

NEW

Motor control and protection UMC100-FBP

2



UMC100-FBP is a flexible, modular and expandable motor management system for constant-speed low-voltage range motors. It's most important tasks include motor protection, prevention of plant standstills and the reduction of down time. This is made possible by early information relating to possible motor problems which avoids unplanned plant standstills. Even if a motor trips, quick diagnosis of the cause of the fault serves to reduce downtime.

UMC100-FBP combines in a very compact unit:

Motor protection

- Overload, blocked rotor, low/high current
- Phase failure, unbalance, phase sequence
- Earth-leakage
- Thermistor protection
- One single version covers the rated motor current from 24 mA to 63 A

Motor control

- Integrated and easy to parametrize starter functions like direct, reversing, stardelta
- Free programmable logic for special, application-specific control functions
- Expansion modules for more or special I/Os

Motor diagnostics

- Quick and comprehensive access to all data via control station, fieldbus and operator panel

Communication

- Communication-neutral basic device
- Freely selectable fieldbus protocol with FieldBusPlug

Typical applications

- oil & gas
- cement
- paper
- mining
- steel
- chemical industry
- water supply and distribution
- food and beverage

Further information
UMC & FBP Catalogue 2CDC 190 022 D0201
UMC & FBP Brochure 2CDC 135 011 B0201

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Motor control and protection

UMC100-FBP



Basic device UMC100-FBP

Main power	
Voltage	max 1000 V AC
Frequency	45 to 65 Hz
Rated motor current	0.24 to 63 A, without accessories
	Greater currents with transformer
Transformer diameter	11 mm (max 25 mm ²)
Tripping classes	5, 10, 20, 30, 40 in accordance with EN/IEC 60947-4-1
Short-circuit protection	Separate fuse on network side

Control unit

Supply voltage	24 V DC
Reverse polarity protection	yes
Inputs	6 digital inputs 24 V DC
	1 PTC input
Outputs	3 relay outputs relay
	1 digital output transistor
Interfaces	1 for ABB FieldBusPlug
	1 for UMC100-PAN control station
	1 for expansion module
Parametric assignment	via fieldbus, control station and / or software
Addressing	Control station or addressing set
LEDs	3 LEDs: green, yellow, red

Environment and mechanical data

Fastening	on DIN busbar (EN50022-35) or with 4 screws x M4
Dimensions (W x H x D)	70 x 105 x 110 mm (incl. FieldBusPlug and control panel)
Weight	0.39 kg
Terminal cross-section	max. 2.5 mm ² or 2 x 1.5 mm ²

Expansion modules DX111 / DX122

A DX111/122 expansion module can be connected per UMC100-FBP via a simple two-wire line
Application also possible via simple parametric assignment (without programming), e.g. for error messages and warnings

Supply voltage	24 V DC	
Inputs	DX111	8 digital inputs 24 V DC
	DX122	8 digital inputs 110/230 V AC
Outputs	4 relay outputs relay	
	1 analogue output, 0/4 to 20 mA / 0 to 10 V configurable	
Fastening	on DIN busbar (EN50022-35)	
Dimensions (W x H x D)	45 x 77 x 100 mm (without terminal block)	

Control panel UMC100-PAN

Installation on the device or on the switching cabinet door
Graphics-enabled and backlit display, 3 LEDs for status indication
Freely configurable error messages
Multilingual: German, English, French, Italian, Portuguese, Spanish

