

FBP FieldBusPlug Technical Catalogue

Communicative Control and Protection Components





FBP FieldBusPlug

Communicative Switching and Automation Components



Contents

System Description	4
FBP terminal device data, overview	6
Dimensional drawings	7
Ordering data – Communicative motor starter UMC 22-FBP with control functions	9
Ordering data – Software packages and diagnosis tools	10
Ordering data – Devices for extension of protection functions.....	11
Earth fault monitors	
Current transformers	
Further FBP terminal devices	12
Communicative circuit breakers Tmax und Emax	
Communicative soft starters PSR/PST	
I/O module for WDIO 100	
Ordering data – PROFIBUS DP FieldBusPlugs.....	13
Ordering data – PROFIBUS DP accessories.....	14
Ordering data – DeviceNet, CANopen and Modbus-RTU FieldBusPlugs.....	16
Ordering data – DeviceNet, CANopen and Modbus-RTU accessories	17
Ordering data – System accessories and documentation	18
Other FBP terminal devices.....	19

FBP FieldBusPlug

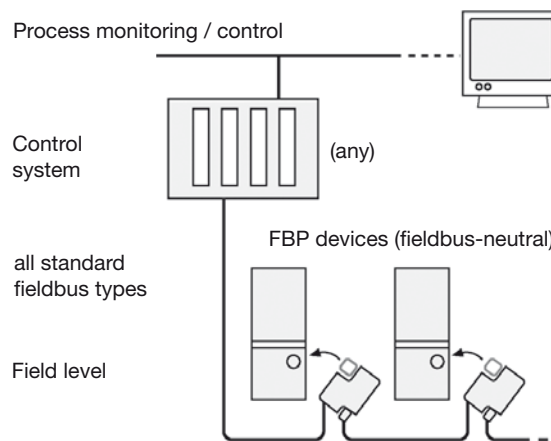
System description, general information

The FBP system connects switching devices and other similar components via any fieldbus types with usual automation systems (PLCs) in a simple and cost-efficient way. The switching devices are independent of the chosen fieldbus type. Connection to the various fieldbus types is established via the fieldbus-specific FieldBusPlug cables (FBP cables).



One device for all field bus types

Each device, and each function module within the product family, has a fieldbus-neutral interface. A specially prefabricated connection cable establishes the communications connections with its bus-specific plug interface. In this way, flexibility, transparency and reliability in the process are achieved. The connecting, operating and diagnostic elements are placed at the front of all devices providing increased ease of installation.



The components

The FieldBusPlug cable is used inside as well as outside of the control cabinet. Particularly for usage outside of the control cabinet the FBP cable complies with IP65, being at the same time a small and robust device excellently suitable for industrial usage.

One of the outstanding advantages is the presence of the 24 V DC supply voltage inside the FBP cable which makes additional wiring unnecessary because the available current is sufficient for most applications. Examples of typical devices for connection are sensors, push-buttons / switches, signal lamps, motor contactors, motor branch connections, etc.

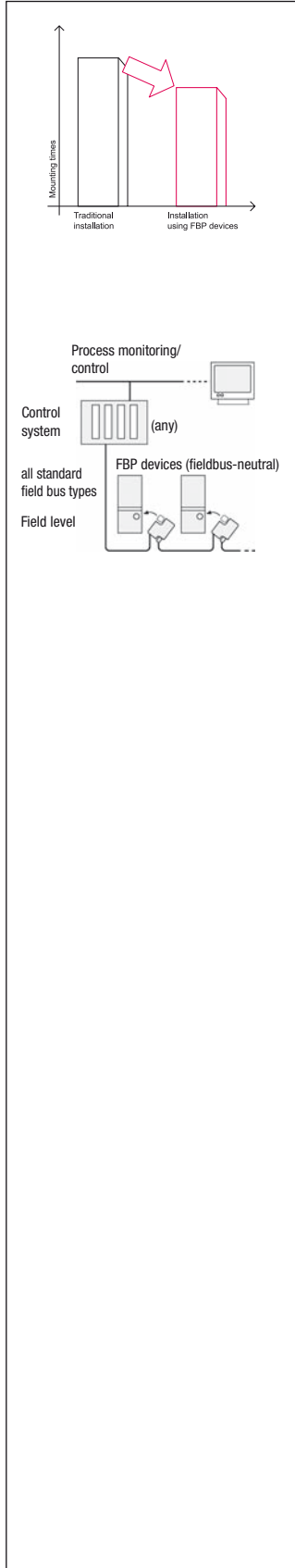
The FieldBusPlug connects

The FieldBusPlug provides a name to the new product family as a connecting element. The various FieldBusPlugs can be used with the different fieldbus types. The definitions of the respective fieldbus standards apply.

FBP FieldBusPlug

System description, general information

The FieldBusPlug system, with its new installation concept, opens a multitude of further possibilities for centralized and decentralized applications. Simple integration into the process, the compact, space-saving designs of the devices, the flexibility during planning and designing as well as cost-effective assembly and commissioning are further application-specific features. This offers considerable effects for the conception and design of a machine or plant:



Shorter throughput and realization times

Until now, wiring and cabling has been expensive and time-consuming in machines and plants. Standardized plug-in fieldbus connections now provide fast installation and the highest level of flexibility.

Higher quality in machines and plants

Standards make general planning and project planning more reliable, the assembly more effective and reduce the commissioning time.

Improved response time

Reacting flexibly to customer requirements means being able to carry out modifications even shortly before completion. All devices can be replaced in a minimum of time. Due to the devices' independence of the fieldbus type, the determination of the fieldbus system can be made just before the control cabinet is to be delivered.

Effortless connection to the process

The FBP system also shows its adaptability when inserted into the automation level and thus into the process. With the aid of standardized software functions, FBP components and automation devices can be integrated into the process via standard fieldbuses. Via the fieldbus, all device information are transmitted to the automation level and thus can be visualized in the entire process. Which data are forwarded depends on the performance data of the chosen fieldbus system.

Increased availability of machines and plants

The FBP components have extensive diagnostic functions. For example, the status of each FBP device and fieldbus plug as well as of the bus is indicated by LEDs. Depending on the functionality of the device, a preventive diagnostic function enables preventive maintenance (e.g. by counting the number of switching cycles) and operating data of the motor can be displayed on an operating panel. This allows possible malfunctions to be recognized before downtimes and production failures occur. An occurring error can be visualized thanks to the communication ability of the components and can therefore be remedied faster.

