ABB general purpose drives
ACS480, 0.75 to 22 kW

The ACS480 general purpose drives are designed to simplify drive selection, set up, and operation for many basic applications without the head scratching complexities.

One product, many applications
The drive includes all the essential components for typical light industry applications. The ACS480 is ready to control compressors, conveyors, fans, as well as many other basic speed-controlled applications.

Reliability and constant high quality
ACS480 drives are designed for customers who value high quality and robustness in their applications. The product features, such as coated boards, earth fault protection and maximum ambient temperature of 50 °C while operating, ensure reliable processes, also in the cabinet installations, where the ACS480 drives are especially optimized. Additionally, all the drives are tested at maximum temperature and with nominal loads. The tests include performance and all protective functions.

Easier than ever before
ACS480 drives have all the essential features built-in reducing commissioning and setup time. The assistant control panel with 13 different languages is standard for ACS480 drives, and users can upgrade to an optional Bluetooth control panel for wireless commissioning and monitoring. Primary settings and control macros help in the quick product setup and help button offers instant advice in unclear situations.

Instant availability
ACS480 products are available from the central stock for immediate delivery. The product is also widely available from ABB distributors.

Technical data

Voltage and power range	3-phase, 380 to 480 V, +10%/-15% 0.75 up to 22 kW
Frequency	48 to 63 Hz
Degree of protection	IP20
Ambient conditions	-10 to +50 °C no derating required, no frost allowed, +50 to +60 °C with derating
Compliance	CE Low Voltage Directive 2014/34/EU, EN 61800-5-1: 2007 Machinery Directive 2006/42/EC, EN 61800-5-2: 2007 EMC Directive 2014/30/EU, EN 61800-3: 2004 + A1: 2012 RoHS directive 2011/65/EU Quality assurance system ISO 9001 Environmental system ISO 14001 Waste electrical and electronic equipment directive (WEEE) 2002/96/ EC RoHS directive 2011/65/EU TÜV certification for functional safety pending (April 2018) UL, cUL certification
Functional safety	Safe torque off (STO according EN 61800-5-2) IEC 61508 ed2: SIL 3. IEC 61511: SIL 3 IEC 62061: SIL CL 3. EN ISO 13849-1: PL e
EMC	EMC according to EN 61800-3: 2004 + A1: 2012 Class C2 as standard
Control connections in the standard delivery	**Base unit:** – Two digital inputs – One relay output – Safe torque off (SIL3/PL e) – CCA-01 interface **I/O module:** – Two analog inputs (mA or V mode), +10 V voltage supply – Two analog outputs, AO1 (mA or V mode) – Four digital inputs, DI5 (digital or frequency), +24 V voltage supply – Two relay outputs – EIA-485 Modbus RTU **Assistant control panel:** – Mini USB

Control and communication options

Fieldbus adapters	PROFIBUS DP. DPV0/DPV1, DeviceNet, Two-Port Modbus/TCP, Two-Port Ethernet/IP, Two-Port PROFINET IO, CANopen, ControlNet, EtherCAT, POWERLINK
PC tools	Drive composer tool entry, available for free via ABB website Drive composer tool pro
Control panel options	ACS-AP-S, assistant control panel (delivered as standard) ACS-AP-W, control panel with Bluetooth interface ACS-AP-I, industrial control panel ACS-BP-S, basic control panel RDUM-01, blank control panel with a RJ-45 connector
Door mounting options	DPMP-01, flush door mounting kit DPMP-02, surface door mounting kit DPMP-EXT2 door mounting kit which includes DPMP-02 and RDUM-01

Video playlist:
ACS480 how-to
videos

Simple. Effortless. All-compatible.

Essential features inside
- Integrated safe torque off (STO)
- Modbus RTU terminal
- USB interface for PC tool connection
- Integrated brake chopper
- Integrated EMC C2 filter

Get started, without the hassle
- Integrated PID controllers, timers, load analyzer, supervision functions, energy saving optimizer and energy saving calculator for effortless and easy operation
- Three relay outputs and ready-made PFC macro for simplifying running parallel pumps, fans, or compressors
- Same I/O connections and control functionalities as standard as in other general use drives in the industry to make it easy to switch between these products
- Connection to most common industrial automation systems via plug-in fieldbus and Ethernet adapters
- USB port for transferring information between PC and drive
- Free Drive Composer software to program and monitor drive performance

Learn it once, use it everywhere
- Common drives architecture enables a smooth transition to other all-compatible drives in the ABB portfolio, such as the ACS580 drives
- The drives share the same user interfaces, fieldbus options, and operation logic, enabling users to use the knowledge gained with the ACS480 drives

There is more to this drive.

With optional Bluetooth assistant control panel users can control the drive from up to 75 meters and out of the arc flash boundary.

Compact size together with the control panel door mounting kit make the ACS480 an **optimal product for cabinet installations**.

Motor control capabilities include support for asynchronous motors as well as high energy efficient permanent magnet and synchronous reluctance motors.

For more information contact your
local ABB representative or visit:

abb.com/drives
abb.com/drivespartners
abb.com/motors&generators