

DATA SHEET

## **PM 783F**

## Freelance hardware selector



This is the smallest Freelance CPU that typically supports up to 300 I/Os. It optionally can be equipped with 8 direct I/O modules and one Profibus Interface module and supports Modbus TCP. Two serial line interfaces complement the connectivity. One interface can be used for Modbus communication, while the other is used for diagnosis.

For demanding applications, eight cyclic and priority-driven tasks with adjustable cycle time can be configured, as well as a cyclic PLC-type task, which runs as fast as possible. This multi-tasking scenario enables engineers to design applications that reflect all demands of process control, while at the same time balancing the CPU load. This keeps the resources needed in a project at a minimum. The small front panel display shows status and diagnostic information.

Furthermore, you can lock the controller via the keys. This means the controller can be blocked for downloads of application and firmware to enhance security. The status, if the controller is locked or unlocked, is shown on the display.

## Features and benefits

- High-performance CPU for fast processing
- On-board Ethernet for system communication
- Serial interfaces for Modbus and diagnostics
- Multi-tasking capability to optimize CPU usage

| General info                         |                 |  |
|--------------------------------------|-----------------|--|
| Article number                       | 3BDH000364R0005 |  |
| Life cycle status                    | Active          |  |
| Redundancy                           | No              |  |
| Clock Frequency                      | 96 MHz          |  |
| Performance, 1000 boolean operations | 0.71 ms         |  |
| Memory                               | 10 MB           |  |
| RAM available for application        | 2 MB            |  |

| Detailed data                   |  |  |
|---------------------------------|--|--|
| Processor type                  | PowerQUICC   |  |
| Switch over time in red. conf.  | N/A  |  |
| No. of tasks per controller     | 9  |  |
| Power supply                    | 24 V DC  |  |
| Power consumption +24 V typ/max | 24 W   |  |
| Power dissipation               | 10 W   |  |
| Built-in back-up battery        | Lithium battery (TA 521F)                                    |  |
| Clock synchronization           | yes  |  |
| Ethernet channels               | 1  |  |
| Ethernet interface              | Ethernet (IEEE 802.3), 100/10 Mbit/s, RJ-45, female (8-pole) |  |
| RS-232C interface               | 2 (1 general, 1 for service tool)                            |  |

| Environment and certification |   |  |
|-------------------------------|---|--|
| Temperature, Operating        | 0°C +60°C   |  |
| Temperature, Storage          | -20 + 75°C  |  |
| Corrosion protection          | G3 compliant acc. ISA 71.04                       |  |
| Relative humidity             | max. 95%, non-condensing                          |  |
| Vibration                     | 1 g, 2 Hz 150 Hz                                  |  |
| Protection class              | IP20  |  |
| Altitude                      | < 2000 m  |  |
| Emission & Immunity           | EN 61000-6-4, EN 61000-6-2                        |  |
| Environmental conditions      | Industrial  |  |
| CE Mark                       | Yes   |  |
| Electrical Safety             | EN 50178, IEC 61131-2, UL 61010-1, UL 61010-2-201 |  |
| Hazardous location            | cULus Class 1 Div 2                               |  |
| Marine certificates           | DNV   |  |
| RoHS compliance               | Directive 2011/65/EU, (EU) 2015/863               |  |
| WEEE compliance               | Directive 2012/19/EU                              |  |

| Dimensions              |         |  |
|-------------------------|---------|--|
| Width                   | 67.5 mm |  |
| Height                  | 76 mm   |  |
| Depth                   | 54 mm   |  |
| Weight (including base) | 0.4 kg  |  |



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