

PRODUCT-DETAILS

ACQ580-04-650A-4

LV AC drive module for water and wastewater,
IEC: Pn 355 kW, 650 A, 400 V, UL: Pld 500 Hp,
623 A, 480 V (ACQ580-04-650A-4)



General Information

Global Commercial Alias	ACQ580-04-650A-4
Product ID	3AXD50000049030
ABB Type Designation	ACQ580-04-650A-4
Catalog Description	LV AC drive module for water and wastewater, IEC: Pn 355 kW, 650 A, 400 V, UL: Pld 500 Hp, 623 A, 480 V (ACQ580-04-650A-4)
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>

Ordering

Country of Origin	Finland (FI)
Customs Tariff Number	85044085
Invoice Description	ACQ580-04-650A-4 PN: 355 kW, IN: 650 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	270.689 dm³
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Dimensions

Product Net Weight	161 kg 354.945 lb
Product Net Depth / Length	529 mm 20.827 in
Product Net Height	1462 mm 57.559 in
Product Net Width	350 mm 13.780 in
Package Level 1 Depth / Length	2060.00 mm 81.102 in
Package Level 1 Height	500.00 mm 19.685 in
Package Level 1 Width	670.00 mm 26.378 in
Package Level 1 Units	1 carton

Technical

Number of Phases	3
Degree of Protection	IP00
Enclosure Type NEMA	Open Type
Altitude	1000 m
	95
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	R10
Input Voltage (U _{in})	380 ... 480 V
Mounting Type	Module for cabinet building
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, Heavy-Duty Use (I_{HD})	477 A
Output Current, Light-Overload Use (I_{LD})	634 A
Output Current, Normal Use (I_n)	650 A
Output Power, Heavy-Duty Use (P_{HD})	250 kW
Output Power, Light-Overload Use (P_{LD})	355 kW
Output Power, Normal Use (P_n)	355 kW
Apparent Power Output	450 kV·A
Efficiency Level	IE2
Standby Loss	423 W
Complete Drive Module Efficiency (61800-9-2)	

Operating Point Frequency / Current	Absolute Loss	Efficiency	Relative Loss
0/25 %	2143 W	93.1 %	0.4 %
0/50 %	3094 W	94.8 %	0.6 %
0/100 %	5693 W	95.2 %	1.1 %
50/25 %	2306 W	96.3 %	0.4 %
50/50 %	3445 W	97.2 %	0.6 %
50/100 %	6585 W	97.3 %	1.2 %
90/50 %	3956 W	98.2 %	0.7 %
90/100 %	8046 W	98.1 %	1.5 %

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

Product Main Type	ACQ580-04
Product Name	Frequency converter

Classifications

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

Environmental

SCIP	58f22844-2faf-42d0-845e-c7388e32f3e4 Finland (FI)
WEEE Category	4. Large Equipment (Any External Dimension More Than 50 cm)

Categories

Drives → Low Voltage AC Drives → Industry-Specific Drives → Drives for water → ACQ580-04 - Drive module for water and wastewater

