

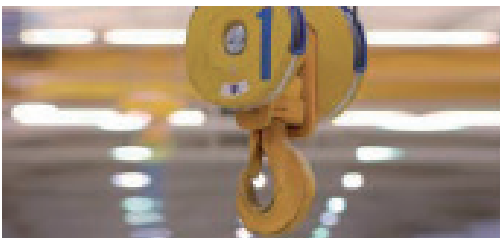
ABB industrial drives

ACS880-04 single drive modules, 300 to 700 Hp

ACS880-04XT single drive module sets, 700 to 1000 Hp



The ACS880-04 and -04XT are part of ABB's new all-compatible drives portfolio. The single drive modules and module sets are optimized for cabinet installation and various application needs.



Power and productivity
for a better world™



Single drive modules, ACS880-04, -04XT

Our ACS880-04 single drive modules and -04XT parallel connected module sets are optimized for easy and cost efficient cabinet assembly. With a compact and robust cabinet design, they save a lot of floor space and are easy to maintain and service. Being part of the all-compatible ACS880 industrial drives series, the single drive modules and paired module sets are easy to integrate into other systems and combine superior control performance with versatile drive features. The power intensive drive modules are compatible with a wide range of industries including oil and gas, mining, metals, chemicals, cement, power plants, material handling, pulp and paper and woodworking. Applications range from cranes, extruders, conveyors and compressors to pumps and fans.

Easy and cost efficient cabinet assembly

The modules are designed with all the necessary components to make engineering, cabling and cabinet assembly easier. Modules come standard in a bookshelf configuration with optional capability for flat mounting. Each module has a pedestal with wheels and a ramp for pushing the module inside the cabinet. The optional cabling panel allows fast and simple installation or removal of the module to or from the cabinet, without touching the power cables. For optimized cabinet usage, features include power input connections on the top of the module and power output on the bottom. The control unit can be either installed inside or outside of the module, enabling free location of input/output terminals.

The built-in features include direct torque control (DTC), ABB's premier motor control technology, chokes for harmonic reduction, safe torque off (STO) and drive-to-drive communication as standard. Additional built-in options include EMC filters, braking choppers, several inputs/outputs terminals, fieldbus connectivity, integrated safety including several safety functions and option slots for speed feedback. The drive comes with UL type open enclosure class as standard, reducing engineering time and cabinet assembly costs.

Main features

- Enclosure class UL type open as standard
- Power supply coming from the top part of the module and out from the lower part of the cabinet, enabling more optimal cabinet design
- Possibility for flat mounting enables module installation into cabinets with limited depth
- Easy installation, commissioning and maintenance with pedestal on wheels, ramp and optional cable panel (+H381)
- Direct torque control (DTC) as standard for high performance motor control
- Integrated safety, including safe torque off (STO) as standard and optional safety functions modules
- Supports various motor types including synchronous reluctance motors
- Intuitive control panel with USB connection
- Removable memory unit for easy maintenance
- Drive composer PC tool for commissioning and configuration
- Control unit with three option slots that can be installed either inside the module or in different parts of the cabinet, supporting a wide range of fieldbuses, feedback devices and input/output options
- Redundant fan that enables the module to run in part load even with one fan only running
- Coated boards as standard
- Built-in choke as standard for input harmonics reduction
- Built-in braking chopper (option)
- EMC filter option
- Power terminals are available as standard on the left side of the module. The power terminals can also be cabled on the right side of the module as option
- Common DC busbars (-04 only)



Single drive modules, ACS880-04, frame sizes R10 (with external control unit) and R11 (with internal control unit and control panel integrated in the module), bookshelf mounting



Single drive modules, ACS880-04, flat mounting



Single drive module set, ACS880-04XT

The innovation behind all-compatibility is ABB's common drives architecture, designed to simplify operation, optimize energy efficiency and maximize output.

Learn it once, use it everywhere

The common drives architecture features the same control panel, parameter menu structure, universal accessories and engineering tools.

The control panel is equipped with an intuitive and high-resolution control display that enables easy navigation. Many flexible data visualizations including bar charts, histograms and trend graphs help users to analyze processes. The menus and messages are customizable for the specific terminology of different applications.

An integrated USB port allows easy connection to the Drive composer PC tool, which offers fast and harmonized startup, commissioning and monitoring.

The built-in energy calculators, including used and saved kWh, CO2 reduction and money saved, help the user finetune processes to ensure optimal energy use. The energy optimizer control mode ensures the maximum torque per ampere, reducing energy drawn from the supply. The drive also offers built-in service features.



Technical data

Voltage and power range	3-phase, 380 to 690 V +10/-15% 300 to 700 Hp (-04) 700 to 1000 Hp (-04XT)
Frequency	50/60 Hz ±5%
Mains choke	Standard (built-in)
Degree of protection	UL open type
Ambient temperature	-15 to 40 °C, (<55 °C with derating)
Compliance	CE, EAC/GOST R, UL, cUL, CSA, C-Tick, CSA
Safety	Safe torque off (STO), safe stop 1 (SS1), safely-limited speed (SLS), safe brake control (SBC), safe maximum speed (SMS) and prevention of unexpected startup (POUS)
EMC	According to IEC 61800-3, class C3 as a internal option
Control connections	Two analog inputs, two analog outputs, six digital inputs including thermistor input, two digital inputs/outputs, three relay outputs, digital input interlock, drive-to-drive link (or Modbus RTU), safe torque off (STO), external 24 V DC supply input, memory unit connection, USB via control panel

Control and communication options

Fieldbus adapter modules	PROFIBUS DP, DeviceNet™, CANopen, EtherNet/IP™, Modbus TCP/IP, PROFINET IO, EtherCAT®, Modbus RTU, PowerLink, ControlNet
I/O extension modules	FIO-01: four digital inputs/outputs, two relay outputs FIO-11: three analog inputs, one analog output, two digital inputs/outputs FDCO-01, FDCO-02: DDCS communication options
Feedback modules	HTL pulse encoder, TTL pulse encoder, absolute encoder, resolver
PC tools	Drive composer entry, Drive composer pro

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