

LOW VOLTAGE AC DRIVES

ACS580-01 IP66/Type 4X drive, 5.5 to 22 kW

Reliable control for demanding food and beverage environments



Demanding production environments need products that can withstand extreme conditions. Choose the ACS580 IP66/Type 4X drive for reliable operation in food and beverage environments – indoor or outdoor, in extreme heat or cold, and in wash-down or dry zones. Because it meets IP66 enclosure requirements, you can install the drive right next to your application.



Built to withstand wet, wash-down and outdoor conditions

As part of our all-compatible drive portfolio, the ACS580 IP66/Type 4X drive delivers the same trusted ACS580 performance in a fully sealed design. With exceptional corrosion and UV resistance, it offers resilience comparable to that of a stainless-steel enclosure, helping protect motor control close to pumps, fans, compressors, mixers, and conveyors.

IP66 rated

This rigorously engineered drive is certified to meet standards for IP66 (hose-down), ensuring long lasting performance even with frequent, intense sanitation procedures.

The drive's surface has undergone rigorous testing to withstand exposure to corrosive substances like salt spray, ammonia, chlorine, algaecides, and microbicides.

Created with your application in mind

Ideal for harsh conditions within food and beverage sectors, this drive excels in applications with pumps, fans, compressors, mixers and conveyors used in:

- Cold environments down to -20 °C
- High temperatures up to 50 °C with derating
- Indoor and outdoor food production environments
- Dairy, beverage, meat, poultry and other processed food applications

**ENGINEERED
TO OUTFIT**

Technical data

ACS580 with +B063 option	
Power range	5.5 to 22 kW
Voltage	3-phase, 380 to 480 V, +10%/-15%
Frequency	50/60 Hz ±5%
Mains choke	DC choke
Harmonic mitigation	According to EN 61000-3-12: 2011
Degree of protection	IP66/ UL Type 4X drive Sun shield required outdoors when in direct sunlight *) Drive is UV resistant
Ambient conditions	-20 to 50 °C; no internal condensation 40 to 50 °C with derating 1% per 1°C Keypad display: -15 to 50 °C
Compliance	CE, TÜV Nord (safety functions), UL, cUL CSA, EAC, EIP, UKCA, KC
Safety functions	Safe Torque Off (STO) according to EN/IEC 61800-5-2, SIL 3, PL e (TÜV Nord certified)
EMC	According to EMC Directive 2014/30/EU, EN 61800-3:2004 + A1 2012. Class C2 as standard
Control connections	Two analog inputs, two analog outputs, six digital inputs, three relay outputs, EIA-485 (Modbus RTU), Safe Torque Off (STO), optional Bluetooth via control panel
Control and communication options	
Fieldbus adapters	EtherNet/IP, Modbus TCP, PROFINET, EtherCat, POWERLINK, DeviceNet, Modbus RTU, Profibus DP, CANopen
Optional I/O extension modules	CMOD-01: External +24 V AC/DC • Two relay outputs • One digital output CMOD-02: External +24 V AC/DC and isolated PTC input CHDI-01: 115/230 V AC digital input • Six digital inputs • Two relays CAIO-01: Bipolar analog I/O extension • Three bipolar analog inputs • Two unipolar analog outputs
PC tools	Drive Composer entry, available for free via ABB website . Drive Composer pro
Mobile app	Drivetune, available from App Store and Google Play , lets you start up, commission & troubleshoot wirelessly with your mobile device using Bluetooth control panel
Control panel options	ACS-AP-S, Assistant control panel ACS-AP-I, Industrial assistant control panel ACS-AP-W, Assistant control panel with Bluetooth

*) The sun shield is not supplied by ABB and can be ordered from local vendors.

Dimensions and weight, IP66 (UL Type 4X)				
Power	Height	Width	Depth	Weight
5.5 kW	522 mm	208 mm	249 mm	11.8 kg
7.5 kW, 11 kW	606 mm	208 mm	260 mm	14.5 kg
15 kW, 22 kW	647 mm	277 mm	260 mm	26.4 kg

For more information please contact
your local ABB representative or visit:
new.abb.com/drives

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Key features

Easy startup, commissioning, and tuning

Stay Bluetooth connected up to 75 m away, safely out
of the arc flash boundary. Optional Bluetooth panel
securely connects to your smartphone or PC making
it easy to start up, commission, and tune the drive with
[Drive Composer](#) or [Drivetune](#) and remotely connect to
[ABB Ability™ Mobile Connect](#).

Application features inside

- Startup assistant allows first-time users to quickly
customize the drive according to their needs
- Adaptive programming provides extra flexibility
by offering easy alternative for simple program-
ming needs
- Heavy duty rating for overloadability
- S-ramp for smooth start and stop of conveyors
- Pumping features (cavitation control)

User interface and connectivity

- Built-in PLC with adaptive programming
- Optional Bluetooth Control Panel
 - Backup, Restore and Diagnostic functions
 - Access drive remotely outside of the arc-flash
zone/boundary
 - Drivetune Mobile App for Bluetooth connection
with all the same primary settings and menus
available on the drive control panel
- RS-485 Modbus RTU
- Drive Composer PC tool for harmonized setup,
commissioning, and monitoring

Hardware features

- Integrated Safe Torque Off (STO)
- DC choke for harmonic mitigation
- Coated boards
- Integrated EMC C2 filter
- RS-485 communication terminal
- Two option slots (fieldbus and I/O extension)
- External +24 V AC/DC with CMOD-01 option

Learn more from General purpose drives website.



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