


FLM BK DN M12 DI 8 M12

Order No.: 2736343

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2736343>

The DeviceNet™ bus coupler opens a local bus for up to 16 devices. Additional functions: automatic baud rate detection, 8 digital inputs, channel-specific diagnostics, short-circuit and overload protection, M12 fast connection technology.



| Commercial data | |
|--------------------------|--|
| GTIN (EAN) |  4 017918 974213 |
| sales group | L020 |
| Pack | 1 pcs. |
| Customs tariff | 85176200 |
| Catalog page information | Page 368 (AX-2009) |

Product notes

WEEE/RoHS-compliant since:
12/07/2009



<http://www.download.phoenixcontact.com>
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

Product description

Fieldline modular bus coupler for DeviceNet™ with eight digital inputs

Technical data

General data

| | |
|--|---|
| Width | 70 mm |
| Height | 178 mm |
| Depth | 50 mm |
| Drill hole spacing | 178 mm |
| Weight | 280 g |
| Mounting type | Wall mounting |
| Ambient temperature (operation) | -25 °C ... 60 °C |
| Ambient temperature (storage/transport) | -25 °C ... 85 °C |
| Permissible humidity (storage/transport) | 95 % |
| Air pressure (operation) | 80 kPa ... 106 kPa (up to 2000 m above sea level) |
| Air pressure (storage/transport) | 70 kPa ... 106 kPa (up to 3000 m above sea level) |
| Degree of protection | IP65/67 |
| Protection class | III, IEC 61140, EN 61140, VDE 0140-1 |
| Test section | To I/O 500 V AC |
| Mechanical tests | Shock test in acc. with IEC 60068-2-27 Load 30 g, half sine wave, positive and negative per direction |

Interface

| | |
|------------------------------|---|
| Fieldbus system | DeviceNet™ |
| Name | DeviceNet™ |
| Type of connection | M12 connector, A-coded |
| Designation connection point | Copper cable |
| Transmission speed | 125 kBaud, 250 kBaud, 500 kBaud automatic detection 125 kBit/s, 250 kBit/s, 500 kBit/s (Automatic baud rate detection) |
| Transmission physics | Copper cable in acc. with DeviceNet™ specification |
| Address area assignment | 0 ... 63, can be set |
| Number of positions | 5 |

Local bus gateway

| | |
|----------------------------------|-------------------------------------|
| Name | Local bus gateway |
| Type of connection | M12 connector, B-coded |
| Transmission speed | 500 kBaud/ 2 MBaud, can be selected |
| Max. number of local bus devices | 16 |
| Max. length of local bus | 20 m |

Power supply for module electronics

| | |
|----------------------|--|
| Type of connection | M12 male connector |
| Name | U _L |
| Supply voltage | 24 V DC |
| Supply voltage range | 18 V DC ... 30 V DC IEC 61131-2 (including ripple) |

Fieldline potential routing

| | |
|---|--|
| Voltage supply U _L | 24 V DC |
| Power supply at U _L | max. 4 A |
| Current consumption from U _L | max. 100 mA (At 2 Mbaud) |
| | Typ. 75 mA (At 2 Mbaud) |
| | max. 100 mA (At 500 kBaud) |
| | Typ. 65 mA (At 500 kBaud) |
| Voltage supply U _S | 24 V DC |
| Power supply at U _S | max. 4 A |
| Current consumption from U _S | Typ. 10 mA (plus power supply for sensors) |
| | max. 700 mA |

Digital inputs

| | |
|--------------------------------|--------------------------------------|
| Input name | Digital inputs |
| Description of the input | Double-occupancy |
| Type of connection | M12 male connector |
| Connection method | 2, 3, 4-wire |
| Number of inputs | 8 |
| Protective circuit | Protection against polarity reversal |
| Filter time | 3 ms |
| Input characteristic curve | IEC 61131-2 type 1 |
| Input voltage | 24 V DC |
| Input voltage range "0" signal | -30 V DC ... 5 V DC |
| Input voltage range "1" signal | 13 V DC ... 30 V DC |

Certificates / Approvals



Certification CUL, UL

Certification Ex: CUL-EX, UL-EX

Accessories

| Item | Designation | Description |
|------------------------|---------------------------|---|
| Cable/conductor | | |
| 1518368 | SAC-5P- 2,0-186/FS SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Free conductor end, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 2 m |
| 1518371 | SAC-5P- 5,0-186/FS SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Free conductor end, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 5 m |
| 1518384 | SAC-5P-10,0-186/FS SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Free conductor end, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 10 m |
| 1518397 | SAC-5P-15,0-186/FS SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Free conductor end, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 15 m |
| 1518407 | SAC-5P-MS/ 0,3-186/FS SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 0.3 m |
| 1518410 | SAC-5P-MS/ 0,5-186/FS SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 0.5 m |
| 1518423 | SAC-5P-MS/ 1,0-186/FS SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 1 m |
| 1518326 | SAC-5P-MS/ 2,0-186 SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Free conductor end, Cable length: 2 m |
| 1518436 | SAC-5P-MS/ 2,0-186/FS SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 2 m |
| 1518339 | SAC-5P-MS/ 5,0-186 SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Free conductor end, Cable length: 5 m |
| 1518449 | SAC-5P-MS/ 5,0-186/FS SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 5 m |
| 1518342 | SAC-5P-MS/10,0-186 SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Free conductor end, Cable length: 10 m |

| | | |
|---------|---------------------------|--|
| 1518452 | SAC-5P-MS/10,0-186/FS SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 10 m |
| 1518355 | SAC-5P-MS/15,0-186 SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Free conductor end, Cable length: 15 m |
| 1518465 | SAC-5P-MS/15,0-186/FS SCO | Sensor/Actuator cable, 5-position, PUR, Black-gray RAL 7021, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 15 m |

