4PP065.IF23-1

1 Order data

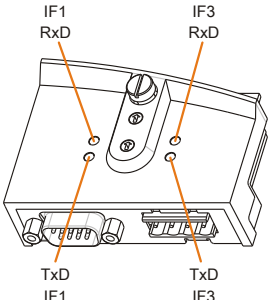| Model number	Short description	Figure
	Interface modules	
4PP065.IF23-1	PP65 interface module, 1 RS232 interface, 1 RS485/RS422 interface, RS422 electrically isolated, RS485 electrically isolated and network-capable, RS232/RS485/RS422 in one connector, 1 CAN interface electrically isolated and network-capable, order 0TB704 terminal block separately	
	Optional accessories	
	Infrastructure components	
0AC913.93	Bus adapter, CAN bus, 2 CAN bus interfaces, including 03 m attachment cable (TB704)	
	Others	
0G0001.00-090	PC - PLC/PW cable, RS232, online cable	
	Terminal blocks	
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: 4PP065.IF23-1 - Order data

2 Technical data

Model number	4PP065.IF23-1
Short description	
Communication module	1x RS232/RS422/RS485, 1x CAN
General information	
B&R ID code	0xB0BB
Status indicators	
RS232 and CAN bus	Data transfer per interface
RS485/RS422	No display
Diagnostics	
Data transfer	Yes, using LED status indicators
Electrical isolation	
IF1 - IF2	Yes
IF1 - IF3	Yes
IF2 - IF3	Yes
PLC - IF1	No
PLC - IF2	Yes
PLC - IF3	Yes
Certifications	
CE	Yes
UL	cULus E115267 Industrial control equipment
Interfaces	
Interface IF1	
Type	RS232
Variant	9-pin male DSUB connector (shared with IF2)
Input filter / Protective circuit	Yes
Max. distance	15 m / 19,200 bit/s
Max. transfer rate	115.2 kbit/s
Network-capable	No
FIFO buffer	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 / 2

Table 2: 4PP065.IF23-1 - Technical data

Model number	4PP065.IF23-1
Interface IF2	
Type	RS485/RS422
Variant	9-pin male DSUB connector (shared with IF1)
Max. distance	500 m
Max. transfer rate	115.2 kbit/s
Network-capable	Yes
FIFO buffer	16 bytes in transmit and receive direction
Terminating resistor	Integrated in the module
Controller	UART type 16C550 compatible
Interface IF3	
Fieldbus	CAN bus
Type	CAN bus
Variant	4-pin male multipoint connector
Controller	SJA 1000
Max. distance	1000 m
Max. transfer rate	1 Mbit/s
Network-capable	Yes
Bus terminating resistor	Integrated in the module, switchable
Max. transfer rate	
Bus length ≤25 m	1 Mbit/s
Bus length ≤60 m	500 kbit/s
Bus length ≤200 m	250 kbit/s
Bus length ≤1000 m	50 kbit/s
Operating conditions	
Degree of protection	IP20
Ambient conditions	
Temperature	
Operation	0 to 50°C
Storage	-25 to 70°C
Transport	-25 to 70°C
Relative humidity	
Operation	10 to 90%, non-condensing
Storage	10 to 90%, non-condensing
Transport	10 to 90%, non-condensing
Mechanical properties	
Weight	57 g
Slot	PP65 insert
Torque for mounting screw	Max. 0.6 Nm

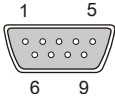Table 2: 4PP065.IF23-1 - Technical data

3 LED status indicators

Figure	LED	Color	Status	Description
	RxD	Orange	On	Module receiving data via the RS232 interface
	TxD	Orange	On	Module transmitting data via the X2X Link interface
	IF1 ... RS232 interface IF3 ... CAN bus interface			

4 CAN bus node number

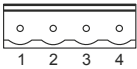The node number for the CAN bus interface is set with the two hex switches.

