



PRODUCT-DETAILS

# ACH580-01-012A-2

## LV AC wall-mounted drive for HVAC, IEC: Pn 3.0 kW, 12 A, 230 V (ACH580-01-012A-2)



General Information	
Global Commercial Alias	ACH580-01-012A-2
Product ID	3AXD50000417674
ABB Type Designation	ACH580-01-012A-2
EAN	6438177591498
Catalog Description	LV AC wall-mounted drive for HVAC, IEC: Pn 3.0 kW, 12 A, 230 V (ACH580-01-012A-2)
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	
Country of Origin	China (CN) Finland (FI) United States (US)
Customs Tariff Number	85044085
Invoice Description	ACH580-01-012A-2 PN: 3.0 kW, IN: 12.0 A
Made To Order	Yes

Minimum Order Quantity	1 piece
Order Multiple	1 piece
Quote Only	No
Selling Unit of Measure	piece

Container Information

Gross Volume	10.397 dm³
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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

Technical

Number of Phases	3
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 <sub>in</sub> )	200 ... 240 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, Heavy-Duty Use ( $I_{HD}$ )	7.5 A
Output Current, Light-Overload Use ( $I_{LD}$ )	11.8 A
Output Current, Normal Use ( $I_n$ )	12 A
Output Power, Heavy-Duty Use ( $P_{HD}$ )	2.2 kW
Output Power, Light-Overload Use ( $P_{LD}$ )	3.0 kW
Output Power, Normal Use ( $P_n$ )	3.0 kW
Apparent Power Output	4.8 kV-A
Efficiency Level	IE2
Standby Loss	13 W
Complete Drive Module Efficiency (61800-9-2)	

Operating Point Frequency / Current	Absolute Loss	Efficiency	Relative Loss
0/25 %	56 W	81.9 %	1.2 %
0/50 %	67 W	87.9 %	1.4 %
0/100 %	95 W	90.5 %	2.0 %
50/25 %	59 W	89.9 %	1.2 %
50/50 %	73 W	93.3 %	1.5 %
50/100 %	111 W	94.4 %	2.3 %
90/50 %	85 W	95.6 %	1.8 %
90/100 %	143 W	96.0 %	3.0 %

Temperature Rating	Maximum 40 °C Minimum -15 °C
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Additional Information

Product Main Type	ACH580-01
Product Name	Frequency converter

Classifications

ETIM 8	EC001857 - Frequency converter =< 1 kV
ETIM 9	EC001857 - Frequency converter =< 1 kV
UNSPSC	39122001

Environmental

SCIP	8105d671-49fa-4c1c-836d-baf56982886a Finland (FI)
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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