General

| | | |
|---------|---------------------------|---|
| 1518216 | SAC-5P- 2,0-920/FS SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Free conductor end, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 2 m |
| 1518229 | SAC-5P- 5,0-920/FS SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Free conductor end, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 5 m |
| 1518232 | SAC-5P-10,0-920/FS SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Free conductor end, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 10 m |
| 1518245 | SAC-5P-15,0-920/FS SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Free conductor end, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 15 m |
| 1518258 | SAC-5P-MS/ 0,3-920/FS SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 0.3 m |
| 1518261 | SAC-5P-MS/ 0,5-920/FS SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 0.5 m |
| 1518274 | SAC-5P-MS/ 1,0-920/FS SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 1 m |
| 1518177 | SAC-5P-MS/ 2,0-920 SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, A-coded, on Free conductor end, Cable length: 2 m |
| 1518287 | SAC-5P-MS/ 2,0-920/FS SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 2 m |
| 1518180 | SAC-5P-MS/ 5,0-920 SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, A-coded, on Free conductor end, Cable length: 5 m |
| 1518290 | SAC-5P-MS/ 5,0-920/FS SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 5 m |

| | | |
|---------|---------------------------|--|
| 1518193 | SAC-5P-MS/10,0-920 SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, A-coded, on Free conductor end, Cable length: 10 m |
| 1518300 | SAC-5P-MS/10,0-920/FS SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 10 m |
| 1518203 | SAC-5P-MS/15,0-920 SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, A-coded, on Free conductor end, Cable length: 15 m |
| 1518313 | SAC-5P-MS/15,0-920/FS SCO | Bus system cable, 5-position, PUR, halogen-free, Violet, RAL 4001, shielded, Plug, straight M12-SPEEDCON, A-coded, on Socket, straight M12-SPEEDCON, A-coded, Cable length: 15 m |
| 1512584 | SACC-M12FR-5SC SH | Sensor/actuator connector, female, angled, 5-pos., M12, shielded, A-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm |
| 1512571 | SACC-M12FS-5SC SH | Sensor/actuator connector, female, straight, 5-pos., M12, shielded, A-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm |
| 1512568 | SACC-M12MR-5SC SH | Sensor/actuator connector, male, angled, 5-pos., M12, shielded, A-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm |
| 1512555 | SACC-M12MS-5SC SH | Sensor/actuator connector, male, straight, 5-pos., M12, shielded, A-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm |

Marking

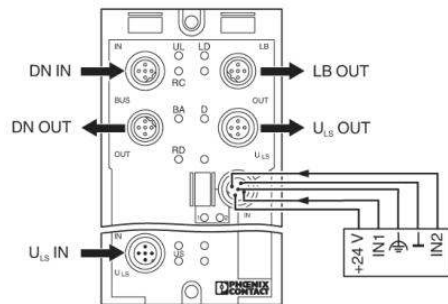
| | | |
|---------|-------------------|---|
| 0809735 | ZBF 12:UNBEDRUCKT | Zack strip, flat, unprinted, 5-section, divisible, for labeling by the customer |
| 2809128 | ZBN 18:UNBEDRUCKT | Unprinted marker labels, strips with 5 labels for individual labeling with M-PEN or CMS system, for terminal block width: 17.5 mm, color: White |

Plug/Adapter

| | | |
|---------|----------------------------|---|
| 1508365 | SACC-M12FS-5CON-PG 9 SH AU | Bus system plug connector, female straight, 5-pos., M12, shielded, gold-plated contacts, A-coded, screw connection, metal knurl, cable screw connection Pg9 |
| 1508200 | SACC-M12FS-5SC M | Sensor/actuator connector, female, straight, 5-pos., M12, A-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm |
| 1508352 | SACC-M12MS-5CON-PG 9 SH AU | Bus system plug connector, male, straight, 5-pos., M12, shielded, gold-plated contacts, A-coded, screw connection, metal knurl, cable screw connection Pg9 |
| 1508187 | SACC-M12MS-5SC M | Sensor/actuator connector, male, straight, 5-pos., M12, A-coded, spring-cage connection, metal knurl, cable cross section max. 8 mm |

Diagrams/Drawings

Connection diagram



Dimensioned drawing



Address

PHOENIX CONTACT Deutschland GmbH
Flachmarktstr. 8
32825 Blomberg, Germany
Phone +49 5235 3 12000
Fax +49 5235 3 41200
<http://www.phoenixcontact.de>



© 2011 Phoenix Contact
Technical modifications reserved;