

# Universal Motor Controller UMC100.3

Intelligent data hub for predictive applications

## 1 Features and benefits



### Safe & Reliable

- Protection at all times, even if your communication system breaks down
- Detect problems early and increase plant availability
- Easy expansion for higher functionality



### Integrated and future ready

- Multi-language control panel configuration
- Configuration from the control system by an integrated fieldbus or network configurator
- Software tool FIM UMC edition



### Simple configuration

- Widest range of communication modules available
- Integrated into distributed control systems (DCS)
- The only universal motor controller that follows the Field Device Integration (FDI) standard



### Wide range of communication protocols available

The UMC100.3 is compatible with more communication protocols than any other motor controller. Serial communication reduces wiring and installation and provides much more data. This allows you to have software that enables predictive maintenance and acts as an intelligent data hub. And the more data you have, the quicker you can identify errors.



### Easy expansion for higher functionality

Its modular design means that the UMC meets all motor management requirements, greatly simplifying planning, construction, and inventory. Easy-to-attach modules – such as digital expansion modules, analog and temperature modules, and voltage modules – give you complete flexibility and cover a wide range of applications.

## 3 Example set up

### EXPANSION MODULES



Voltage module



Digital module



Analog / temperature module



Manual motor starter



Universal Motor Controller UMC100.3



AF contactors



Connection to DCS, 800xA and gateway for ABB Ability™



### COMMUNICATION MODULES



Industrial Ethernet

- EtherNet/IP™
- Profinet IO
- Modbus TCP



Fieldbus

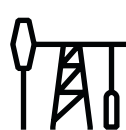
- Modbus RTU
- DeviceNet™
- Profibus DP

## 4 Types of applications



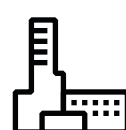
### Cement factories

- Robust and compact design
- Several inputs, e.g. for querying the position of the damper limit switches



### The oil and gas industry, chemical industry

- Programmability
- Ground fault monitoring
- Undervoltage detection and configurable restart following voltage drops
- Protection of motors in hazardous environments (ATEX)
- Use in IT networks



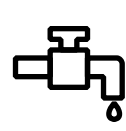
### Pulp and paper plants

- Modular design
- Flexible communication
- Versions with conformal coating available



### Mining

- Rated motor voltage of up to 1000 V
- Can be used at altitudes of up to 5000 m
- Ground fault monitoring



### Water supply and treatment

- Pump controls as required
- Underload detection with 2 x detection
- Own control logic e.g. for pump cleaning



### Others

- Steel plants
- Ships

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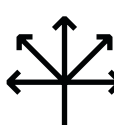
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## 2 Integrated and future-ready solution



### Wide range of communication protocols available

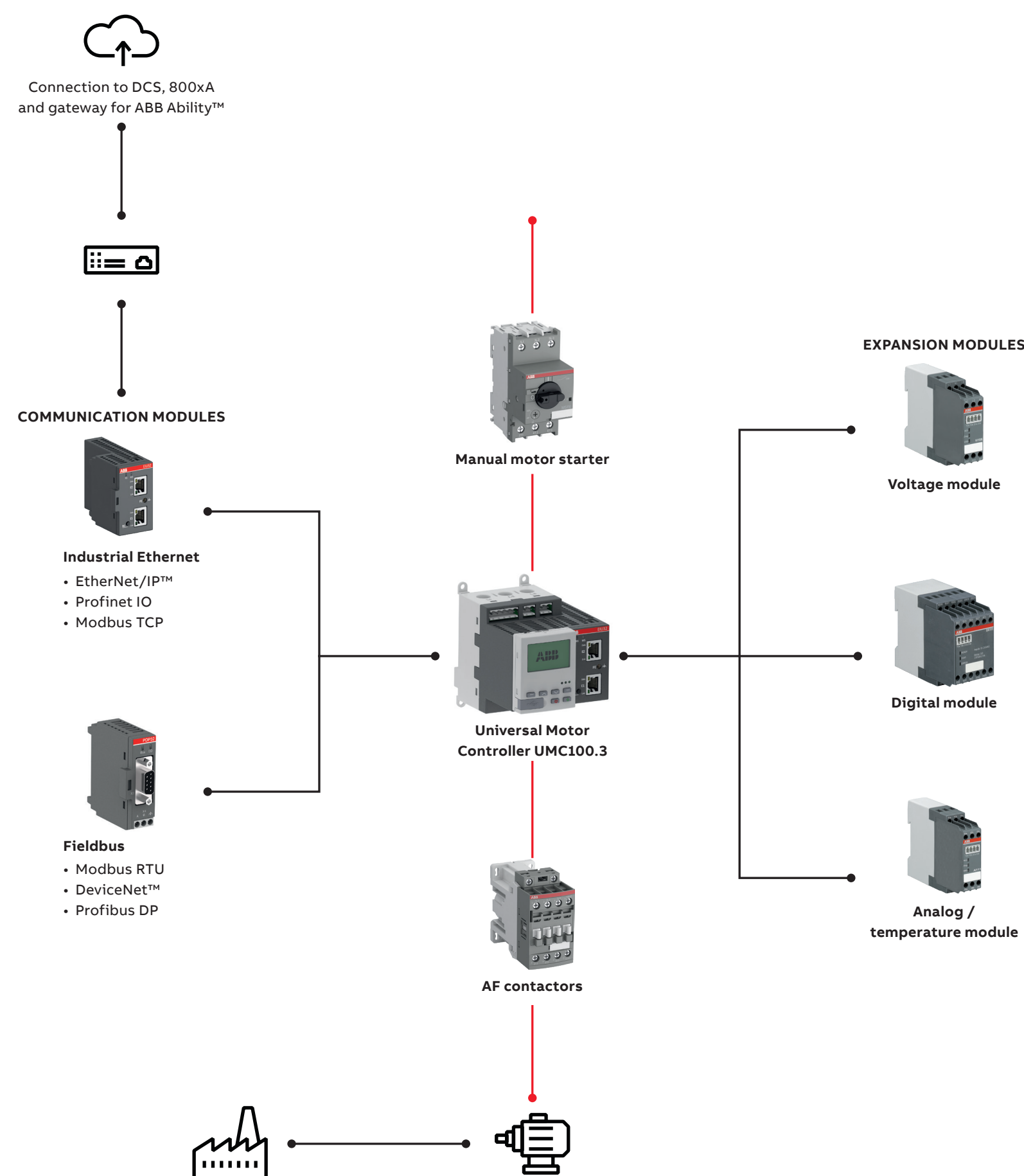
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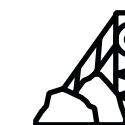
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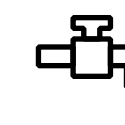
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