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 PRODUCT-DETAILS

## ACH580-01-046A-4+B056

LV AC wall-mounted drive for HVAC, IEC: Pn 22 kW, 45 A, 400 V, UL: Pld 30 Hp, 44.0 A (ACH580-01-046A-4+B056)




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**General Information**

Global Commercial Alias	ACH580-01-046A-4+B056
Product ID	3AXD50000039014
ABB Type Designation	ACH580-01-046A-4+B056
EAN	6438177459644
Catalog Description	LV AC wall-mounted drive for HVAC, IEC: Pn 22 kW, 45 A, 400 V, UL: Pld 30 Hp, 44.0 A (ACH580-01-046A-4+B056)

Long Description	<p>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.</p>
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**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

(for example, rectifiers) and inductors;Static converters

Invoice Description	ACH580-01-046A-4+B056 PN: 22 kW, IN: 45 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	13 kg 28.660 lb
Product Net Depth / Length	237.00 mm 9.331 in
Product Net Height	490.00 mm 19.291 in
Product Net Width	206.00 mm 8.110 in
Package Level 1 Depth / Length	295.00 mm 11.614 in
Package Level 1 Height	390.00 mm 15.354 in
Package Level 1 Width	600.00 mm 23.622 in
Package Level 1 Units	1 carton

**Technical**

Number of Phases	3-phase
Degree of Protection	IP55
Enclosure Type NEMA	Type 12
Multiple Battery Information	95 Lithium Coin, CR2032, 220 mAh, 3 V, 1 pc, 3 g
Frequency (f)	47.5 ... 63 Hz
Frame Size	R3
Input Voltage (U <sub>in</sub> )	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	With control unit Without optical interface With PC connection
Analog Inputs	2
Analog Outputs	2
Number of Digital In/Outputs	6/3
Output Current, Normal	45 A

Use ( $I_n$ )	
Output Current, Light-Overload Use ( $I_{LD}$ )	42.8 A
Output Current, Heavy-Duty Use ( $I_{HD}$ )	37.7 A
Output Power, Normal Use ( $P_n$ )	22 kW
Output Power, Light-Overload Use ( $P_{LD}$ )	22.0 kW
Output Power, Heavy-Duty Use ( $P_{HD}$ )	18.5 kW
	672 W
Apparent Power Output	31 kV·A
Efficiency Level	IE2
Standby Loss	16 W
Complete Drive Module Efficiency (IEC61800-9-2)	

Operating Point Frequency / Current	Absolute Loss	Efficiency	Relative Loss
0/25 %	200 W	89.2 %	0.6 %
0/50 %	260 W	92.5 %	0.8 %
0/100 %	459 W	93.3 %	1.5 %
50/25 %	216 W	94.1 %	0.7 %
50/50 %	290 W	95.8 %	0.9 %
50/100 %	534 W	96.1 %	1.7 %
90/50 %	328 W	97.3 %	1.1 %
90/100 %	672 W	97.3 %	2.2 %

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

Output Current, Heavy-Duty Use (UL)	34.0 A
Output Current, Light-Overload Use (UL)	44.0 A
Output Power, Light-Overload Use (UL)	30 Hp

**Certificates and Declarations**

Declaration of Conformity - CE	3AXD10001818627
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**

SCIP	7ab39eb4-9330-424a-b7ff-fcf491eb4b83 Finland
WEEE Category	4. Large Equipment (Any External Dimension More Than 50 cm)

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### External Classifications and Standards

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

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### Categories

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

