

6. IF33

The IF33 interface module is used for application-specific expansion of the Power Panel 45. It is equipped with two CAN bus interfaces.

- Dual CAN bus connection
- Integrated terminating resistors

6.1 Order data

Model number	Short description	Figure
4PP045.IF33-1	PP45 interface module, 2 CAN (electrically isolated and network capable). Order 0TB710.91 terminal blocks separately.	
Required accessories		
0TB704.9	Accessory terminal block, 4-pin, screw clamp, 1.5 mm²	
0TB704.91	Accessory terminal block, 4-pin, cage clamp, 2.5 mm²	
Optional accessories		
0AC913.93	Bus adapter, CAN, 2 CAN interfaces, including 30 cm attachment cable (TB704)	

Table 54: 4PP045.IF33-1 - Order data

6.2 Technical data

Product ID	4PP045.IF33-1
Short description	
Communication module	2 x CAN bus
Interfaces	
Interfaces IF1 and IF2 Type Design Maximum transfer rate	CAN bus 2 x 4-pin multipoint connector 1000 kBit/s
General information	
Status indicators	Data transfer for IF1 and IF2
Diagnostics Data transfer	Yes, with status LEDs
Electrical isolation PLC - IF1/IF2 IF1 - IF2	Yes Yes
Certification	CE, C-UL-US, GOST-R

Table 55: 4PP045.IF33-1 - technical data

Product ID	4PP045.IF33-1
Operational conditions	
Operating temperature	0°C to +50°C
Relative humidity	10 to 90%, non-condensing
Protection type	IP20
Storage and transport conditions	
Temperature	-25°C to +70°C
Relative humidity	10 to 90%, non-condensing
Mechanical characteristics	
Slot	PP45 insert

Table 55: 4PP045.IF33-1 - technical data (cont.)

6.3 Additional technical data

Product ID	4PP045.IF33-1
Interface IF1/IF2, CAN bus	
Controller	SJA 1000 controller
Maximum distance	1000 m
Maximum 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
Network-capable	Yes
Terminating resistors	Integrated in the module, switchable
General information	
B&R ID code	\$269C

Table 56: 4PP045.IF33-1 - Additional technical data

6.4 Status LEDs

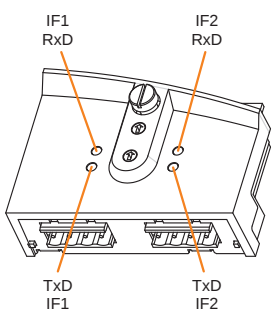
Figure	LED	Color	Status	Description
	RxD	Orange	On	The module is receiving data via the interface
	TxD	Orange	On	The module is sending data via the interface
	IF1 ...CAN bus interface 1 IF2 ...CAN bus interface 2			

Table 57: 4PP045.IF33-1 - Status LEDs

6.5 CAN bus node number

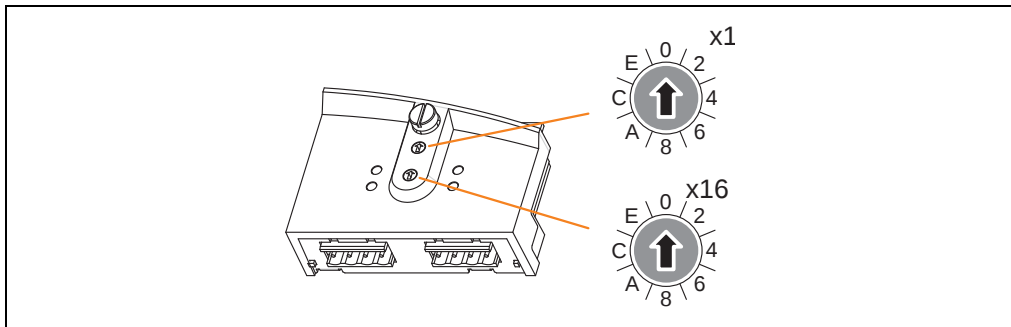


Figure 20: 4PP045.IF33-1 - CAN bus node number switch

The two hex switches are used to configure the node numbers for the CAN bus interfaces. The configured node number applies to both interfaces.

6.6 CAN bus interface (IF1 and IF2)

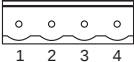
Interface	Pin assignments		
	Pin	CAN bus	
CAN bus interface  4-pin multipoint connector	• 1	• CAN _H	CAN high
	• 2	• CAN _L	CAN ground
	• 3	• CAN _L	CAN low
	• 4	• SHLD	Shield

Table 58: 4PP045.IF33-1 - CAN bus interface (IF1 and IF2)

6.7 Terminating resistors

There are two switches on the back of the interface module which can be used to switch on a terminating resistor for the CAN bus interfaces IF1 and IF2.

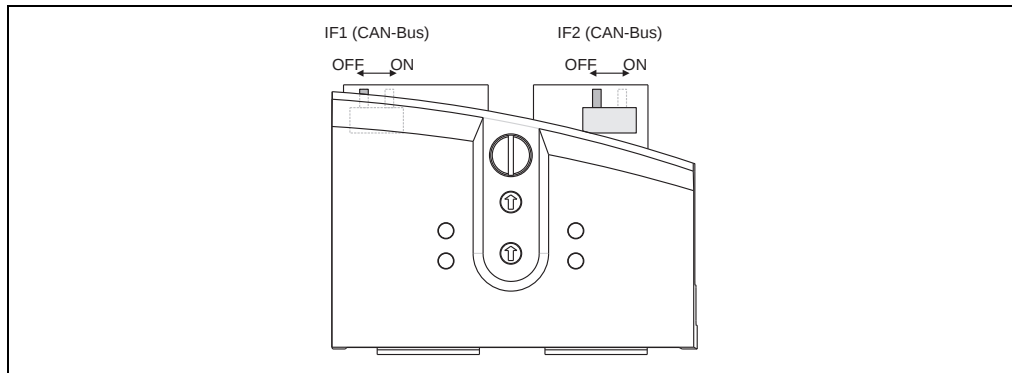


Figure 21: 4PP045.IF33-1 - Terminating resistors for IF1 and IF2

Interface	Switch position	Description
IF1 (CAN bus)	ON	Terminating resistor activated (120 Ω)
	OFF	Terminating resistor deactivated
IF2 (CAN bus)	ON	Terminating resistor activated (120 Ω)
	OFF	Terminating resistor deactivated

Table 59: 4PP045.IF33-1 - Terminating resistors for IF2 and IF3