

# X20(c)IF1072

## 1 General information

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

- 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 Coated modules

Coated modules are X20 modules with a protective coating for the electronics component. This coating protects X20c modules from condensation and corrosive gases.

The modules' electronics are fully compatible with the corresponding X20 modules.

**For simplification purposes, only images and module IDs of uncoated modules are used in this data sheet.**

The coating has been certified according to the following standards:

- Condensation: BMW GS 95011-4, 2x 1 cycle
- Corrosive gas: EN 60068-2-60, method 4, exposure 21 days



## 3 Order data


Model number	Short description	Figure
	<b>X20 interface module communication</b>	
X20IF1072	X20 interface module, 1 CAN bus interface, max. 1 Mbit/s, electrically isolated, order 1x TB2105 terminal block separately	
X20clF1072	X20 interface module, coated, 1 CAN bus interface, max. 1 Mbit/s, electrically isolated, order 1x TB2105 terminal block separately	
	<b>Required accessories</b>	
	<b>Terminal blocks</b>	
0TB2105.9010	Accessory terminal block, 5-pin, screw clamps 2.5 mm <sup>2</sup>	
0TB2105.9110	Accessory terminal block, 5-pin, cage clamp terminal block 2.5 mm <sup>2</sup>	

Table 1: X20IF1072, X20clF1072 - Order data


## 4 Technical data

Model number	X20IF1072	X20cIF1072
Short description		
Communication module	1x CAN bus	
General information		
B&R ID code	0x1F20	0xE506
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	0.79 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) FTZÜ 09 ATEX 0083X	
DNV GL	Temperature: <b>B</b> (0 - 55°C) Humidity: <b>B</b> (up to 100%) Vibration: <b>B</b> (4 g) EMC: <b>B</b> (bridge and open deck)	
LR	ENV1	-
Interfaces		
Interface IF1		
Signal	CAN bus <sup>1)</sup>	
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)	
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	Up to 100%, condensing
Storage	5 to 95%, non-condensing	
Transport	5 to 95%, non-condensing	
Mechanical properties		
Note	Order 1x TB2105 terminal block separately	
Slot	In X20 CPU	

Table 2: X20IF1072, X20cIF1072 - Technical data

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

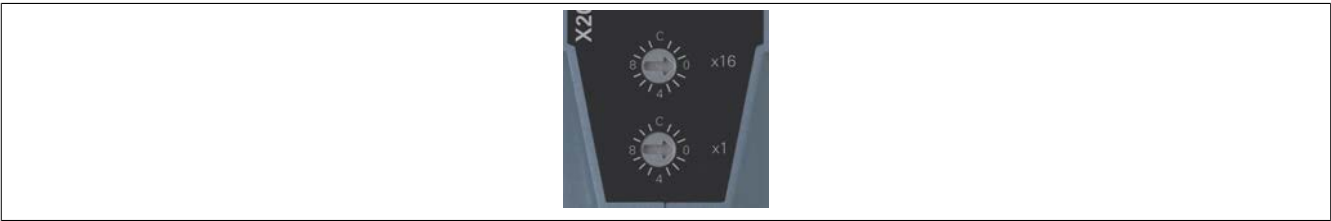
5 LED status indicators

Figure	LED	Color	Status	Description
	STATUS	Green	On	Interface module active
		Red	On	CPU starting up
	TxD	Yellow	On	The module is sending data via the CAN bus interface
	TERM	Yellow	On	Terminating resistor integrated in the module switched on

6 Operating and connection elements



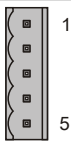
7 Node number switch



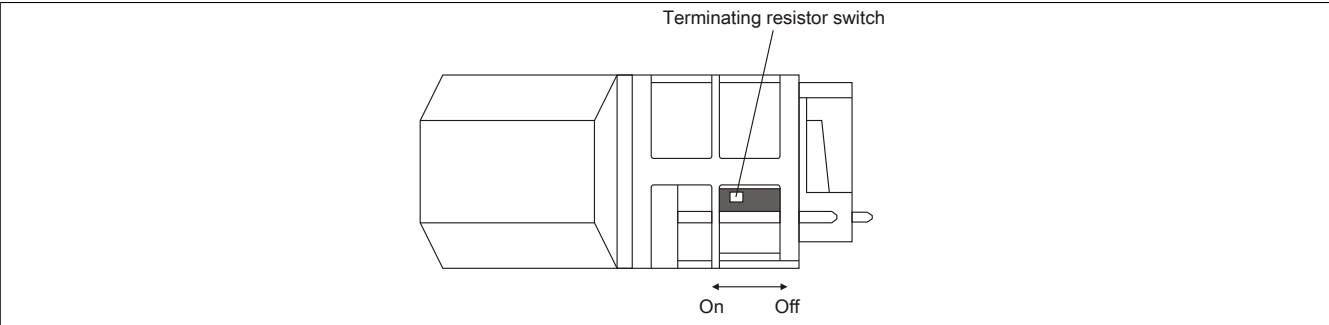
The node number for the interface is set with the two hex switches.

## 8 CAN bus interface

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

Interface		Pinout	
	5-pin male multipoint connector	Terminal	Function
		1	CAN <sub>⊥</sub> CAN ground
		2	CAN <sub>-</sub> L CAN low
		3	SHLD Shield
		4	CAN <sub>+</sub> H CAN high
		5	NC

## 9 Terminating resistor



A terminating resistor is integrated in the interface module. It can be switched on or off with a switch on the bottom of the housing. A switched-on terminating resistor is indicated by LED "TERM".

## 10 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).