ABB industrial drives
ACS880-04, single drive modules, 250 to 710 kW

The ACS880-04 is part of ABB’s new all-compatible drives portfolio. The single drive modules are optimized for cabinet installation and various application needs.
The innovation behind all-compatibility is ABB’s common drives architecture, designed to simplify operation, optimize energy efficiency and maximize output.

Simplifying your world without limiting your possibilities

The single drive modules ACS880-04 come as a bookshelf or flat variant for easy and flexible cabinet installation. The module can easily be pushed inside the cabinet using a pedestal on wheels. Additional features include the optional cabling panel, that allows fast and simple installation or removal of the module to or from the cabinet, without touching the power cables.

This robust and power intensive drive is compatible with industries such as oil and gas, mining, metals and chemicals for applications such as cranes, extruders, conveyors, compressors, pumps and fans. At the heart of the single drive module is the direct torque control (DTC), ABB’s premier motor control technology. Built-in safety features reduce the need for external safety components. The single drive module is easy to adapt to various customer needs with built-in options such as EMC filter, brake chopper, common mode filter, wide range of fieldbus adapters, encoders and input/output extension modules.

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 fine-tune 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%  
| 250 to 710 kW |
| Frequency | 50/60 Hz ±5% |
| Mains choke | Standard (built-in) |
| Degree of protection | IP00 and IP20 (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 | PROFINET, DeviceNet, CANopen, EtherCAT, EtherCAT®, 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 |
| Feedback modules | HTL pulse encoder, TTL pulse encoder, absolute encoder, resolver |
| PC tools | Drive composer entry, Drive composer pro |

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

www.abb.com/drives
www.abb.com/drivespartners

© Copyright 2014 ABB. All rights reserved
Specifications subject to change without notice.