



Catalog | November 2012

Catalog 2012 FBP FieldBusPlug - Communicative Control and Protection Components

Power and productivity
for a better world™



FBP FieldBusPlug Product group picture



FBP FieldBusPlug

Table of Contents

FBP FieldBusPlug	
Product group picture	2
Table of Contents	3
System description, general information	4
Motor management, general information	5
Further FBP terminal devices	6
Motor management system UMC100-FBP and accessories	7
Ordering details - Universal Motor Controller UMC100-FBP	7
Expansion modules and accessories for Universal Motor Controller UMC100-FBP	8
Configuration software overview	9
Devices for extension of protection functions	10
Ethernet Modbus TCP Interface MTQ22-FBP	11
PROFIBUS DP FieldBusPlugs and other FBP terminal devices	13
Several Universal Motor Controllers on a PROFIBUS DP node	14
Application	14
Accessories for PROFIBUS DP bus connection	15
Accessories for PROFIBUS DP FieldBusPlug PDQ22-FBP	16
DeviceNet, CANopen® and Modbus-RTU FieldBusPlugs	17
DeviceNet, CANopen® and Modbus-RTU accessories	18
System accessories and documentation	19
Communicative motor starters with control functions	20
FBP terminal device data, overview	21
Technical data - DX111, DX122	21
Technical data - VI150, VI155	22
FBP FieldBusPlug	23
Dimensional drawings	23
Configuration examples for the integration of other terminal devices to the FieldBusPlug system	25
Configuration examples for the integration of Universal Motor Controllers into MCCs	29
Configuration examples for the integration of third-party terminal devices to the FieldBusPlug system	31
Notes	32

FBP FieldBusPlug

System description, general information

The FieldBusPlug system allows simple, universal and intelligent integration of numerous switching devices and components into any automation system. Simple and flexible planning and integration also has an effect on the design and operation of machines and systems.

Typical devices

These are intelligent motor controllers, softstarters, circuit breakers, switch disconnecter fuses and decentralized automation systems.

Communication interface

The listed devices are fieldbus-neutral. With the FieldBusPlug (FBP) they can be connected to the most common fieldbus system. And with the new MTQ22 interface to Ethernet networks.

Reduces multiplicity of devices

One single device version can be connected to different fieldbus systems via suitable FieldBusPlugs. This simplifies planning, development, service and storage.

Operational safety

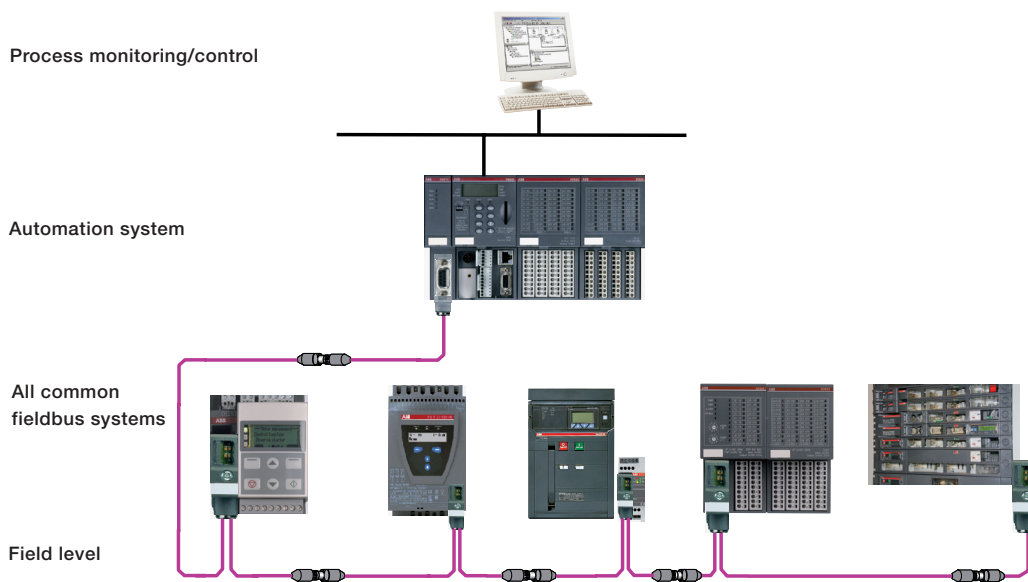
The M12 connection technology with ready-made components ensures easy assembly and high availability.

Large product portfolio

A comprehensive range of accessories, like cables, adapters, plugs and software tools rounds off the product range.

Simple integration

New tools based on the generally valid FDT / DTM (Device Type Manager) standard support planners and operators in configuring and implementing the systems.



2CDDC 341 046 F0003

FieldBusPlug



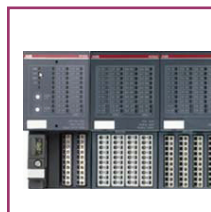
2CDDC 343 009 F0009

Universal Motor Controller UMC100-FBP



1SFC 182 173 F0001

Softstarter PST



2CDDC 351 026 F0006

Decentralized automation S500



2CDDC 341 005 S0012

MTQ22



1SDC 200 077 F0001

Circuit breaker Emax

FBP FieldBusPlug

Motor management, general information

With the Universal Motor Controller UMC100-FBP, ABB provides the optimum solution for integrating motor control into system control. The UMC100-FBP is a flexible, modularly expandable motor management system for low voltage motors with constant rotational speed. Its most important task is avoiding system downtimes through early detection of possible drive problems and reducing the associated downtimes through quick detection of the error cause if a motor stop has occurred.

Motor management and more

With its predefined control features and the option to optimally adapt the device to different system conditions due to its flexible logic, the UMC100-FBP is very well suited to varied applications. For complex applications with more I/Os or special signals, extension modules are available.

High system availability

The UMC100-FBP continuously provides extensive operating, service and diagnostic data of the motor. This enables the operator to detect faults in time or to even prevent these with suitable measures, or to limit their effect. Quick error location and elimination increases system availability.

Electronic full motor protection

The comprehensive electronic full motor protection is self-sufficient and guarantees full motor protection even if superordinated automation or process control systems or the bus system fail. The high accuracy of the electronic measuring system better utilizes the performance of the motors. The digital technology guarantees high long-term stability of the tripping characteristic and consistent tripping behavior even after many years of use.

Less planning, development and material effort

The UMC100-FBP already convinces during the planning and development phase due to its universal and modular structure. All required protection, monitoring and control features are integrated in one single device, which thus reduces the wiring effort. One single version for all current ranges and field buses simplifies planning and service from systems through to the spares inventory.

Simple integration in a confined space

Due to its compact design with integrated measuring system, the UMC100-FBP reduces the required floor space. This is important for application in low voltage drawer systems in conditions with limited space, or for conversion of existing systems to a modern motor management system.

Flexible integration into process control

With the FieldBusPlug, the UMC100 can communicate with control systems via the widespread standard fieldbus systems PROFIBUS DP, DeviceNet, CANopen or Modbus RTU.

The new interface MTQ22 enables Ethernet network communication via Modbus TCP. Allowing even network redundancy in an easy way.

Application in industrial plants

In large industrial systems it is quite common that several thousand motors are required to provide the required movement. This in turn requires intelligent devices on site, as well as a continuous connection from the process control and automation level through to the field. For this reason it is particularly important that motors can be easily integrated into system control and monitoring. With the Field-BusPlug system and the new UMC100-FBP motor management system, the best prerequisites are created for this. Intelligent motor management ensures high reliability in the process. The UMC100-FBP motor management system is easy to handle, from planning and implementation through to on-site service.

References worldwide

Due to the benefits it provides, the UMC100 is used worldwide in many segments and in projects with several thousand motor controllers

FBP FieldBusPlug

Further FBP terminal devices



S500

Decentralized S500 I/O components

Interface module DC505 with fieldbus-neutral interface for connection to FieldBusPlug. Expandable with I/O modules of the AC500 automation system for decentralized automation concepts.

For technical details, please refer to:

www.abb.com > Low Voltage Products and Systems > Control Products > Programmable Logic Controllers PLCs



Tmax

Circuit breakers Tmax and Emax E1– E6 and X1

Circuit breakers can be integrated into any fieldbus systems via the FBP interface module EP010 for connection to FieldBusPlug.

For technical details, please refer to:

www.abb.com > Low Voltage Products and Systems > Circuit Breakers > Moulded Circuit Breakers (Tmax)

www.abb.com > Low Voltage Products and Systems > Circuit Breakers > Air Circuit Breakers (Emax)



Emax

X1



PSR3...PSR16

Softstarters PSE/PSR/PST

PSE/PSR:

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

For technical details, please refer to:

www.abb.com > Low Voltage Products and Systems > Control Products > Softstarters > Softstarters



Softstarter PST

PST:

Softstarter with integrated fieldbus-neutral interface for connection to FieldBusPlug.

For technical details, please refer to:

www.abb.com > Low Voltage Products and Systems > Control Products > Softstarters > Softstarters



Switch disconnecter fuse SlimLine XR

Switch disconnecter fuse SlimLine XR

XR tier switch

with fieldbus-neutral interface for connection to FieldBusPlug.

