X20IF2792

Data sheet
2.30 (February 2025)



Translation of the original documentation

Publishing information

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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 Order data

Order number	Short description	Figure
	X20 interface module communication	
X20IF2792	X20 interface module, 1 CAN bus interface, max. 1 Mbit/s, electrically isolated, 1 X2X Link master interface, electrically isolated, order 1x terminal block TB2105 and 1x terminal block TB704 separately!	
	Required accessories	
	Terminal blocks	
0TB2105.9010	Accessory terminal block, 5-pin, screw clamp terminal block 2.5 mm²	
0TB2105.9110	Accessory terminal block, 5-pin, push-in terminal block 2.5 mm²	
0TB704.9	Accessory terminal block, 4-pin, screw clamp terminal block 2.5 mm²	
0TB704.91	Accessory terminal block, 4-pin, push-in terminal block 2.5 mm²	

Table 1: X20IF2792 - Order data

1.3 Module description

The interface module is used for application-specific expansion of the X20 controllers. It is equipped with an X2X Link interface and a CAN bus interface.

- X2X Link connection
- CAN bus connection
- Integrated terminating resistor

Information:

This module does not support CAN RTR messages with extended CAN identifiers (29-bit) (memory/performance bottleneck).

2 Technical description

2.1 Technical data

Order number	X20IF2792
Short description	
Communication module	1x X2X Link master, 1x CAN bus
General information	
B&R ID code	0x1F26
Status indicators	Module status, data transfer, terminating resistor
Diagnostics	
Module status	Yes, using LED status indicator
Data transfer	Yes, using LED status indicator
Terminating resistor	Yes, using LED status indicator
Power consumption	1.25 W (rev. <E0: 1.51 W)
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
KC	Yes
Interfaces	
Interface IF1	
Fieldbus	X2X Link master
Variant	4-pin male multipoint connector
Number of stations	Max. 253
Internal bus power supply	No
Network topology	Line
Distance between 2 stations	Max. 100 m
Bus terminating resistor	Internal
Interface IF2	
Signal	CAN bus [1)]
Variant	5-pin male multipoint connector
Max. distance	1000 m
Transfer rate	Max. 1 Mbit/s
Terminating resistor	Integrated in module
Controller	SJA 1000
Electrical properties	
Electrical isolation	PLC isolated from X2X Link (IF1) and CAN (IF2) and interfaces 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

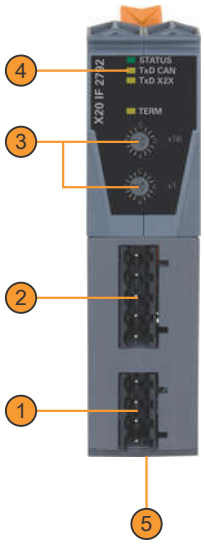
Table 2: X20IF2792 - Technical data

Order number	X20IF2792
Relative humidity	
Operation	5 to 95%, non-condensing
Storage	5 to 95%, non-condensing
Transport	5 to 95%, non-condensing
Mechanical properties	
Note	Order 1x terminal block TB704 and 1x terminal block TB2105 separately.
Slot	In the X20 PLC

Table 2: X20IF2792 - Technical data

1) This CAN bus interface can be configured as a CANopen master in Automation Studio 3.0 and later.

2.2 Operating and connection elements



1	IF1 - X2X Link	2	IF2 - CAN bus
3	Node number switches	4	LED status indicators
5	Switch for terminating resistor (CAN bus) on the bottom of the module	6	-

2.2.1 LED status indicators

Figure	LED	Color	Status	Description
	STATUS	Green	On	Interface module active
		Red	On	The controller is starting up.
	TxD CAN	Yellow	On	The module is sending data via the CAN bus interface
	TxD X2X	Yellow	On	Module sending data via the X2X Link interface
	TERM	Yellow	On	The integrated terminating resistor for the CAN bus interface is turned on

2.2.2 CAN bus node number



The node number for the CAN bus interface (IF2) is set with the two hex switches.

2.2.3 X2X Link interface (IF1)

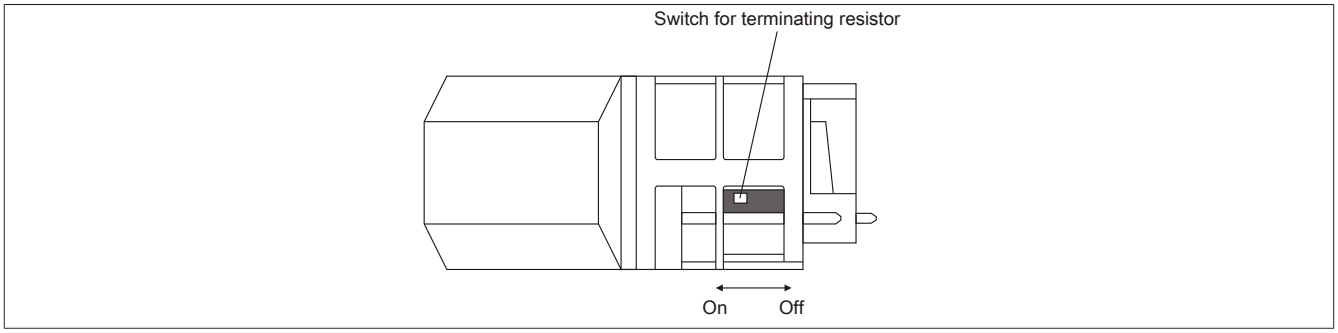
Interface	Pinout		
	**Terminal**	**Function**	
	1	X2X	
	2	X2X⊥	
	3	X2X\	
	4	SHLD	Shield
4-pin male multipoint connector			

2.2.4 CAN bus interface

The interface is a 5-pin multipoint connector. Terminal block 0TB2105 must be ordered separately.

Interface	Pinout		
	**Terminal**	**Function**	
	1	CAN⊥	CAN ground
	2	CAN_L	CAN low
	3	SHLD	Shield
	4	CAN_H	CAN high
	5	NC	
5-pin male multipoint connector			

2.2.5 Terminating resistor



The interface module has an integrated terminating resistor for the CAN bus interface. It can be turned on and off with a switch on the bottom of the housing. An active terminating resistor is indicated by the "TERM" LED.

3 Commissioning

3.1 Firmware

The module comes with preinstalled firmware. The firmware is part of the Automation Studio project. The module is automatically brought up to this level.

A hardware upgrade must be performed to upgrade the firmware included in Automation Studio (see Help "Project management - Workspace - Upgrades" in Automation Help).