X20IF2772

1 General information

The interface module can be used to expand the X20 CPU for specific applications. It is equipped with 2 CAN bus interfaces.

- Dual CAN bus connection
- Integrated terminating resistors

Information:

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

2 Order data

Model number	Short description	Figure
	X20 interface module communication	
X20IF2772	X20 interface module, 2 CAN bus interfaces, max. 1 Mbit/s, electrically isolated, order 2x TB2105 terminal block separately	
	Required accessories	
	Terminal blocks	
0TB2105.9010	Accessory terminal block, 5-pin, screw clamps 2.5 mm²	
0TB2105.9110	Accessory terminal block, 5-pin, cage clamp terminal block 2.5 mm²	

Table 1: X20IF2772 - Order data

3 Technical data

Model number	X20IF2772
Short description	
Communication module	2x CAN bus
General information	
B&R ID code	0x1F25
Status indicators	Module status, data transfer, terminating resistor
Diagnostics	
Module status	Yes, using status LED
Data transfer	Yes, using status LED
Terminating resistor	Yes, using status LED
Power consumption	1.2 W
Additional power dissipation caused by actuators (resistive) [W]	-
Certifications	
CE	Yes
KC	Yes
EAC	Yes
UL	cULus E115267 Industrial control equipment
HazLoc	cCSAus 244665 Process control equipment for hazardous locations Class I, Division 2, Groups ABCD, T5
ATEX	Zone 2, II 3G Ex nA nC IIA T5 Gc IP20, Ta (see X20 user's manual) FTZÚ 09 ATEX 0083X
DNV GL	Temperature: **B** (0 - 55°C) Humidity: **B** (up to 100%) Vibration: **B** (4 g) EMC: **B** (bridge and open deck)
LR	ENV1
Interfaces	
Interface IF1	
Signal	CAN bus [1)]
Variant	5-pin male multipoint connector
Max. distance	1000 m
Transfer rate	Max. 1 Mbit/s
Terminating resistor	Integrated in the module
Controller	SJA 1000
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 the module
Controller	SJA 1000
Electrical properties	
Electrical isolation	PLC isolated from CAN (IF1 and IF2) and interfaces from each other
Operating conditions	
Mounting orientation	
Horizontal	Yes
Vertical	Yes
Installation elevation above sea level	
0 to 2000 m	No limitations
>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	Order 2x TB2105 terminal blocks separately
Slot	In X20 CPU

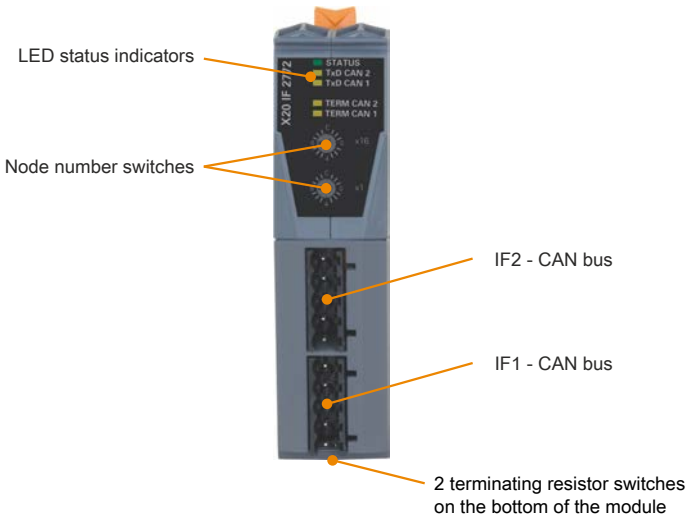
Table 2: X20IF2772 - Technical data

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

4 LED status indicators

Figure	LED	Color	Status	Description
	STATUS	Green	On	Interface module active
		Red	On	CPU starting up
	TxD CAN 1	Yellow	On	The module is sending data via the CAN bus interface (IF1)
	TxD CAN 2	Yellow	On	The module is sending data via the CAN bus interface (IF2)
	TERM CAN 1	Yellow	On	The integrated terminating resistor for the CAN bus interface (IF1) is turned on
	TERM CAN 2	Yellow	On	The integrated terminating resistor for the CAN bus interface (IF2) is turned on

5 Operating and connection elements



6 CAN bus node number

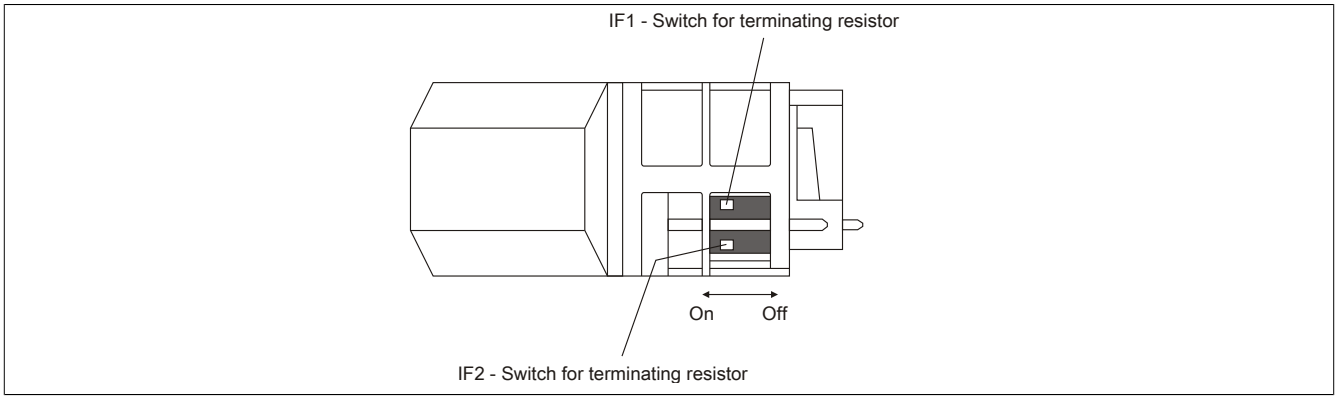
The node number for the CAN bus interfaces is set with the two hex switches.

7 Interfaces CAN bus 1 and CAN bus 2 (IF1 and IF2)

Both interfaces feature a 5-pin multipoint plug. The 0TB2105 terminal block must be ordered separately.

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

8 Terminating resistor



Two terminating resistors are integrated in the interface module. The respective resistor can be turned on and off with a switch on the bottom of the housing. An active terminating resistor is indicated by the "TERM CAN 1" or "TERM CAN 2".

9 Firmware

The module comes with preinstalled firmware. The firmware is a component of Automation Studio. The module is updated to this version automatically.

To update the firmware contained in Automation Studio, a hardware upgrade must be performed (see "Project management - Workspace - Upgrades" in Automation Help).