PRODUCT-DETAILS

ACH580-01-04A1-4

LV AC wall-mounted drive for HVAC, IEC: Pn 1.5 kW, 4 A, 400 V, UL: Pld 2 Hp, 3.4 A (ACH580-01-04A1-4)



General Information

Global Commercial Alias	ACH580-01-04A1-4
Product ID	3AXD50000038983
ABB Type Designation	ACH580-01-04A1-4
EAN	6438177459439
Catalog Description	LV AC wall-mounted drive for HVAC, IEC: Pn 1.5 kW, 4 A, 400 V, UL: Pld 2 Hp, 3.4 A (ACH580-01-04A1-4)
Long Description	ACH580 HVAC drive offering has all key features built-in to control fans, pumps and compressors, and more complex equipment like air-handling units and chillers, 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 ACH580-01 comes in IP21 enclosure and can be installed on the wall as standard. Also, IP55 and flange mounting units are available.

Ordering

Customs Tariff Number	85044085
HS Code	850440 -- ELECTRICAL MACHINERY AND EQUIPMENT AND PARTS THEREOF; SOUND RECORDERS AND REPRODUCERS, TELEVISION IMAGE AND SOUND RECORDERS AND REPRODUCERS, AND PARTS AND ACCESSORIES OF SUCH ARTICLES;Electrical transformers, static converters

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	(for example, rectifiers) and inductors;Static converters
Invoice Description	ACH580-01-04A1-4 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	4.6 kg 10.141 lb
Product Net Depth / Length	223.00 mm 8.78 in
Product Net Height	373.00 mm 14.69 in
Product Net Width	125.00 mm 4.92 in
Package Level 1 Depth / Length	225.00 mm 8.858 in
Package Level 1 Height	370.00 mm 14.567 in
Package Level 1 Width	526.00 mm 20.709 in
Package Level 1 Units	1 carton

Certificates and Declarations

Declaration of Conformity - CE	3AXD10001818627
REACH Date	20250320
REACH Declaration	9AKK107992A7060
REACH Information	True - contains substances > 0.1 mass percentage
RoHS Date	20240508
RoHS Declaration	3AXD10001818627
RoHS Information	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

Technical

Number of Phases	3-phase
Degree of Protection	IP21
Enclosure Type NEMA	Type1
Altitude	1000 m
	95
Sound dB (A)	59 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	Wall-mounted
Communication Protocol	BACNET CAN DeviceNet EtherNet/IP LON MODBUS Other Bus Systems PROFIBUS PROFINET IO TCP/IP

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Number of Hardware Interfaces	Industrial Ethernet 0 Other 2 Parallel 2 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
	60 W
Apparent Power Output	2.8 kV·A
Efficiency Level	IE2
Standby Loss	14 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 %	38 W	88.2 %	1.4 %
0/100 %	47 W	91.8 %	1.7 %
50/25 %	36 W	89.6 %	1.3 %
50/50 %	40 W	93.6 %	1.5 %
50/100 %	52 W	95.5 %	1.9 %
90/50 %	44 W	96.0 %	1.6 %
90/100 %	60 W	97.0 %	2.2 %

Temperature Rating	Maximum 40 °C Minimum -15 °C

Technical UL

Output Current, Heavy-Duty Use (UL)	3.0 A
Output Current, Light-Overload Use (UL)	3.4 A
Output Power, Light-Overload Use (UL)	2 Hp

External Classifications and Standards

ETIM 9	EC001857 - Frequency converter =< 1 kV

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UNSPSC	39122001

Environmental

SCIP	a5c3dd71-8ecd-44d9-98e4-45c53b6836e1 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 → ACH580-01 - Wall-mounted drive for HVAC



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