PRODUCT-DETAILS

ACH480-04-04A1-4

LV AC drive module for HVAC, IEC: Pn 1.5 kW, 4 A, 400 V (ACH480-04-04A1-4)



General Information

Global Commercial Alias	ACH480-04-04A1-4
Product ID	3AXD50000275458
ABB Type Designation	ACH480-04-04A1-4
EAN	6438177541752
Catalog Description	LV AC drive module for HVAC, IEC: Pn 1.5 kW, 4 A, 400 V (ACH480-04-04A1-4)
Long Description	The cabinet-optimized ACH480 drive has complete HVAC functionality to control fans, pumps, compressors, and more complex HVAC equipment like air-handling units, ensuring smooth, energy-efficient operation of your HVAC systems in normal and mission-critical situations. The built-in features significantly reduce installation time and the intuitive control panel with an HVAC-specific primary settings menu and help assistants makes startup, commissioning and operation easy. The optional Bluetooth® capability enables the commissioning and monitoring of the drive from a distance. The ACH480 is especially a good fit for panel builders and OEMs.

Ordering

Customs Tariff Number	850440
HS Code	850440 -- ELECTRICAL MACHINERY AND EQUIPMENT AND PARTS THEREOF; SOUND RECORDERS AND REPRODUCERS, TELEVISION IMAGE AND SOUND RECORDERS AND REPRODUCERS, AND PARTS AND

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	ACCESSORIES OF SUCH ARTICLES;Electrical transformers, static converters (for example, rectifiers) and inductors;Static converters
Invoice Description	ACH480-04-04A1-4 PN: 1.5 kW, IN: 4.0 A
Made To Order	Yes
Minimum Order Quantity	1 piece
Order Multiple	1 piece
Quote Only	No
Selling Unit of Measure	piece

Dimensions

Product Net Weight	1.7 kg 3.7 lb
Product Net Depth / Length	208 mm 8.19 in
Product Net Height	223 mm 8.780 in
Product Net Width	73 mm 2.87 in
Package Level 1 Depth / Length	282 mm 11.10 in
Package Level 1 Height	273 mm 10.75 in
Package Level 1 Width	148 mm 5.83 in
Package Level 1 Units	1 carton

Certificates and Declarations

Declaration of Conformity - CE	3AXD10000594967
REACH Date	20250320
REACH Declaration	9AKK107992A7060
REACH Information	True - contains substances > 0.1 mass percentage
RoHS Date	20230315
RoHS Declaration	3AXD10000594967
RoHS Information	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

Technical

Number of Phases	3-phase
Degree of Protection	IP20
Enclosure Type NEMA	Open Type
Sound dB (A)	63.10 dB(A)
Multiple Battery Information	Lithium Coin, CR2032, 220 mAh, 3 V, 1 pc, 3 g
Frequency (f)	47.5 ... 63 Hz
Frame Size	R1
Input Voltage (U_{in})	380 ... 480 V
Mounting Type	Module
Communication Protocol	BACNET CAN DeviceNet EtherNet/IP LON MODBUS

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	Other Bus Systems PROFIBUS PROFINET IO TCP/IP
Number of Hardware Interfaces	Industrial Ethernet 0 Other 2 Parallel 0 PROFINET 0 RS-232 0 RS-422 0 RS-485 1 Serial TTY 0 USB 1
Includes	Control unit PC connection
Analog Inputs	2
Analog Outputs	2
Number of Digital In/Outputs	6 / 3
Output Current, Normal Use (I_n)	4 A
Output Current, Light-Overload Use (I_{LD})	3.8 A
Output Current, Heavy-Duty Use (I_{HD})	3.3 A
Output Power, Normal Use (P_n)	1.5 kW
Output Power, Light-Overload Use (P_{LD})	1.5 kW
Output Power, Heavy-Duty Use (P_{HD})	1.1 kW
	62 W
Apparent Power Output	2.8 kV·A
Efficiency Level	IE2
Standby Loss	15 W

Complete Drive Module Efficiency (IEC61800-9-2)

Operating Point Frequency / Current	Absolute Loss	Efficiency	Relative Loss
0/25 %	34 W	81.0 %	1.2 %
0/50 %	39 W	87.9 %	1.4 %
0/100 %	50 W	91.4 %	1.8 %
50/25 %	36 W	89.5 %	1.3 %
50/50 %	41 W	93.5 %	1.5 %
50/100 %	55 W	95.2 %	2.0 %
90/50 %	44 W	96.0 %	1.6 %
90/100 %	62 W	96.9 %	2.2 %

Temperature Rating	Maximum 50 °C

Technical UL

Output Current, Heavy-Duty Use (UL)	3.0 A
Output Current, Light-	3.5 A

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Overload Use (UL)	
Output Current, Normal Use (UL)	3.5 A

External Classifications and Standards

ETIM 9	EC001857 - Frequency converter =< 1 kV
UNSPSC	39122001

Environmental

SCIP	4b7f0af1-4313-4811-b990-f45b6c1653c8 Finland
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Categories

Drives → Low Voltage AC Drives → Industry-Specific Drives → Drives for HVAC → ACH480-04 - Drive module for HVAC



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