For technical details, please refer to

www.abb.com > Fusegear > Switch Fuses Tier Type

Motor management system UMC100-FBP and accessories

Ordering details - Universal Motor Controller UMC100-FBP



UMC100-FBP

Description

Intelligent motor management system for three-phase motors with $I_e = 0,24 - 63$ A in one single device. Compact housing with integrated bushing-type current transformer for cable cross section up to 25 mm² (max. X with Insulation 11 mm). Higher currents with additional external current transformer. Thermal overload protection according to EN/IEC 60947-4-1, selectable trip classes 5E, 10E, 20E, 30E, 40E. (Some functions require the additional use of a voltage expansion module VI150 or VI155)

- Motor protection functions:
Over-/Underload, Over-/Undercurrent, Over-/Undervoltage, rotor blocking Phase failure / imbalance / sequence Earth fault detection integrated or with external sensor CEM11
Thermistor motor protection
- Motor control functions:
Easily configurable motor control functions: direct, reverse, star-delta starter, pole-changing, overload relay, actuator mode. Additionally free programmable application specific logic with function blocks
- Service and diagnostic data:
Operating hours, number of motor starts and overload trips
Motorstatus, faults and warnings, fault history (16 events)
Motor current, phase voltages, thermal load, power factor (cos φ), active power, apparent power, energy, total harmonic distortion (THD).
- Integrated I/Os: 6 digital inputs, 1 PTC input, 4 digital outputs. Maximum number of I/Os with expansion module: 14 digital inputs, 1 PTC input, 8 digital outputs, 1 analogue output,
- Interface for FieldBusPlug for communication via fieldbus systems, Interface for operator panel UMC100-PAN, Bus interface for connection of expansion modules
- UMC100 requires 24 V DC power supply.

Ordering details

Designation	Nominal motor current	Type	Order code	Price:Weight
				(1 pce)
				1 pce:kg (lb)
Universal Motor Controller	0.24 – 63 A	UMC100-FBP.0	1SAJ520000R0101	0.282 (0.622)
Universal Motor Controller, ATEX	0.24 – 63 A	UMC100-FBP.0	1SAJ520000R0201	0.282 (0.622)



UMC100-PAN

Operating panel UMC100-PAN and accessories for Universal Motor Controller UMC100-FBP

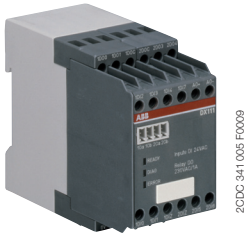
Operating, diagnostics and parameter setting panel for Universal Motor Controller UMC100-FBP. Setting of motor and bus parameters. Backlit graphical multilingual display. Assembly directly on UMC100-FBP or on the control cabinet door via extension cable and door mounting set IP65 (front side).

Ordering details

Designation	Type	Order code	Price:Weight
			(1 pce)
			1 pce:kg (lb)
Operating panel	UMC100-PAN	1SAJ590000R0102	0.040 (0.088)
3 m ext. cable with door mounting set	UMCPAN-CAB.300	1SAJ510002R0001	0.176 (0.388)
0.7 m ext. cable with door mounting set	UMCPAN-CAB.070	1SAJ510003R0001	0.700 (0.154)
1.5 m ext. cable with door mounting set	UMCPAN-CAB.150	1SAJ510004R0001	0.088 (0.194)

Motor management system UMC100-FBP and accessories

Expansion modules and accessories for Universal Motor Controller UMC100-FBP



DX111-FBP

2CDC 341 005 F0009

Description

One I/O-expansion-module DX111 or DX122 and one voltage-expansion-module VI150 or VI155 can be connected to a UMC100. All expansion modules require 24 V DC power supply

DX111-FBP.0:

I/O-expansion module with 8 digital inputs 24 V DC, 4 relay outputs, 1 analog output 0/4...20 mA or 0...10 V

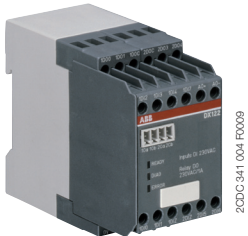
DX122-FBP.0:

I/O-expansion module with 8 digital inputs 110 / 230 V AC, 4 relay outputs, 1 analog output 0/4 - 0 mA or 0 - 10 V

VI150-FBP.0: Voltage expansion module for use in grounded networks, 150 – 690 V AC

VI155-FBP.0: Voltage expansion module for use in all networks, 150 – 690 V AC

Voltage modules for the determination of phase voltages, power factor ($\cos \varphi$), apparent power, energy, total harmonic distortion (THD)



DX122-FBP

2CDC 341 004 F0009

Ordering details

Designation	Type	Order code	Price	Weight
			1 pce	(1 pce)
			kg	(lb)
I/O module for UMC100, 24 V DC digital input	DX111-FBP.0	1SAJ611000R0101		0.220 (0.485)
I/O module for UMC100, 110 – 230 V AC digital input	DX122-FBP.0	1SAJ622000R0101		0.220 (0.485)
3 phase Voltage module for grounded networks	VI150-FBP.0	1SAJ650000R0100		0.110 (0.243)
3 phase Voltage module for all networks	VI155-FBP.0	1SAJ655000R0100		0.110 (0.243)
Connection cable UMC100 - I/O module, length 0.30 m	UMCIO-CAB.030	1SAJ691000R0001		0.011 (0.024)
Connection cable IO-module - IO-module, length 0,30 m	IOIO-CAB.030	1SAJ692000R0001		0.011 (0.024)
Terminal set for UMC (spare parts)	UMCTB-FBP.0	1SAJ929160R0001		0.008 (0.018)



VI150-FBP

2CDC 345 001 S0011

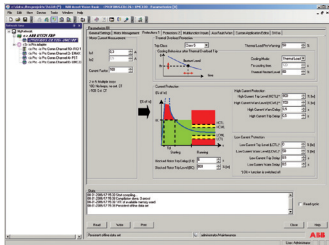


VI155-FBP

2CDC 345 002 S0011

Configuration software overview

Ordering details



Configuration software for the UMC100-FBP motor management system The software screwdriver for your application

Asset Vision Basic is an FDT frame application with a modern and simple graphical user interface. It provides effective basic functionality for configuration, diagnosis and maintenance of intelligent low voltage switching devices from ABB. Furthermore, due to the open FDT interface, other ABB and 3rd party DTMs can also be used.

Asset Vision Basic is the optimal tool for configuring FBP devices during commissioning, in the workshop or as second master in a PROFIBUS network of a process control system.

System requirements: Windows XP / Windows 7

Overview of features:

- Online/offline configuration and parameterization of devices
- Reading parameterization and configuration information from the device
- Online display of measuring and status data
- Online operation and error acknowledgement
- Creation of customer-specific logics
- Archiving

Connection to the device can either be via PROFIBUS (option 1) or as point to point connection directly to the device (option 2).

Ordering details - Configuration software (option 1): This option is recommended if the system comprises many devices.

Designation	Type	Order code	Price:Weight	
			1 pce	(1 pce)
USB interface for PROFIBUS networks	UTP22-FBP	1SAJ924013R0001	0.261	(0.575)
PDP22/PDQ22 Device Type Manager (DTM) incl. FDT/DTM frame application	PBDTM-FBP	1SAJ924012R0004	0.062	(0.137)
PROFIBUS DP adapter cable Dsub9-M12 (optional, for use if Dsub9 connection is not available, e.g. on master or repeater)	PDA11-FBP.050	1SAJ924009R0005	0.113	(0.249)



UTP22-FBP (option 1)

Ordering details - Configuration software (option 2): This option is recommended if it is intended to use devices without a bus or if devices are connected to a DeviceNet, CANopen or Modbus bus.

Designation	Type	Order code	Price:Weight	
			1 pce	(1 pce)
USB to FBP interface cable	UTF21-FBP	1SAJ929400R0002	0.100	(0.220)
PDP22/PDQ22 Device Type Manager (DTM) incl. FDT/DTM frame application	PBDTM-FBP	1SAJ924012R0004	0.062	(0.137)



UTF21-FBP (option 2)

Devices for extension of protection functions

Ordering details



CEM11-FBP

2CDC 346 011 F008

Earth fault monitors CEM11-FBP for use with Universal Motor Controller UMC100-FBP

Ordering details

Earth fault currents [mA]	Through-hole diameter	Type	Order code	Price	Weight
				1 pce	(1 pce)
80 ¹⁾ , 300, 550, 750, 1000, 1200, 1500, 1700	20 mm	CEM11-FBP.20	1SAJ929200R0020		0.130 (0.287)
100 ¹⁾ , 500, 1000, 1400, 2000, 2400, 3000, 3400	35 mm	CEM11-FBP.35	1SAJ929200R0035		0.200 (0.441)
120 ¹⁾ , 1000, 2000, 2800, 4000, 4800, 6000, 6800	60 mm	CEM11-FBP.60	1SAJ929200R0060		0.330 (0.728)
300 ¹⁾ , 2000, 4000, 5600, 8000, 9600, 12000, 13600	120 mm	CEM11-FBP.120	1SAJ929200R0120		0.940 (2.072)

¹⁾ lower values have higher inaccuracy

Current transformers for use with Universal Motor Controller UMC100-FBP

Linear type transformers, 3-phase, with terminal block, for conductors Cu 2.5 mm². For use with UMC100 and nominal motor currents >63 A



CT4L185R/4, CT4L310R/4

2CDC 341 001 F012

Ordering details

Designation	Recommended current range	Type	Order code	Price	Weight
				1 pce	(1 pce)
Current transformer	60...185 A AC	CT4L185R/4	1SAJ929500R0185		1.600 (3.527)
Current transformer	180...310 A AC	CT4L310R/4	1SAJ929500R0310		1.500 (3.307)
Current transformer	300...500 A AC	CT5L500R/4	1SAJ929501R0500		1.700 (3.748)
Current transformer	500...850 A AC	CT5L850R/4	1SAJ929501R0850		1.900 (4.189)



