X20IF1020

1 General information

The interface module can be used to expand the X20 CPU for specific applications. It is equipped with an RS232 interface.

• The RS232 interface can be configured as an online interface

2 Order data

Model number	Short description	Figure
	X20 interface module communication	
X20IF1020	X20 interface module, 1 RS232 interface, max. 115.2 kbit/s, electrically isolated	and the second
	Optional accessories	a Walland
	Others	0001
0G0001.00-090	PC - PLC/PW cable, RS232, online cable	

Table 1: X20IF1020 - Order data

3 Technical data

Model number	X20IF1020				
Short description					
Communication module	1x RS232				
General information					
B&R ID code	0x1F27				
Status indicators	Module status, data transfer				
Diagnostics					
Module status	Voc. using status LED				
	Yes, using status LED				
Data transfer	Yes, using status LED				
Power consumption	0.35 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)				
DIV GE	Humidity: B (up to 100%)				
	Vibration: B (4 g)				
	EMC: B (bridge and open deck)				
LR	ENV1				
KR	Yes				
Interfaces					
Interface IF1					
Signal	R\$232				
Variant	9-pin male DSUB connector				
Max. distance	900 m				
Transfer rate	Max. 115.2 kbit/s				
Network-capable	No				
FIFO	16 bytes in transmit and receive direction				
Handshake lines	RTS, CTS				
Controller	UART type 16C550 compatible				
Data formats					
Data bits	5 to 8				
Parity	Yes / No / Even / Odd				
Stop bits	1 or 2				
Electrical properties					
Electrical isolation	PLC isolated from RS232 (IF1)				
Operating conditions					
Mounting orientation					
Horizontal	Yes				
Vertical	Yes				
	;ttp				
Installation elevation above sea level	Na limitationa				
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					
Slot	In X20 CPU				

Table 2: X20IF1020 - Technical data

4 LED status indicators

Figure	LED	Color	Status	Description	
	STATUS	Green	On	Interface module active	
		Red	On	CPU starting up	
	RxD	Yellow	On	The module receives data via the RS232 interface	
X20 IF 1020	TxD	Yellow	On	The module sends data via the RS232 interface	

5 Operating and connection elements



6 RS232 interface (IF1)

Interface	Pinout		
	Pin	RS232	
	1	NC	
	2	RxD	Receive signal
6 (°°) 1	3	TxD	Transmit signal
	4	NC	
9 0 0	5	GND	Ground
5	6	NC	
9-pin male DSUB connector	7	RTS	Request To Send
	8	CTS	Clear To Send
	9	NC	

7 Firmware

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

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