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 PRODUCT-DETAILS

## ACQ580-31-033A-4

LV AC wall-mounted ultra-low harmonic drive for water and wastewater, IEC: Pn 15 kW, 32.0 A, 400 V, UL: Pld 20 Hp, 27.0 A, 480 V (ACQ580-31-033A-4)




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**General Information**

Global Commercial Alias	ACQ580-31-033A-4
Product ID	3AXD50000359325
ABB Type Designation	ACQ580-31-033A-4
EAN	6438177594246

Catalog Description	LV AC wall-mounted ultra-low harmonic drive for water and wastewater, IEC: Pn 15 kW, 32.0 A, 400 V, UL: Pld 20 Hp, 27.0 A, 480 V (ACQ580-31-033A-4)
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## Long Description

The ACQ580-31 drives deliver innovative pump features for the water and wastewater industry, securing energy efficient flow of water and wastewater in your pumping solutions. The ultra-low harmonic variant provides ultimate harmonic performance, reaching even less than 3 % THDi, and exceeding the requirements set by low harmonic standards and recommendations. The drive includes an active supply unit and integrated low harmonic line filter, meaning there is no need for external filters, multi-pulse arrangements or special transformers.

Other features include output voltage boost and power factor correction. 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. Usability is further enhanced with the intuitive Hand-Off-Auto control panel, the PC tool Drive composer and an optional Bluetooth® control panel. The ultra-low harmonic wall-mounted variant comes in IP21 enclosure as standard. Also, IP55 and flange mounting units are available.

## Ordering

Customs Tariff Number	85044086
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	ACQ580-31-033A-4 PN: 15 kW, IN: 32 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	52 kg 115 lb
Product Net Depth / Length	392 mm 15.43 in
Product Net Height	771 mm 30.35 in
Product Net Width	252 mm 9.92 in
Package Level 1 Depth / Length	992 mm 39.06 in
Package Level 1 Height	598 mm 23.54 in
Package Level 1 Width	400 mm 15.75 in
Package Level 1 Units	1 case

## Technical

Number of Phases	3-phase
Degree of Protection	IP21
Enclosure Type NEMA	Type1
Altitude	4000 m 5 ... 95
Power Factor	1.00
Sound dB (A)	71 dB(A)
Multiple Battery Information	Lithium Coin; CR2032; 220 mAh; 3 V; 1 pc; 3 g
Frequency (f)	47.5 ... 63 Hz
Frame Size	R6
Input Voltage (U <sub>in</sub> )	380 ... 480 V
Mounting Type	Wall-mounted
Communication Protocol	BACNET CAN DeviceNet EtherNet/IP 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 ( $I_n$ )	32.0 A
Output Current, Light-Overload Use ( $I_{LD}$ )	30.4 A
Output Current, Heavy-Duty Use ( $I_{HD}$ )	25.0 A
Output Power, Normal Use ( $P_n$ )	15 kW
Output Power, Light-Overload Use ( $P_{LD}$ )	15 kW
Output Power, Heavy-Duty Use ( $P_{HD}$ )	11 kW
Apparent Power Output	629 W 22 kV·A
Efficiency Level	IE2
Standby Loss	46 W
Complete Drive Module Efficiency (IEC61800-9-2)	

Operating Point Frequency / Current	Absolute Loss	Efficiency	Relative Loss
0/25 %	181 W	87.1 %	0.8 %
0/50 %	214 W	91.7 %	1.0 %
0/100 %	303 W	94.0 %	1.4 %
50/25 %	195 W	92.6 %	0.9 %
50/50 %	245 W	95.1 %	1.1 %
50/100 %	379 W	96.1 %	1.7 %
90/50 %	300 W	96.6 %	1.4 %
90/100 %	629 W	96.4 %	2.8 %

Temperature Rating	Maximum 50 °C Minimum -15 °C
Ecodesign Exemption	Energy efficiency data is not provided for the drive. The low-harmonic drives are exempt from the EU ecodesign requirements (Regulation EU/2019/1781, §2.3.d).

**Technical UL**

Output Current, Heavy-Duty Use (UL)	23 A
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Output Current, Light-Overload Use (UL)	27.0 A
Output Current, Normal Use (UL)	27.0 A
Output Power, Heavy-Duty Use (UL)	15 Hp
Output Power, Light-Overload Use (UL)	20 Hp
Output Power, Normal Use (UL)	20 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	57e8c16b-6eaf-4596-b5a1-948147184af3 Finland
WEEE Category	4. Large Equipment (Any 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 Water → ACQ580-31 - Wall-mounted ultra-low harmonic drive for water and wastewater

Drives → Services → Spares and Consumables → Parts



# ماكان كنترول