Allen-Bradley 80190-580-01-R

01 Preserve the working configuration

1 Capture the working state

Before the outage, export the parameter set through the approved drive tool or terminal and retain a readable copy. Record firmware, motor and converter identity, the existing DPM revision and the recent warning history. A board exchange must not silently replace the commissioned settings with defaults.

2 Reconcile the DIM

Identify the DIM belonging to this drive and document its location. Distinguish its factory default set from the latest saved operating parameters. Assign responsibility for deciding which verified image will be restored if the new control hardware reports initialized memory.

Retain	Parameter export and readable comparison
Associate	Drive identity and DIM
Record	DPM revision and firmware

80190-580-01-R / Prepare the processor exchange

02 Prepare the processor exchange

1 Make the cabinet safe

Use the applicable manufacturer isolation, discharge and access procedure, performed by qualified drive personnel. Control power and medium-voltage circuits are separate considerations. Establish an ESD-protected working area and protect the board connectors before removing the existing module.

2 Map the control connections

Photograph and label the DPM connections and the DIM/HMI arrangement. Inspect connectors for damage or misalignment before the replacement is seated. Refit the complete intended assembly using the applicable drive instructions; do not use another board variant simply because its connectors appear similar.

Connection record	DPM and associated interface connections
Handling	ESD protection and undamaged contacts
Configuration match	Revision, firmware and drive identity

80190-580-01-R / Recover settings under control

03 Recover settings under control

1 Review initialization warnings

After controlled restoration of control power, check whether NVRAM has been initialized or a parameter has been rejected. Do not release a drive that is operating on unintended defaults. Compare the restored configuration with the saved engineering baseline before any machine test.

2 Resolve invalid values

For a parameter-range event, use the recorded offending parameter number to locate the setting. Determine whether a DIM limit, incompatible value or load operation caused the problem. Correct the approved value, save it and confirm that the warning does not recur after the prescribed verification sequence.

Initialized values	Compare with the approved backup
Parameter rejection	Identify the specific setting
Persistence	Save and verify retention

80190-580-01-R / Separate faults before replacement decisions

04 Separate faults before replacement decisions

1 Check communication first

For an adapter-loss event, identify the affected adapter and inspect its power, cable and connection. The alarm identifies a lost path, not necessarily a failed processor board. Record whether the fault is persistent and whether other communication channels remain available.

2 Preserve the analog fault context

If an analog conversion fault remains, retain its exact code and the ACB/DPM configuration. Review the relevant analog feedback and conversion-transfer path. Avoid changing several boards at once without a documented diagnostic sequence, because the original fault location would become harder to establish.

Adapter path	Power, cable and connection
Analog path	ACB, data transfer and DPM
Diagnostic record	Original code and repeatability

80190-580-01-R / Verify retention and hand over

05 Verify retention and hand over

1 Complete the return-to-service review

Confirm that the intended parameter set survives the approved power-cycle or retention check. Verify the applicable communications, drive protection functions and machine permissives under the site commissioning procedure. Record the installed module identity and the final configuration with the maintenance documentation.

2 Close the battery action

If low NVRAM battery power was present, document the backup and battery service outcome separately from the processor exchange. Keep the final parameter export and any unresolved diagnostic issue with the handover record. Do not treat an extinguished warning alone as proof of a fully commissioned drive.

Technical basis: Rockwell Automation PowerFlex 7000 Troubleshooting Guide, 7000-TG002L-EN-P; HMI User Manual, 7000-UM201D-EN-P.

Related product navigation

- Allen-Bradley 80190-440-02-R
- Allen-Bradley 80190-560-02-R
- Allen-Bradley 80190-480-01-R

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