

MEDIUM VOLTAGE AC DRIVES

## ABB general purpose drives

ACS580MV, 200 to 6300 kW, 6 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 common drives architecture, designed to simplify operation, optimize energy efficiency and maximize output.

● **One product, many applications**

The cabinet-built ABB general purpose drive ACS580MV is designed for variable square torque and basic constant torque applications, such as pumps, fans, compressors, conveyors, mixers and extruders. The drive is equipped with standard features that simplify ordering and delivery, and reduce cost for 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 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 industrial environments. The plug-in fieldbus adapter modules enable connectivity with all major automation systems.



## Technical data

<b>Voltage and power range</b>	Input 6 to 11 kV $\pm 10\%$ ( $-25\%$ with reduced power) Output 6 to 11 kV 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
<b>Supply frequency</b>	50/60 Hz $\pm 5\%$
<b>Motor frequency</b>	0 to 120 Hz output, up to 80 Hz nominal motor frequency
<b>Degree of protection</b>	IP21 as standard IP42 cabinet protection class as an optional variant
<b>Ambient conditions</b>	0 to $+40\text{ }^{\circ}\text{C}$ as standard, no frost or condensation, up to $+50\text{ }^{\circ}\text{C}$ with derating Up to 2000 meters as standard, above with derating
<b>Compliance</b>	CE, GOST-R
<b>Safety functions</b>	Emergency stop cat. 0 as standard, (SILCL 3/PL e) as an optional variant
<b>EMC</b>	According to IEC 61000-2-4 class 2, IEC 61800-3 category 4
<b>Harmonic mitigation</b>	According to IEC 61800-3, IEEE 519-1992
<b>Control connections</b>	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
<b>Control and communication options</b>	
<b>Fieldbus adapters</b>	PROFIBUS DP, CANopen®, DeviceNet™, EtherNet/IP™, Modbus TCP/RTU, PROFINET IO, EtherCAT®, POWERLINK, ControlNet
<b>I/O extension modules</b>	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])
<b>PC tools</b>	Drive composer tool entry, available for free via ABB website Drive composer tool pro
<b>Control panel options</b>	ACS-AP-S ACS-AP-W (Bluetooth)



Optional Bluetooth connectivity available via simple plug-in 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

- 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
- Optional 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 DriveComposer software to program and monitor drive performance

### 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.

Hardware manual for the ACS580MV



Panel manual



For more information contact your local ABB representative or visit:

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[www.abb.com/drivespartners](http://www.abb.com/drivespartners)  
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