FBP FieldBusPlug

FBP terminal device data, overview



2CDC341001F0008

UMC22-FBP

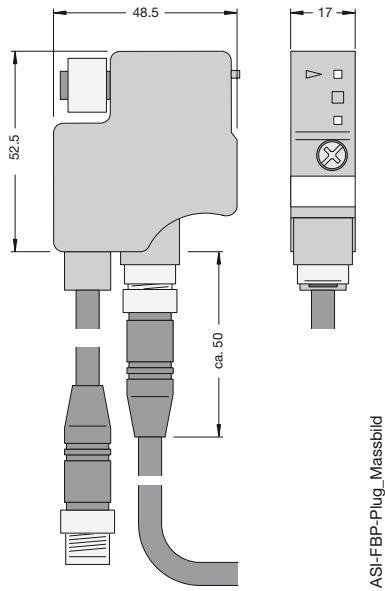
Communicative motor starters with control functions Universal Motor Controller UMC22-FBP

Main circuit	
Voltage (3-phase system)	1000 V AC (see manual), 45 ... 65 Hz, 3-phase system
Nominal motor current	0.24 ... 63 A with integrated current transformers, up to 850 A with ext. protective current transformers (see page 11)
Overload protection for 3-phase motors	Acc. to EN/IEC 60947-4-1
Trip categories (adjustable)	5, 10, 20, 30
Feed-through holes of int. current transformer	25 mm ² max. (11 mm max. wire diameter incl. insulation)
Short-circuit protection	by fuse on line side
Control voltage circuit	
Supply voltage	24 V DC (+ 30 %, - 20 %, incl. residual ripple)
Current consumption incl. inputs, relays energized	160 mA max.
Total power dissipation	3.7 W max.
Reversed polarity protection	yes
Inputs/Outputs	
Digital inputs	6 inputs 24 V DC
PTC input	1
Digital outputs	3 relay outputs with common supply
Voltage switching capacity	24 V AC/DC ... 250 V AC/DC
Current switching cap. per relay	
240 V AC (AC15)	1.5 A max.
120 V AC (AC15)	3 A max.
250 V AC (AC13)	0.11 A max.
24 V AC (AC13)	1 A max.
Load current via common	$I_{max} = 4$ A (thermal limit)
Relay contact lifetime	> 5 x 10 ⁶ switching cycles mechanical lifetime > 1 x 10 ⁶ switching cycles at 230 V AC, 0.5 A
Contact wiring for inductive loads	Free-wheeling diodes for direct current, varistors/VDRs for alternating current
Interfaces	
Bus interface	1 (for connection of ABB FieldBusPlug)
Operating panel interface	1 (for connection of operating panel UMC-PAN)
Integrated diagnostic functions	
	Green LED: Device ready for operation Yellow LED: Motor running (motor current > 20 % of nominal current adjusted) Red LED: Error (tripping, failure, ...)
Further diagnostic functions	
	Operating hours count Contactor switching cycles count Tripping events due to overload count
Integrated control functions	
	Direct starting, reverse starting, star-delta starting, pole-changing starting, servo-drive, transparent mode, emergency start function, stand alone operation (operation even without bus connection)
Integrated motor protection functions	
	Overload monitoring Phase failure detection Detection of blocking motors Thermal overload monitoring (PTC) Earth fault monitoring with sensor CEM11-FBP
Parameter setting / configuration	
	Operating panel Fieldbus (FieldBusPlug) DTM (DeviceTypeManager)
General data	
Conductor cross section	1 x 2.5 mm ² max. or 2 x 1.5 mm ² max.
Mounting	On DIN rail or with screws (4 screws M4)
Dimensions	70 x 105 x 87.5 mm (110 mm incl. operating panel and FBP)
Weight	0.390 kg
Degree of protection	IP20
Temperature range	Storage: - 25 ... + 70 °C Operation: 0 ... 55 °C
Approvals	
	CE, UL, GL, CSA, SN, RMRS, CCC
Operating panel (optional)	
	Adjustment and visualization of motor and device data as well as of bus parameters, status indication of digital inputs and outputs, contactor switching cycles and operating hours counting

FBP FieldBusPlug Dimensional drawings

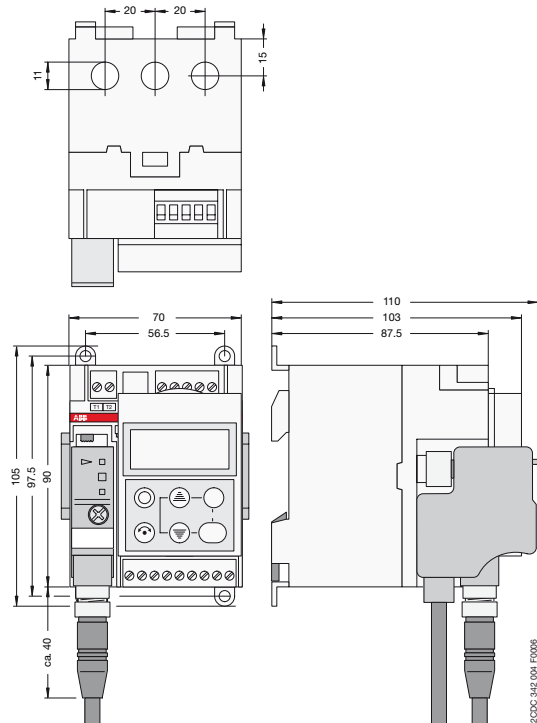
Dimensions in mm

FieldBusPlugs and accessories



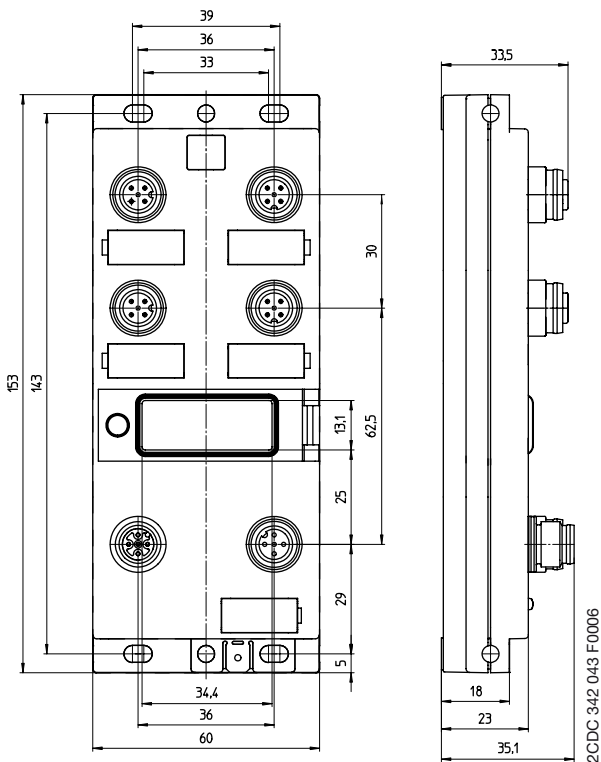
PDP22-FBP, DNP21-FBP, COP21-FBP, MRP21-FBP