CT5L500R/4, CT5L850R/4

2CDC 341 002 F012

Ethernet Modbus TCP Interface MTQ22-FBP

Ordering details



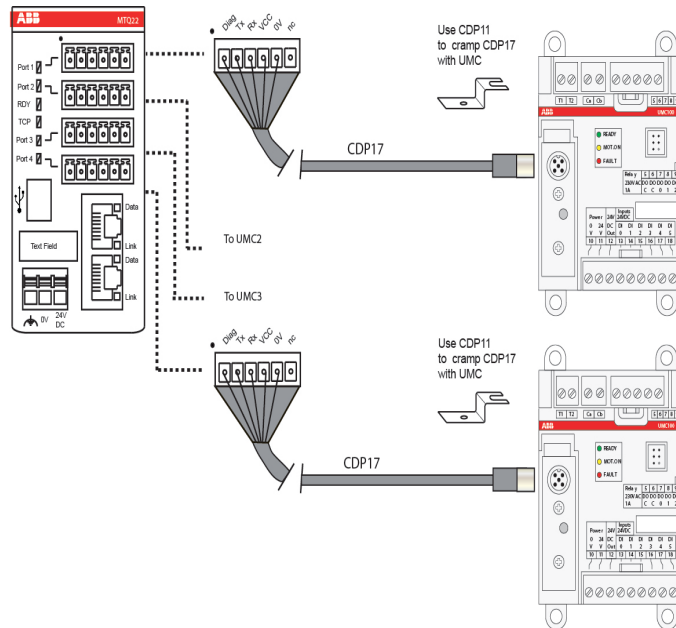
MTQ22

- Ethernet connectivity for up to four UMC100
- Modbus TCP protocol
- Supports all network topologies
 - Star
 - Bus
 - Ring with redundancy (MRP protocol)
- No special Ethernet connectors required in MCCs
- Easy to use in withdrawable applications

Ordering details

Designation	Cable length	Type	Order code	Price	Pkg qty	Weight (1 pce)
				Pkg: pieces	kg (lb)	
Ethernet Modbus TCP Interface	-	MTQ22-FBP.0	1SAJ260000R0100		1	0.200
Terminal bloc for MTQ22 X1...X4	-	ETHTB-FBP.4	1SAJ929200R0001		4	0.001
Terminal bloc for MTQ22 X1...X4	-	ETHTB-FBP.50	1SAJ929200R0002		50	0.001
Cable MTQ22 – UMC100	1.5 m	CDP17-FBP.150	1SAJ929170R0015		1	0.001
Cable MTQ22 – drawer outside	1.5 m	CDP18-FBP.150	1SAJ929180R0015		1	0.001
Cable UMC100 – drawer inside	1.0 m	CDP19-FBP.100	1SAJ929190R0010		1	0.001
Passive cable fixing bracket	-	CDP11-FBP.0	1SAJ929100R0001		50	0.010 (0.220)
Passive cable fixing bracket	-	CDP11-FBP.4	1SAJ929100R0004		4	0.010 (0.220)

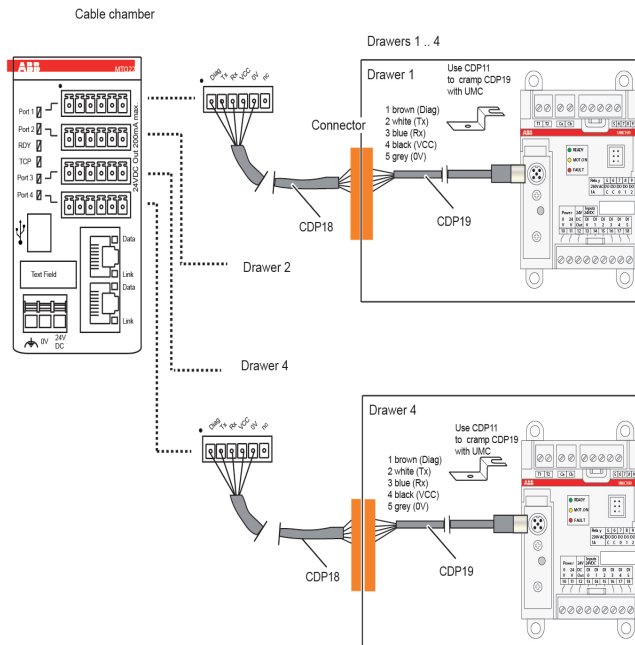
UMC100-FBP , fix mounted application with solution MTQ22-FBP



Ethernet Modbus TCP Interface MTQ22-FBP

Ordering details

UMC100-FBP, withdrawable application with MTQ22-FBP



PROFIBUS DP FieldBusPlugs and other FBP terminal devices

Ordering details



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 (other approvals in preparation).

Ordering details

Designation	Cable length	Type	Order code	Price: Weight
				(1 pce)
				1 pce: kg (lb)
Profibus DP FBP	0.25 m	PDP22-FBP.025	1SAJ240100R1003	0.090 (0.198)
Profibus DP FBP	0.50 m	PDP22-FBP.050	1SAJ240100R1005	0.100 (0.220)
Profibus DP FBP	1.00 m	PDP22-FBP.100	1SAJ240100R1010	0.130 (0.287)
Profibus DP FBP	2.00 m	PDP22-FBP.200	1SAJ240100R1020	0.200 (0.441)
Profibus DP FBP	5.00 m	PDP22-FBP.500	1SAJ240100R1050	0.360 (0.794)



2CDC 341 046 F0003

PDP22-FBP

PROFIBUS DP FieldBusPlug for 4 devices

The 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. This allows cost-efficient integration of devices that are located physically nearby.

- The PDQ22 supports: Universal Motor Controllers UMC100, softstarters 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 (other approvals in preparation).

Ordering details

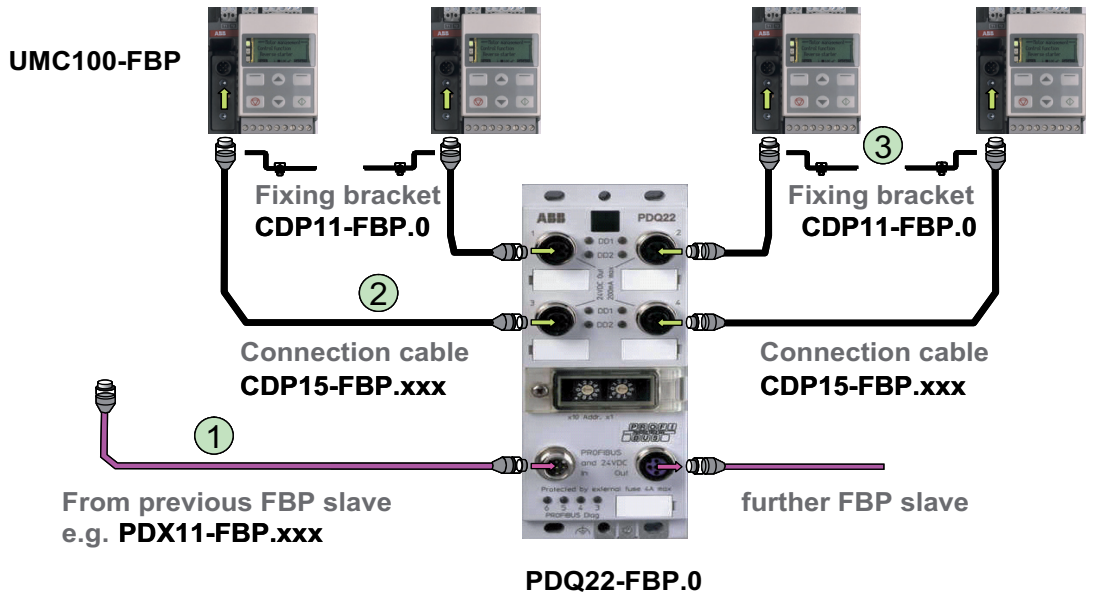
Designation	Type	Order code	Price: Weight
			(1 pce)
			1 pce: kg (lb)
Quadruple bus connector	PDQ22-FBP	1SAJ240200R0050	0.200 (0.441)



2CDC 341 046 F0006

PDQ22-FBP

Several Universal Motor Controllers on a PROFIBUS DP node Application



Several Universal Motor Controllers on a PROFIBUS DP node

Ordering details

Description	Type	Order code	Price	Weight
			1 pce	(1 pce)
			kg	(lb)
(1) PROFIBUS DP extension cable (0.50 m...5.00 m)	PDX11-FBP.050	1SAJ924001R0005		0.100 (1.102)
	PDX11-FBP.100	1SAJ924001R0010		0.130 (0.287)
	PDX11-FBP.300	1SAJ924001R0030		0.271 (0.597)
	PDX11-FBP.500	1SAJ924001R0050		0.442 (0.974)
(2) Connection cable (0.30 m...1.50 m)	CDP15-FBP.030	1SAJ929140R0003		1.180 (2.601)
	CDP15-FBP.060	1SAJ929140R0006		0.100 (0.220)
	CDP15-FBP.150	1SAJ929140R0015		0.099 (0.218)
(3) Fixing bracket for passive plug	CDP11-FBP.0	1SAJ929100R0001		0.010 (0.220)

Note: Refer to „FBP terminal device data, overview“ see page 1/21. for system accessories and documentation.

Accessories for PROFIBUS DP bus connection

Ordering details



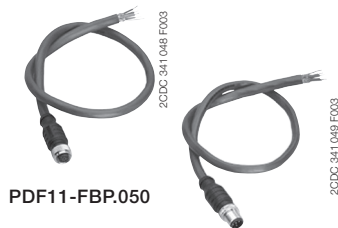
Round cables for bus junctions

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

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.

