

LOW VOLTAGE AC DRIVES

ABB industrial drives

ACS880 ultra-low harmonic drives, 2.2 to 3200 kW



ACS880 ultra-low harmonic drives offer an easy harmonic reduction method which is incorporated in the drive. No additional filters or special transformers are needed. This compact, cost-effective solution meets the strictest harmonic recommendations.

Keeps the network clean

Clean supply network

The drive produces exceptionally low harmonic content and exceeds the requirements of harmonic recommendations, such as IEEE 519 and G5/4. The total harmonic current distortion is typically <3% in nominal situation and undistorted network.

Minimized downtime

Ultra-low harmonic drives ensure reliable operation in unstable supply network conditions. The drive's active supply unit is able to boost output to guarantee full motor voltage even when the supply voltage is below nominal.

Optimized cost and space

The compact drive has harmonics mitigation built-in. This includes an active supply unit and a low harmonic line filter. As there is no need for external filters, multi-pulse arrangements or special transformers, the simple installation offers significant savings in space, time and cost.

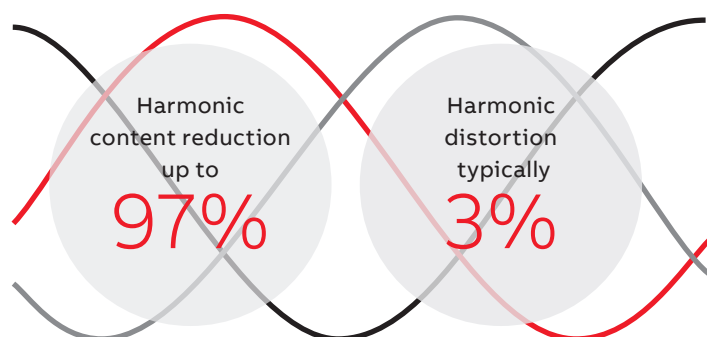
Maximized motor performance and efficiency

ABB's direct torque control (DTC) provides precise speed and torque control for maximum motor performance and efficiency. The drive's voltage boost capability also improves motor efficiency – with a higher voltage, the same power is achieved with less current.



Technical data

ACS880-31 wall-mounted ultra-low harmonic drives	
Power range	2.2 to 110 kW
Voltage range	3-phase, 380 to 500 V
Enclosure	IP20, IP21 (as standard) and IP55. Flange mounting with IP55 back side protection as an option.
ACS880-34 ultra-low harmonic drive modules	
Power range	110 to 400 kW
Voltage range	3-phase, 380 to 690 V
Enclosure	IP20
ACS880-34 ultra-low harmonic drive module packages	
Power range	160 to 2200 kW
Voltage range	3-phase, 380 to 690 V
Enclosure	IP00
ACS880-37 cabinet-built ultra-low harmonic drives	
Power range	45 to 3200 kW
Voltage range	3-phase, 380 to 690 V
Enclosure	IP22 (as standard), IP42 and IP54



Key features

- Compact package**
 Designed for easy installation.
- Easy commissioning**
 No need to set extra parameters for the active supply unit.
- Low harmonic content**
 Total harmonic current distortion is typically <3% in nominal situation and undistorted network.
- Unity power factor**
 Possibility also for network power factor correction.
- Voltage boost**
 Guarantees full motor voltage in all conditions and can also be utilized to overcome a voltage drop caused by long supply or motor cables or output filters. Voltage boost capability may allow a smaller motor to be used.
- Nine-year maintenance interval**
- Factory-tested solution for high reliability**
 All ACS880 drives are tested at maximum temperature with nominal loads.

Video playlist:
ACS880 how-to videos



For more information please contact your local ABB representative or visit:

www.abb.com/drives
www.abb.com/drivespartners
new.abb.com/drives/harmonics

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB. Copyright © 2018 ABB. All rights reserved.