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PRODUCT-DETAILS

# ACS880-31-087A-3

# LV AC industrial wall-mounted low harmonic single drive, IEC: Pn 45 kW, 87 A, 400 V (ACS880-31-087A-3)



General Information	
Global Commercial Alias	ACS880-31-087A-3
Product ID	3AXD50000121175
ABB Type Designation	ACS880-31-087A-3
EAN	6438177548256
Catalog Description	LV AC industrial wall-mounted low harmonic single drive, IEC: Pn 45 kW, 87 A, 400 V (ACS880-31-087A-3)
Long Description	The ACS880-31 drives are customized to meet the particular needs of specific industries, such as oil and gas, mining, metals, chemicals, cement, power plants, material handling, pulp and paper, sawmills, marine, water and wastewater, food and beverage, and automotive. They can control a wide range of applications, including cranes, extruders, winches, winders, conveyors, mixers, compressors, centrifuges, test benches, elevators, extruders, pumps and fans. The compact ACS880-31 ultra-low harmonic drive produces exceptionally low harmonic content and exceeds the requirements set by low harmonic 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.

### **Ordering**

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Country of Origin	Finland (FI)
Customs Tariff Number	85044086
HS Code	850440 Electrical transformers, static converters (for example, rectifiers) and inductors Static converters
Invoice Description	ACS880-31-087A-3 PN: 45 kW, IN: 87 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	61 kg
	134.482 lb
Product Net Depth /	382 mm
Length	15.039 in
Product Net Height	771 mm
	30.354 in
Product Net Width	252 mm
	9.921 in
Package Level 1 Depth /	992 mm
Length	39.055 in
Package Level 1 Height	598 mm
	23.543 in
Package Level 1 Width	400.0 mm
	15.748 in
Package Level 1 Units	1 case

Technical	
Number of Phases	3
Degree of Protection	IP21
Enclosure Type NEMA	Type1
Altitude	4000 m
	5 95
Power Factor	1.0
Sound dB (A)	71 dB(A)
Multiple Battery Information	Lithium Coin, CR2032, 220 mAh, 3 V, 2 pcs, 6 g
Frequency (f)	47.5 63 Hz
Frame Size	R6
Input Voltage (U <sub>in</sub> )	380 415 V
Mounting Type	Wall-mounted
Communication Protocol	CAN DeviceNet EtherNet/IP MODBUS Other Bus Systems PROFISATE PROFIBUS PROFINET IO TCP/IP
Number of Hardware Interfaces	Industrial Ethernet 0 Other 6 Parallel 0 PROFINET 0 RS-232 0

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	RS-4851
	Serial TTY 0
	USB 1
Includes	Control unit
	PC connection
Analog Inputs	2
Analog Outputs	2
Number of Digital	6/2
In/Outputs	
Output Current, Heavy-	72 A
Duty Use (I <sub>HD</sub> )	
Output Current, Light-	83 A
Overload Use (I <sub>LD</sub> )	
Output Current, Normal	87 A
Use $(I_n)$	
Output Power, Heavy-	37 kW
Duty Use ( $P_{HD}$ )	
Output Power, Light-	45 kW
Overload Use ( $P_{LD}$ )	
Output Power, Normal	45 kW
Use $(P_n)$	
Apparent Power Output	60 kV·A
Efficiency Level	IE2
Standby Loss	51 W
Complete Drive Module	
E((; ; (C1000 0 0)	

Operating Point Frequency / Current	Absolute Loss	Efficiency	Relative Loss
0/25 %	408 W	89.3 %	0.7 %
0/50 %	551 W	92.2 %	0.9 %
0/100 %	939 W	93.2 %	1.6 %
50/25 %	459 W	93.7 %	0.8 %
50/50 %	662 W	95.2 %	1.1 %
50/100 %	1216 W	95.5 %	2.0 %
90/50 %	862 W	96.5 %	1.4 %
90/100 %	2016 W	95.9 %	3.3 %

Temperature Rating Maximum +55 °C Minimum -15 °C

**Ecodesign Exemption** 

Efficiency (61800-9-2)

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).

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

Environmental	
SCIP	fcdc24ef-6177-4a20-9ff6-4fd916600fd0 Finland (FI)

RS-422 0

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WEEE Category

4. Large Equipment (Any External Dimension More Than 50 cm)

### **Additional Information**

Product Name Frequency converter

## **Categories**

 $Drives \rightarrow Low\ Voltage\ AC\ Drives \rightarrow Industrial\ Drives \rightarrow ACS880\ Single\ Drives \rightarrow ACS880-31\ -\ Wall-mounted\ low\ harmonic\ single\ drive$ 

 $\mathsf{Drives} \to \mathsf{Services} \to \mathsf{Spares} \ \mathsf{and} \ \mathsf{Consumables} \to \mathsf{Parts}$ 

