

Universal Backplane

FB9262BP20220.2

- Universal backplane
- Max. 20 slots for I/O modules
- Redundancy (field bus and power supply)
- Installation in Zone 1
- For PROFIBUS, PROFINET, MODBUS RTU or MODBUS TCP



Function

The universal backplane can be used as base and extension backplane.
The backplane provides slots for a redundant gateway, and a redundant power supply.
It provides 20 slots for I/O modules. The I/O modules can be plugged anywhere on each slot.

Connection Assignment

Power Supply Selection of Bus Coupler / Gateway

Jumper Settings for using the Gateway FB822*, FB823*

40	<input type="checkbox"/>	12 V	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39	<input type="checkbox"/>	12 V / 5.4 V	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38	<input type="checkbox"/>	5.4 V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Jumper Settings for using the Bus Coupler FB8205 – FB8211

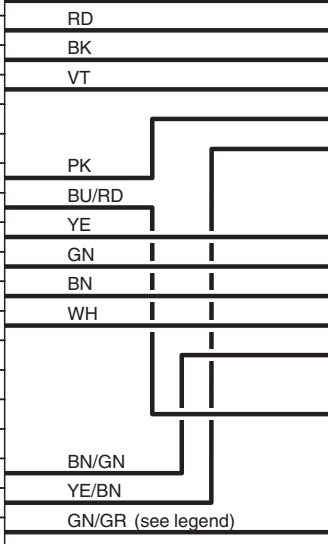
40	<input type="checkbox"/>	12 V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39	<input type="checkbox"/>	12 V / 5.4 V	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38	<input type="checkbox"/>	5.4 V	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Wiring Base / Extension Backplane

Base Backplane
FB9262BP20220.2

37	<input type="checkbox"/>	GND PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36	<input type="checkbox"/>	CTRL PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35	<input type="checkbox"/>	GND PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34	<input type="checkbox"/>	DATA PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33	<input type="checkbox"/>	Select 0 PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32	<input type="checkbox"/>	Select 1 SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31	<input type="checkbox"/>	Select 2 PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	<input type="checkbox"/>	Select 3 PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29	<input type="checkbox"/>	GND SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	<input type="checkbox"/>	CTRL SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27	<input type="checkbox"/>	GND SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26	<input type="checkbox"/>	DATA SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	<input type="checkbox"/>	Select U SGW	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	<input type="checkbox"/>	Select 0 SGW	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	<input type="checkbox"/>	Select L SGW	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	<input type="checkbox"/>	Select 1 PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	<input type="checkbox"/>	Select 2 SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	<input type="checkbox"/>	Select 3 SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	<input type="checkbox"/>	PB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Connection Cable
FB9274-*
BU



Extension Backplane
FB9262BP10220.2, FB9262BP20220.2

37	<input type="checkbox"/>	GND PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36	<input type="checkbox"/>	CTRL PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35	<input type="checkbox"/>	GND PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34	<input type="checkbox"/>	DATA PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33	<input type="checkbox"/>	Select 0 PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32	<input type="checkbox"/>	Select 1 SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31	<input type="checkbox"/>	Select 2 PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	<input type="checkbox"/>	Select 3 PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29	<input type="checkbox"/>	GND SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	<input type="checkbox"/>	CTRL SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27	<input type="checkbox"/>	GND SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26	<input type="checkbox"/>	DATA SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	<input type="checkbox"/>	Select U SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	<input type="checkbox"/>	Select 0 SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	<input type="checkbox"/>	Select L SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	<input type="checkbox"/>	Select 1 PGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	<input type="checkbox"/>	Select 2 SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	<input type="checkbox"/>	Select 3 SGW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	<input type="checkbox"/>	PB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Wiring Emergency Shutdown

No Shutdown

19	<input type="checkbox"/>	Shutdown	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	<input type="checkbox"/>	12 V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Shutdown

19	<input checked="" type="checkbox"/>	Shutdown	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	<input type="checkbox"/>	12 V	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fieldbus and Servicebus Connection

In Brackets: Connection for Ethernet / Modbus TCP FB8211* Bus Coupler

14	<input type="checkbox"/>	See Table	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	<input type="checkbox"/>	See Table	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	<input type="checkbox"/>	See Table	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	<input type="checkbox"/>	See Table	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	<input type="checkbox"/>	See Table	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	See Table	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	See Table	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	See Table	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Table: Fieldbus and Servicebus Connection

