ABB MICRO DRIVES

ACS150

0.5 to 30 hp (0.37 to 4 kW)

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

ACS150 variable frequency drives feature an integrated control panel with LCD display and built-in potentiometer. For easy setup and commissioning, the drives include a variety of pre-defined I/O configuration macros, including: ABB standard, 3-wire control, digital input control, PID control, Hand/Auto control, and a PLC interface. User defined macros can also be created. The ACS150 drive has an extensive list of programmable drive parameters to achieve high performance with maximum versatility in many applications.

FlashDrop, an optional drive confi guration tool, can be used to quickly and easily confi gure spares or large volumes of unpowered drives using the connection port on the front panel. FlashDrop stores up to 20 different parameter sets and can copy parameters from on drive to another, or between a PC and a drive.

Highlights

- Worldwide availability through logistical distributors
- User-friendly LCD user panel and integrated potentiometer
- Flexible mounting alternatives
- PID control
- Integrated 2nd environment EMC filter with disconnect option
- Built-in brake chopper
- FlashDrop tool for fast drive commissioning
- Coated boards
- Common height and depth across the product line for flexible installation
- Wall or DIN-rail mountable
- Easy access to power and I/O connections for rapid installation

Voltage and power range

- 1-phase, 200 to 240 V ±10% 0.5 to 3 hp (0.37 to 2.2 kW)
- 3-phase, 200 to 240 V ±10% 0.5 to 3 hp (0.37 to 2.2 kW)
- 3-phase, 380 to 480 V ±10% 0.5 to 5 hp (0.37 to 4 kW)

Options

- FlashDrop tool
- NEMA 1 enclosure kit

Applications

- Conveyors
- Mixers
- Material handling
- Fans and pumps
- Automated gate control
- Food and beverage
- Printing
- Woodworking machinery