Communicative motor starters with control functions



Universal Motor Controller UMC22-FBP

Profibus DP FieldBusPlug for 4 devices



PDQ22-FBP

Profibus DP (V0/V1)
Node for 4 FBP subscribers



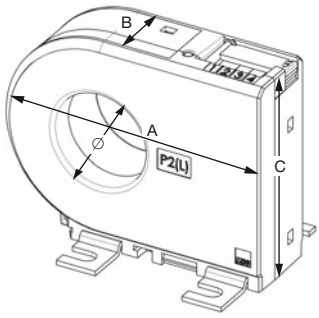
FBP FieldBusPlug

Dimensional drawings

FieldBusPlugs

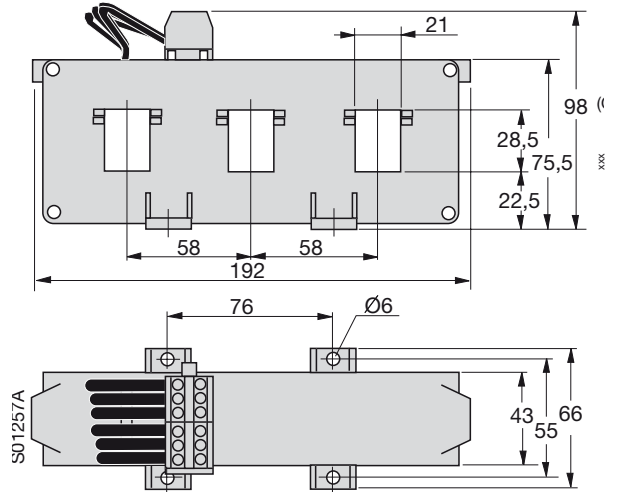
Dimensions in mm

Earth fault monitor for use with
Universal Motor Controller UMC22-FBP

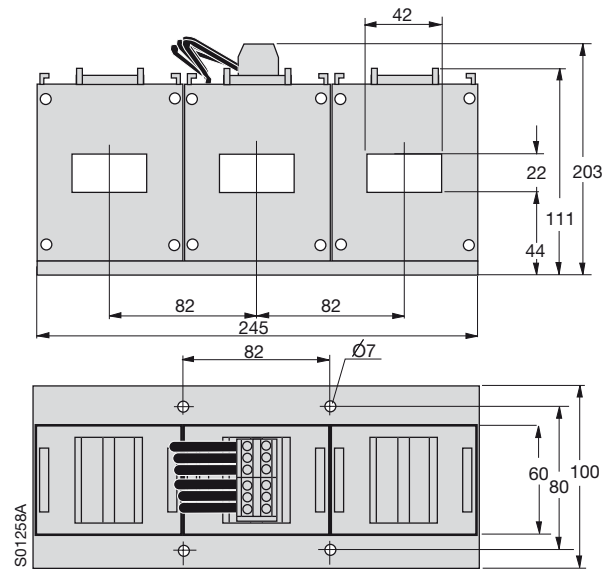


Type	W (A)	D (B)	H (C)	Ø
CEM11-FBP.20	76	31	56	20
CEM11-FBP.35	100	31	79	35
CEM11-FBP.60	135	38	116	60
CEM11-FBP.120	210	38	190	120

Current transformer for use with
Universal Motor Controller UMC22-FBP



KORK 4L185 R/4, KORK 4L310 R/4



KORK 5L500 R/4, KORK 5L850 R/4

FBP FieldBusPlug

Communicative motor starter with control functions

UMC22-FBP, ordering data



UMC22-FBP

2CDC341001F0008



UMC-PAN

2CDC341008F0008

Universal Motor Controller UMC22-FBP

Universal motor controller with thermal overload protection 0.24 - 63 A in a single device type. Bushing-type transformer, cable cross section 25 mm² (11 mm max. diameter incl. insulation). Integrated motor control functions: Direct starting, reverse starting, star-delta starting, servo-drive, pole-changing. Diagnostic functions: Overload, phase failure, trip categories 5, 10, 20, 30. Integrated storage of parameters and motor data. 6 digital inputs, 1 PTC input, 3 relay outputs. Fieldbus-neutral interface for connection to FBP fieldbus connectors, interface to operating panel UMC-PAN.

Type	Designation	Nominal motor current	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
UMC22-FBP.0	Universal Motor Controller	0.24 – 63 A	1SAJ 510 000 R0600		1	0.36
UMC22-FBP.0	Universal Motor Controller ATEX version	0.24 – 63 A	1SAJ 510 000 R0500		1	0.36

Accessories for Universal Motor Controller UMC22-FBP

Operating, diagnostics and parameter setting panel for Universal Motor Controller UMC22-FBP. Setting of motor and bus parameters.

Type	Designation	For use with	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
UMC-PAN	Operating panel	UMC22-FBP	1SAJ 510 001 R0002		1	0.04

Accessories for operating panel UMC-PAN

Extension cables with door mounting set IP65 (front side) for operating panel UMC-PAN.

Type	Designation	For use with	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
UMC-CAB.300	Extension cable 3 m with door mounting set	UMC-PAN	1SAJ 510 002 R0001		1	0.40
UMC-CAB.070	Extension cable 0.7 m with door mounting set	UMC-PAN	1SAJ 510 003 R0001		1	0.40

FBP FieldBusPlug

Overview of software packages

Ordering data

Two new software packages (service tool variant 1 and 2)

Service tool variant 1:

Comfortable parameter setting and diagnosis for the devices via PROFIBUS-DP. This variant is recommended if the system comprises many devices.

The following components are required:

Type	Designation	Order code	Price p. pc. €	Pack. size pcs.	Weight p. pc. kg
UTP22-FBP	USB interface for PROFIBUS network PDP22/PDQ22	1SAJ 924 013 R0001			
PBDTM-FBP	Device type manager (DTM) incl. FDT/DTM frame application	1SAJ 924 012 R0004			
PDA11-FBP.050	PROFIBUS DP adapter cable Dsub9-M12 (optional, for use if Dsub9 connection is not available, e.g. on master or repeater)	1SAJ 924 009 R0005			



UTP22-FBP



Service tool variant 2:

Parameter setting and diagnosis can be performed directly (without fieldbus plug) for one single device. This variant is recommended if it is intended to use devices without bus, or if devices are connected to DeviceNet, CANopen or Modbus, or if fieldbusses do not support this function.

