Allen-Bradley 80026-044-06-R

01 Function and selected configuration

Product function

Allen-Bradley 80026-044-06-R serves a defined point in the PowerFlex 7000 IGDPS circuit path. Separating the source, connections and monitored output helps locate the actual cause of a supply-related fault.

Selected configuration

The IGDPS occupies the auxiliary power path between the drive 56 VDC source and its gate-driver circuitry. It is distinct from the AC/DC source that generates the 56 VDC rail and from the SGCT power devices controlled by the gate drivers.

Functional path

Control energy source	Gate Power Supply	DC auxiliary circuit	Assigned loads / diagnostics

Input supply	56 VDC
Gate-drive output	20 VDC
Output diagnostic tolerance	+/-2%

Gate-supply diagnosis compares the nominal 20 VDC output against a +/-2% window. A low gate-supply event requires inspection of output voltage and its connections; the diagnostic state of a gate driver cannot be explained by the IGDPS part number alone.

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02 Technical operating envelope

Input supply	56 VDC
Gate-drive output	20 VDC
Output diagnostic tolerance	+/-2%

Output check window	19.6-20.4 VDC
IGDPS loss fault	53
Supply comparison	ACB J15 and parameter P101

Measurements require the approved isolated or controlled test arrangement. The listed diagnostic thresholds belong to the installed controller and are not universal component ratings.

Signal interpretation

Gate-supply diagnosis compares the nominal 20 VDC output against a +/-2% window. A low gate-supply event requires inspection of output voltage and its connections; the diagnostic state of a gate driver cannot be explained by the IGDPS part number alone.

Interface boundary

For IGDPS 56V Loss, inspect the AC/DC output, IGDPS input and supply wiring. Compare the measured ACB J15 voltage with the value in P101. A valid physical 56 V reading paired with a lower reported value directs attention to the measurement/control path rather than automatically condemning the supply.

What does IGDPS 56V Loss mean for the circuit feeding 80026-044-06-R?

The drive has detected loss of the 56 VDC feed. Inspect source output, connections and IGDPS input before selecting a replacement.

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03 System integration and applications

Auxiliary source verification

Keep AC/DC source failures, IGDPS 56V Loss and gate-output faults distinct. Their diagnostic names point to different parts of the auxiliary circuit.

Controlled circuit replacement

Mark the incoming auxiliary feed and outgoing gate-power connections. Inspect for loose, damaged or incorrectly seated connectors.

Diagnostic comparison

Under the authorized test setup, compare AC/DC output with the voltage at the IGDPS input. Correct wiring loss before evaluating the converter.

System recovery

For fault 53, measure ACB J15 and compare with P101. A normal physical rail and low displayed value call for control-path investigation.

System and supply context

80026-044-06-R requires its corresponding controller or drive assembly, retained wiring and matching auxiliary circuits. Connected loads and other supply stages are separate unless itemized.

Application boundary

Use the exact supply selection within the stated platform. Similar output voltages do not establish compatibility with a different source or gate-drive board.

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04 Engineering selection decisions

What voltage conversion is associated with 80026-044-06-R?

The PowerFlex 7000 IGDPS selection is 56 VDC input to nominal 20 VDC gate-drive power.

Which output window is used when diagnosing 80026-044-06-R?

The gate-supply procedure uses 20 VDC +/-2%, equivalent to 19.6-20.4 VDC.

Does a correct 56 VDC input prove the outputs of 80026-044-06-R are healthy?

No. Verify the gate-supply outputs and their connections separately against the 20 VDC diagnostic window.

What should be checked if 80026-044-06-R is replaced but gate-power faults remain?

Check output voltage at the affected gate-driver path, connector seating, the upstream 56 VDC source and the drive feedback/measurement circuit.

Check upstream voltage	Under the authorized test setup, compare AC/DC output with the voltage at the IGDPS input. Correct wiring loss before evaluating the converter.
Verify the gate supply	Measure the nominal 20 VDC output at the prescribed points and compare it with 19.6-20.4 VDC. Include the affected gate-driver power connection.

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05 Configuration boundary and references

Lifecycle and support

The current manufacturing and factory-support phase of 80026-044-06-R is not confirmed. Apter Power availability is assessed separately from manufacturer lifecycle status.

Replacement assessment

Match the exact board or converter selection and installed circuit. Retain voltage, source position and connection identities instead of choosing by physical similarity.

Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains selection and system context. The separate installation guide covers preparation, connection, tests and handover; it does not replace manufacturer instructions.

Technical basis

Rockwell Automation PowerFlex 7000 Troubleshooting Guide, 7000-TG002L-EN-P, February 2020.

Related product navigation

- Allen-Bradley 80190-560-02-R
- Allen-Bradley 80190-320-02-R

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

Product enquiries