5 RS232 (IF1) or RS485/RS422 (IF2) interface

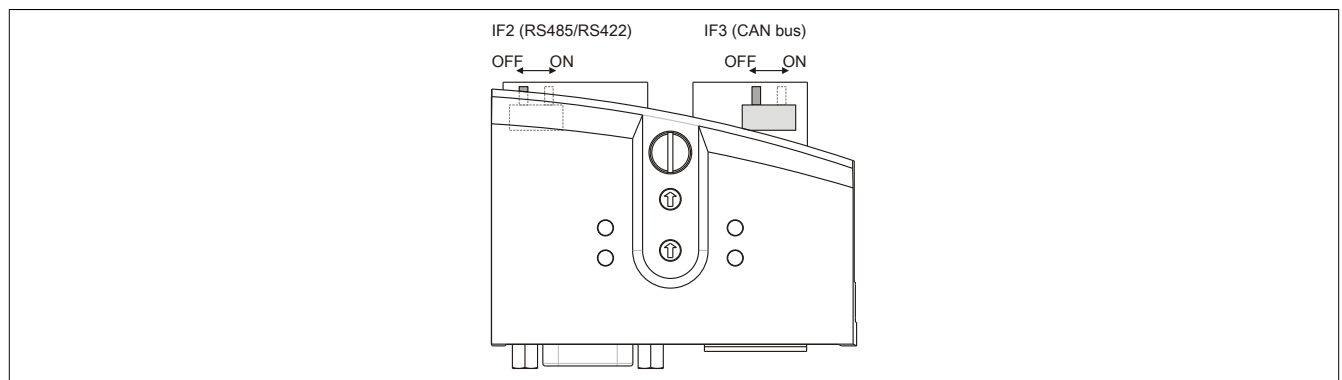| Interface	Pinout			
RS232 or RS485/RS422 interface 1 5 6 9 9-pin male DSUB connector	Pin	IF1	IF2	
		RS232	RS485	RS422
	1		Tx+/Rx+	Tx+
	2	RxD		
	3	TxD		
	4			Rx+
	5	GND		
	6			Rx-
	7	RTS		
	8	CTS		
	9		Tx-/Rx-	Tx-

> **Information:**
>
> **The IF1 and IF2 interfaces can be used simultaneously when wired appropriately.**

6 CAN bus interface (IF3)

Interface	Pinout		
CAN bus interface 1 2 3 4 4-pin male multipoint connector	Pin	CAN bus	
	1	CAN_H	CAN high
	2	CAN⊥	CAN ground
	3	CAN_L	CAN low
	4	SHLD	Shield

7 Terminating resistors

Two switches are located on the back of the interface module that can be used to switch on a terminating resistor for IF2 (RS485/RS422) and IF3 (CAN bus).

Interface	Switch position	Description
IF2 (RS485/RS422)	ON	Terminating resistor enabled (150 Ω)
	OFF	Terminating resistor disabled
IF3 (CAN bus)	ON	Terminating resistor enabled (120 Ω)
	OFF	Terminating resistor disabled

8 I/O mapping in Automation Studio

Data points for interfaces IF1 and IF2 are available in the I/O mapping in Automation Studio.

I/O mapping for IF2

Channel name	Data type	Description
TerminatingResistor[1]	BOOL	State of the switch for the IF2 terminating resistor: 0 ... OFF: Terminating resistor disabled 1 ... ON: Terminating resistor enabled

1) TerminatingResistor only available in Automation Runtime A4.32 and later.

I/O mapping for IF3

Channel name	Data type	Description
NodeSwitch	USINT	Hexadecimal value of the node number switch.
TerminatingResistor[1]	BOOL	State of the switch for the IF3 terminating resistor: 0 ... OFF: Terminating resistor disabled 1 ... ON: Terminating resistor enabled

1) TerminatingResistor only available in Automation Runtime A4.32 and later.