

ebm-papst D3G146-AH50-16

Drive Cooling Fan Verification Guide

ebm-papst Long-life centrifugal cooling fan used as the D8D module fan in an ABB ACS880-304 +A003 configuration

DOCUMENT SCOPE

Independent Apter Power manual compiled only from the cited ebm-papst manufacturer sources. No product photograph is included.

Product / lookup identity	ebm-papst D3G146-AH50-16
Reference number	D3G146-AH50-16
Document basis	Published ebm-papst product records, PDFs, and manuals listed on page 3



Product page

<https://www.apterpower.com/EBM-Papst/d3g146-ah50-16>

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Drive supply-to-airflow path

ebm-papst D3G146-AH50-16 is an exact fan type identified by ABB official documentation as a long-life centrifugal fan and as the D8D module cooling fan in an ACS880-304 +A003 diode-supply-module configuration; the physical ebm-papst nameplate must still be checked because no exact public ebm-papst -16 data page was located. Its documented system function is to move cooling air through the drive module so heat produced by the power electronics can be removed and the drive can maintain its designed operating capability and reliability.

01	Energy And Airflow Path: The host drive supplies 230 V AC to the D8D module fan; the fan converts electrical power into mechanical airflow that removes heat from the power-electronic module.
02	Process Signals: None documented. The fan is not an analog-input, digital-I/O, measurement, or PLC processing module.
03	Control Or Feedback: No exact D3G146-AH50-16 speed-control, tachometer, alarm, or communication signal is confirmed in the reviewed official sources. Do not copy the interface of -11 or -01 variants.
04	Host Monitoring: Any drive cooling alarm, fan supervision, or maintenance counter belongs to the host-drive design and must be confirmed in the exact ACS880 hardware and firmware documentation.

Host drive, nameplate, and cooling boundaries

01	Verification Status: EXACT_TYPE_CODE_VERIFIED_IN_OFFICIAL_ABB_HOST_EQUIPMENT_DOCUMENTS; EXACT_PUBLIC_EBM_PAPST_-16_PAGE_OR_MANUAL_NOT_LOCATED
02	Exact Mapping: ABB maps type D3G146-AH50-16 to long-life centrifugal fan stock code 3AUA0000059428 and identifies it as the D8D module fan in the ACS880-304 +A003 hardware manual.
03	Lifecycle Status: No exact ebm-papst public lifecycle statement was located. ABB's 2019 long-life-fan note lists the type and ABB stock code, but that document does not establish a current Active, Classic, Limited, or Obsolete phase for the fan in 2026.

Fan identity and replacement checks

01	Verify a clear physical nameplate showing D3G146-AH50-16. Do not accept D3G146-AH50-11 or D3G146-AH50-01 as the same variant.
02	For an ABB drive application, also verify stock code 3AUA0000059428 and the exact ACS880-304 +A003 D8D module parts list.
03	Isolate the drive and fan auxiliary supply and follow the exact ABB drive electrical-safety, discharge-time, lockout, and fan-replacement procedure before opening the module.
04	Verify 230 V AC, 50/60 Hz, fan connector, lead assignment, mounting, impeller clearance, airflow direction, and guards against the exact host manual and nameplate before energization.
05	Do not publish or configure airflow, static pressure, speed, power, dimensions, weight, IP rating, approvals, tachometer, 0-10 V, PWM, or MODBUS data until an exact -16 ebm-papst official document or nameplate supports each value.
06	After replacement, confirm free rotation, correct airflow, absence of abnormal noise or vibration, and normal host-drive cooling status before returning the drive to service.

Identity and release controls

Verification Status	EXACT_TYPE_CODE_VERIFIED_IN_OFFICIAL_ABB_HOST_EQUIPMENT_DOCUMENTS; EXACT_PUBLIC_EBM_PAPST_-16_PAGE_OR_MANUAL_NOT_LOCATED
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Official ebm-papst sources

ABB Drive Services – New Improved Long-Life Fans for LV AC Drives	https://library.e.abb.com/public/3c9550504190466486cf7be1ccde75aa/ABB_New%20long-life_fans_Technical_note_3AUA0000216096%20REVf_EN.pdf
ABB ACS880-304 +A003 Hardware Manual	https://library.e.abb.com/public/7364e5f10f5348189699d290664e5043/EN_ACS880-304_A003_HW_G_A4.pdf
ebm-papst Operating Instructions Search	https://www.ebmpapst.com/sg/en/support/downloads/operating-instructions.html