The following components are required:

Type	Designation	Order code	Price p. pc. €	Pack. size pcs.	Weight p. pc. kg
UTF21-FBP	USB to FBP interface cable	1SAJ 929 400 R0002			
PBDTM-FBP	PDP22/PDQ22 device type manager (DTM) incl. FDT/DTM frame application	1SAJ 924 012 R0004			



UTF21-FBP



FBP FieldBusPlug

Devices for extension of protection functions

Ordering data

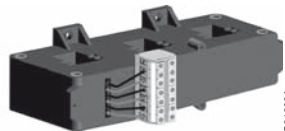


CEM11-FBP

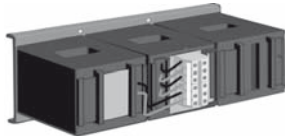
Earth fault monitor CEM11-FBP for Universal Motor Controller UMC22-FBP

Type	Earth fault currents [mA]	Through hole diameter	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
CEM11-FBP.20	80 ¹⁾ , 300, 550, 750, 1000, 1200, 1500, 1700	20 mm	1SAJ 929 200 R0020		1	0.130
CEM11-FBP.35	100 ¹⁾ , 500, 1000, 1400, 2000, 2400, 3000, 3400	35 mm	1SAJ 929 200 R0035		1	0.200
CEM11-FBP.60	120 ¹⁾ , 1000, 2000, 2800, 4000, 4800, 6000, 6800	60 mm	1SAJ 929 200 R0060		1	0.330
CEM11-FBP.120	300 ¹⁾ , 2000, 4000, 5600, 8000, 9600, 12000, 13600	120 mm	1SAJ 929 200 R0120		1	0.940

¹⁾ Lowest values have higher inaccuracy



KORC 4L...



KORC 5L...

Current transformers for use with Universal Motor Controller UMC22-FBP

Secondary-linear transformer, 3-phase with terminal block, intended for conductors Cu 2.5 mm².

Type	Designation	Current range recommended	Order code ¹⁾	Price p. pc. €	Pack. size	Weight p. pc. kg
KORC 4L 185 R/4	Current transformer	60 ... 185 A	1SCA 022 193 R7830		1	1.550
KORC 4L 310 R/4	Current transformer	180 ... 310 A	1SCA 022 181 R0760		1	1.442
KORC 5L 500 R/4	Current transformer	300 ... 500 A	1SCA 022 208 R1010		1	1.700
KORC 5L 850 R/4	Current transformer	500 ... 850 A	1SCA 022 208 R1440		1	1.900

¹⁾ To be ordered via your local sales office.

Connection kit for use with the KORC current transformers

Connection kits for application with KORC current transformers and series A contactors.

Type	Designation	Appropriate for contactor type	Order code ¹⁾	Price p. pc. €	Pack. size	Weight p. pc. kg
DT 450 / A185	Connection kit	AF145 – AF185	1SAZ 501 901 R1001		1	0.500
DT 450 / A300	Connection kit	AF260 – AF300	1SAZ 501 902 R1001		1	0.750
DT 500 / AF460L	Connection kit ²⁾	AF400 – AF460	1SAX 701 902 R1001		1	0.500
DT 800 / AF750L	Connection kit ²⁾	AF580 – AF750	1SAX 801 902 R1001		1	0.750

¹⁾ To be ordered via your local sales office.

²⁾ Connection kit for star-delta starter. For other connection kits, please refer to Volume 2 in the switching components main catalog.

FBP FieldBusPlug

Further FBP terminal devices

Communicative power circuit breakers Tmax and Emax

FBP interface module EP010 for connection to the FieldBusPlug.
For technical details, please refer to chapter 11, circuit breakers.



Tmax



Emax



EP010



PSR3 ... PSR16



Soft starter PST



I/O module WDIO 100

Communicative soft starters PSR/PST

PSR

Compact device with fieldbus-neutral interface via external module (type PSR-FBPA) for connection to FieldBusPlug.

PST

Soft starter with fieldbus-neutral interface for connection to FieldBusPlug.
For technical details, please refer to chapter 3, soft starters.

Input/output module for WDIO 100

Input/output module with fieldbus-neutral interface for wireless automation.
For technical details, please refer to chapter 7b, wireless automation.



PDP22-FBP

2CDC341048F0003



PDQ22-FBP

2CDC341048 F0006

PROFIBUS DP FieldBusPlug

Ready-made PROFIBUS DP fieldbus interface with various cable lengths.

- Supports PROFIBUS DP-V0 and V1.
- Data transfer rate up to 12 Mbit/s.
- Certified PROFIBUS subscriber.
- Degree of protection: IP65. Diagnostic LED.
- A-coded M12 plug.
- Approvals: CE, cUL (approval applied).

Type	Designation	Cable length	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
PDP22-FBP.025	PROFIBUS DP FBP	0.25 m	1SAJ 240 100 R1003		1	0.09
PDP22-FBP.050	PROFIBUS DP FBP	0.50 m	1SAJ 240 100 R1005		1	0.10
PDP22-FBP.100	PROFIBUS DP FBP	1.00 m	1SAJ 240 100 R1010		1	0.13
PDP22-FBP.200	PROFIBUS DP FBP	2.00 m	1SAJ 240 100 R1020		1	0.20
PDP22-FBP.500	PROFIBUS DP FBP	5.00 m	1SAJ 240 100 R1050		1	0.36

PROFIBUS DP FieldBusPlug for 4 devices

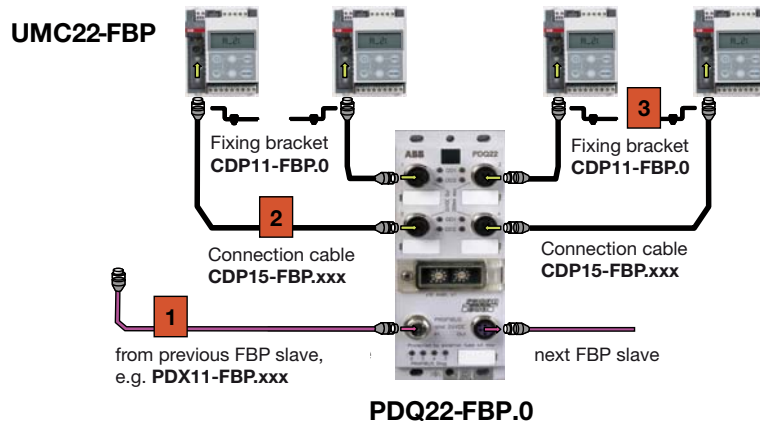
PDQ22 is a member of the ABB FieldBusPlug family of bus connectors. It allows the connection of up to four devices to PROFIBUS DP by just using one PROFIBUS node address.

- It allows a cost-efficient integration of devices that are located physically nearby.
- PDQ22 supports: Motor starter UMC22, soft starter PSR2-105 and I/O pads WDI and WDI/O.
- Degree of protection: IP65.
- Separate LEDs for device status and bus status indication.
- Approvals: CE, cUL (approval applied).

Type	Designation	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
PDQ22-FBP	Quadruple bus connector	1SAJ 240 200 R0050		1	0.20

Connecting several Universal Motor Controllers to one Profibus DP node

Up to 4 FBP devices can be connected to one Profibus DP distributor. The fieldbus-neutral interface of each FBP device is connected to the fieldbus-neutral interface of the distributor.



