ABB general purpose drives
ACS550, 0.75 to 355 kW/1 to 500 hp

The ACS550 drives are simple to buy, install, configure and use, saving considerable time. The drives have common user and process interfaces with fieldbuses, common software tools for sizing, commissioning, maintenance and common spare parts.

All your energy saving options covered from the start

- **Simplicity for many needs**
  ABB general purpose drives can be used in a wide range of industries. Typical applications include pump, fan and constant torque use, such as conveyors.

- **Guaranteed easiness with built-in features**
  General purpose drives are ideal in those situations where there is a need for simplicity to install, commission and use and where customizing or special product engineering is not required. The drives include several features as standard, such as swinging choke, EMC filter and control panel. All drives are tested with full load at the factory ensuring premium quality.

- **Efficient operation**
  Energy efficiency achieved with general purpose drives can be easily monitored using the built-in counters, which display energy savings in kilowatt hours, carbon dioxide emissions or local currencies.
Technical data

Motor connection
Voltage 3-phase, from 0 to Usupply
Frequency 0 to 500 Hz
Continuous loading capability (constant torque at a max. ambient temperature of 40 °C) Rated output current I_{on}
Overload capacity (at a max. ambient temperature of 40 °C) At normal use 1.1 x I_{on} for 1 minute every 10 minutes
At heavy duty use 1.5 x I_{on} for 1 minute every 10 minutes
Always 1.8 x I_{on} for 2 seconds every 60 seconds
Switching frequency 1, 2, 4, 8, 12 kHz; 4 kHz as default.

Programmable control connections
Two analog inputs
Voltage signal 0 (2) to 10 V, R_{in} > 312 kΩ single-ended
Current signal 0 (4) to 20 mA, R_{in} = 100 Ω
Potentiometer reference value 10 V ± 2% max. 10 mA, R < 10 kΩ
Resolution 0.1%
Maximum delay 12 to 32 ms
Accuracy ±1%
Two analog outputs
Accuracy 0 (4) to 20 mA, load < 500 Ω
± 3%
Auxiliary voltage 24 V DC ± 10%, max. 250 mA
Six digital inputs
12 to 24 V DC with internal or external supply, PNP and NPN
Input impedance 2.4 kΩ
Maximum delay 5 ms ± 1 ms
Three relay outputs
Maximum switching voltage 250 V AC/30 V DC
Maximum switching current 6 A/30 V DC; 1500 V A/230 V AC
Maximum continuous current 2 A rms
Serial communication EIA-485, Modbus protocol

Control and communication options
Fieldbusses DeviceNet™, RDNA-01
DeviceNet™, RDNA-01
PROFIBUS DP, RPBA-01
CANopen®, RCAN-01
ControlNet, RCNA-01
Ethernet/IP™, RETA-01
EtherCAT®, RECA-01
Modbus TCP, RETA-01, RETA-02
PROFINET IO, RETA-02
PowerLink, REPL-01
Remote monitoring Ethernet adapter, SREA-01
Encoder adapter Encoder adapter, OTAC-01
Relay output extension Extension module, 3 relay outputs, OREL-01
Product compliance UL, cUL, CE, C-Tick and GOST R approvals, RoHS compliant
Environmental limits
Degree of protection IP21 or IP54 (≤160 kW)
Ambient temperature -15 to +50 °C. No frost allowed. From +40 to 50 °C with derating.
Relative humidity 5 to 95%, no condensation allowed

For more details see ACS550 catalog (3AFE64792857).

Highlights
- Energy efficiency counters
- Intuitive use with assistant control panel
- Swinging choke for superior harmonic reduction
- Vector control
- Coated boards for harsh environments
- Built-in category C2 EMC filter (1st environment) as standard
- Flexible fieldbus system with built-in Modbus and numerous internally mountable fieldbus adapters
- Brake chopper as standard in the frames R1 and R2
- FlashDrop tool for cold configuration

Options
- Fieldbus adapters
- Panel mounting kits
- DriveWindow Light software
- Output chokes
- Brake units and resistors
- Encoder feedback module
- Relay output extension module
- Remote monitoring adapter
- Flange mounting kits
- FlashDrop tool
- Basic control panel

For more information please contact your local ABB representative or visit:
abb.com/drives
abb.com/drivespartners

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