Ordering details

PROFIBUS DP round cable for bus junctions	Cable length	Type	Order code	Price: Weight (1 pce)
				1 pce: kg (lb)
Round cable with female connector	0.50 m	PDF11-FBP.050	1SAJ924002R0005	0.040 (0.088)
Round cable with male connector	0.50 m	PDM11-FBP.050	1SAJ924003R0005	0.040 (0.088)



PDF11-FBP.050

PDM11-FBP.050

Round cables for bus extension

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

Ordering details

PROFIBUS DP extension cable	Cable length	Type	Order code	Price: Weight (1 pce)
				1 pce: kg (lb)
Ready-made cable	0.50 m	PDX11-FBP.050	1SAJ924001R0005	0.040 (0.088)
Ready-made cable	1.00 m	PDX11-FBP.100	1SAJ924001R0010	0.080 (0.176)
Ready-made cable	3.00 m	PDX11-FBP.300	1SAJ924001R0030	0.200 (0.441)
Ready-made cable	5.00 m	PDX11-FBP.500	1SAJ924001R0050	0.310 (0.683)
Coil	100 m	PDC11-FBP.999	1SAJ924004R1000	5.600 (12.346)



PDX11-FBP



PDM11-FBP.0

PDF11-FBP.0



PDV11-FBP.0
PDV12-FBP.0



PDR11-FBP.150



PDA11-FBP.050



PDA12-FBP.050

Ordering details - Accessories for bus extension

PROFIBUS DP cable connector	Type	Order code	Price: Weight (1 pce)
			1 pce: kg (lb)
Male plug for round cables	PDM11-FBP.0	1SAJ924005R0001	0.030 (0.066)
Female plug for round cables	PDF11-FBP.0	1SAJ924006R0001	0.030 (0.066)

Ordering details - Line termination, feeding connectors, adapters

Designation	Type	Order code	Price: Weight (1 pce)
			1 pce: kg (lb)
Line termination 150 ohms	PDR11-FBP.150	1SAJ924007R0001	0.030 (0.066)
Feeding connector 24 V DC, code B-A	PDV11-FBP.0	1SAJ924008R0001	0.040 (0.088)
Feeding connector 24 V DC, code A-A	PDV12-FBP.0	1SAJ924011R0001	0.040 (0.088)
Adapter Dsub9-M12, cable length 0.50 m	PDA11-FBP.050	1SAJ924009R0005	0.040 (0.088)
Adapter M12-Dsub9-M12, cable length 2 x 0.50 m	PDA12-FBP.050	1SAJ924010R0005	0.040 (0.088)

Accessories for PROFIBUS DP FieldBusPlug PDQ22-FBP

Ordering details

Several Universal Motor Controllers on a PROFIBUS DP node

Ordering details

Designation	Accessory type	Type	Order code	Price	Weight
				1 pce	(1 pce)
				kg (lb)	
DIN rail adapter for PDQ22-FBP	Mounting material	CDA11-FBP.0	1SAJ929300R0001		0.110 (0.242)
Fixing bracket for pas-sive plug of connection cable	Mounting material	CDP11-FBP.0	1SAJ929100R0001		0.500 (1.102)
Connection cable (female/male), shielded, length 0.3 m	Connection cables	CDP15-FBP.030	1SAJ929140R0003		0.100 (0.220)
Connection cable (female/male), shielded, length 0.6 m	Connection cables	CDP15-FBP.060	1SAJ929140R0006		0.150 (0.331)
Connection cable (female/male), shielded, length 1.5 m	Connection cables	CDP15-FBP.150	1SAJ929140R0015		0.200 (0.441)
Connection cable (male/open end), shielded,length 1.5 m	Connection cables	CDP16-FBP.150	1SAJ929150R0015		0.200 (0.441)



CDP15-FBP

5T04801

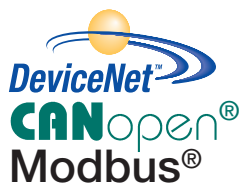


CDP16-FBP

2CDC341103F0006

DeviceNet, CANopen® and Modbus-RTU FieldBusPlugs

Ordering details



B10_3282_RET

DNP21-FBP
COP21-FBP
MRP21-FBP

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 (further on request)

Ordering details

Designation	Cable length	Type	Order code	Price	Weight
				1 pce	(1 pce)
				kg	(lb)
DeviceNet FBP	0.25 m	DNP21-FBP.025	1SAJ230000R1003	0.090	0.198
DeviceNet FBP	0.5 m	DNP21-FBP.050	1SAJ230000R1005	0.100	0.220
DeviceNet FBP	1.00 m	DNP21-FBP.100	1SAJ230000R1010	0.130	0.287
DeviceNet FBP	5.00 m	DNP21-FBP.500	1SAJ230000R1050	0.360	0.794

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 (applied for)

Designation	Cable length	Type	Order code	Price	Weight
				1 pce	(1 pce)
				kg	(lb)
CANopen FBP	0.25 m	COP21-FBP.025	1SAJ230100R1003	0.090	0.198
CANopen FBP	0.5 m	COP21-FBP.050	1SAJ230100R1005	0.100	0.220
CANopen FBP	1.00 m	COP21-FBP.100	1SAJ230100R1010	0.130	0.287

Modbus-RTU FieldBusPlug

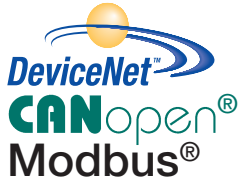
Ready-made Modbus-RTU fieldbus interface with various cable lengths.

- 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 (applied for)

Designation	Cable length	Type	Order code	Price	Weight
				1 pce	(1 pce)
				kg	(lb)
Modbus-RTU FBP	0.25 m	MRP21-FBP.025	1SAJ250000R0003	0.090	0.198
Modbus-RTU FBP	0.5 m	MRP21-FBP.050	1SAJ250000R0005	0.100	0.220
Modbus-RTU FBP	1.00 m	MRP21-FBP.100	1SAJ250000R0010	0.130	0.287
Modbus-RTU FBP	5.00 m	MRP21-FBP.500	1SAJ250000R0050	0.360	0.794

DeviceNet, CANopen® and Modbus-RTU accessories

Ordering details



DNF11-FBP.050

ST05301



DNM11-FBP.050

ST05201



DNX11-FBP

ST04801

Accessories for DeviceNet, CANopen®, Modbus-RTU bus connection

Round cables for bus junctions

Ready-made bus cable for bus junctions, one cable end open

Ordering details

Round cables for bus junctions	Cable length	Type	Order code	Price	Weight
				1 pce	(1 pce)
				kg (lb)	
Round cable with female plug	0.50 m	DNF11-FBP.050	1SAJ923002R0005	0.400	(0.882)
Round cable with male plug	0.50 m	DNM11-FBP.050	1SAJ923003R0005	0.400	(0.882)

Round cables for bus extension

Ready-made bus cable

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

Ordering details

PROFIBUS extension cable	Cable length	Type	Order code	Price	Weight
				1 pce	(1 pce)
				kg (lb)	
Ready-made cable	1.00 m	DNX11-FBP.100	1SAJ923001R0010	0.080	(0.176)
Ready-made cable	3.00 m	DNX11-FBP.300	1SAJ923001R0030	0.200	(0.441)
Ready-made cable	5.00 m	DNX11-FBP.500	1SAJ923001R0050	0.310	(0.683)
Cable on coil	100.00 m	DNC11-FBP.999	1SAJ923004R1000	5.600	(12.346)

Accessories for bus extension

Ordering details

Cable connector	Type	Order code	Price	Weight
			1 pce	(1 pce)
			kg (lb)	
Male plug for round cable	DNM11-FBP.0	1SAJ923005R0001	0.030	(0.066)
Female plug for round cable	DNF11-FBP.0	1SAJ923006R0001	0.030	(0.066)



DNF11-FBP.0

ST05701



DNM11-FBP.0

ST05401



DNR11-FBP.120

ST05501

Termination resistor

Ordering details

Bus accessories	Type	Order code	Price	Weight
			1 pce	(1 pce)
			kg (lb)	
Termination resistor 120 ohms	DNR11-FBP.120	1SAJ923007R0001	0.200	(0.441)

System accessories and documentation

Ordering details

Miscellaneous accessories

- Addressing labels for address labelling of FieldBusPlugs.
- Covering caps for protection of open M12 plugs

Ordering details

Designation	Type	Order code	Price:Weight (1 pce)
			1 pce:kg (lb)
Addressing labels for FieldBusPlugs / 40 pcs	CAL11-FBP.0	1SAJ929005R0001	0.189 (0.417)
M12 covering caps for FieldBusPlugs / 10 pcs	CCC11-FBP.0	1SAJ929006R0001	0.010 (0.022)

FieldBusPlug power supply unit

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

Ordering details

Designation	Type	Order code	Price:Weight (1 pce)
			1 pce:kg (lb)
Power supply unit 24 V / 2.5 A	CP-E 24/2.5	1SVR427032R0000	0.360 (0.882)
Power supply unit 24 V / 5 A	CP-S 24/5.0	1SVR427014R0000	0.960 (0.882)



CP-E 24/2.5



CP-S 24/5.0

For larger power supplies please refer to www.abb.com

> Low Voltage Products and Systems > Control Products > Electronic Relays and Controls > Power Supplies

Accessories for installation in control cabinet drawer systems

Fixing brackets for passive plug and FBP passive cables for installation of FBP terminal devices in drawer systems.

