Allen-Bradley 80026-529-01-R

01 Function and selected configuration

Product function

Allen-Bradley 80026-529-01-R serves a defined point in the PowerFlex 7000 auxiliary power path. Separating the source, connections and monitored output helps locate the actual cause of a supply-related fault.

Selected configuration

The selected converter is the 1000 W, single-phase-input 56 VDC source in the PowerFlex 7000 auxiliary-power system. Other source ratings are separate spare selections; the installed control-power wiring and supply allocation govern its application.

Functional path

Control energy source	AC DC Supply	DC auxiliary circuit	Assigned loads / diagnostics

Input phase	Single phase
Nominal DC output	56 VDC
Power rating	1000 W

The drive can monitor multiple AC/DC sources by position. AC Fail identifies a low input-control-voltage condition, while DC Fail uses the individual converter output sensing circuit. The diagnostic thresholds of 85 Vrms and 49 VDC describe drive fault detection rather than universal supply nameplate limits.

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02 Technical operating envelope

Input phase	Single phase
Nominal DC output	56 VDC
Power rating	1000 W
Drive DC-fail threshold	Below 49 VDC
Drive AC-fail threshold	Below 85 Vrms
DC status inputs	ACB J18-J21; installed supply positions
56 V monitoring	ACB J15

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 drive can monitor multiple AC/DC sources by position. AC Fail identifies a low input-control-voltage condition, while DC Fail uses the individual converter output sensing circuit. The diagnostic thresholds of 85 Vrms and 49 VDC describe drive fault detection rather than universal supply nameplate limits.

Interface boundary

Troubleshooting compares physical input/output measurements, ACB status wiring and the drive metering values. The converter cooling fan must operate. A failed fan or sustained output loss must be resolved before returning the auxiliary power circuit to service.

How does the drive distinguish status from several supplies including 80026-529-01-R?

It assigns supply positions and monitors their DC-fail signals through ACB inputs J18, J19, J20 and J21 as configured.

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03 System integration and applications

Auxiliary source verification

Record AC-fail and DC-fail indications separately. Input loss, output loss and an incorrect monitor connection need different corrective actions.

Controlled circuit replacement

Check the input, DC output and fault-monitor connectors for seating or damage. Keep the airflow path clear and inspect the fan condition.

Diagnostic comparison

Under the prescribed test procedure, confirm the correct input control power and measure the source output. The fault thresholds are not substitutes for the input nameplate.

System recovery

Verify that the internal cooling fan runs as required. A failed fan must be corrected by the specified supply replacement action.

System and supply context

80026-529-01-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 distinguishes 80026-529-01-R from the other 56 VDC supply selections?

It is the single-phase-input, 1000 W AC/DC selection. A 300 W or 1500 W source is a different part selection.

When is a DC-fail signal associated with 80026-529-01-R generated?

The AC/DC converter DC-fail condition is triggered when its monitored output drops below 49 VDC.

Can 80026-529-01-R be declared faulty from a status signal alone?

No. Verify that the source is energized, measure its output, and compare the fault-detection wiring and signal levels with the drive drawings.

Which output should be compared with the drive metering value for 80026-529-01-R?

Compare the physical 56 VDC source output with the corresponding monitoring circuit and metering indication. Resolve sensing-wiring discrepancies before condemning the converter.

Verify energization conditions	Under the prescribed test procedure, confirm the correct input control power and measure the source output. The fault thresholds are not substitutes for the input nameplate.
Check output and status together	Compare physical output with the 49 VDC DC-fail threshold and the assigned ACB status input. Investigate inconsistent status wiring before replacing another component.

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05 Configuration boundary and references

Lifecycle and support

The current manufacturing and factory-support phase of 80026-529-01-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 80190-299-01/9
- Allen-Bradley 80190-100-01-R

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

Product enquiries