



 PRODUCT-DETAILS

ACQ580-01-046A-4

LV AC wall-mounted drive for water and wastewater, IEC: Pn 22 kW, 45.0 A, 400 V (ACQ580-01-046A-4)



General Information

Global Commercial Alias	ACQ580-01-046A-4
Product ID	3AXD50000039031
ABB Type Designation	ACQ580-01-046A-4
EAN	6438177459767

Catalog Description	LV AC wall-mounted drive for water and wastewater, IEC: Pn 22 kW, 45.0 A, 400 V (ACQ580-01-046A-4)
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The ACQ580-01 drives deliver innovative pump features for the water and wastewater industry, securing energy efficient flow of water and wastewater in your pumping solutions. This robust and compact wall-mounted drive has built-in pump application functionality such as sensorless flow calculation, multipump control, level control, soft pipe fill, dry run protection, quick ramps and a solution for keeping the impeller of the pump clean.

Long Description

Usability is further enhanced with the intuitive Hand-Off-Auto control panel, the PC tool Drive composer and an optional Bluetooth® control panel. The built-in energy calculator visualizes the energy savings achieved with the use of the drive. The ACQ580-01 variant comes in IP21 enclosure as standard and can be installed on the wall. Also, IP55 and flange mounting units are available.

Ordering

Country of Origin	Romania (RO) Finland (FI) China (CN)
Customs Tariff Number	85044086
HS Code	850440-- Electrical transformers, static converters (for example, rectifiers) and inductors.- Static converters
Invoice Description	ACQ580-01-046A-4 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	26.0 lb
Product Net Depth / Length	9.016 in
Product Net Height	19.291 in
Product Net Width	7.992 in
Package Level 1 Depth / Length	26.73 in
Package Level 1 Height	12.80 in
Package Level 1 Width	11.42 in
Package Level 1 Units	1 carton

Technical

Number of Phases	3
Degree of Protection	IP21
Enclosure Type NEMA	Type1
Altitude	4000 m
Temperature Range	-15 to 50 °C 5 ... 95
Power Factor	0.98
Sound dB (A)	76 dB(A)
Multiple Battery Information	Lithium Coin; CR2032; 220 mAh; 3 V; 1 pc; 3 g
Frequency (f)	47.5 ... 63 Hz
Frame Size	R3
Input Voltage (U _{in})	380 ... 480 V
Mounting Type	Wall-mounted
Communication Protocol	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	6 / 3

In/Outputs

Output Current, Normal	45.0 A
Use (I_n)	
Output Current, Light-	42.8 A
Overload Use (I_{LD})	
Output Current, Heavy-	37.7 A
Duty Use (I_{HD})	
Output Power, Normal	22 kW
Use (P_n)	
Output Power, Light-	22 kW
Overload Use (P_{LD})	
Output Power, Heavy-	18.5 kW
Duty Use (P_{HD})	
Apparent Power Output	31 kV-A
Efficiency Level	IE2
Standby Loss	16 W
Complete Drive Module	
Efficiency (61800-9-2)	

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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External Classifications and Standards

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

Environmental

SCIP	8e1cd225-4cd2-4db1-8a7b-419a51ce1ae3 Finland (FI)
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Additional Information

Product Name	Frequency converter
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Categories

Drives → Low Voltage AC Drives → Industry-Specific Drives → Drives for Water → ACQ580-01 - Wall-mounted drive for water and wastewater

