ABB standard 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.

ABB standard drives can be used in a wide range of industries. These 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.

Energy efficiency achieved with ABB standard drives can be easily monitored using the built-in counters, which display energy savings in kilowatt hours, carbon dioxide emissions or local currencies.

**Highlights**
- Advanced control panel permitting intuitive operation
- Patented swinging choke for superior harmonic reduction (R1-R6) and AC line reactor (R8)
- Sensorless vector control
- Integral EMC filter as standard
- Built-in Modbus RTU and numerous internally mountable fieldbus adapters
- FlashDrop
- Coated boards for harsh environments
- UL, cUL, C-Tick and Gost-R approved
- Built-in brake chopper (10Hp, 230V / 15Hp, 480V and 600 V)
- Many assistants including Start-up, Drive Optimizer, Real-time Clock, Diagnostics, Maintenance, Serial and PID
- Seismic Certification to ICC AC-156 Criteria

**Voltage and power range**
- 3-phase, 208 to 240 V, 0.75 - 100Hp
- 3-phase, 380 to 480 V, 1 - 550Hp
- 3-phase, 500 to 600V, 1.5 - 150Hp

**Applications**
- Pumps and Fans
- Conveyors

**Options**
- Fieldbus adapters
- Panel mounting kits
- DriveWindow Light 2 software
- Brake units and resistors
- Encoder feedback module
- Relay output extension module
- Flange mounting kits
- FlashDrop tool
ACS550 standard drives
ACS550-U1, wall mount
- NEMA 1 & 12 enclosures
  - 1.0 to 100 HP @ 240Vac
  - 1.5 to 200 HP @ 480Vac
  - 2.0 to 150 HP @ 600Vac
ACS550-PC/PD, wall-mount packaged
- NEMA 1, 12 & 3R enclosures
  - 0.75 to 100 HP @ 240Vac
  - 1.0 to 200 HP @ 480Vac
  - 1.5 to 150 HP @ 600Vac
- Circuit Breaker (PC)
- Fused disconnect (PD)
ACS550-PC, free standing packaged
- NEMA 1 & 12 enclosures (NEMA 12 std. 450-550 HP)
  - 250 to 550 HP @ 480Vac
- Circuit Breaker (PC)
ACS550-CC, wall mount & free standing
- Three contactor Bypass
  - Wall mount
    - NEMA 1, 12 & 3R
    - 1 to 100 HP @ 240Vac
    - 1 to 400 HP @ 480Vac
    - 1.5 to 150 HP @ 600Vac
  - Free standing
    - NEMA 1 & 12
    - 250 - 400 HP @ 480Vac

Input power connection

Voltage and power range
3-phase, 208 to 240 V, +10/-15%, 0.75 - 100Hp
3-phase, 380 to 480 V, +10/-15%, 1 - 550Hp
3-phase, 500 to 600V, +10/-15%, 1.5 - 150Hp

Frequency
48 to 63 Hz
Power factor
0.98

Motor connection

Frequency
0 to 500 Hz
Acceleration time
0.1 to 1800 s
Deceleration time
0.1 to 1800 s

Programmable control connections

Two analog inputs
- Voltage signal
  0 (2) to 10 V, Rin > 312 kΩ single-ended
- Current signal
  0 (4) to 20 mA, Rin = 100 Ω single-ended
- Potentiometer reference value
  10 V ±2% max. 10 mA, R < 10 kΩ
- Maximum delay
  12...32 ms
- Resolution
  0.1%
- Accuracy
  ±1%

Two analog outputs
- Accuracy
  ±3%

Auxiliary voltage
24 V DC ±10%, max. 250 mA

Six digital inputs
- Input impedance
  12 V... 24 V DC with internal or external supply, PNP and NPN
- Maximum delay
  2.4 kΩ
  5 ms ± 1ms

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

Serial communication
RS 485
Built-in Modbus RTU protocol

Product compliance

240V products: UL, cUL, CSA, CE, C-TICK, and GOST-R approvals
480V products: UL, cUL, CSA, CE, C-TICK, and GOST-R approvals
600V products: UL, cUL, CSA, C-TICK, and GOST-R approvals

Low Voltage Directive 73/23/EEC with supplements
Machinery Directive 98/37/EC
EMC Directive 89/336/EEC with supplements
Quality assurance system ISO 9001 and Environmental system ISO 14001
Seismic Certification to ICC AC-156

Environmental Limits

Protection class
UL Type 1, 12 or 3R (NEMA 1, 12, or 3R)

Ambient temperature
15 to 40°C (5 to 104°F)
40 to 50°C (104 to 122°F)
No frost allowed

Relative humidity
lower than 95% (without condensation)