Ordering details

Designation	Cable length	Type	Order code	Price:Weight (1 pce)
				1 pce:kg (lb)
Passive plug fixing bracket for drawer systems / 50 pcs		CDP11-FBP.0	1SAJ929100R0001	0.500 (1.102)
Passive plug fixing bracket for drawer systems / 4 pcs		CDP11-FBP.4	1SAJ929100R0004	0.400 (0.882)
Passive cable for drawer systems (outside)	1.00 m	CDP12-FBP.100	1SAJ929120R0001	0.200 (0.441)
Passive cable for drawer systems (inside)	1.00 m	CDP13-FBP.100	1SAJ929110R0001	0.310 (0.683)



CDP12-FBP



CDP13-FBP

FieldBusPlug system documentation

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

Ordering details

Designation	Language	Type	Order code	Price:Weight (1 pce)
				1 pce:kg (lb)
CD-ROM version	German/Englisch	FieldBusPlug documentation	2CDC190008E04xx	0.010 (0.220)

Communicative motor starters with control functions

Technical data - UMC100-FBP

		UMC100-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 external current transformers	
Overload protection for 3-phase motors	According to EN/IEC 60947-4-1	
Trip categories (adjustable)	5, 10, 20, 30, 40	
Extended motor model	Cooling time definition by calculat. or configurat.	
Feed-through holes of internal 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	360 mA	
Total power dissipation	9 W max.	
Reverse polarity protection	yes	
Inputs/outputs		
Digital inputs	6 inputs 24 V DC	
PTC input	1	
Digital outputs	3 relay outputs with common supply 1 transistor output 24 V DC, 0.2 A	
Voltage switching capacity	24 V AC/DC ... 250 V AC/DC	
Current switching capacity per relay	240 V AC (AC15)	1.5 A max.
	120 V AC (AC15)	3 A max.
	250 V DC (DC13)	0.11 A max.
	125 V DC (DC13)	0.22 A max.
	24 V DC (DC13)	1 A max.
Load current via common	I _{max} = 6 A gL / gG (thermal limit)	
Relay contact lifetime	> 500.000 switching cycles – mechanical > 100.000 switching cycles – at 250 V AC, 0,5 A > 50.000 switching cycles – at 250 V AC, 1,5 A	
Contact wiring for inductive load	Free-wheeling diode for direct current, varistors/VDRs for alternating current	
Interfaces		
Bus interface	1 (for connection of ABB FieldBusPlug)	
Operating panel interface	1 (for connection of UMC100-PAN operating panel)	
Interface for I/O expansion	1 (for connection of I/O expansion modules)	
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, contactor switching cycles count, tripping events due to overload count Time period since last tripping event Error history Selectable warning & tripping limits	
Integrated control functions	Direct starting, reverse starting, star-delta starting, pole-changing starting, actuator/servo-drive, transparent mode, emergency start function, stand alone operation (even without bus connection) Time-controlled load shedding in case of voltage dips / configurable starting delay	
Integrated motor protection functions	Overload monitoring, phase failure detection, motor blocking detection, thermal overload monitoring (PTC), earth fault monitoring with sensor CEM11-FBP Configurable checkback time, phase imbalance detection, fast blocking protection during starting	
Parameter setting / configuration	Operating panel, fieldbus (FieldBusPlug), DTM (DeviceTypeManager)	
Customer-specific applications	Configurable logic	
General data		
Conductor cross section	1 x 0.2 - 2.5 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	0.282 kg (0.622 lb)	
Degree of protection	IP20	
Temperature range	Storage: - 25 ... + 70 °C Operation: 0 ... + 60 °C	
Approvals	ATEX, CCC, CE, cUL, GL, GOST (other approvals on request)	
Operating panel (optional)	Adjustment and visualization of motor & device data and bus parameters, status indication of digital Inputs & outputs, contactor switching cycles and operating hours counting, local operation on site Graphical multilingual user interface	
I/O expansion modules (optional)	2 I/O expansion modules	

FBP terminal device data, overview

Technical data - DX111, DX122

I/O expansion modules for Universal Motor Controller UMC100-FBP

The I/O expansion modules are exclusively intended to supplement the UMC100-FBP with additional inputs and outputs. Customer-specific adaptations are possible by means of logical interconnection of the I/O channels. The information is available for local functions and via the fieldbus. The PBTDM tool is required for configuration.

	DX111	DX122
Electrical data		
Supply voltage	24 V DC (+ 30 %, – 20 %) (19.2 ... 31.2 V DC incl. residual ripple)	
Current consumption incl. inputs, relays energized	90 mA max.	
Digital inputs		
Number of inputs	8 inputs in 2 groups of common reference potential (1 group with 5 inputs, 1 group with 3 inputs) Insulation: Type 1 acc. to EN 61131-1	8 inputs in 2 groups of common reference potential (1 group with 5 inputs, 1 group with 3 inputs) Insulation: Type 2 acc. to EN 61131-1
Input voltage	24 V DC	110 V AC ... 240 V AC
Input delay	6 ms typ.	20 ms typ.
Signal levels	0 state – 31.2 ... + 5 V 1 state + 15 ... + 31.2 V	0 ... 40 V AC 74 ... 265 V AC
ON current per channel	6.0 mA typ. (24 V DC)	10.0 mA typ. (230 V AC)
Input resistance against 0 V	3.9 kΩ	
Frequency range		45 ... 65 Hz
Digital outputs		
Number of digital outputs	4 relay outputs with 2 common supplies (1DO0 & 1DO1 by 1DOC; 2DO2 & 2DO3 by 2DOC)	
Voltage switching capacity	12 ... 250 V AC/DC	
Load current via common	$I_{max} = 6 \text{ A gL} / \text{gG}$ per common supply (1DOC, 2DOC)	
Minimum load for proper switching	1 W or 1 VA	
Contact wiring for inductive load	Free-wheeling diode for direct current, varistors/VDRs for alternating current	
Current switching capacity per relay	EN 60947-5-1	
	240 V AC (AC15)	1.5 A max.
	120 V AC (AC15)	3 A max.
	250 V DC (DC13)	0.11 A max.
	125 V DC (DC13)	0.22 A max.
	24 V DC (DC13)	1 A max.
Relay contact lifetime	> 500.000 switching cycles – mechanical > 100.000 switching cycles – at 250 V AC, 0.5 A > 50.000 switching cycles – at 250 V AC, 1.5 A	
Analog output		
Number of analog outputs	1	
Connection type	2-wire, for motor current indication on an external analog instrument	
Output ranges	Configurable: 0/4 ... 20 mA or 0 ... 10 V	
Cable specification	< 30 m outside the control cabinet; > 30 m if shielded	
Max. output voltage	10 V	
Accuracy	< 5 %	
Output load	500 Ω max. if configured for 0/4 ... 20 mA output; 1 kΩ min. if configured for 0 ... 10 V output	
Resolution	8 bits	
Short-circuit detection	Yes, if configured for 0 ... 10 V output	
Wire break detection	Yes, if configured for 0/4 ... 20 mA output	
Insulation	none	
Interfaces		
Interface for I/O expansion	1 (for connection to UMC100-FBP or I/O expansion modules)	
Integrated diagnostic functions		
	Green LED: Device ready for operation	
	Yellow LED: Wire break or short circuit indication	
	Red LED: Error (loss of communication, failure, ...)	
General data		
Conductor cross section	2 x 0.75 - 2.5 mm ² max.	
Mounting	Snap-on mounting on DIN rail, any mounting position	
Dimensions	45 x 77 x 100 mm (without communication plug)	
Weight	0.220 kg	
Degree of protection	IP20	
Temperature range	Storage: – 25 ... + 70 °C	Storage: – 25 ... + 70 °C
	Operation: 0 ... + 60 °C	Operation: 0 ... + 55 °C
Approvals	ATEX, CCC, CE, cUL, GL, GOST (other approvals on request)	

FBP terminal device data, overview

Technical data - VI150, VI155

I/O expansion modules for Universal Motor Controller UMC100-FBP

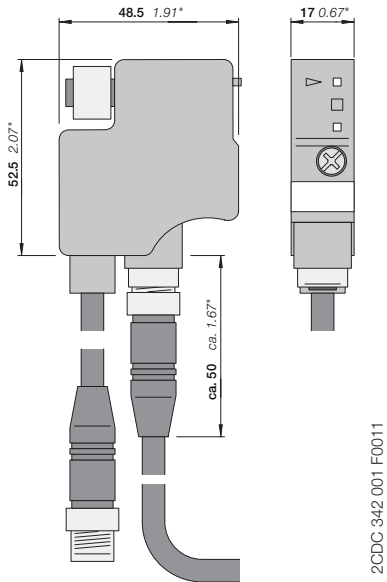
The I/O expansion modules are exclusively intended to supplement the UMC100-FBP with additional inputs and outputs. Customer-specific adaptations are possible by means of logical interconnection of the I/O channels. The information is available for local functions and via the fieldbus. The PBTDM tool is required for configuration.

	VI150	VI155
Application	only in grounded networks	in grounded and ungrounded networks
Electrical data		
Supply voltage	24 V DC (+ 30 %, - 20 %) (19.2 ... 31.2 V DC including ripple)	
Current consumption relay energized	max. 40 mA	max. 55 mA
Voltage input	L1, L2, L3	
Overvoltage category	III in grounded networks	II in ungrounded networks
Nominal voltage input range (phase to phase)	150 - 690 V AC	
U_{imp}	8 kV	
Accuracy voltage	+/- 2% in nominal input range	
Accuracy power factor	+/- 3.5 % in range 0.4 ... 0.95, I > 0.75 A	
Accuracy real power kW	+/- 5 % typ.	
Accuracy energy kWh	+/- 5 % typ.	
Total Harmonic Distortion THD	in %	
Rated operational voltage U_n	690 V AC	
Voltage supply cables	connection cables for voltage measurement may require additional cable protection	
Digital output		
Number	1 relay output	
Voltage switching capacity	12 ... 250 V AC/DC	
Current switching capacity	EN 60947-5-1	
	240 V AC (AC15)	max. 1.5 A
	120 V AC (AC15)	max. 3 A
	250 V DC (DC13)	max. 0.11 A
	125 V DC (DC13)	max. 0.22 A
	24 V DC (DC13)	max. 1 A
Minimum load for proper switching	1 W or 1 VA	
Contact wiring for inductive load	free-wheeling diode for DC, Varistors/VDRs for AC	
Relay contact lifetime	> 500.000 switching cycles – mechanical > 100.000 switching cycles – at 250 V AC, 0,5 A > 50.000 switching cycles – at 250 V AC, 1,5 A	
Interfaces		
Interface for I/O expansion	1 (zum Anschluss an UMC100-FBP und Digitalem Erweiterungsmodul)	
Integrated diagnostic functions		
	Green LED: Device ready	
	Yellow LED: Diagnostics	
	Red LED: Fault	
General data		
Conductor cross section	2 x 0.75 - 2.5 mm ² max.	
Mounting	snap-on mounting on DIN-rail, any mounting position	
	Min. 10 mm distance left and right to the L1 and L3	
	terminals required for voltages > 230 / 400 V	
Dimensions (W x H x D)	22.5 x 77 x 100 mm (excl. communication connector)	
Weight	0.110 kg	
Degree of protection	IP20	
Temperature range	storage: - 25 ... + 70 °C, operation: 0 ... + 60 °C*	
Operation altitude above sea level	max. 2000 m	max. 4000 m without derating
Approvals		
	ATEX, CCC, CE, cUL, GL, GOST (other approvals on request)	

