Allen-Bradley 80026-044-02

01 Function and selected configuration

Product function

Allen-Bradley 80026-044-02 serves a defined point in the MV SMC gate-drive power path. Separating the source, connections and monitored output helps locate the actual cause of a supply-related fault.

Selected configuration

The IGDPS board provides continuous power to the gate-drive boards in applicable MV SMC optional stopping arrangements. Its six output circuits are isolated, with each channel identified at its output connection. Controller-specific wiring and quantity remain part of the installed assembly.

Functional path

Control energy source	Gate Power Supply	6	Assigned loads / diagnostics

Nominal input	50 VDC
Input diagnostic range	50 VDC +/-8 VDC
Isolated outputs	6

The board is supplied from nominal 50 VDC. Each output module has a green indication for a healthy 20 VDC output; an extinguished indication corresponds to output below 18 VDC. If the group is dark, inspect the common input and connections before treating all channels as failed.

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02 Technical operating envelope

Nominal input	50 VDC
Input diagnostic range	50 VDC +/-8 VDC
Isolated outputs	6
Nominal output	20 VDC per channel

Output verification	20 VDC +/-1%
LED low threshold	Below 18 VDC
Construction	Epoxy-encapsulated circuitry

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

The board is supplied from nominal 50 VDC. Each output module has a green indication for a healthy 20 VDC output; an extinguished indication corresponds to output below 18 VDC. If the group is dark, inspect the common input and connections before treating all channels as failed.

Interface boundary

The circuitry is epoxy encapsulated and has no internal field-test points or adjustments. The service test checks each accessible output at 20 VDC within +/-1%. A failed output requires replacement of the board rather than internal repair.

What does an extinguished channel LED on 80026-044-02 indicate?

Its output voltage is below 18 VDC. Compare the indication with a controlled measurement and connection inspection.

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03 System integration and applications

Auxiliary source verification

Capture which green channel indicators are lit or dark and the operating condition when the fault occurred. Preserve that evidence before removing power.

Controlled circuit replacement

Use appropriate ESD handling and support the board at its mechanical mounting. Do not open encapsulation or attempt internal adjustment.

Diagnostic comparison

Using the authorized safe test procedure, confirm the board input is 50 VDC +/-8 VDC. Resolve a missing common feed before investigating individual outputs.

System recovery

All healthy channel indicators should be illuminated. Investigate a dark indicator, bad connection or low output; replace the board if an output module is defective.

System and supply context

80026-044-02 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

How many isolated gate outputs does 80026-044-02 provide?

Six isolated outputs supply the associated gate-drive circuits. Record the channel assignments before disconnecting them.

Why might every indicator on 80026-044-02 be dark?

A missing input source or bad input connection can affect the whole board. Verify the common 50 VDC feed before diagnosing six independent output failures.

Can a faulty output module inside 80026-044-02 be repaired in the field?

No. The circuitry is encapsulated, with no internal test points or adjustments. A failed channel calls for board replacement.

How are multiple 80026-044-02 boards handled during a controller test?

Test and record all six outputs on every installed board. One board passing does not establish the condition of other boards or their assigned gate circuits.

Verify the common source	Using the authorized safe test procedure, confirm the board input is 50 VDC +/-8 VDC. Resolve a missing common feed before investigating individual outputs.
Measure every output	Check pin 1 to pin 2 of each of the six outputs using the prescribed measurement arrangement. Compare each result with 20 VDC +/-1%.

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05 Configuration boundary and references

Lifecycle and support

The current manufacturing and factory-support phase of 80026-044-02 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

Allen-Bradley Medium Voltage SMC Controller User Manual, 1560D-UM051D-EN-P, February 2005.

Related product navigation

- Allen-Bradley 80190-320-03-R
- Allen-Bradley 80190-560-01-R

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

Product enquiries