Technical data and types

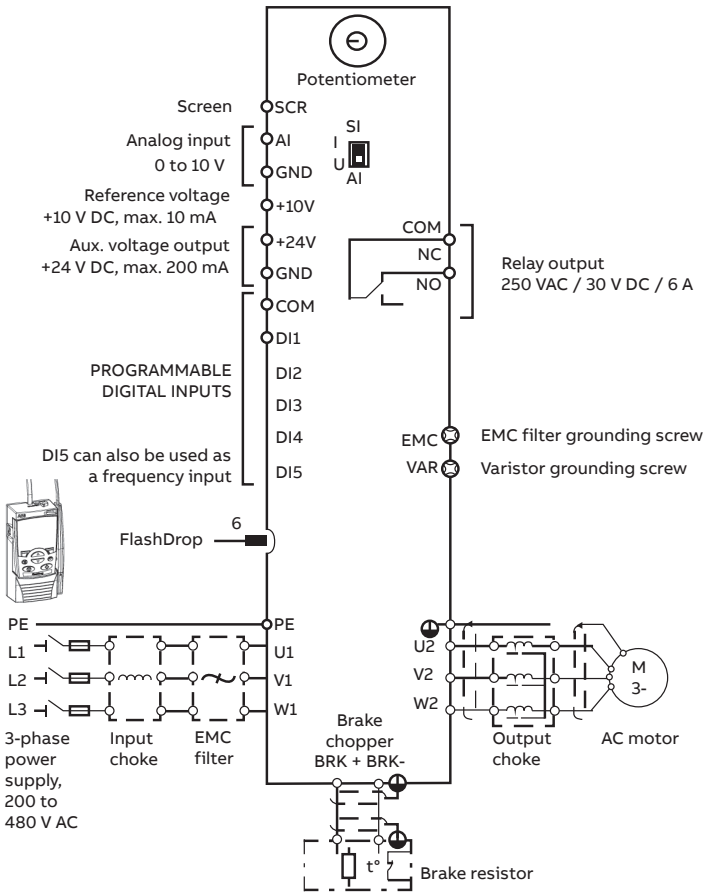
Ratings			Type designation	Frame size	IP20 UL open				NEMA 1 Kit installed			
P_N hp	P_N kW	I_{2N} A			H2 in	W in	D in	Weight lb	H5 in	W in	D in	Weight lbs
1-phase AC supply, 200 to 240 V units												
0.5	0.37	2.4	ACS150-01X-02A4-2	R0	7.95	2.76	5.59	2.5	11.02	2.76	5.59	3.3
1	0.75	4.7	ACS150-01X-04A7-2	R1	7.95	2.76	5.59	2.9	11.02	2.76	5.59	3.75
1.5	1.1	6.7	ACS150-01X-06A7-2	R1	7.95	2.76	5.59	2.9	11.02	2.76	5.59	3.75
2	1.5	7.5	ACS150-01X-07A5-2	R2	7.95	4.13	5.59	3.3	11.1	4.13	5.59	4.2
3	2.2	9.8	ACS150-01X-09A8-2	R2	7.95	4.13	5.59	3.3	11.1	4.13	5.59	4.2
3-phase AC supply, 200 to 240 V												
0.5	0.37	2.4	ACS150-03U-02A4-2	R0	7.95	2.76	5.59	2.5	11.02	2.76	5.59	3.3
0.75	0.55	3.5	ACS150-03U-03A5-2	R0	7.95	2.76	5.59	2.5	11.02	2.76	5.59	3.3
1	0.75	4.7	ACS150-03U-04A7-2	R1	7.95	2.76	5.59	2.9	11.02	2.76	5.59	3.75
1.5	1.1	6.7	ACS150-03U-06A7-2	R1	7.95	2.76	5.59	2.9	11.02	2.76	5.59	3.75
2	1.5	7.5	ACS150-03U-07A5-2	R1	7.95	2.76	5.59	2.9	11.02	2.76	5.59	3.75
3	2.2	9.8	ACS150-03U-09A8-2	R2	7.95	4.13	5.59	3.3	11.1	4.13	5.59	4.2
3-phase AC supply, 380 to 480 V												
0.5	0.37	1.2	ACS150-03U-01A2-4	R0	7.95	2.76	5.59	2.5	11.02	2.76	5.59	3.3
0.75	0.55	1.9	ACS150-03U-01A9-4	R0	7.95	2.76	5.59	2.5	11.02	2.76	5.59	3.3
1	0.75	2.4	ACS150-03U-02A4-4	R1	7.95	2.76	5.59	2.9	11.02	2.76	5.59	3.75
1.5	1.1	3.3	ACS150-03U-03A3-4	R1	7.95	2.76	5.59	2.9	11.02	2.76	5.59	3.75
2	1.5	4.1	ACS150-03U-04A1-4	R1	7.95	2.76	5.59	2.9	11.02	2.76	5.59	3.75
3	2.2	5.6	ACS150-03U-05A6-4	R1	7.95	2.76	5.59	2.9	11.02	2.76	5.59	3.75
5	4	8.8	ACS150-03U-08A8-4	R1	7.95	2.76	5.59	2.9	11.02	2.76	5.59	3.75

X within the type code stands for E or N.
E = EMC filter connected.
U = EMC filter disconnected.
N = No built-in EMC filter
H2 = Height with fastenings but without clamping plate.
H5 = Height with fastings, NEMA 1 connection box and hood.
W = Width
D = Depth

Mains connection	
Voltage and power connection	1-phase, 200 to 240 V ±10%: 0.5 to 3 hp (0.37 to 2.2 kW) 3-phase, 200 to 240 V ±10%: 0.5 to 3 hp (0.37 to 2.2 kW) 3-phase, 380 to 480 V ±10%: 0.5 to 5 hp (0.37 to 4 kW)
Frequency	48 to 63 Hz
Motor connection	
Voltage	3-phase, from 0 to U_{SUPPLY}
Frequency	0 to 500 Hz
Overload capability (at a max. ambient temperature of 40 ºC)	At heavy duty use 1.5 x I2N for 1 minute every 10 minutes At start 1.8 x I2N for 2 s
Switching frequency Default Selectable	4 kHz 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 ±10%, max. 200 mA
Motor control method	Scalar V/Hz
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	14 to 104 ºF (-10 to 40 ºC), no frost allowed, 122 ºF (50 ºC) with 10% derating
Relative humidity	Lower than 95% (without condensation)

For more details see ACS150 catalog (*3AUA0000085631*).

Control connections



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

abb.com/drives