

# ABB component drives

## ACS55, 0.18 to 2.2 kW / 0.25 to 3 hp



### ABB component drives

ABB component drives meet the requirements of OEMs, installation companies and panel builders. These drives are components that are bought together with other components from a logistical distributor. The drives are stocked, and the number of options and variants is optimized for logistical distribution.

### Highlights

- Suitable for single phase residential and commercial applications
- Compact and slim
- Flexible installation alternatives
- Reduced motor noise with high switching frequency
- Integrated 1<sup>st</sup> environment EMC filter as standard
- Easy configuration via potentiometer and switches
- Fast programming of powered and unpowered drives with DriveConfig kit

### Voltage and power range

- 1-phase, 110 to 120 V +10/-15%  
0.18 to 0.37 kW (0.25 to 0.5 hp)
- 1-phase, 200 to 240 V +10/-15%  
0.18 to 2.2 kW (0.25 to 3 hp)

### Applications

- Fans
- Pumps
- Gate control
- Material handling
- Conveyors

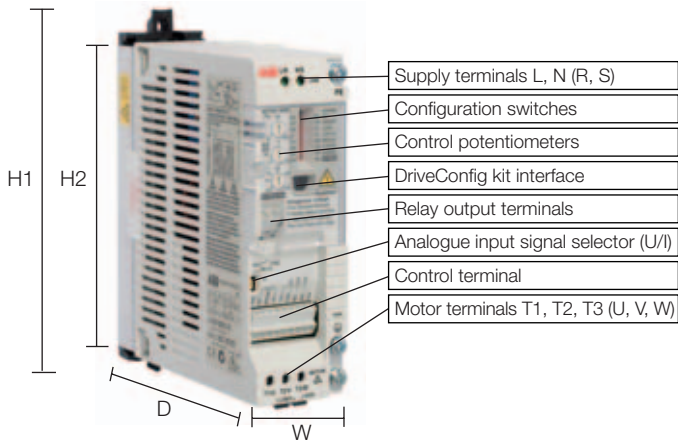
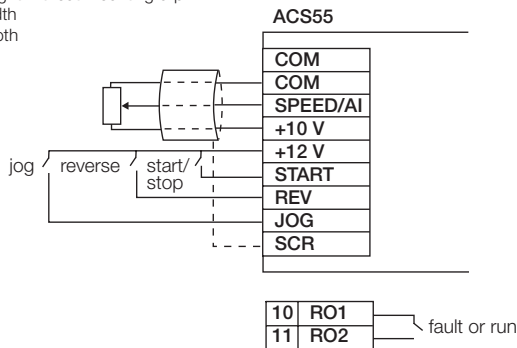
### Options

- Input/Output chokes
- Potentiometer
- DriveConfig kit



Ratings		Output current		Input current	Type code	Frame size	H1	H2	W	D	Weight
$P_N$ kW	$P_N$ hp	nominal A	max A	A			mm	mm	mm	mm	kg
<b>Inbuilt EMC filter, 1-phase supply voltage 200/240 V, +10/-15%, 3-phase output 200/240 V</b>											
0.18	0.25	1.4	2.1	4.4	ACS55-01E-01A4-2	A	170	146.5	45	128	0.65
0.37	0.5	2.2	3.3	6.9	ACS55-01E-02A2-2	A	170	146.5	45	128	0.7
0.75	1.0	4.3	6.5	10.8	ACS55-01E-04A3-2	B	170	146.5	67.5	128	0.7
1.5	2	7.6	11.4	18.2	ACS55-01E-07A6-2	D	226	203	70	159	1.1
2.2	3	9.8	14.7	22	ACS55-01E-09A8-2	D	226	203	70	159	1.1
<b>No EMC filter, 1-phase supply voltage 200/240 V, +10/-15%, 3-phase output 200/240 V</b>											
0.18	0.25	1.4	2.1	4.4	ACS55-01N-01A4-2	A	170	146.5	45	128	0.65
0.37	0.5	2.2	3.3	6.9	ACS55-01N-02A2-2	A	170	146.5	45	128	0.7
0.75	1.0	4.3	6.5	10.8	ACS55-01N-04A3-2	B	170	146.5	67.5	128	0.7
1.5	2	7.6	11.4	18.2	ACS55-01N-07A6-2	C	194	171	70	159	1.1
2.2	3	9.8	14.7	22	ACS55-01N-09A8-2	C	194	171	70	159	1.1
<b>Inbuilt EMC filter, 1-phase supply voltage 110/120 V, +10/-15%, 3-phase output 200/240 V</b>											
0.18	0.25	1.4	2.1	6.4	ACS55-01E-01A4-1	A	170	146.5	45	128	0.65
0.37	0.5	2.2	3.3	9.5	ACS55-01E-02A2-1	A	170	146.5	45	128	0.7
<b>No EMC filter, 1-phase supply voltage 110/120 V, +10/-15%, 3-phase output 200/240 V</b>											
0.18	0.25	1.4	2.1	6.4	ACS55-01N-01A4-1	A	170	146.5	45	128	0.55
0.37	0.5	2.2	3.3	9.5	ACS55-01N-02A2-1	A	170	146.5	45	128	0.6

H = Height with mounting clip  
H2 = Height without mounting clip  
W = Width  
D = Depth



## Motor connection

<b>Voltage</b>	3-phase, from 0 to $U_{SUPPLY}$ (for 110/120 V from 0 to 230 V)
<b>Frequency</b>	0 to 120/130 Hz
<b>Overload capacity</b>	150% (60 s)

## Control connections

<b>One analog input</b>	
Voltage signal	0 (2) to 10 V, 200 k $\Omega$ single-ended
Current signal	0 (4) to 20 mA, 100 $\Omega$ single-ended
Potentiometer reference value	10 V $\pm$ 2% max. 10 mA, 1 k $\Omega$ $\leq$ R $\leq$ 10 k $\Omega$
Response time	$\leq$ 60 ms
Resolution	0.1%
Accuracy	$\pm$ 1%
<b>Three digital inputs</b>	
	12 V DC with internal or 12 to 24 V DC external supply, PNP
Input impedance	1.5 $\Omega$
Response time	$\leq$ 9 ms
<b>One relay output</b>	
Switching voltage	12 to 250 V AC or max 30 V DC
Maximum continuous current	2 A

## Application parameters

	As standard	With DriveConfig kit
<b>Motor nominal frequency</b>	50/60 Hz	40 to 250 Hz
<b>Acceleration time</b>	0.1 to 30 s	0.1 to 100 s
<b>Deceleration time</b>	0.1 to 30 s	0.1 to 100 s
<b>Maximum frequency</b>	50 to 120 Hz	0 to 250 Hz
<b>Relay output</b>	Fault/Run	Fault/Fault (-1)/Run
<b>Load type</b>	Pump/fan or constant	
<b>Switching frequency</b>	Standard	
	5 kHz, adjustable up to 16 kHz with automatic switching frequency reduction	
<b>Features available with DriveConfig kit</b>	Application macro selection, IR compensation, constant speed selection, stop mode selection, reset mode selection	

## Product compliance

CE, UL, cUL, C-Tick and GOST R approvals

## Environmental limits

<b>Degree of protection</b>	IP20
<b>Ambient temperature</b>	-20 to 40 $^{\circ}$ C
	with nominal current and 5 kHz switching frequency, no frost allowed
	up to 50 $^{\circ}$ C
	with derating
<b>Relative humidity</b>	lower than 95% (without condensation)

For more information see technical catalogue  
ABB component drives, ACS55 (3AFE68899842).