1	Profibus DP extension cable (0.50 m ... 5.00m)	PDX11-FBP.050	1SAJ 924 001 R0005
		PDX11-FBP.100	1SAJ 924 001 R0010
		PDX11-FBP.300	1SAJ 924 001 R0030
		PDX11-FBP.500	1SAJ 924 001 R0050
2	Connection cable (0.30 m ... 1.50 m)	CDP15-FBP.030	1SAJ 929 140 R0003
		CDP15-FBP.060	1SAJ 929 140 R0006
		CDP15-FBP.150	1SAJ 929 140 R0015
3	Fixing bracket for passive plug	CDP11-FBP.0	1SAJ 929 100 R0001

Note: Refer to page 18 for system accessories and documentation.

Accessories for PROFIBUS DP bus connection

Round cables for bus junctions

Ready-made bus cable with M12 connector and open cable end. Applicable for bus junctions such as e.g. Profibus DP couplers or devices with integrated Profibus DP communication. All M12 plugs are A-coded, if not explicitly stated otherwise.

Type	PROFIBUS DP round cable for bus junctions	Cable length	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
PDF11-FBP.050	Round cable with female connector	0.50 m	1SAJ 924 002 R0005		1	0.04
PDM11-FBP.050	Round cable with male connector	0.50 m	1SAJ 924 003 R0005		1	0.04

Round cables for bus extension

Ready-made Profibus DP bus cable, round cable with M12 female and male connectors (PDX11-FBP.xxx). Profibus DP bus cable, round cable on coil (PDC11-FBP.999).

Type	PROFIBUS DP extension cable	Cable length	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
PDX11-FBP.050	Ready-made	0.50 m	1SAJ 924 001 R0005		1	
PDX11-FBP.100	Ready-made	1.00 m	1SAJ 924 001 R0010		1	0.08
PDX11-FBP.300	Ready-made	3.00 m	1SAJ 924 001 R0030		1	0.20
PDX11-FBP.500	Ready-made	5.00 m	1SAJ 924 001 R0050		1	0.31
PDC11-FBP.999	Coil	100 m	1SAJ 924 004 R1000		1	5.60

Accessories for bus extension

Type	PROFIBUS DP cable connector	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
PDM11-FBP.0	Male plug for round cables	1SAJ 924 005 R0001		1	0.03
PDF11-FBP.0	Female plug for round cables	1SAJ 924 006 R0001		1	0.03

Line termination, feeding connectors, adapters

Type	Designation	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
PDR11-FBP.150	Line termination 150 ohms	1SAJ 924 007 R0001		1	0.03
PDV11-FBP.0	Feeding connector 24 V DC, code B-A	1SAJ 924 008 R0001		1	0.04
PDV12-FBP.0	Feeding connector 24 V DC, code A-A (FBP standard)	1SAJ 924 011 R0001		1	0.04
PDA11-FBP.050	Adapter Dsub9-M12 cable length 0.50 m	1SAJ 924 009 R0005		1	0.04
PDA12-FBP.050	Adapter M12-Dsub9-M12 cable length 2 x 0.50 m	1SAJ 924 010 R0005		1	0.04





FBP FieldBusPlug PROFIBUS DP accessories Ordering data

Accessories for PROFIBUS DP FieldBusPlug PDQ22-FBP

Mounting material

Type	Designation	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
CDA11-FBP.0	DIN rail adapter for PDQ22-FBP	1SAJ 929 300 R0001		1	0.110
CDP11-FBP.0	Fixing bracket for passive plug of connection cable	1SAJ 929 100 R0001		50	0.50

Connection cable

Type	Designation	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
CDP15-FBP.030	Connection cable (female/male), shielded, length 0.3 m	1SAJ 929 140 R0003		1	
CDP15-FBP.060	Connection cable (female/male), shielded, length 0.6 m	1SAJ 929 140 R0006		1	
CDP15-FBP.150	Connection cable (female/male), shielded, length 1.5 m	1SAJ 929 140 R0015		1	0.20
CDP16-FBP.150	Connection cable (female/male), shielded, length 1.5 m	1SAJ 929 150 R0015		1	0.20

Hinweis: Systemzubehör und Dokumentation siehe Seite 9/16.



DeviceNet FieldBusPlug

Ready-made DeviceNet fieldbus interface with various cable lengths.

- Applicable with all FBP motor starters and other terminal devices
- Data transfer rate up to 500 kbit/s
- Degree of protection: IP65
- Diagnostic LED
- Approvals: CE, cUL (approval applied)

Type	Designation	Cable length	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
DNP21-FBP.025	DeviceNet FBP	0.25 m	1SAJ 230 000 R1003		1	0.09
DNP21-FBP.050	DeviceNet FBP	0.50 m	1SAJ 230 000 R1005		1	0.10
DNP21-FBP.100	DeviceNet FBP	1.00 m	1SAJ 230 000 R1010		1	0.13

CANopen FieldBusPlug

Ready-made CANopen fieldbus interface with various cable lengths.

- Applicable with all FBP motor starters and other terminal devices
- Data transfer rate up to 500 kbit/s
- Degree of protection: IP65
- Diagnostic LED
- Approvals: CE, cUL (approval applied)

Type	Designation	Cable length	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
COP21-FBP.025	CANopen FBP	0.25 m	1SAJ 230 100 R1003		1	0.09
COP21-FBP.050	CANopen FBP	0.50 m	1SAJ 230 100 R1005		1	0.10
COP21-FBP.100	CANopen FBP	1.00 m	1SAJ 230 100 R1010		1	0.13

Modbus-RTU FieldBusPlug

Ready-made Modbus-RTU fieldbus interface with various cable lengths.

- Applicable with all FBP motor starters and other terminal devices
- Data transfer rate up to 57.6 kbit/s
- Degree of protection: IP65
- Diagnostic LED
- Approvals: CE, cUL (approval applied)

Type	Designation	Cable length	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
MRP21-FBP.025	Modbus-RTU FBP	0.25 m	1SAJ 250 000 R0003		1	0.09
MRP21-FBP.050	Modbus-RTU FBP	0.50 m	1SAJ 250 000 R0005		1	0.10
MRP21-FBP.100	Modbus-RTU FBP	1.00 m	1SAJ 250 000 R0010		1	0.13

FBP FieldBusPlug

DeviceNet, CANopen and Modbus-RTU accessories Ordering data

Accessories for DeviceNet, CANopen, Modbus-RTU bus connection

Round cables for bus junctions

Ready-made bus cable with M12 connector and open cable end.

