

# PM 902F

## Freelance hardware selector



This CPU module is the medium base unit of the Freelance AC 900F controller family. It typically supports up to 1500 I/O and 8 MB battery buffered SRAM. 4 Ethernet interfaces, 800 MHz CPU clock, 24 MB Controller Memory, 8 MB battery buffered SRAM, and 16 MB DRAM. 2 slots for assembling Communication Interface Modules.

The operating system can be loaded during software installation. Needs an external 24 V DC power supply. Software version 2013 or higher is mandatory. Display Unit TD 951F and Battery TA 951F are not included.

## Features and benefits

- More connectivity with serial ports and Ethernet ports
- Built-in SD card support
- New Ethernet-based protocols – Modbus TCP and IEC 60870-5-104
- G3 compliant as standard
- Built-in power supply
- Optional LCD providing enhanced security through controller lock

| General info                         |                 |
|--------------------------------------|-----------------|
| Article number                       | 3BDH001000R0001 |
| Life cycle status                    | Active          |
| Redundancy                           | Yes             |
| Clock Frequency                      | 800 MHz         |
| Performance, 1000 boolean operations | 0.12 ms         |
| Memory                               | 24 MB           |
| RAM available for application        | 8 MB            |

| Detailed data                   |  |
|---------------------------------|--|
| Processor type                  | PowerQUICC II Pro  |
| Switch over time in red. conf.  | 500 ms   |
| No. of tasks per controller     | 9  |
| Power supply                    | 24 V DC  |
| Power consumption +24 V typ/max | 24 W / 30 W  |
| Power dissipation               | 18 W   |
| Built-in back-up battery        | Lithium battery (TA 951F)                                    |
| Clock synchronization           | yes  |
| Ethernet channels               | 4  |
| Ethernet interface              | Ethernet (IEEE 802.3), 100/10 Mbit/s, RJ-45, female (8-pole) |
| RS-232C interface               | 3 (2 general, 1 for service tool)                            |

| Environment and certification |                                     |
|-------------------------------|-------------------------------------|
| Temperature, Operating        | -20°C ... +70°C                     |
| Temperature, Storage          | -40 ... + 85°C                      |
| Temperature changes           | 3K/min at -20°C ... +70°C           |
| Corrosion protection          | G3 compliant acc. ISA 71.04         |
| Relative humidity             | max. 93%, non-condensing            |
| Vibration                     | 2 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             | IEC/EN 61010-1, IEC/EN 61010-2-201  |
| Hazardous location            | cULus Class 1 Div 2                 |
| RoHS compliance               | Directive 2011/65/EU, (EU) 2015/863 |
| WEEE compliance               | Directive 2012/19/EU                |

| Dimensions              |        |
|-------------------------|--------|
| Width                   | 227 mm |
| Height                  | 152 mm |
| Depth                   | 95 mm  |
| Weight (including base) | 1.1 kg |

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