Allen-Bradley 80190-780-01-R

01 Function and selected configuration

Product function

Allen-Bradley 80190-780-01-R adds network access and file services to the drive through the DPM DIM socket. The external DIM and SD card retain different information and must remain associated with the correct drive.

Selected configuration

The PFNI baseboard carries a socket for the NetBurner processor, and the complete HMI assembly connects through the existing DIM socket on the DPM. An external Drive Identity Module can be fitted to the PFNI socket. The external DIM takes precedence when installed; SW2 switch 2 controls the internal DIM and is OFF by default.

Functional path

Terminal/service PC	Ethernet HMI services	PFNI/NetBurner	DPM control platform

Ethernet interface	RJ45, 100 Mbps full duplex
Module structure	PFNI baseboard plus NetBurner processor
Identity and files	External DIM socket and SD card storage

The Ethernet port operates at 100 Mbps full duplex with a standard Cat5 connection. TCP ports 21 and 80 support file transfer and HTTP access. TCP 44818 supports the drive-specific DPI protocol embedded in PCCC packets, rather than the entire EtherNet/IP feature set. UDP/TCP 20034 supports discovery and configuration, and UDP 514 carries update status.

80190-780-01-R / Technical operating envelope

02 Technical operating envelope

Ethernet physical interface	RJ45; standard Cat5 cable
Ethernet mode	100 Mbps, full duplex
FTP service	TCP port 21
HTTP service	TCP port 80
Drive communication service	TCP 44818; DPI embedded in PCCC subset

Discovery/configuration service	UDP and TCP 20034
Update status service	SysLog UDP 514
SW2 default positions	Switches 1, 2 and 3 OFF
Hardware reset	SW1; restarts HMI board and disconnects active communication

These ports and switch functions describe the HMI module. They do not imply support for all industrial Ethernet messages, built-in firewall protection or unrestricted online firmware changes.

Storage responsibilities

The DIM retains drive identity and configuration data, while the SD card provides HMI files and job-specific information. Protect both records during a hardware replacement and review the actual contents of any software package.

Network service limits

Ethernet link speed is a physical communication capability, not a promise of every EtherNet/IP function. The supported drive-message subset and approved network services define how terminals and engineering tools can interact with the board.

80190-780-01-R / System integration and applications

03 System integration and applications

Operator-interface access

Connect a compatible terminal to the HMI Ethernet interface while retaining the correct drive addressing.

Configuration-file handling

Use the board file services to preserve and transfer relevant drive and HMI data under the approved procedure.

Device discovery

Use the designated discovery service on the managed maintenance network to identify and configure the correct board.

Firmware-package validation

Review the contents of a package and verify whether it includes HMI firmware, drive firmware, SD content or a combination.

System and supply context

The assembly interfaces with the PowerFlex 7000 DPM. A separate operator terminal or service computer accesses its applications; a terminal, SD card or DIM is included only if itemized.

Application boundary

Use it for compatible HMI access, file management and controlled maintenance. Its EtherNet/IP implementation is limited to drive-specific DPI messages inside PCCC packets.

Does Allen-Bradley 80190-780-01-R support every EtherNet/IP function?

No. Its implementation supports the subset used for DPI protocol messages embedded in PCCC packets.

80190-780-01-R / Engineering selection decisions

04 Engineering selection decisions

What Ethernet connection does Allen-Bradley 80190-780-01-R require?

Its RJ45 interface uses a standard Cat5 cable and operates at 100 Mbps full duplex.

Which ports discover and configure Allen-Bradley 80190-780-01-R?

The NetBurner discovery and configuration services use UDP and TCP port 20034.

Can the USB port on Allen-Bradley 80190-780-01-R be promised as a supported serial-port replacement?

No. The hardware description identifies that drive data-port functionality as not currently available. Preserve the approved communication path.

What makes an update package acceptable to Allen-Bradley 80190-780-01-R?

The package must match the intended update, pass content validation and be applied in the required drive state. A package containing drive firmware requires the appropriate download mode.

Avoid unsupported USB use	Do not assume the USB connector provides a currently supported general drive data-port function.
Plan reset effects	SW1 disconnects active communications while the HMI module restarts.

80190-780-01-R / Configuration boundary and references

05 Configuration boundary and references

Lifecycle and support

The current manufacturer lifecycle phase for this exact part number is unconfirmed. Production and repair availability require model-specific confirmation.

Replacement assessment

Preserve the drive-specific DIM, SD contents, addressing and compatible firmware package. Replacing the HMI board does not automatically update the drive firmware or job-specific documentation.

Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains configuration and selection boundaries. The independent installation guide organizes preparation, connection, testing and handover. It does not replace the applicable manufacturer installation instructions.

Technical basis

Rockwell Automation PowerFlex 7000 HMI Offering With Enhanced Functionality User Manual, 7000-UM201D-EN-P.

Related product navigation

- Allen-Bradley 80190-100-01-R
- Allen-Bradley 80190-099-01/7
- Allen-Bradley 80190-540-02-R

These are related references, not confirmed substitutes or an automatically approved assembly.

Product enquiries