

BROCHURE

Low voltage AC drives

ABB general purpose drives
ACS580, 1 to 700 hp



ABB

Local ACS580 31.0 Hz

Output frequency	30.98
Hz	
Motor current	39.12
A	
Motor torque %	66.5
%	

Options 15:05 Menu

Control panel with a central green LED indicator and a USB symbol at the bottom. The panel includes several function buttons:

- Stop button (red circle with a diagonal line)
- Loc/Rem button (lock symbol)
- Start button (diamond with a downward arrow)
- Navigation buttons: Up, Down, Left, Right, and a central button.
- A question mark button on the right side.



Switch on simplicity

The ACS580 general purpose drive is equipped with built-in features that simplify ordering and delivery, and reduce commissioning costs. Everything is provided in a single, compact and ready-to-use package.



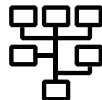
Communication with all major automation networks

Optional fieldbus adapters enable connectivity with all major industrial automation networks.



Start-up and maintenance tool

Drive Composer PC tool for start-up, configuration, monitoring and process tuning is included as standard. The PC tool is connected to the drive's control panel via a USB interface.



Adaptive programming

Adaptive programming is ideal for creating custom programs for various applications. It does not require expertise in programming.



Simple to select, install and use

Built-in features such as an EMC filter, choke, a Modbus RTU fieldbus interface and safe torque off functionality simplify drive selection, installation and use.



Designed for maximum reliability

Design features like coated circuit boards, minimized airflow through the control board section, earth fault protection and design for 40°C ambient temperature make the ACS580 an easy choice.



Control at your fingertips

The control panel's straightforward primary settings menu with assistants help you set up the drive quickly and effectively.



Remote monitoring

With a built-in web server and stand-alone datalogger, NETA-21 module enables worldwide and secure access to your drives.



Scalable performance

The ACS580 is a perfect match not only for simple applications, but also for applications where sophisticated speed and torque control are needed.

The all-compatible ACS580 series

Effortless energy efficiency

ABB's new ACS580 drives provide the quality, reliability, and energy savings you expect from ABB drives as well as new features, such as the new primary settings menu and Bluetooth connectivity, that will make it easier to use and safer to maintain.

With offices in over 90 countries and a network of global technical partners, you can rely on ABB for technical assistance and local support worldwide.

Save time and money

The ACS580 is simple to install, commission, use, expand, and even upgrade, when the time comes. A compact design makes handling the units easy and with all the essential features built-in, commissioning and setup time is greatly reduced by leveraging the Primary Settings menus and assistants. The assistant control panel, which provides 16 different language options, can be upgraded to an optional Bluetooth control panel to enable wireless commissioning and monitoring.

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Keep your system running smoothly

ACS580 drives are designed for customers who value reliability, high quality, and robustness in their applications. Product features, such as coated boards, compact UL Type 12 (IP55) enclosure for wall-mounted drives, and UL Type 3R enclosure for packaged drives, make the ACS580 suitable for harsh conditions.

Additionally, all ACS580 drives and their protective functions are thoroughly tested for performance at maximum temperature with nominal loads.

Contain costs to improve your bottom line

When you think of VFDs, you likely think of energy savings – and rightly so. Energy savings alone can easily justify the cost of a VFD, even on small applications that traditionally use starters. Just by up-grading from constant to variable speed, you can create energy savings of up to 50%. Add to that the ability to track the savings, in both energy and dollars, so you can evaluate the effectiveness of your system, and adjust accordingly for even more savings.

When your processes runs more efficiently, the result is not only energy savings, but minimized wear and tear on your mechanical equipment, and overall process efficiencies, which results in financial savings.

The ACS580 design helps to contain costs as well. Because all the essential features, including Safe Torque Off (STO), are integrated into the ACS580, the amount of equipment that needs to be installed, commissioned, and maintained is less.

As one of ABB's all-compatible products, fieldbus adapters, flange mounting kit, and PC tools are consistent, to simplify commissioning and minimize your need for training, as well.

Partner with ABB to achieve success

We encourage you to collaborate with ABB's factory and local VFD experts who are available throughout the lifecycle of your system. You have access to this team of experts to assist with developing functional, cost-effective, and easy-to-maintain systems, improving designs to meet specific project requirements, ensuring that you include the latest technologies, and training your staff on appropriate topics. Our goal is to ensure your success.

We also offer preventive maintenance to keep your system in tip-top shape and service plans in the event a machine does go down. You can also count on our free, 24/7/365 technical support to assist whenever you need help.



ACS580 offerings

The ACS580 general purpose drive portfolio includes wall-mounted, packaged and cabinet-built drives. All variations feature Safe Torque Off (STO), common software including Adaptive Programming, and an intuitive control panel with USB connection.



ACS580-01 drive

A wall-mounted drive available in UL (NEMA) Type 1 (IP21) and UL Type 12 (IP55) enclosures. Our wall-mounted drives are available from 0.75 to 350HP and feature compact designs for easy installation and commissioning. By frame size, ACS580 drives feature the same or smaller footprints as the ACS550 drives.



ACS580-07 drive

A cabinet-built single drive available from 150 to 700HP at 480V. The UL (NEMA) Type 12 (IP55) enclosure is a product feature that makes this drive suitable for harsh conditions.



ACS580-0P drive

A packaged drive with either an input disconnect switch and fast acting fuses (standard) or an input circuit breaker and fast acting fuses (+F255). Our packaged drive is available from 1 to 200HP and is offered in UL (NEMA) Type 1 (IP21), Type 12 (IP55), and Type 3R* making it a great fit for a variety of applications and environments.

*ACS580-0P is not available in all horsepower ranges in the UL (NEMA) Type 3R enclosure

Typical applications

ACS580 drives improve process performance, increase productivity and ensure machine and personnel safety

Pumps

Standard features

- Power range up to 700HP available in different enclosure versions
- Motor cables up to 1,000 ft (300 m)
- Built-in choke in all ACS580 devices for harmonic mitigation in partial loads

Industry: Food and beverage, agriculture, automotive, rubber and plastics



Fans

Standard features

- Compact UL Type 12 devices with coated PCBs for stand-alone installation
- EMC level C2 for installation in the 1st environment
- Support for high efficiency, PM and SynRM motors

Industry: Food and beverage, agriculture, automotive, textile



Compressors

Standard features

- Broad support for different fieldbus protocols
- STO for machinery safety
- Power range up to 350HP

Industry: Food and beverage, printing, textile



Conveyors

Standard features

- Integrated braking chopper up to 30HP
- Compact UL Type 12 enclosure
- STO for machinery safety
- External +24 V supply (optional on R1-R5 frame) to maintain communication when the mains supply is disconnected.

Industry: Material handling, sawmill, textile, automotive, food and beverage



Mixers

Standard features

- Vector control ensures high starting torque at low speeds
- STO for personnel / machinery safety
- Connectivity: Control panels / IO / Fieldbus options
- Coated control boards

Industry: Food and beverage



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

www.abb.com/ACS580
www.abb.com/drives

Online manuals
for the ACS580 drives



Video playlist:
ACS580 how-to videos

