

APTER POWER PRODUCT REFERENCE MANUAL

PM902F-3BDH001000R0005

Freelance AC 900F Standard CPU Module

ENGINEERING LENS	CONTROLLER EXECUTION, REDUNDANCY, AND PROJECT BACKUP
SYSTEM	ABB Freelance AC 900F DCS
SOURCE CONTROL	Manufacturer-published information only

This original Apter Power manual explains controller execution, redundancy, and project backup using only the manufacturer source named inside the document.

Manufacturer	ABB
Prepared by	Apter Power
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APTER POWER SALES TEAM

INDUSTRIAL AUTOMATION PRODUCT SUPPORT

Engineering clarity for controller execution, redundancy, and project backup.

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SCAN FOR PRODUCT & QUOTE
PM902F-3BDH001000R0005

1. Product Identity and System Role

PM902F-3BDH001000R0005 is an ABB standard CPU module for the Freelance AC 900F controller family. ABB documentation identifies this R0005 hardware revision and describes PM 902F as the standard controller CPU with four Ethernet interfaces, two serial interfaces, a diagnostic interface, SD-card support, and two communication-interface slots.

The CPU executes the Freelance control application, coordinates direct and remote I/O, processes controller communications, and can operate in a single or redundant controller arrangement for process automation systems.

Model Configuration

Field	Verified information
Complete model	PM902F-3BDH001000R0005
Manufacturer	ABB
Product description	Freelance AC 900F Standard CPU Module
System	ABB Freelance AC 900F DCS

Product-Specific Design Focus

controller execution, redundancy, and project backup

2. Technical Specifications and Evidence Boundary

Only values supported by the named ABB source are stated. Where the complete ordering code is absent from public data, the field is explicitly marked for verification.

Parameter	Verified value
Manufacturer	ABB
Controller family	Freelance AC 900F
CPU clock	800 MHz
Controller memory	24 MB
Battery-buffered SRAM	8 MB
Ethernet interfaces	4
Communication-interface slots	2
External supply	24 V DC

Evidence Note

Use the complete PM902F-3BDH001000R0005 identity. ABB's current AC 900F product information presents PM 902F within the active Freelance controller portfolio. Confirm the complete R0005 ordering status with ABB. Values not published in the cited ABB source are intentionally not inferred.

3. Functions, Applications and Matched Components

Core Functions

- The CPU executes the Freelance control application, coordinates direct and remote I/O, processes controller communications, and can operate in a single or redundant controller arrangement for process automation systems.
- Preserves the documented role within ABB Freelance AC 900F DCS.
- Supports model-specific engineering review without substituting unverified third-party data.

Application Areas

Application	System role
ABB Freelance AC 900F DCS	Maintains the documented controller execution, redundancy, and project backup role in a correctly matched installation.
Process and machine automation	Supports the control, communication, power, safety, measurement, or protection duty stated in the official source for this exact or verified family identity.
Lifecycle-controlled maintenance	Requires complete-code, nameplate, host-system, and project verification before replacement or recommissioning.

Compatible Components

- Freelance software release supporting the exact R0005 hardware revision
- Up to ten directly attached S700 I/O modules as documented by ABB
- Supported AC 900F communication interfaces, TD 951F display, TA 951F battery, and SD card

Lifecycle Status

ABB's current AC 900F product information presents PM 902F within the active Freelance controller portfolio. Confirm the complete R0005 ordering status with ABB.

4. Installation Precautions

- Match every character of PM902F-3BDH001000R0005 to the physical nameplate before work.
- Use the exact ABB manual, wiring drawing, and safety instructions for the installed revision.
- De-energize and apply the required lockout, discharge, ESD, and stored-energy controls before removal.
- Back up firmware, parameters, controller project, calibration, and network settings where applicable.
- Verify supply, signal type, polarity, grounding, shielding, connector pinout, load, and environmental limits.
- Commission with the manufacturer test procedure and record results before returning equipment to service.

DECISION GATE - Verify before installation

Use the complete PM902F-3BDH001000R0005 identity. ABB's current AC 900F product information presents PM 902F within the active Freelance controller portfolio. Confirm the complete R0005 ordering status with ABB. Values not published in the cited ABB source are intentionally not inferred.

Controlling records: physical nameplate, current ABB document, and host-system drawings.

5. Official Source and Use Notice

Official manufacturer source

ABB AC 900F controller product page and Freelance DCS Product Catalog covering PM 902F revision 3BDH001000R0005.

<https://www.abb.com/global/en/areas/automation/control-systems/freelance/controllers-io/ac-900f>

Apter Power product page

<https://www.apterpower.com/ABB/pm902f-3bdh001000r0005>

Use Notice

This is an original Apter Power model-specific reference prepared from the ABB source named above. It is not a ABB publication and does not replace the original data sheet, nameplate, certificate, installation drawing, safety instructions, or machine-builder documentation.

ASK FOR QUOTE

For availability and a model-specific quotation, visit www.apterpower.com or contact sales13@apterpower.com.