Type	Round cables for bus junctions	Cable length	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
DNF11-FBP.050	Round cable with female plug	0.50 m	1SAJ 923 002 R0005		1	0.04
DNM11-FBP.050	Round cable with male plug	0.50 m	1SAJ 923 003 R0005		1	0.04

Round cables for bus extension

Ready-made bus cable

- Round cable with M12 female and male connector (DNX11-FBP.xxx)
- Round cable on coil (DNC11-FBP.999)

Type	Extension cable	Cable length	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
DNX11-FBP.100	Ready-made	1.00 m	1SAJ 923 001 R0010		1	0.08
DNX11-FBP.300	Ready-made	3.00 m	1SAJ 923 001 R0030		1	0.20
DNX11-FBP.500	Ready-made	5.00 m	1SAJ 923 001 R0050		1	0.31
DNC11-FBP.999	Coil (drop cable)	100.00 m	1SAJ 923 004 R1000		1	5.60

Accessories for bus extension

Type	Cable connector	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
DNM11-FBP.0	Male plug for round cable	1SAJ 923 005 R0001		5	0.15
DNF11-FBP.0	Female plug for round cable	1SAJ 923 006 R0001		5	0.15

Termination resistor

Type	Bus accessories	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
DNR11-FBP.120	Termination resistor 120 ohms	1SAJ 923 007 R0001		1	0.02



Hinweis: Systemzubehör und Dokumentation siehe Seite 9/16.

FBP FieldBusPlug

System accessories and documentation

Ordering data



CP-E 24/2.5



CP-S 24/5.0

FieldBusPlug addressing labels

For addressing the FieldBusPlug connectors.

Type	Designation	Order code	Price p. unit €	Pack. size	Weight p. unit kg
CAL11-FBP.0	400 addressing labels for FBPs	1SAJ 929 005 R0001		1	0.15

FieldBusPlug power supply unit

Supply voltage 90...260 V AC, 47...63 Hz.
Adjustable output voltage 23...28 V DC, 5 A.

Type	Designation	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
CP-E 24/2.5	Power supply unit 24 V / 2.5 A	1SVR 427 032 R0000		1	0.36
CP-S 24/5.0	Power supply unit 24 V / 5 A	1SVR 427 014 R0000		1	0.58

For technical details, please refer to chapter 5, electronic relays, converters, power supplies.

FBP addressing set for Profibus DP, DeviceNet, CANopen, Modbus-RTU

For setting the FieldBusPlug connector address.
Consisting of software package for notebook, level converter incl. battery and cable to notebook.

Type	Designation	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
CAS21-FBP.0	Addressing set for PROFIBUS DP, DeviceNet, CANopen, Modbus-RTU	1SAJ 929 003 R0001		1	0.40

FieldBusPlug accessories for installation inside control cabinet drawer systems

Fixing bracket for passive plug and FBP passive cable for installation of FBP terminal devices in drawer systems.

Type	Designation	Length	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
CDP11-FBP.0	Passive plug fixing bracket for drawer systems		1SAJ 929 100 R0001		50	0.50
CDP12-FBP.100	Passive cable for drawer systems (outside)	1.00 m	1SAJ 929 120 R0001		1	0.20
CDP13-FBP.100	Passive cable for drawer systems (inside)	1.00 m	1SAJ 929 110 R0001		1	0.31

FieldBusPlug system documentation

Complete system documentation for planning and project planning.
Technical data, software, examples, FAQs.

Type	Designation	Language	Order code	Price p. pc. €	Pack. size	Weight p. pc. kg
FieldBusPlug documentation	CD-ROM version	German English	2CDC 190 008 E0406		1	0.01

FBP FieldBusPlug

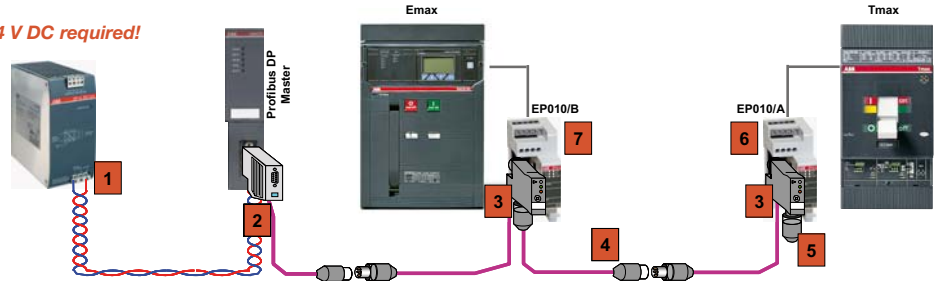
Other FBP terminal devices

Communicative Power Circuit Breakers Tmax and Emax

FBP interface module EP010 for connection to FieldBusPlug.
For technical details, please refer to chapter 11, circuit breakers.

Profibus line with power circuit breaker and EP010

24 V DC required!



Tmax T4/T5



Emax



EP010

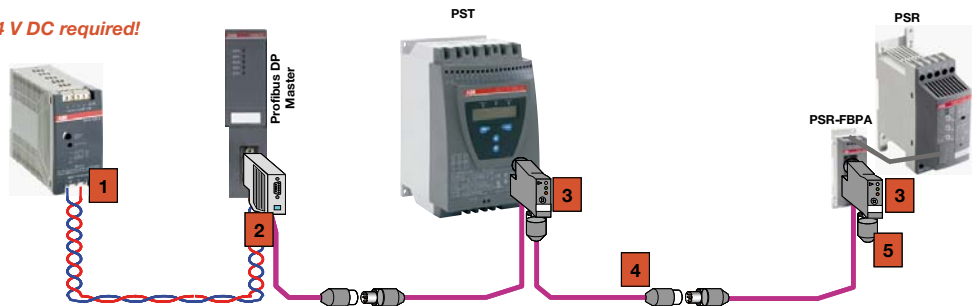
1	Power supply unit 110 ... 240 V AC/24 V DC, 10 A	CP-S 24/10.0	1SVR 427 015 R0100
2	Adapter SubD-9 - M12 (A coded)	PDA11-FBP.050	1SAJ 924 009 R0005
3	FieldBusPlug PROFIBUS-DP V0/V1 (0.25 m ... 5 m)	PDP22-FBP.025	1SAJ 240 100 R1003
		PDP22-FBP.050	1SAJ 240 100 R1005
		PDP22-FBP.100	1SAJ 240 100 R1010
		PDP22-FBP.200	1SAJ 240 100 R1020
4	Profibus DP extension cable (0.50 m ... 5.00 m)	PDX11-FBP.050	1SAJ 924 001 R0005
		PDX11-FBP.100	1SAJ 924 001 R0010
		PDX11-FBP.300	1SAJ 924 001 R0030
5	Line termination 150 ohms	PDX11-FBP.500	1SAJ 924 001 R0050
		PDR11-FBP.150	1SAJ 924 007 R0001
6	Communication interface type A (Tmax: T4, T5, T6)	EP010	1SDA 059 469 R0001
7	Communication interface type B (Emax, Tmax: T7)	EP010	1SDA 060 198 R0001

Communicative soft starters PST/PSR

Compact device with fieldbus-neutral interface for connection to FieldBusPlug connector.
For technical details, please refer to chapter 3, soft starters.