Terminal	Gateway	Profibus	Modbus TCP	Modbus RTU	Servicebus
14	P_GW	Fieldbus B	TX+ ←	Fieldbus A	-----
13	P_GW	Fieldbus A	TX- ←	Fieldbus B	-----
12	P_GW	-----	RX+ →	-----	Servicebus A
11	P_GW	-----	RX- →	-----	Servicebus B
10	S_GW	Fieldbus B	TX+ ←	Fieldbus A	-----
9	S_GW	Fieldbus A	TX- ←	Fieldbus B	-----
8	S_GW	-----	RX+ →	-----	Servicebus A
7	S_GW	-----	RX- →	-----	Servicebus B

Power Connection

6	<input type="checkbox"/>	PE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	L / + PSU 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	N / - PSU 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	PE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	L / + PSU 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	<input type="checkbox"/>	N / - PSU 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Power Supply Unit 1 (rows 5, 4)
Power Supply Unit 2 (rows 2, 1)

Protective Bonding

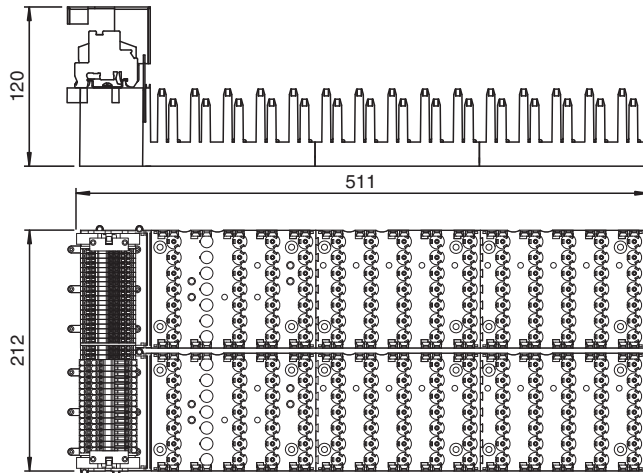
16	<input type="checkbox"/>	PB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	<input type="checkbox"/>	PB	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Legend

- PGW: Primary Gateway
- SGW: Secondary Gateway
- PSU: Power Supply Unit
- GN/GR: Green heat-shrinkable tube at the end of a grey stranded conductor

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Dimensions



Technical Data

Slots		
Bus coupler		2
Bus termination		2
Supply		2
I/O modules (single width)		max. 20
I/O modules (dual width)		max. 10
Supply		
Maximum safe voltage U_m		60 V DC (SELV/PELV) / 253 V AC, depending on power supply
Input voltage range	U	18 ... 32 V DC (SELV/PELV) / 95 ... 253 V AC; depends on power supply
Redundancy		yes
Fieldbus connection		
Fieldbus type		PROFIBUS, PROFINET, MODBUS RTU or MODBUS TCP
Redundancy		yes
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013
Conformity		
Degree of protection		EN 60529
Ambient conditions		
Ambient temperature		-40 ... 60 °C (-40 ... 140 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Shock resistance		shock type I, shock duration 11 ms, shock amplitude 15 g, number of shocks 18
Vibration resistance		frequency range 10 ... 150 Hz; transition frequency: 57.56 Hz, amplitude/acceleration ± 0.075 mm/1 g; 10 cycles frequency range 5 ... 100 Hz; transition frequency: 13.2 Hz amplitude/acceleration ± 1 mm/0.7 g; 90 minutes at each resonance
Mechanical specifications		
Degree of protection		IP30
Mass		approx. 2133 g , without modules
Dimensions		(W x H x D) 511 x 212 x 120 mm , without modules
Height		211.8 mm
Width		510.7 mm
Depth		120 mm
Data for application in connection with hazardous areas		
EU-type examination certificate		BVS 11 ATEX E 041 X
Marking		
Marking		Ⓔ II 2 G Ex d e m IIC T4

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Technical Data

Directive conformity	
Directive 2014/34/EU	EN IEC 60079-0:2018+AC:2020 EN 60079-1:2014 EN 60079-7:2015+A1:2018 EN 60079-18:2015+A1:2017
International approvals	
ATEX approval	BVS 11 ATEX E 041 X
IECEx approval	
IECEx certificate	IECEx BVS 11.0019X
IECEx marking	Ex db eb mb IIC T4 Gb Ex db eb IIC T4 Gb
General information	
Supplementary information	Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. For information see www.pepperl-fuchs.com .

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Product Versions

Backplane combination possibilities

Type FB9262BP* backplanes can be used together as base and extension backplanes in the following combinations:

		Extension			
		FB9262BP10220.2	FB9262BP20220.2	FB9262BP24110.2	FB9262BP24200.2
Base	FB9262BP10220.2	-	-	-	-
	FB9262BP20220.2	X	X	-	-
	FB9262BP24110.2	-	-	-	-
	FB9262BP24200.2	-	-	-	X

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