

X20BB77

Data sheet
1.13 (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).

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
	System modules for Compact-S PLCs	
X20BB77	X20 Compact-S bus base, for Compact-S PLC and Compact-S PLC power supply module, base for integrated RS232 and CAN bus interface, 2 slots for X20 interface modules, X20 connection, X20 end cover plates (left and right) X20AC0SL1/X20AC0SR1 included	

Table 1: X20BB77 - Order data

1.3 Module description

The bus module is a base for all X20 Compact-S controllers with the designation X20CP048x. It is equipped with 2 slots for X20 interface modules.

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

- Base for X20 Compact-S controllers
- 2 slots for X20 interface modules
- RS232 connection
- CAN bus connection
- Integrated terminating resistor for CAN bus



Information:

Compact-S controller must be inserted into the slot on the far right.

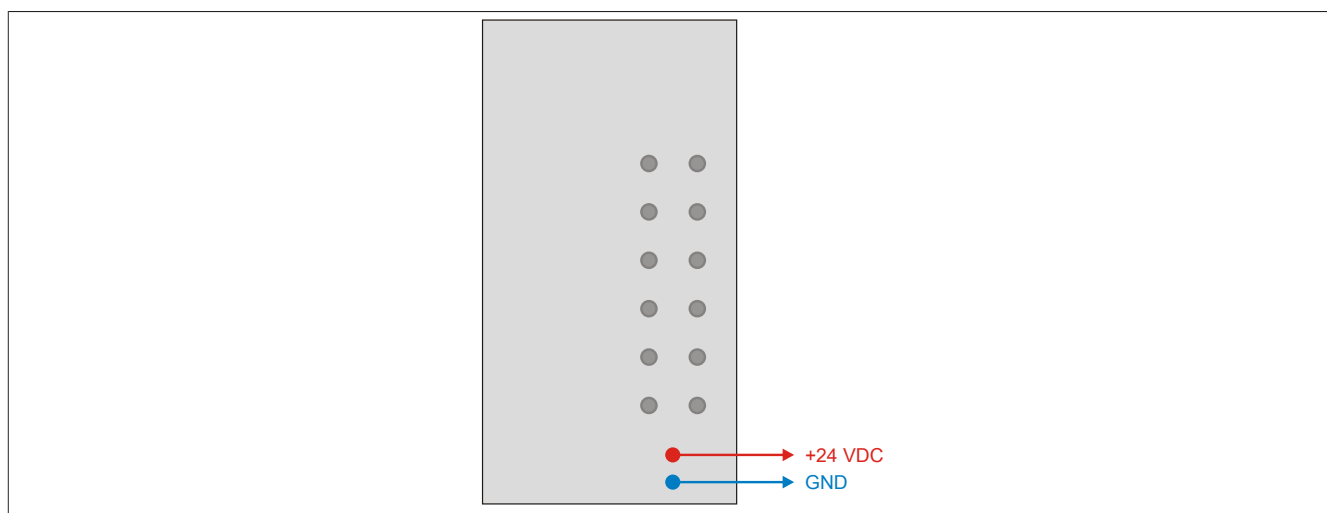
2 Technical description

2.1 Technical data

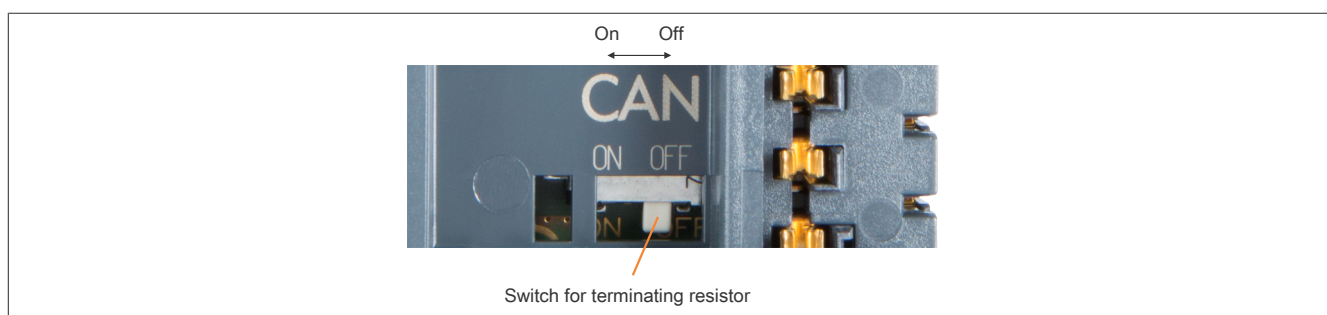
Order number	X20BB77
Short description	
Bus module	X20 Compact-S PLC base - backplane for Compact-S PLC and Compact-S PLC power supply module and 2 X20 interface modules
Interfaces	1x RS232 connection, 1x CAN bus connection
General information	
B&R ID code	0xEB05
Power consumption	
Bus	1.17 W
Internal I/O	-
Additional power dissipation caused by actuators (resistive) [W]	-
Certifications	
CE	Yes
UKCA	Yes
UL	cULus E115267
DNV	Industrial control equipment 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 EMC: Bridge and open deck
I/O power supply	
Nominal voltage	24 VDC
Permissible contact load	10 A
Electrical properties	
Electrical isolation	Bus, CAN bus and RS232 not isolated from each other
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
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	87.5 ^{+0.2} mm

Table 2: X20BB77 - Technical data

2.2 Voltage routing



2.3 Terminating resistor for CAN bus



The bus module has an integrated CAN bus terminating resistor. The terminating resistor is switched on or off with a switch. An enabled terminating resistor is indicated on the power supply module by LED "T".