Profibus line with soft starter

24 V DC required!



PST



PSR

1	Power supply unit 100 .. 240 V AC/24 V DC, 1.25 A	CP-E 24/1.25	1SVR 427 031 R0000
2	Adapter SubD-9 - M12 (A coded)	PDA11-FBP.050	1SAJ 924 009 R0005
3	FieldBusPlug PROFIBUS-DP V0/V1 (0.25 m ... 5 m)	PDP22-FBP.025	1SAJ 240 100 R1003
		PDP22-FBP.050	1SAJ 240 100 R1005
		PDP22-FBP.100	1SAJ 240 100 R1010
		PDP22-FBP.200	1SAJ 240 100 R1020
4	Profibus DP extension cable (0.50 m ... 5.00 m)	PDP22-FBP.500	1SAJ 240 100 R1050
		PDX11-FBP.050	1SAJ 924 001 R0005
		PDX11-FBP.100	1SAJ 924 001 R0010
5	Line termination 150 ohms	PDX11-FBP.300	1SAJ 924 001 R0030
		PDX11-FBP.500	1SAJ 924 001 R0050
		PDR11-FBP.150	1SAJ 924 007 R0001

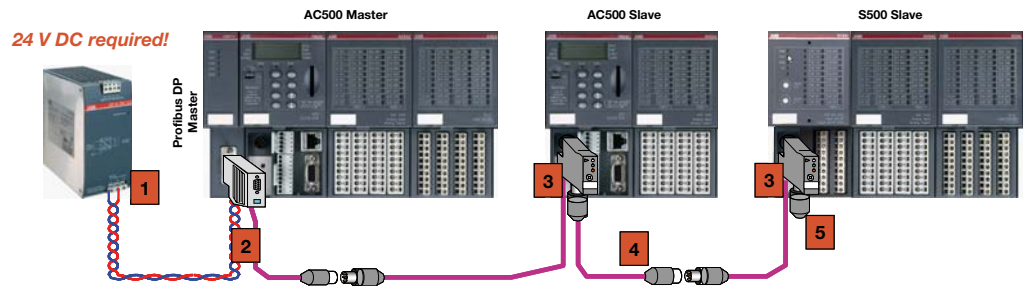
FBP FieldBusPlug

Other FBP terminal devices

AC500 automation devices connected via Profibus DP

Automation device with fieldbus-neutral interface for connection to FieldBusPlug connector.
For technical details, please refer to chapter 8, automation devices.

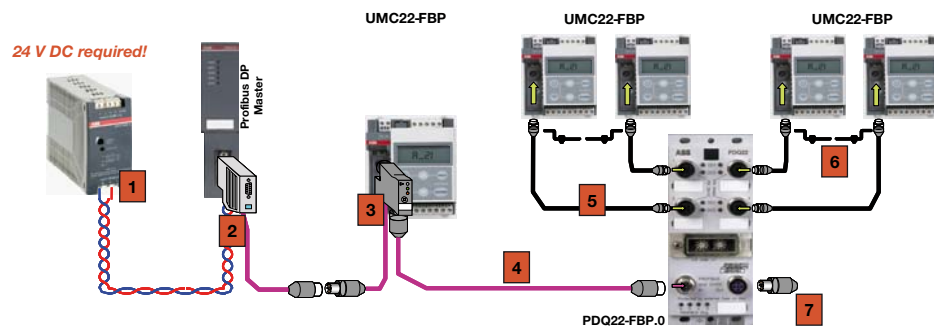
Profibus line with intelligent and non-intelligent decentralized AC500 I/O devices



1	Power supply unit 110 ... 240 V AC/24 V DC, 10A	CP-S 24/10.0	1SVR 427 015 R0100
2	Adapter SubD-9 - M12 (A coded)	PDA11-FBP.050	1SAJ 924 009 R0005
3	FieldBusPlug PROFIBUS-DP V0/V1 (0.25 m ... 5 m)	PDP22-FBP.025 PDP22-FBP.050 PDP22-FBP.100 PDP22-FBP.200 PDP22-FBP.500	1SAJ 240 100 R1003 1SAJ 240 100 R1005 1SAJ 240 100 R1010 1SAJ 240 100 R1020 1SAJ 240 100 R1050
4	Profibus DP extension cable (0.50 m ... 5.00 m)	PDX11-FBP.050 PDX11-FBP.100 PDX11-FBP.300 PDX11-FBP.500	1SAJ 924 001 R0005 1SAJ 924 001 R0010 1SAJ 924 001 R0030 1SAJ 924 001 R0050
5	Line termination 150 ohms	PDR11-FBP.150	1SAJ 924 007 R0001

Several Universal Motor Controllers connected to one Profibus DP node

Up to 4 FBP devices can be connected to one Profibus DP distributor. The fieldbus-neutral interface of each FBP device is connected to the fieldbus-neutral interface of the distributor.



1	Power supply unit 110 ... 240 V AC/24 V DC, 2.5 A	CP-E 24/2.5	1SVR 427 032 R0000
2	Adapter SubD-9 - M12 (A coded)	PDA11-FBP.050	1SAJ 924 009 R0005
3	FieldBusPlug PROFIBUS-DP V0/V1 (0.25 m ... 5 m)	PDP22-FBP.025 PDP22-FBP.050 PDP22-FBP.100 PDP22-FBP.200 PDP22-FBP.500	1SAJ 240 100 R1003 1SAJ 240 100 R1005 1SAJ 240 100 R1010 1SAJ 240 100 R1020 1SAJ 240 100 R1050
4	Profibus DP extension cable (0.50 m ... 5.00 m)	PDX11-FBP.050 PDX11-FBP.100 PDX11-FBP.300 PDX11-FBP.500	1SAJ 924 001 R0005 1SAJ 924 001 R0010 1SAJ 924 001 R0030 1SAJ 924 001 R0050
5	Connection cable (0.30 m ... 1.50 m)	CDP15-FBP.030 CDP15-FBP.060 CDP15-FBP.150	1SAJ 929 140 R0003 1SAJ 929 140 R0006 1SAJ 929 140 R0015
6	Fixing bracket for passive plug	CDP11-FBP.0	1SAJ 929 100 R0001
7	Line termination 150 ohms	PDR11-FBP.150	1SAJ 924 007 R0001



