



PRODUCT-DETAILS

ACH580-01-07A3-4

LV AC wall-mounted drive for HVAC, IEC: Pn 3 kW, 7.2 A, 400 V, UL: Pld 3 Hp, 6.0 A (ACH580-01-07A3-4)



General Information	
Global Commercial Alias	ACH580-01-07A3-4
Product ID	3AXD50000038985
ABB Type Designation	ACH580-01-07A3-4
EAN	6438177459453
Catalog Description	LV AC wall-mounted drive for HVAC, IEC: Pn 3 kW, 7.2 A, 400 V, UL: Pld 3 Hp, 6.0 A (ACH580-01-07A3-4)
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	85044087
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 (for example, rectifiers) and inductors;Static converters	
Invoice Description	ACH580-01-07A3-4 PN: 3 kW, IN: 7.2 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

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
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)	7.2 A
Output Current, Light-Overload Use (I_{LD})	6.8 A
Output Current, Heavy-Duty Use (I_{HD})	5.6 A
Output Power, Normal Use (P_n)	3 kW
Output Power, Light-Overload Use (P_{LD})	3.0 kW
Output Power, Heavy-Duty Use (P_{HD})	2.2 kW
	98 W
Apparent Power Output	5.0 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 %	49 W	84.3 %	1.0 %
0/50 %	57 W	89.9 %	1.1 %
0/100 %	77 W	92.4 %	1.6 %
50/25 %	52 W	91.4 %	1.0 %
50/50 %	62 W	94.5 %	1.2 %
50/100 %	87 W	95.8 %	1.7 %
90/50 %	67 W	96.6 %	1.4 %
90/100 %	98 W	97.3 %	2.0 %

Temperature Rating	Maximum 40 °C Minimum -15 °C
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Technical UL

Output Current, Heavy-Duty Use (UL)	4.0 A
Output Current, Light-Overload Use (UL)	6.0 A
Output Power, Light-Overload Use (UL)	3 Hp

Certificates and Declarations

Declaration of	3AXD10001818627
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Conformity - CE	
REACH Date	20250905
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

Environmental

Global Warming	Distribution (Module A4) 1 kg CO ₂ eq
Potential GWP Total	End of Life (Modules C1-C4) 10 kg CO ₂ eq
	Installation (Module A5) 4 kg CO ₂ eq
	Manufacturing (Modules A1-A3) 115 kg CO ₂ eq
	Total 1285 kg CO ₂ eq
	Use (Modules B1-B7) 1155 kg CO ₂ eq
SCIP	a5c3dd71-8ecd-44d9-98e4-45c53b6836e1 Finland
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

External Classifications and Standards

ETIM 9	EC001857 - Frequency converter =< 1 kV
ETIM 10	EC001857 - Frequency converter =< 1 kV
UNSPSC	39122001

Categories

Drives → Low Voltage AC Drives → Industry-Specific Drives → Drives for HVAC → ACH580-01 - Wall-mounted drive for HVAC

