



 PRODUCT-DETAILS

ACQ580-04-725A-4

LV AC drive module for water and wastewater,
 IEC: Pn 400 kW, 725 A, 400 V, UL: Pld 600 Hp,
 705 A, 480 V (ACQ580-04-725A-4)



General Information

Global Commercial Alias	ACQ580-04-725A-4
Product ID	3AXD50000049061
ABB Type Designation	ACQ580-04-725A-4

Catalog Description	LV AC drive module for water and wastewater, IEC: Pn 400 kW, 725 A, 400 V, UL: Pld 600 Hp, 705 A, 480 V (ACQ580-04-725A-4)
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Long Description	<p>The ACQ580-04 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 drive module 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 built-in energy calculator visualizes the energy savings achieved with the use of the drive.</p> <p>The ACQ580-04 drive module comes in IP00 enclosure as standard for cabinet installation. Also, IP20 enclosure is available</p>
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Ordering

Country of Origin	Finland (FI)
Customs Tariff Number	85044085

HS Code	850440-- Electrical transformers, static converters (for example, rectifiers) and inductors.- Static converters
Invoice Description	ACQ580-04-725A-4 PN: 400 kW, IN: 725 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	199 kg 439 lb
Product Net Depth / Length	529 mm 20.83 in
Product Net Height	1662 mm 65.43 in
Product Net Width	350 mm 13.78 in
Package Level 1 Depth / Length	2060 mm 81.10 in
Package Level 1 Height	500 mm 19.69 in
Package Level 1 Width	670 mm 26.38 in
Package Level 1 Units	1 case

Technical

Number of Phases	3
Degree of Protection	IP00
Enclosure Type NEMA	Open Type
Altitude	1000 m 5 ... 95
Power Factor	0.98
Sound dB (A)	72 dB(A)
Multiple Battery Information	Lithium Coin, CR2032, 220 mAh, 3 V, 1 pc, 3 g
Frequency (f)	47.5 ... 63 Hz
Frame Size	R11
Input Voltage (U _{in})	380 ... 480 V
Mounting Type	Module
Communication Protocol	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)	725 A
Output Current, Light-Overload Use (I_{LD})	715 A
Output Current, Heavy-Duty Use (I_{HD})	566 A
Output Power, Normal Use (P_n)	400 kW
Output Power, Light-Overload Use (P_{LD})	400 kW
Output Power, Heavy-Duty Use (P_{HD})	315 kW
Apparent Power Output	502 kV-A
Efficiency Level	IE2
Standby Loss	466 W
Complete Drive Module Efficiency (61800-9-2)	

Operating Point Frequency / Current	Absolute Loss	Efficiency	Relative Loss
0/25 %	2223 W	93.5 %	0.4 %
0/50 %	3150 W	95.3 %	0.5 %
0/100 %	5629 W	95.7 %	0.9 %
50/25 %	2399 W	96.5 %	0.4 %
50/50 %	3524 W	97.4 %	0.6 %
50/100 %	6547 W	97.6 %	1.1 %
90/50 %	4093 W	98.3 %	0.7 %
90/100 %	8108 W	98.3 %	1.3 %

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

Output Current, Heavy-Duty Use (UL)	566 A
Output Current, Light-Overload Use (UL)	705 A
Output Current, Normal Use (UL)	725 A
Output Power, Heavy-Duty Use (UL)	450 Hp
Output Power, Light-Overload Use (UL)	600 Hp
Output Power, Normal Use (UL)	600 Hp

External Classifications and Standards

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

Environmental

SCIP	e9fd22a6-81c4-4079-87c1-83e8cf566d7a Finland (FI)
WEEE Category	4. Large Equipment (Any 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 → ACQ580-04 - Drive module for water and wastewater

