



PRODUCT-DETAILS

3BDH001002R0001

PM 904F CPU Module

General Information

Product ID	3BDH001002R0001
ABB Type Designation	PM 904F
Catalog Description	PM 904F CPU Module

Long Description

The Central Processing Unit (CPU) module is equipped with a high-performance processor for multitasking and executing fast loop cycle times. It offers expanded flexibility via a pluggable SD card, redundancy options for high availability and powers for around 1500 I/Os. It comes with four on-board 100 Mbit/s Ethernet network connection used for communication between controllers, operator stations and engineering tool. Two serial line interfaces can be used for Modbus communication and/or Telecontrol. A third serial interface is reserved for diagnosis purpose and radio clock connection.

The CPU has 48 MB of memory of which 16 MB are battery backed up. 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. The additional available display unit TD 951F shows status and diagnostic information directly at the module. Operating modes can be modified by switches on the front panel. 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. S700 I/O modules can be directly plugged to the I/O bus interface on the right side of the CPU module. A maximum of 10 direct I/O modules can be connected to one controller. The CPU and the local S700 I/O modules communicate very fast. I/O scan times of 2 ms are possible. Short circuit and line break detection is realized for each channel. Four coupler bus slots on the left side can be assigned with fieldbus interface modules. The PM 904F can be equipped with a maximum of four PROFIBUS modules. 3rd party I/O's can be connected via a MODBUS ASCII / RTU, IEC 60870-5-101 Telecontrol protocol or via PROFIBUS.

Additional Information

Medium Description	This CPU module is the high-end base unit of the Freelance AC 900F controller family. It supports up to 1500 I/Os. 4 Ethernet interfaces, 800 MHz CPU clock, 48 MB Controller Memory: 16 MB battery buffered SRAM, 32 MB DRAM. 4 slots for assembling Communication Interface Module. It comes without operating system. The operating system has to be loaded during software installation. Needs external 24 VDC power supply. Software version 2019 or higher is mandatory. Display Unit TD 951F and Battery TA 951F are not included.
Technical Information	4 Ethernet interfaces, 800 MHz CPU clock, 48 MB Controller Memory: 16 MB battery buffered SRAM, 32 MB DRAM. 4 slots for assembling Communication Interface Module. Without operating system. The operating system has to be loaded during software installation. Needs external 24 VDC power supply. Software version 2019 or higher is mandatory. White housing. Display Unit TD 951F and Battery TA 951F are not included.
Product Type	Central_Unit

Ordering

Country of Origin	United States (US) Malta (MT)
HS Code	853890-- Parts suitable for use solely or principally with the apparatus of

heading 85.35, 85.36 or 85.37.- Other	
Customs Tariff Number	85389091

Dimensions	
Product Net Height	152 mm
Product Net Width	285 mm
Product Net Weight	1.1 kg

Environmental	
RoHS Status	Not RoHs Compliant

Categories	
Control System Products → Control & Communication → AC 900F → AC 900F - Processor Modules → PM 904F CPU Module	