4PP065.IF24-1

1 Order data

Model number	Short description	Figure
	Interface modules	
4PP065.IF24-1	PP65 interface module, 1 PROFIBUS DP slave interface electrically isolated and network-capable, 1 RS232 interface, 1 RS422/RS485 interface, RS422/RS485: electrically isolated and network-capable, RS232/RS422/RS485 in one connector	
	Optional accessories	
	Infrastructure components	
0G1000.00-090	Bus connector, RS485, for PROFIBUS networks	
	Others	
0G0001.00-090	PC - PLC/PW cable, RS232, online cable	

Table 1: 4PP065.IF24-1 - Order data

2 Technical data

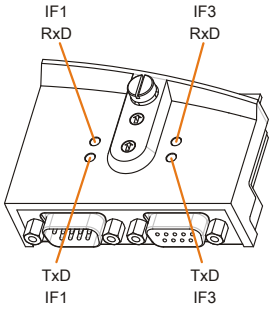
Model number	4PP065.IF24-1
Short description	
Communication module	1x RS232/RS422, RS485 1x PROFIBUS DP slave
General information	
B&R ID code	0xB0BC
Status indicators	Data transfer per interface
Diagnostics	
Data transfer	Yes, using LED status indicators
Electrical isolation	
PLC - IF1	No
PLC - IF2	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
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, switchable
Controller	UART type 16C550 compatible

Table 2: 4PP065.IF24-1 - Technical data

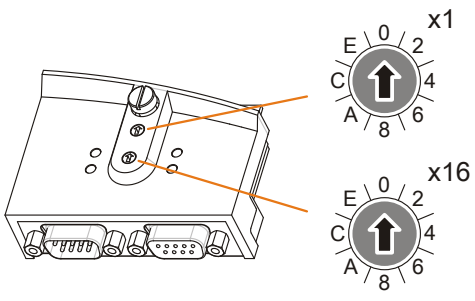
Model number	4PP065.IF24-1
Interface IF3	
Fieldbus	PROFIBUS DP slave
Type	RS485
Variant	9-pin female DSUB connector
Controller	ASIC SPC3
RAM	1.5 kB
Max. distance	1000 m
Max. transfer rate	12 Mbit/s
Network-capable	Yes
Bus terminating resistor	Integrated in the module
Max. transfer rate	
Bus length ≤100 m	12 Mbit/s
Bus length ≤200 m	1.5 Mbit/s
Bus length ≤400 m	500 kbit/s
Bus length ≤1000 m	187.5 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	65 g
Slot	PP65 insert
Torque for mounting screw	Max. 0.6 Nm

Table 2: 4PP065.IF24-1 - 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 ... PROFIBUS DP slave interface			

4 PROFIBUS DP slave node number



The node number for the PROFIBUS DP slave interface is set with the 2 hex switches.

The AsL2DP library is used for the 4PP065.IF24-1.

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

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

Information:

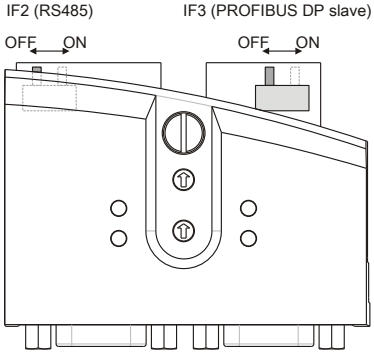
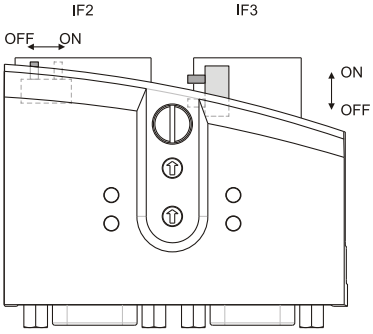
The IF1 and IF2 interfaces can be used simultaneously when wired appropriately.

6 PROFIBUS DP slave interface (IF3)

Interface	Pinout		
	Pin	PROFIBUS	
PROFIBUS DP slave interface 5 1 9 6 9-pin female DSUB connector	1	NC	
	2	NC	
	3	DATA	Data
	4	CTRL	Transmit enable
	5	GND	PROFIBUS GND (electrically isolated)
	6	5 V / 50 mA	Power supply (electrically isolated)
	7	NC	
	8	DATA\	Data inverted
	9	CTRL\	Transmit enable inverted

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) and IF3 (PROFIBUS DP).

Rev. < D0	Rev. ≥ D0
	

Interface	Switch position	Description
IF2	ON	Terminating resistor switched on (170 Ω between pin 1 and pin 9)
	OFF	Terminating resistor disabled
IF3	ON	Terminating resistor switched on (170 Ω between pin 1 and pin 9)
	OFF	Terminating resistor disabled

8 I/O mapping in Automation Studio

One data point for interface IF2 is 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

Interface IF3 is not shown in the I/O mapping in Automation Studio.

This interface is operated using library AsL2DP.