

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. 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 for easy motor starter replacement
- Variable torque or constant torque V/Hz characteristics

## Supporting options

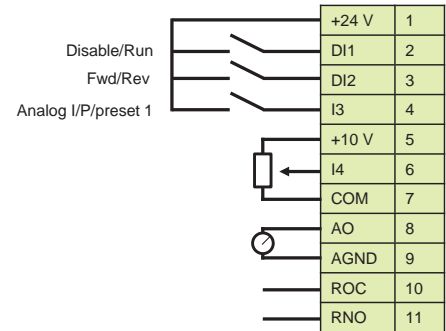
- Remote keypad (RCRP-01) provides easy cabinet installations
- Parameter upload/download tool (RCCS-01) for straightforward commissioning
- Relay output card (RCRO-01)
- UL Type 4X/IP66 frames for harsh environments
- Disconnect switch for UL Type 4X/IP66 frames
- Modbus RS485 RJ45 cable splitter

## 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	
<b>Voltage</b>	110 to 120 V ± 10%
<b>Power range</b>	0.5 to 1.5 hp (0.37 to 1.1 kw)
<b>Frequency</b>	48 to 62 Hz
Connections	
<b>Voltage</b>	3-phase, from 0 to $U_{\text{SUPPLY}}$
<b>Frequency</b>	0 to 500 Hz, 0.1 Hz resolution
<b>Overload capacity</b>	150% for 60 seconds
<b>Motor control methods</b>	V/F voltage vector, energy optimized V/F
Product compliance	
CE, UL, cUL, C-Tick, Gost	
Environmental limits	
<b>Degree of protection</b>	UL type Open/IP20 and UL Type 4X/IP66
<b>Ambient temperature</b>	Operating –10 to 50 °C (IP66/NEMA 4X: –10 to 40 °C)
<b>Relative humidity</b>	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							
<b>1-phase AC supply, 110 to 120 V</b>									
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	E1	-	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](http://www.abb.com/drives)

[www.abb.com/drivespartners](http://www.abb.com/drivespartners)

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