

LOW VOLTAGE AC DRIVES

ABB micro drives

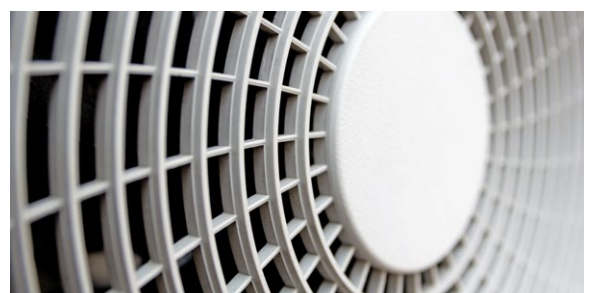
ACS150, 0.37 to 4 kW/0.5 to 5 hp



The ACS150 drives are designed to be incorporated into a wide variety of machines such as mixers, conveyors, fans or pumps or anywhere where a fixed speed motor needs to run at variable speed.

Get the very best out of your basic applications

- **Quick set-up and superior performance**
 In the simplest, choose a drive according to the motor size and connect it. The next thing you'll notice is a flawlessly operating system. If some fine-tuning is needed, the drive offers an extensive range of parameters that help obtaining the best performance out of the application.
- **Built-in features in a compact package**
 The ACS150 drives have an integrated user panel and potentiometer, and a variety of features such as macros, which are pre-defined I/O configurations like 3-wire, PID-control and motor potentiometer macro. These features enable even more convenient configuration and save time when setting up your system.
- **Guaranteed easiness for volume configuration**
 FlashDrop, an optional drive configuration tool designed for volume configuration, can be used to quickly and easily configure unpowered drives. FlashDrop stores up to 20 different drive parameter sets and can copy parameters from one drive to another, or between a PC and a drive.



Technical data

Mains connection	
Voltage and power range	1-phase, 200 to 240 V $\pm 10\%$ 0.37 to 2.2 kW (0.5 to 3 hp)
	3-phase, 200 to 240 V $\pm 10\%$ 0.37 to 2.2 kW (0.5 to 3 hp)
	3-phase, 380 to 480 V $\pm 10\%$ 0.37 to 4 kW (0.5 to 5 hp)
Motor connection	
Voltage	3-phase, from 0 to U_{supply}
Frequency	0 to 500 Hz
Overload capacity (at a max. ambient temperature of 40 °C)	At heavy duty use 1.5 x I_{2N} for 1 minute every 10 minutes At start 1.8 x I_{2N} for 2 s
Switching frequency	
Default	4 kHz
Selectable	4 to 16 kHz with 4 kHz steps with derating Parameter-enabled noise cancellation function
Acceleration time	0.1 to 1800 s
Deceleration time	0.1 to 1800 s
Braking	Built-in brake chopper as standard
Auxiliary voltage	24 V DC $\pm 10\%$, max. 200 mA
Motor control method Scalar U/f	
Control connections	
Auxiliary voltage input	24 V DC $\pm 10\%$ max. 200 mA
One analog input	
Voltage signal, unipolar	0 (2) to 10 V, $R_{\text{in}} > 312 \text{ k}\Omega$
Current signal	0 (4) to 20 mA, $R_{\text{in}} = 100 \Omega$
Potentiometer reference value	10 V $\pm 1\%$, max. 10 mA, $R < 10 \text{ k}\Omega$
Resolution	0.1%
Accuracy	$\pm 1\%$
Five digital inputs	
Input type	PNP and NPN (sinking or sourcing)
Input impedance	2.4 k Ω
Response time	<8 ms
DI5 can be used either as a frequency input or a digital input	Pulse train 0 to 16 kHz
One relay output NO + NC Type	
Max. switching voltage	250 V AC / 30 V DC
Max. switching current	5 A / 230 V; 0.5 A / 30 V DC
Max. continuous current	2 A RMS
Product compliance	
UL, cUL, CE, C-Tick and GOST R approvals, RoHS compliant	
Environmental limits	
Degree of protection	IP20 / Optional NEMA 1 enclosure
Ambient temperature	-10 to 40 °C (14 to 104 °F), no frost allowed, 50 °C (122 °F) with 10% derating
Relative humidity	Lower than 95% (without condensation)

For more details see ACS150 catalog (3AFE68596114).

Highlights

- Worldwide availability through logistical distributors
- User-friendly LCD user panel and integrated potentiometer
- Flexible mounting alternatives
- PID control
- EMC C3 filter
- Built-in brake chopper
- FlashDrop tool for fast drive commissioning

Options

- FlashDrop tool
- Input/output chokes
- EMC C2 filters
- NEMA 1 enclosure kit

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

abb.com/drives
abb.com/drivespartners

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