FBP FieldBusPlug Dimensional drawings

Dimensions in mm

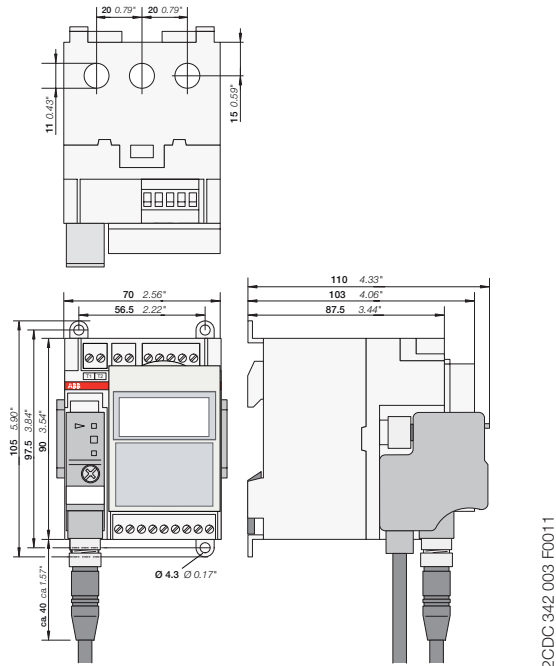
FieldBusPlugs and accessories



2CDC 342 001 F0011

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

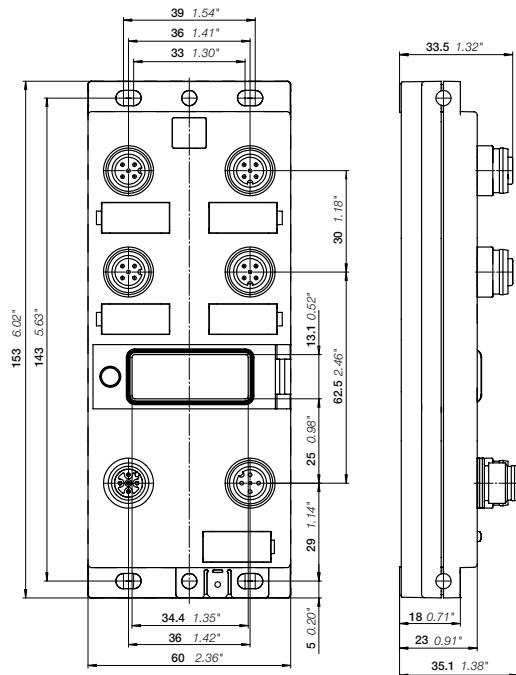
Communicative motor starters with control functions



2CDC 342 003 F0011

Universal Motor Controller UMC100-FBP

PROFIBUS DP FieldBusPlug for 4 FBP devices

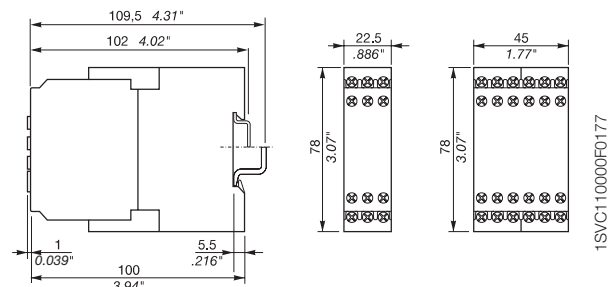


2CDC 342 043 F0006

PDQ22-FBP

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

I/O expansion modules for Universal Motor Controller UMC100-FBP



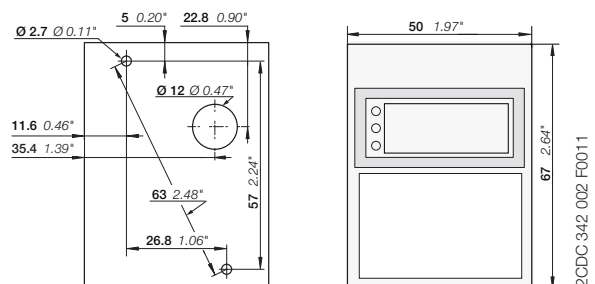
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DX111-FBP, DX122-FBP
VI150-FBP, VI155-FBP

VI150-FBP,
VI155-FBP

DX111-FBP,
DX122-FBP

LCD-Control panel for UMC100-FBP



2CDC 342 002 F0011

Drilling plan for
door mounting

Frontal view
LCD panel

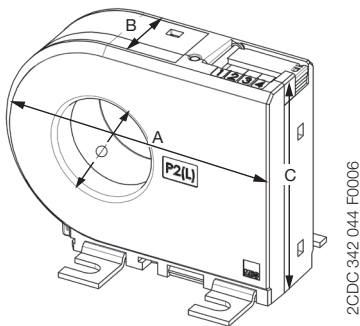
FBP FieldBusPlug

Dimensional drawings

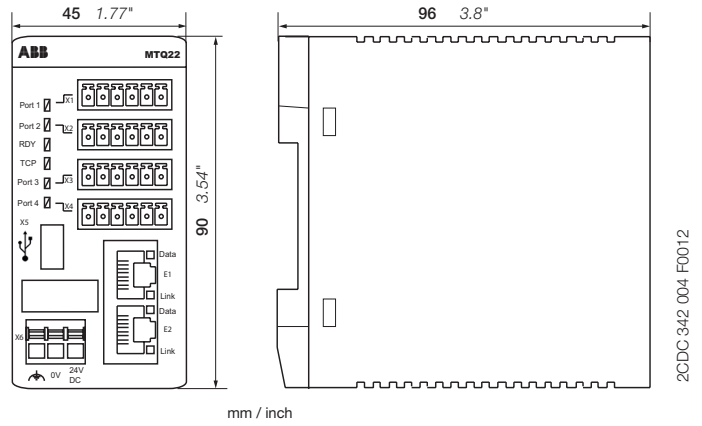
Accessories

Dimensions in mm

Earth fault monitor for use with Universal Motor Controller UMC100-FBP

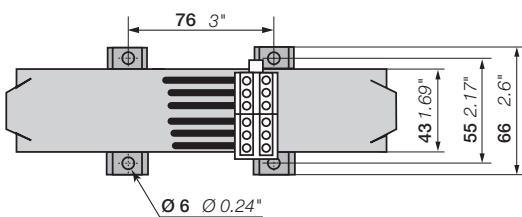
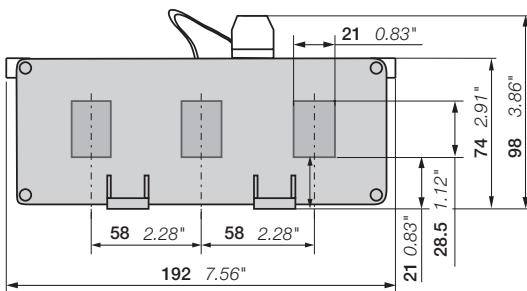


Type	W(A)	D (B)	H (C)	∅
CEM11-FBP.20	76.4 (3.01)	30 (1.18)	56 (2.20)	20 (0.79)
CEM11-FBP.35	99.5 (1.38)	30 (1.18)	79 (3.11)	35 (1.38)
CEM11-FBP.60	135 (5.31)	38 (1.46)	116 (4.57)	60 (2.36)
CEM11-FBP.120	210 (8.27)	38 (1.46)	190 (7.48)	120 (4.72)

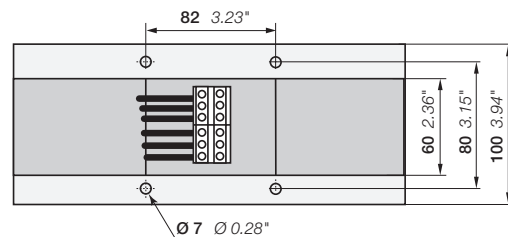
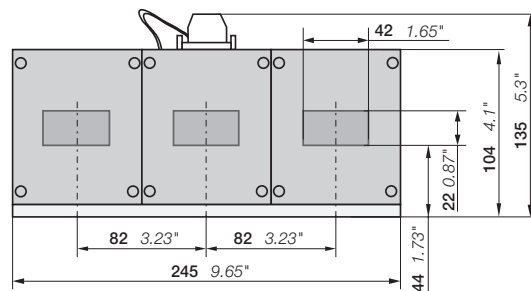


MTQ-22

Current transformer for use with Universal Motor Controller UMC100-FBP



CT4L185R/4, CT4L310R/4



CT5L500R/4, CT5L850R/4

FBP FieldBusPlug

Configuration examples for the integration of other terminal devices to the FieldBusPlug system



Tmax T4/T5



Emax

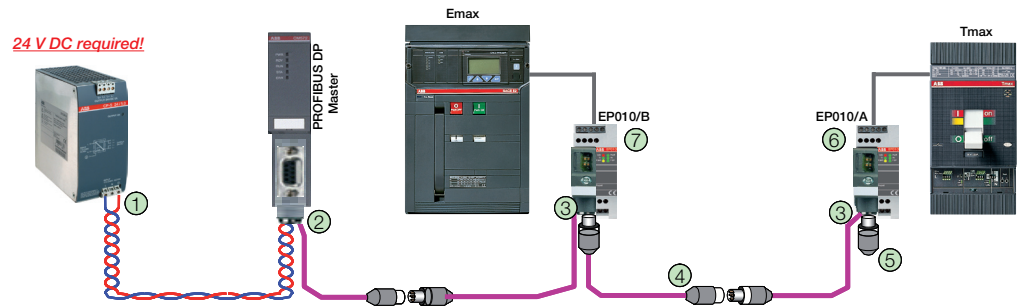


EP010

Communicative power circuit breakers Tmax and Emax

FBP interface module EP010 for connection to FieldBusPlug connector.

