

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

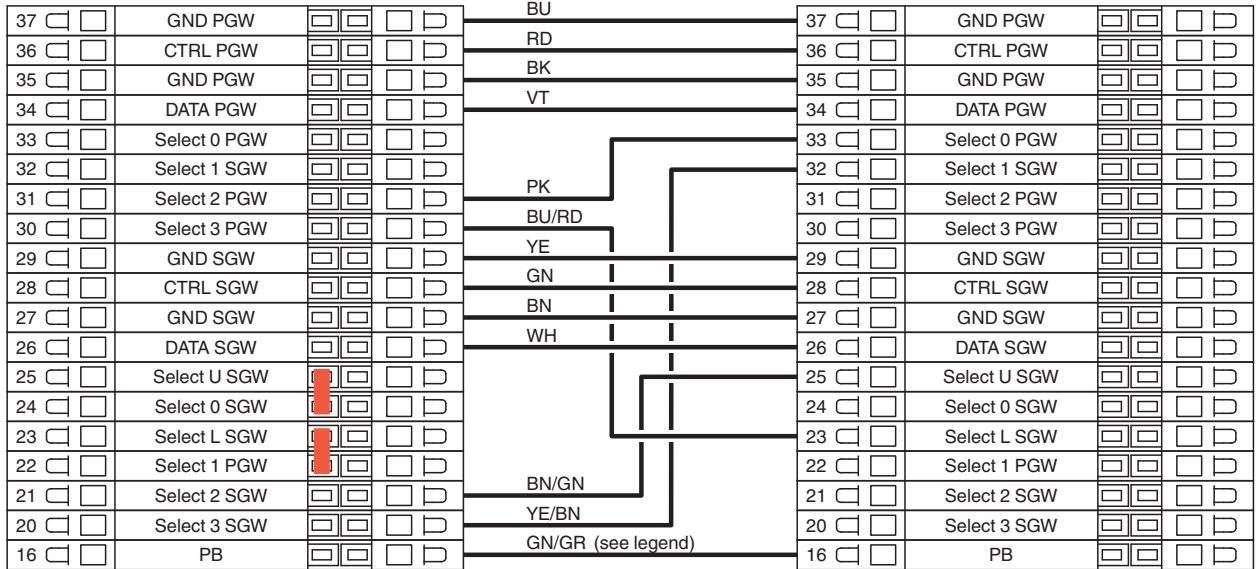
| | | | | | |
|----|--------------------------|--------------|-------------------------------------|--------------------------|--------------------------|
| 40 | <input type="checkbox"/> | 12 V | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 39 | <input type="checkbox"/> | 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

Connection Cable
FB9274-*
BU

Extension Backplane
FB9262BP10220.2, FB9262BP20220.2



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 checked="" 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"/> | Power Supply Unit 1 |
| 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"/> | Power Supply Unit 2 |
| 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"/> | |

Protective Bonding

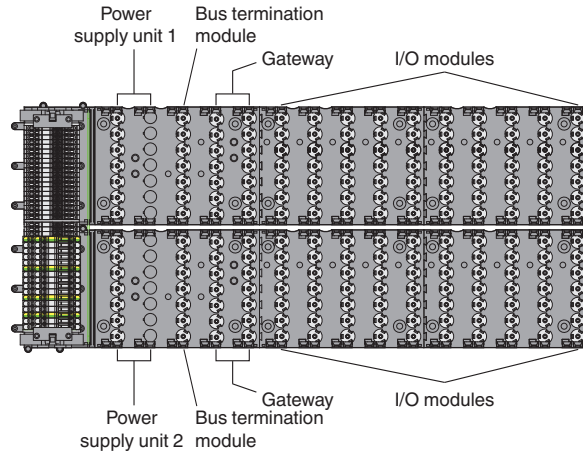
| | | | | | |
|----|--------------------------|----|-------------------------------------|--------------------------|--------------------------|
| 16 | <input type="checkbox"/> | PB | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15 | <input type="checkbox"/>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

Legend

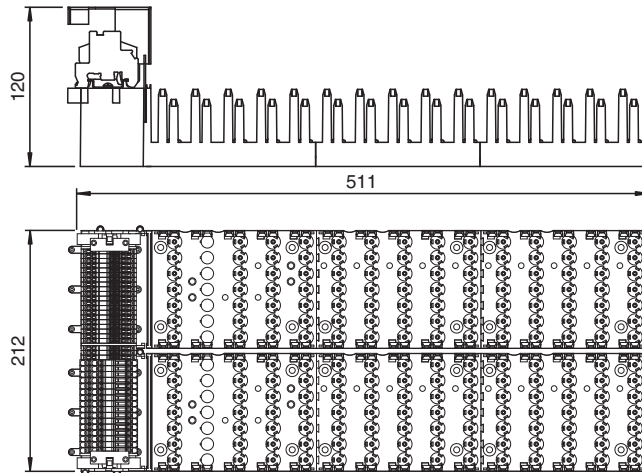
- PGW: Primary Gateway
- SGW: Secondary Gateway
- PSU: Power Supply Unit
- GN/GR: Green heat-shrinkable tube at the end of a grey stranded conductor

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Connection Assignment



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 | |

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Technical Data

| | |
|--|--|
| 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 |
| Data for application in connection with hazardous areas | |
| EU-type examination certificate | BVS 11 ATEX E 041 X |
| Marking | Ⓜ II 2 G Ex d e m IIC T4 |
| 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 | |
| IECEx approval | BVS 11.0019X |
| Approved for | International: Ex db eb mb IIC T4 Gb ; Ex db eb IIC T4 Gb |
| INMETRO approval | Brazil: TÜV 14.1598X |
| Marine approval | |
| Bureau Veritas Marine | 22449/C0 BV |
| 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 . |

Accessories

| | | |
|---|-------------------------------|-----------------------------|
|  | FB9241-T7*-*.***-**-Y* | Field Unit, Stainless Steel |
|  | FB9240-T7*-*.***-**-Y* | Field Unit, Stainless Steel |
|  | FB9261-TX*-*.***-**-Y* | Field Unit, Stainless Steel |
|  | FB9220-T6*-*.***-**-Y* | Field Unit, Stainless Steel |
|  | FB9221-T6*-*.***-**-Y* | Field Unit, Stainless Steel |
|  | FB9241-T8*-*.***-**-Y* | Field Unit, Stainless Steel |

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".