ABB industrial drives
ACS880 multidrive modules 1.5 to 250 Hp / 1.5 to 250 kW

The ACS880 drive modules are part of ABB's new all-compatible drives portfolio. The drives are compatible with virtually all types of AC motors, automation systems, users and business requirements.

Power and productivity
for a better world™

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 ACS880 drive modules are designed to be built into a customers' own cabinet by machine builders and system integrators. With inverter power up to 250 Hp (250 kW) and diode-supply modules (DSU) up to 850 kVA, 380 to 500 V, and IGBT supply modules (ISU) up to 630 kVA, 380 to 500 V, the modules are used to build multidrive configurations. Everything that is required for a complete drive including rectifiers, inverters, brake options, EMC filters, du/dt filters, I/O options, communication options and documentation is available. The drive can control motors in either open loop or closed loop, through its high precision motor control platform, direct torque control (DTC). Built-in safety features reduce the need for external safety components. The drive supports the CoDeSys programming environment according to IEC 61131-3. The modules are used in industries such as metals, oil and gas, mining, marine, offshore, material handling machines, pulp and paper, automotive, food and beverage, cement, power, water and wastewater.

Learn it once, use it everywhere

The common drives architecture features the same control panel, parameter menu structure, universal accessories and engineering tools. The new 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, with assistants available to simplify setup. 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 startup, commissioning and monitoring. The built-in energy calculators, including used and saved kWh, CO_2 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.

Technical data	
Voltage and power range	3-phase, 380 to 500 V +10/-10% Inverter unit (INU) 1.5 to 250 Hp / 1.5 to 250 kW IGBT Supply unit (ISU) 300 to 630 kVA Diode supply unit (DSU) 50 to 850 kVA
Frequency	50/60 Hz ±5%
Mains choke	Standard (built-in)
Degree of protection	Open Chasis (IP00)
Ambient temperature	32 to 122 °F (0 to +50 °C), >104 °F (>40 °C) with derating
Compliance	UL, cUL, CE, CSA, GOST R, Pending: C-Tick
Safety (TÜV Nord certified)	Safe torque-off (STO), safe stop 1 (SS1), safe stop emergency (SSE), safely-limited speed (SLS), safe brake control (SBC) and safe maximum speed (SMS)
EMC	According to IEC 61800-3, class C3 and C2 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, drive interlock input, 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
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 FDCO-01, FDCO-02: DDCS communication options
PC tools	Drive composer entry Drive composer pro

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

www.abb.com/drives

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3AUA0000139391 REV D US 26.2.2013 #16698