PROFIBUS line with power circuit breaker and EP010



Ordering details

Description	Type	Order code	Price	Weight (1 pce)
				kg (lb)
(1) Power supply unit 110 ... 240 V AC/24 V DC, 10 A	CP-S 24/10.0	1SVR427015R0100		1.107 (2.441)
(2) Adapter SubD-9 - M12 (A-coded)	PDA11-FBP.050	1SAJ924009R0005		0.113 (0.249)
	PDP22-FBP.025	1SAJ240100R1003		0.120 (0.265)
	PDP22-FBP.050	1SAJ240100R1005		0.120 (0.265)
(3) FieldBusPlug PROFIBUS DP V0/V1 (0.25 m ... 5 m)	PDP22-FBP.100	1SAJ240100R1010		0.157 (0.346)
	PDP22-FBP.200	1SAJ240100R1020		0.225 (0.496)
	PDP22-FBP.500	1SAJ240100R1050		0.468 (1.032)
	PDX11-FBP.050	1SAJ924001R0005		0.100 (0.220)
(4) PROFIBUS DP extension cable (0.50 m ... 5.00 m)	PDX11-FBP.100	1SAJ924001R0010		0.113 (0.249)
	PDX11-FBP.300	1SAJ924001R0030		0.271 (0.597)
	PDX11-FBP.500	1SAJ924001R0050		0.442 (0.974)
(5) Line termination 150 ohms	PDR11-FBP.150	1SAJ924007R0001		0.030 (0.066)
(6) Communication interface type A (Tmax: T4, T5, T6)	EP010	1SDA059469R0001		0.480 (1.058)
(7) Communication interface type B (Emax, Tmax: T7)	EP010	1SDA060198R0001		0.139 (0.306)

FBP FieldBusPlug

Configuration examples for the integration of other terminal devices to the FieldBusPlug system

Communicative softstarters PST/PSR

Compact device with fieldbus-neutral interface for connection to FieldBusPlug connector.



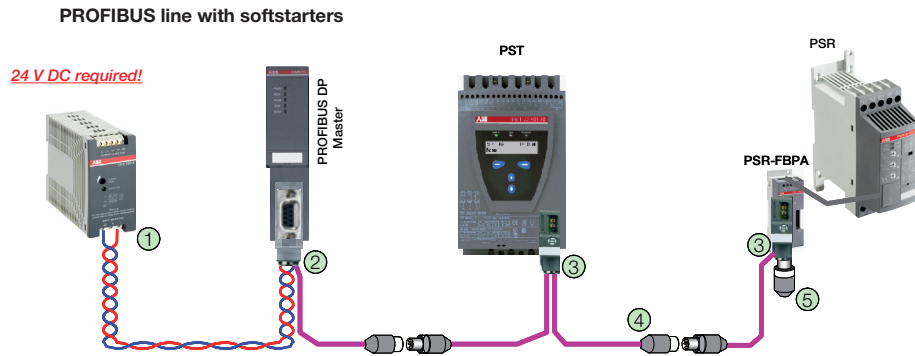
PST

1SFC13273R0001



PSR

1SFC132186F0001



Ordering details

Description	Type	Order code	Price	Weight
			1 pce	(1 pce)
			kg	(lb)
(1) Power supply unit 100 .. 240 V AC/24 V DC, 1.25 A	CP-E 24/1.25	1SVR427031R0000	0.270 (0.595)	
(2) Adapter SubD-9 - M12 (A-coded)	PDA11-FBP.050	1SAJ924009R0005	0.113 (0.249)	
	PDP22-FBP.025	1SAJ240100R1003	0.120 (0.265)	
	PDP22-FBP.050	1SAJ240100R1005	0.120 (0.265)	
(3) FieldBusPlug PROFIBUS DP V0/V1 (0.25 m ... 5 m)	PDP22-FBP.100	1SAJ240100R1010	0.157 (0.346)	
	PDP22-FBP.200	1SAJ240100R1020	0.225 (0.496)	
	PDP22-FBP.500	1SAJ240100R1050	0.468 (1.032)	
	PDX11-FBP.050	1SAJ924001R0005	0.100 (0.220)	
(4) PROFIBUS DP extension cable (0.50 m ... 5.00 m)	PDX11-FBP.100	1SAJ924001R0010	0.113 (0.249)	
	PDX11-FBP.300	1SAJ924001R0030	0.271 (0.597)	
	PDX11-FBP.500	1SAJ924001R0050	0.442 (0.974)	
(5) Line termination 150 ohms	PDR11-FBP.150	1SAJ924007R0001	0.030 (0.066)	

FBP FieldBusPlug

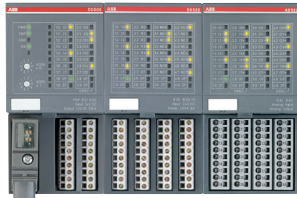
Configuration examples for the integration of other terminal devices to the FieldBusPlug system

AC500 automation devices connected via PROFIBUS DP

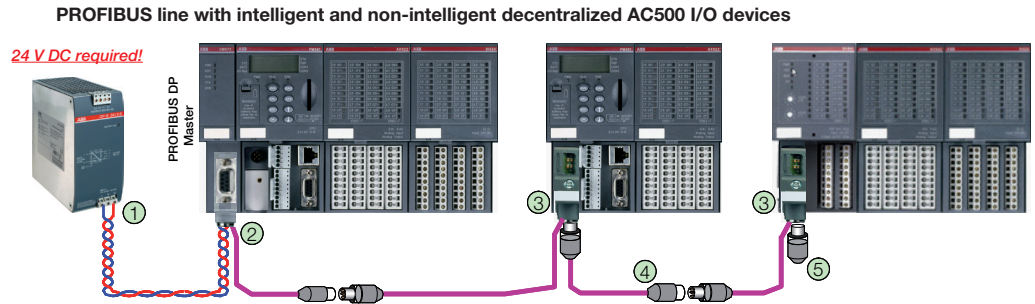
Automation device with fieldbus-neutral interface for connection to FieldBusPlug connector.



AC500



S500



Ordering details

Description	Type	Order code	Price	Weight
			1 pce	kg (lb)
(1) Power supply unit 110 ... 240 V AC/24 V DC, 10 A	CP-S 24/10.0	1SVR427015R0100	1.107	(2.441)
(2) Adapter SubD-9 - M12 (A-coded)	PDA11-FBP.050	1SAJ924009R0005	0.113	(0.249)
	PDP22-FBP.025	1SAJ240100R1003	0.120	(0.265)
	PDP22-FBP.050	1SAJ240100R1005	0.120	(0.265)
(3) FieldBusPlug PROFIBUS DP V0/V1 (0.25 m ... 5 m)	PDP22-FBP.100	1SAJ240100R1010	0.157	(0.346)
	PDP22-FBP.200	1SAJ240100R1020	0.225	(0.496)
	PDP22-FBP.500	1SAJ240100R1050	0.468	(1.032)
	PDX11-FBP.050	1SAJ924001R0005	0.100	(0.220)
(4) PROFIBUS DP extension cable (0.50 m ... 5.00 m)	PDX11-FBP.100	1SAJ924001R0010	0.113	(0.249)
	PDX11-FBP.300	1SAJ924001R0030	0.271	(0.597)
	PDX11-FBP.500	1SAJ924001R0050	0.442	(0.974)
(5) Line termination 150 ohms	PDR11-FBP.150	1SAJ924007R0001	0.030	(0.066)

FBP FieldBusPlug

Configuration examples for the integration of other terminal devices to the FieldBusPlug system



UMC100-FBP
DX122-FBP

2CDC3345 011 FX009

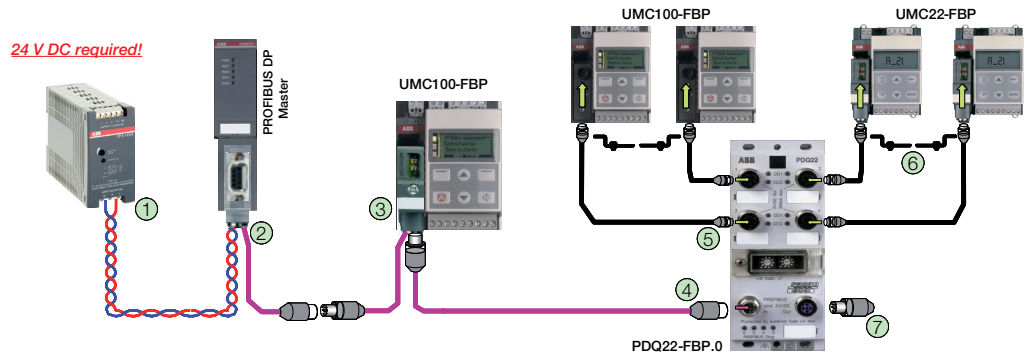


PDQ22-FBP

2CDC341038FB06

Several Universal Motor Controllers on 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.



