ABB G2E140-PI32-10

01 Fan identity and cooling-air direction

1 Capture the 115 V fan and spare reference

Capture the full fan label and spare reference 10032971, installed frame and connector arrangement. Record the airflow direction and duct attachment before removal. Distinguish this G2E140-PI32-10 from the neighboring 230 V G2E140-PI51-09 variant.

2 Distinguish PI32-10 from the 230 V alternative

Match the complete G2E140-PI32-10 marking and spare reference before installation. A similar frame or connector does not establish electrical equivalence with G2E140-PI51-09, which belongs to a different supply selection.

Record	Complete marking and installed position
Comparison	Field labels agree with application assignments
ABB code	10032971
Product type	Long-life fan, centrifugal

02 115 V auxiliary supply under starting load

1 Isolate the fan and drive circuits

Isolate the drive and auxiliary fan circuit using the applicable service procedure. Verify the intended fan supply is 115 V AC at 60 Hz. The circuit must support 3.8 A starting current as well as the 1.9 A nominal current.

2 Check starting demand separately from running current

Assess the auxiliary circuit for the 3.8 A starting demand as well as 1.9 A nominal operation at 60 Hz. A circuit that supports the steady current may still show excessive voltage drop during startup.

Supply evidence	Measured at the device connection
Work condition	Power isolated while wiring is handled
Rated voltage	115 V AC
Rated frequency	60 Hz

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03 Impeller clearance and duct alignment

1 Restore the original cooling position

Inspect the impeller, housing and cable for damage before fitting. Restore the original cooling position, duct alignment and connector engagement. Remove foreign material and obstructions from the air path while keeping the isolated fan free from accidental movement.

2 Inspect the full airflow path before energizing

Check the inlet, outlet and duct joints for obstructions and displaced seals. A freely rotating impeller cannot compensate for an incorrectly restored duct or blocked cooling path through the drive assembly.

Wiring record	Connection-by-connection comparison
Physical inspection	Shield, connector and strain relief checked
Rated current	1.9 A
Starting current	3.8 A

04 Startup voltage and rotation direction

1 Secure guards before the operating test

Check rotation and airflow direction against the original arrangement. Secure all guards and duct connections before an operating test. Measure the auxiliary supply during startup to distinguish a weak supply circuit from a mechanical fan problem.

2 Distinguish supply weakness from mechanical resistance

Observe startup while measuring the intended auxiliary supply. Use the voltage result together with rotation and airflow observations; slow acceleration alone does not identify whether the fault is electrical or mechanical.

Configuration	Approved settings restored
Diagnostic condition	Normal recognition before functional testing
Documented drive frame	R7i/R8i

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05 Thermal response after fan replacement

1 Observe current, noise and airflow together

Run the approved drive test while observing airflow and thermal indications. Verify the fan reaches stable operation without abnormal noise or vibration. Record the steady current and cooling response; stop and investigate if the thermal fault remains despite normal fan rotation.

2 Compare cooling performance with the drive indication

Record whether the thermal indication recovers during the approved operating test. If the fan runs normally but the thermal fault remains, investigate the remaining air path and cooling arrangement rather than assuming replacement is complete.

Technical basis: ABB ACS800-604LC Hardware Manual, Chinese Rev. A; ABB Long-life Fans Technical Note 3AUA0000216096 Rev. F.

Related product navigation

ABB DSQC223 YB560103-BD

ABB DSQC346G

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