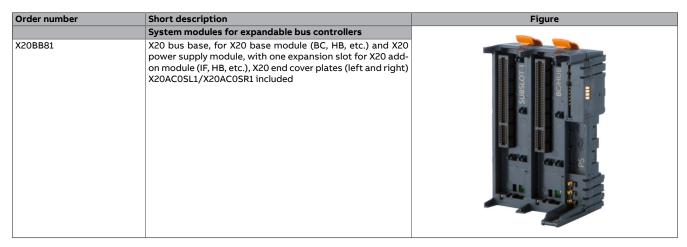


Table 1: X20BB81 - Order data

1.3 Module description

The bus module has an expansion slot. The following modules are used on this module:

- Base module (BC, HB, etc.)
- Add-on module (IF, HB, etc.)
- · Supply module

The left and right end cover plates are included in delivery.

• Bus base with one expansion slot



Information:

The bus controller must be placed in the rightmost slot.

X20BB81 Data sheet V 2.39 3

2 Technical description

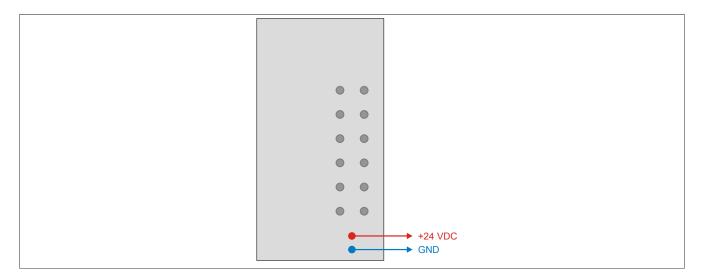
2.1 Technical data

Order number	X20BB81
Short description	
Bus module	Bus base with one expansion slot
General information	
Power consumption	
Bus	0.50 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
	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
ABS	Yes
BV	EC33B
	Temperature: 5 - 55°C
	Vibration: 4 g
KC	EMC: Bridge and open deck Yes
I/O power supply	165
	24 VDC
Nominal voltage Permissible contact load	10 A
	10 A
Operating conditions	
Mounting orientation	Vee
Horizontal Vertical	Yes Yes
Installation elevation above sea level	<u>tes</u>
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	25 to 60°C
Horizontal mounting orientation	-25 to 60°C
Vertical mounting orientation	-25 to 50°C
Derating	-
Storage	-40 to 85°C
Transport Published Published	-40 to 85°C
Relative humidity	5 to 050/
Operation	5 to 95%, non-condensing
Storage	5 to 95%, non-condensing
Transport	5 to 95%, non-condensing
Mechanical properties	
Note	Left and right X20 end cover plates included in delivery
Pitch	62.5 ^{+0.2} mm

Table 2: X20BB81 - Technical data

4 X20BB81 Data sheet V 2.39

2.2 Voltage routing



X20BB81 Data sheet V 2.39 5