AC500



S500



UMC22-FBP



PDQ22-FBP

FBP FieldBusPlug

Other FBP terminal devices

Universal Motor Controllers in Motor Control Centers MCC

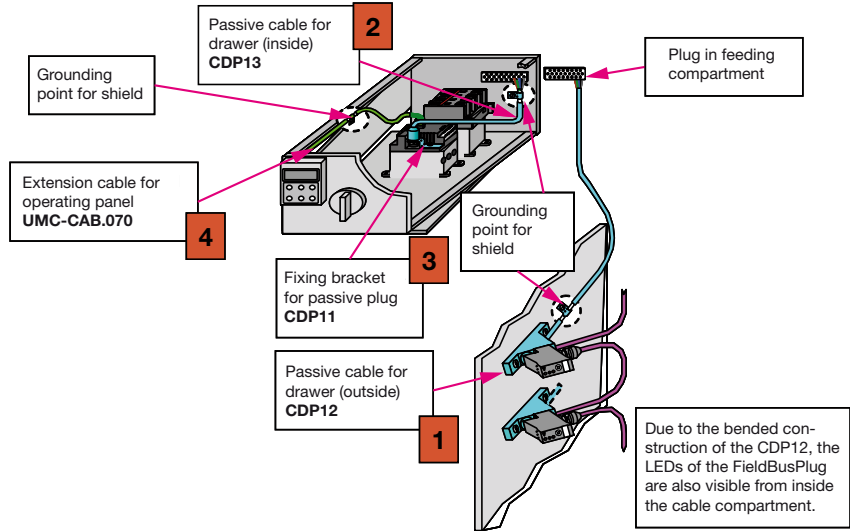
Components for installation of Universal Motor Controller UMC22 to an MCC using drawer systems. Configurations with up to four controllers connected to one Profibus DP node are supported.



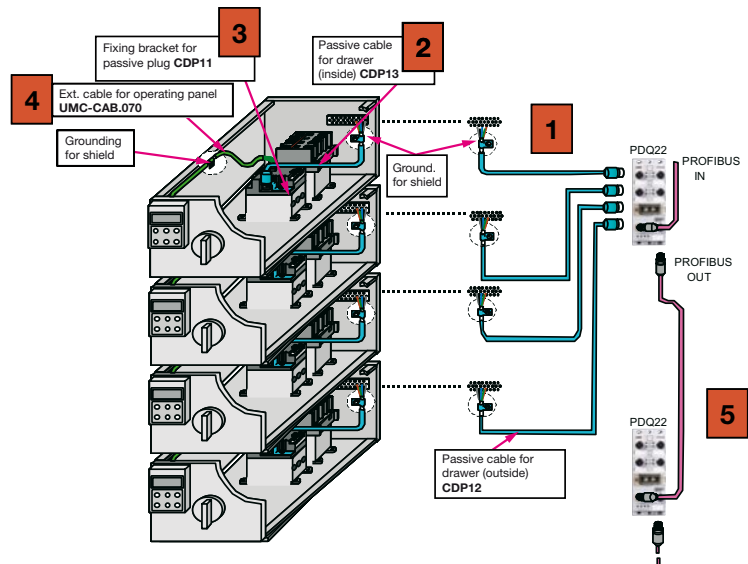
UMC22-FBP



UMC-PAN



1	Passive cable for drawer systems (outside)	CDP12-FBP.100	1SAJ 929 120 R0001
2	Passive cable for drawer systems (inside)	CDP13-FBP.100	1SAJ 929 110 R0001
3	Fixing bracket for passive plug	CDP11-FBP.0	1SAJ 929 100 R0001
4	Extension cable for operating panel, 0.7 m	UMC-CAB.070	1SAJ 510 003 R0001



1	Connection cable, one end open, 1.50 m	CDP16-FBP.150	1SAJ 929 150 R0015
2	Passive cable for drawer systems (inside)	CDP13-FBP.100	1SAJ 929 110 R0001
3	Fixing bracket for passive plug	CDP11-FBP.0	1SAJ 929 100 R0001
4	Extension cable for operating panel, 0.70 m	UMC-CAB.070	1SAJ 510 003 R0001
5	Profibus DP extension cable (0.50 m ... 5.00 m)	PDX11-FBP.050 PDX11-FBP.100 PDX11-FBP.300 PDX11-FBP.500	1SAJ 924 001 R0005 1SAJ 924 001 R0010 1SAJ 924 001 R0030 1SAJ 924 001 R0050

FBP FieldBusPlug

Other FBP terminal devices

Integration of third-party components to the FBP system

Configuration of one Profibus DP bus line consisting of FieldBusPlug components and third-party devices with different connection types.



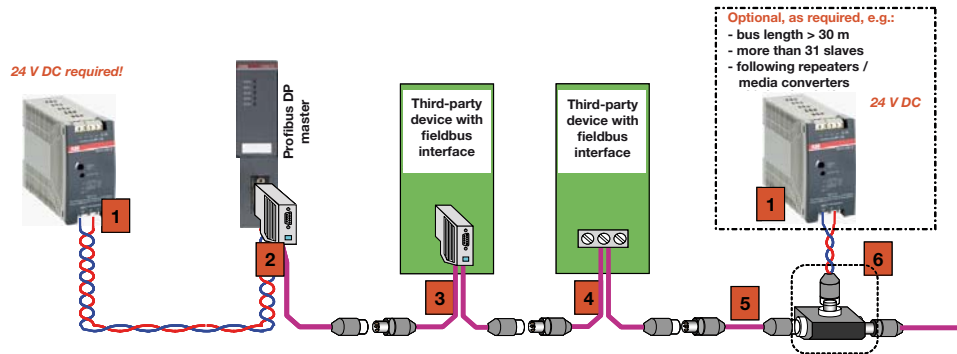
UMC22-FBP

2CDC341001F0008



UMC-PAN

2CDC341006F0008



1	Power supply unit 110 ... 240 V AC/24 V DC, 2.5 A	CP-E 24/2.5	1SVR 427 032 R0000
2	Adapter SubD-9 - M12 (A coded)	PDA11-FBP.050	1SAJ 924 009 R0005
3	Adapter M12 - SubD-9 - M12 (A/A coded)	PDA12-FBP.050	1SAJ 924 010 R0005
4	Round cable with female plug, 0.50 m Round cable with male plug, 0.50 m	PDF11-FBP.050 PDM11-FBP.050	1SAJ 924 002 R0005 1SAJ 924 003 R0005
5	Profibus DP extension cable (0.50 m ... 5.00 m)	PDX11-FBP.050 PDX11-FBP.100 PDX11-FBP.300 PDX11-FBP.500	1SAJ 924 001 R0005 1SAJ 924 001 R0010 1SAJ 924 001 R0030 1SAJ 924 001 R0050
6	Feeding connector 24 V DC (A coded)	PDV12-FBP.0	1SAJ 924 011 R0001



Brochure-No.: 2CDC 190 022 D0202

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