Ordering details

Description	Type	Order code	Price	Weight (1 pce)
(1) Power supply unit 110 ... 240 V AC/24 V DC, 2.5 A	CP-E 24/2.5	1SVR427032R0000		1 pce kg (lb)
(2) Adapter SubD-9 - M12 (A-coded)	PDA11-FBP.050	1SAJ924009R0005		0.331 (0.730)
(3) FieldBusPlug PROFIBUS DP V0/V1 (0.25 m ... 5 m)	PDP22-FBP.025	1SAJ240100R1003		0.113 (0.249)
	PDP22-FBP.050	1SAJ240100R1005		0.120 (0.265)
	PDP22-FBP.100	1SAJ240100R1010		0.120 (0.265)
	PDP22-FBP.200	1SAJ240100R1020		0.157 (0.346)
(4) PROFIBUS DP extension cable (0.50 m ... 5.00 m)	PDX11-FBP.050	1SAJ924001R0005		0.225 (0.496)
	PDX11-FBP.100	1SAJ924001R0010		0.468 (1.032)
	PDX11-FBP.300	1SAJ924001R0030		0.100 (0.220)
(5) Connection cable (0.30 m ... 1.50 m)	PDX11-FBP.500	1SAJ924001R0050		0.113 (0.249)
	CDP15-FBP.030	1SAJ929140R0003		0.271 (0.597)
	CDP15-FBP.060	1SAJ929140R0006		0.442 (0.974)
(6) Fixing bracket for passive plug	CDP15-FBP.150	1SAJ929140R0015		0.100 (0.220)
	CDP11-FBP.0	1SAJ929100R0001		0.100 (0.220)
(7) Line termination 150 ohms	PDR11-FBP.150	1SAJ924007R0001		0.010 (0.022)
				0.030 (0.066)

FBP FieldBusPlug

Configuration examples for the integration of Universal Motor Controllers into MCCs



Motor management
UMC100-FBP

2CDC341 004 F0012



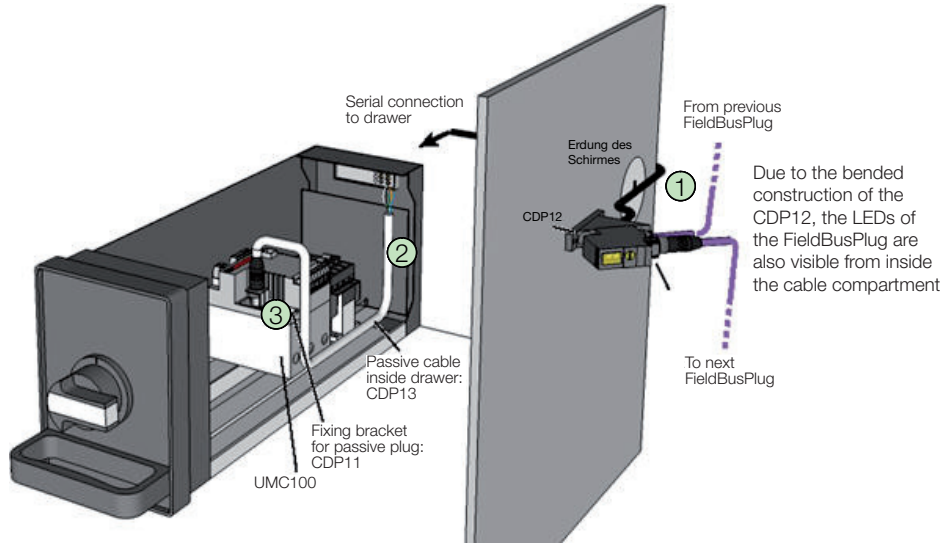
Operating panel
UMC100-PAN

2CDC341 006 F0009

Universal Motor Controllers in Motor Control Centers (MCCs)

Components for installation of Universal Motor Controller UMC100-FBP to an MCC using drawer systems. Configurations with up to four controllers connected to one PROFIBUS DP node are supported.

Single Universal Motor Controller on a PROFIBUS DP node



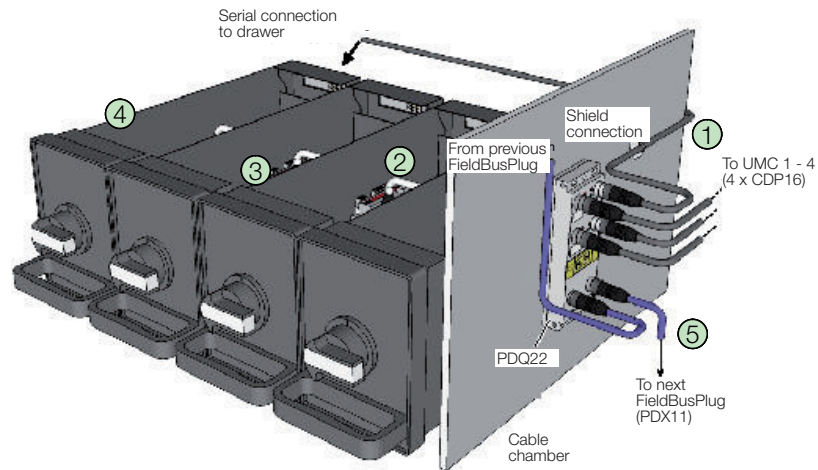
Ordering details

Description	Type	Order code	Price:Weight	
			(1 pce)	
			1 pce:	kg (lb)
(1) Passive cable for drawer systems (outside)	CDP12-FBP.100	1SAJ929120R0001	0.070	(0.154)
(2) Passive cable for drawer systems (inside)	CDP13-FBP.100	1SAJ929110R0001	0.099	(0.218)
(3) Fixing bracket for passive plug	CDP11-FBP.0	1SAJ929100R0001	0.010	(0.220)

FBP FieldBusPlug

Configuration examples for the integration of Universal Motor Controllers into MCCs

Several Universal Motor Controllers on a PROFIBUS DP node



PDQ22-FBP

2CDC341048F0006

Ordering details

Description	Type	Order code	Price	Weight (1 pce)
1 pce: kg (lb)				
(1) Connection cable, one end open, 1.50 m	CDP16-FBP.150	1SAJ929150R0015		0.099 (0.218)
(2) Passive cable for drawer systems (inside)	CDP13-FBP.100	1SAJ929110R0001		0.099 (0.218)
(3) Fixing bracket for passive plug	CDP11-FBP.0	1SAJ929100R0001		0.010 (0.220)
(4) Extension cable for operating panel, 0.70 m ¹⁾	UMCPAN-CAB.070	1SAJ510003R0001		0.070 (0.154)
(5) PROFIBUS DP extension cable (0.50 m ... 5.00 m)	PDX11-FBP.050	1SAJ924001R0005		0.100 (0.220)
	PDX11-FBP.100	1SAJ924001R0010		0.113 (0.249)
	PDX11-FBP.300	1SAJ924001R0030		0.271 (0.597)
	PDX11-FBP.500	1SAJ924001R0050		0.442 (0.974)

¹⁾ No. 4 only necessary when using an operating panel!

FBP FieldBusPlug

Configuration examples for the integration of third-party terminal devices to the FieldBusPlug system

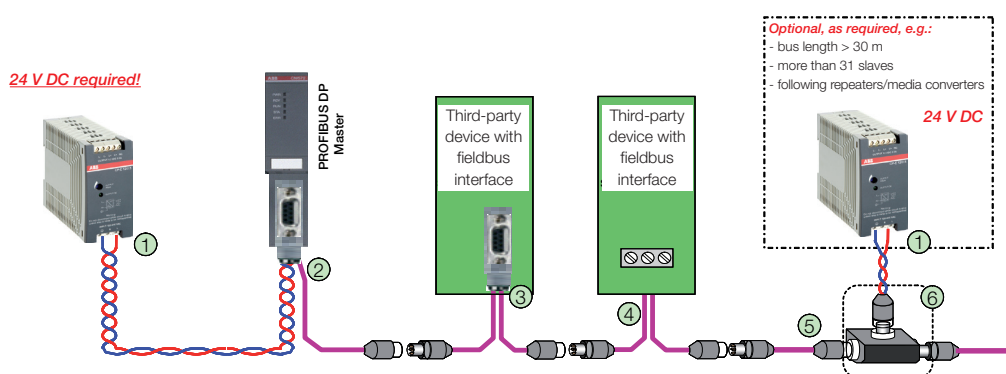


UMC100-FBP
DX122-FBP

2C0C 345 011 FY009

Universal Motor Controllers in Motor Control Centers (MCCs)

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



Ordering details

Description	Type	Order code	Price: Weight (1 pce)
			1 pce: kg (lb)
(1) Power supply unit 110 ... 240 V AC/24 V DC, 2.5 A	CP-E 24/2.5	1SVR427032R0000	0.331 (0.730)
(2) Adapter SubD-9 - M12 (A-coded)	PDA11-FBP.050	1SAJ924009R0005	0.113 (0.218)
(3) Adapter M12 - SubD-9 - M12 (A/A-coded)	PDA12-FBP.050	1SAJ924010R0005	0.136 (0.249)
(4) Round cable with female plug, length 0.50 m	PDF11-FBP.050	1SAJ924002R0005	0.05 (0.243)
(4) Round cable with male plug, length 0.50 m	PDM11-FBP.050	1SAJ924003R0005	0.05 (0.243)
(5) PROFIBUS DP extension cable (0.50 m ... 5.00 m)	PDX11-FBP.050	1SAJ924001R0005	0.100 (0.220)
	PDX11-FBP.100	1SAJ924001R0010	0.113 (0.218)
	PDX11-FBP.300	1SAJ924001R0030	0.271 (0.597)
(6) Feeding connector 24 V DC (A-coded)	PDX11-FBP.500	1SAJ924001R0050	0.442 (0.974)
	PDV12-FBP.0	1SAJ924011R0001	0.096 (0.212)

FBP FieldBusPlug Notes

A large area of horizontal dotted lines for taking notes.

FBP FieldBusPlug Notes

A series of horizontal dashed lines for taking notes.

Contact us

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<http://www.abb.com/lowvoltage>

-> Control Products -> Motor Controllers

www.abb.com/contacts

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