

ABB micro drives ACS250 120 V AC, 0.5 to 1.5 hp



ACS250 120 V AC product is an easy-to-use micro drive for applications in 0.5 to 1.5 hp power range. The built-in Modbus RTU serial communication provides a straightforward integration with the control and monitoring systems. Available with two types of enclosures – IP20 drives have feed thru wiring for ease with panel mounting & IP66 enclosures for washdown environments. Typical applications include pumps, fans, grinders, mixers or conveyors.



Key features

- Built-in macros and only the essential parameters make commissioning straightforward
- Intuitive integrated keypad control
- Modbus RTU fieldbus as standard
- Power range from 0.5 to 1.5 hp
- 1~115 V input/3~230 V output
- IP20 or IP66/NEMA 4X protection class
- Feed thru wiring on IP20 drives for easy motor starter replacement
- Variable torque or constant torque V/Hz characteristics

Supporting options

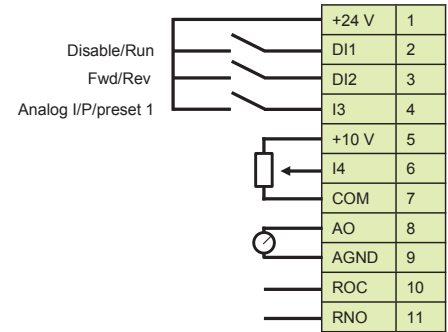
- Remote keypad (RCRP-01) provides easy cabinet installations
- Parameter upload/download tool (RCCS-01) for straightforward commissioning
- Relay output card (RCRO-01)
- UL Type 4X/IP66 frames for harsh environments
- Drive-mounted operator controls (disconnect, Fwd/Off/Rev, & speed potentiometer for UL Type 4X/IP66 enclosures)
- Modbus RS485 RJ45 cable splitter

Part of ABB micro drives portfolio

The ACS250 drive is part of ABB's complete micro drive range, which offers a solution for every need:

- Drives for simple to more complex machines
- Complete input voltage range from 1~110 to 3~600 V AC
- IP20 and IP66 enclosures
- Power range from 0.5 to 20 hp

Standard I/O configurations



Technical specification

Supply connection	
Voltage	110 to 120 V ± 10%
Power range	0.5 to 1.5 hp (0.37 to 1.1 kw)
Frequency	48 to 62 Hz
Connections	
Voltage	3-phase, from 0 to U_{SUPPLY}
Frequency	0 to 500 Hz, 0.1 Hz resolution
Overload capacity	150% for 60 seconds
Motor control methods	V/F voltage vector, energy optimized V/F
Product compliance	
CE, UL, cUL, C-Tick, EAC	
Environmental limits	
Degree of protection	UL type Open/IP20 and UL Type 4X/IP66
Ambient temperature	IP20: -10 to 50 °C (3,5% derate of output amps for each 1 °C above 40 °C to a maximum of 50 °C – without UL) IP66/NEMA 4X: -10 to 40 °C
Relative humidity	95% max (without condensation)

Output ratings			Type designation	Frame size	Braking chopper	Height in (mm)	Width in (mm)	Depth in (mm)	Weight kg
$P_{N,HD}$ kW	$P_{N,HD}$ hp	I_{2N} A							
1-phase AC supply, 110 to 120 V									
0.37	0.5	2.3	ACS250-01U-02A3-1	E1	-	6.8 (173)	3.1 (79)	4.8 (123)	0.8
0.75	1	4.3	ACS250-01U-04A3-1	E1	-	6.8 (173)	3.1 (79)	4.8 (123)	0.8
1.1	1.5	5.8	ACS250-01U-05A8-1	E2	x	8.8 (224)	4.1 (104)	5.9 (150)	1.7
0.37	0.5	2.3	ACS250-01U-02A3-1+B063	E1	-	9.1 (232)	6.3 (161)	6.9 (175)	2.8
0.75	1	4.3	ACS250-01U-04A3-1+B063	E1	-	9.1 (232)	6.3 (161)	6.9 (175)	2.8
1.1	1.5	5.8	ACS250-01U-05A8-1+B063	E2	x	10.1 (257)	7.4 (188)	7.3 (187)	4.1

U within the type code = EMC disconnected

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

www.abb.com/drives