

MEDIUM VOLTAGE AC DRIVES

ABB general purpose drives

ACS580MV, 200 to 6300 kW, 3.3 to 11 kV



The ACS580MV is part of ABB's all-compatible drives portfolio. The drive's built-in features and compact design provide effortless energy efficiency for a wide range of applications.

● **Switch on simplicity without trading off efficiency**

The innovation behind all-compatible is ABB's new commondrives architecture, designed to simplify operation, optimize energy efficiency and maximize output.

● **One product for many applications**

The cabinet-built ABB general purpose drive ACS580MV is designed for variable square torque such as pumps, fans, and constant torque applications such as conveyors, mills, and extruders. The drive is equipped with standard features that simplify the ordering and delivery process while reducing the cost of installation and commissioning.

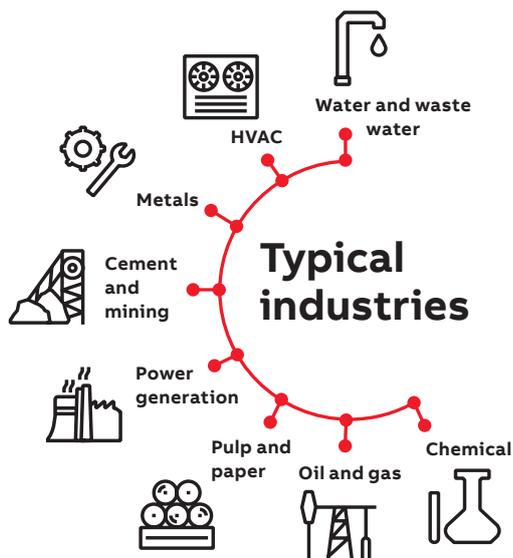
● **The reliability you expect**

The drive features a new generation of cascaded h-bridge technology which offers superior mitigation of harmonics in a compact and light-weight design. Other built-in functions like power loss ride through and automatic restart ensure reliable, trouble free operation and high robustness against weak network performance. Features like IP42, redundant cooling fans and an advanced preventive warning system ensure highest reliability even in harsh environments. The plug-in fieldbus adapter modules enable connectivity with all major automation systems and integrated remote monitoring device enables condition monitoring services and secure remote access to your drive.



Technical data

Voltage and power range	Input 3.3 to 13.8 kV $\pm 10\%$ (-25% with reduced power) Output 3.3 to 11 kV 3.3 kV: 315 to 2000 kW 4.16 kV: 300 to 2500 kW 6 kV: 200 to 3550 kW 6.3 kV: 200 to 3500 kW 6.6 kV: 200 to 4000 kW 10 kV: 200 to 5600 kW 10.5 kV: 200 to 6300 kW 11 kV: 200 to 6300 kW
Supply frequency	50/60 Hz $\pm 5\%$
Motor frequency	0 to 120 Hz output, up to 80 Hz nominal motor frequency
Degree of protection	IP21 as standard IP42 cabinet protection class as an optional variant
Ambient conditions	0 to +40 °C as standard, no frost or condensation, up to +50 °C with derating Up to 2000 meters as standard, above with derating
Compliance	CE, GOST-R
Safety functions	Emergency off cat. 0 as standard, (SIL _{cl} 3/PLe) as an optional variant
EMC	According to IEC 61800-3, IEC 61000-4, IEC 61000-6
Harmonic mitigation	According IEC 61800-3, IEEE 519-1992
Control connections	Analog inputs (4), analog outputs (2), digital inputs (6 freely programmable, 6 predefined), digital outputs (5 freely programmable, 4 predefined), Ethernet connection for PC tool, USB via control panel
Control and communication options	
Fieldbus adapters	PROFIBUS DP, DeviceNet™, EtherNet/IP™, Modbus TCP/RTU, PROFINET IO.
I/O extension modules	FIO-01 (4× DI/O, 2× RO) FIO-11 (3× AI [mA/V], 1× AO [mA], 2× DI/O) FAIO-01 (2× AI [mA/V], 2× AO [mA])
PC tools	Drive composer entry tool, available for free via ABB website Drive composer pro tool
Control panel options	ACS-AP-W - Bluetooth Assistant control panel



Simple. Connected. All-compatible.

Essential features inside

- Assistant control panel
- Option slots
- External +24 V AC/DC
- USB interface for PC tool connection
- Built-in energy calculators

Get connected, without the hassle

- Easy access to your device information, documentation, issue reporting and support with ABB Access online mobile tool
- Optional Bluetooth connectivity available via simple plug-in control panel
- Connection to all major industrial automation systems via plug-in fieldbus and Ethernet adapters
- USB port for transferring information between PC and drive
- Remote monitoring functionality for configuring the drive parameters, and monitoring various data such as load levels, runtime, energy consumption, I/O data, and bearing temperatures of the motor
- Free Drive Composer software to program and monitor drive performance
- Communication between drives for master-follower functionality

Learn it once, use it everywhere

The ACS580MV drive is built on ABB common drives architecture and enables a smooth transition to other all-compatible drives in the ABB's portfolio, such as the ACS580 general purpose drives or the ACS880 industrial drives. The drives share the same user interfaces and options, enabling users to use the knowledge gained with the ACS580MV drive.

ACS580MV product website



ACS580MV product animation video



For more information contact your local ABB representative or visit:

new.abb.com/drives
new.abb.com/drives/drivespartners
new.abb.com/motors-generators

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