

ABB machinery drives

ACS355, 0.37 to 22 kW

What is it?

The ACS355 is designed to be the fastest drive in terms of installation, setting parameters and commissioning. The drive is user-friendly, yet provides a wide range of built-in technology such as the safe torque off functionality and sequence programming which reduce the need for additional control electronics. The product offers options and diverse functionality to cater to the needs set for speed and torque control of AC induction and permanent magnet motors.

The ACS355 drive meets the requirements of new drive users, installers, machine builders, system integrators and panel builders.

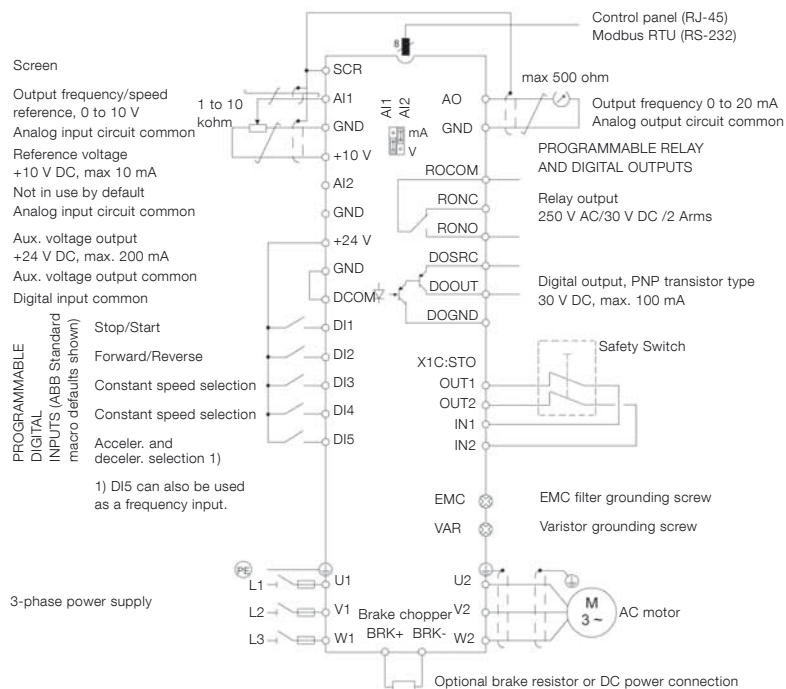


ACS355 frame sizes: R0, R1, R2, R3, R4 and IP66/IP67 variants

Feature	Advantage	Benefit
Same height and depth across power range	Effective space usage	Less engineering and installation time
Assistant control panel with Help functions	Quick setup, easy configuration and commissioning, rapid fault diagnosis	Substantial time savings locating faults and implementing repairs, thereby reducing maintenance costs
Scalar and vector control	Optimum performance depending on application	Ensures the end-product is produced cost efficiently
Sequence programming	Logic programming included as standard with PLC-like functions	Reduces components and wiring in control system
Integrated EMC filter	High electromagnetic compatibility	Low EMC emissions in selected environments
Built-in brake chopper as standard	No need for an external brake chopper	Space savings, reduced installation cost
Safe torque off function (SIL3) as standard	Built-in and certified function that is used for prevention of an unexpected startup and other stopping related functions	Reduces the need for external safety components. Helps machine builders to fulfill the requirements of Machinery Directive 2006/42/EC.
High protection class variant (IP66/67) up to 7.5 kW	No need to design special enclosure for applications that require high ingress protection	Time and cost savings
Product variant for solar pumps	Drive converts PV energy from solar panels to AC current, it can be operated independent from the grid.	Long life time and reduced maintenance costs, energy use and pollution. Improved reliability in electricity supply.
FlashDrop tool	FlashDrop is used to quickly and easily set drive parameters. FlashDrop tool uploads drive parameters directly to unpowered drives. The tool can copy parameters from one drive to another or between a PC and a drive.	Time savings, especially with multiple drives

Inputs and outputs

The figure shows the ACS355 factory-set standard inputs and outputs. All inputs and outputs are freely programmable.



Types and voltages

Rated values *)		ABB ordering code Enclosure IP20	Electrical code/ reference code	ABB type code/order code for IP20 units	Frame size	Price (Eur)
P_{motor} (kW)	I_{motor} (A)					
1-phase AC supply, 200 to 240 V						
0.37	2.4	3AUA0000058166		ACS355-01E-02A4-2	R0	
0.75	4.7	3AUA0000058167		ACS355-01E-04A7-2	R1	
1.1	6.7	3AUA0000058168		ACS355-01E-06A7-2	R1	
1.5	7.5	3AUA0000058169		ACS355-01E-07A5-2	R2	
2.2	9.8	3AUA0000058170		ACS355-01E-09A8-2	R2	
3-phase AC supply, 200 to 240 V						
0.37	2.4	3AUA0000058171		ACS355-03E-02A4-2	R0	
0.55	3.5	3AUA0000058172		ACS355-03E-03A5-2	R0	
0.75	4.7	3AUA0000058173		ACS355-03E-04A7-2	R0	
1.1	6.7	3AUA0000058174		ACS355-03E-06A7-2	R1	
1.5	7.5	3AUA0000058175		ACS355-03E-07A5-2	R1	
2.2	9.8	3AUA0000058176		ACS355-03E-09A8-2	R2	
3	13.3	3AUA0000058177		ACS355-03E-13A3-2	R2	
4	17.6	3AUA0000058178		ACS355-03E-17A6-2	R2	
5.5	24.4	3AUA0000058179		ACS355-03E-24A4-2	R3	
7.5	31	3AUA0000058180		ACS355-03E-31A0-2	R4	
11	46.2	3AUA0000058181		ACS355-03E-46A2-2	R4	
3-phase AC supply, 380 to 480 V						
0.37	1.2	3AUA0000058182		ACS355-03E-01A2-4	R0	
0.55	1.9	3AUA0000058183		ACS355-03E-01A9-4	R0	
0.75	2.4	3AUA0000058184		ACS355-03E-02A4-4	R1	
1.1	3.3	3AUA0000058185		ACS355-03E-03A3-4	R1	
1.5	4.1	3AUA0000058186		ACS355-03E-04A1-4	R1	
2.2	5.6	3AUA0000058187		ACS355-03E-05A6-4	R1	
3	7.3	3AUA0000058188		ACS355-03E-07A3-4	R1	
4	8.8	3AUA0000058189		ACS355-03E-08A8-4	R1	
5.5	12.5	3AUA0000058190		ACS355-03E-12A5-4	R3	
7.5	15.6	3AUA0000058191		ACS355-03E-15A6-4	R3	
11	23.1	3AUA0000058192		ACS355-03E-23A1-4	R3	
15	31	3AUA0000058193		ACS355-03E-31A0-4	R4	
18.5	38	3AUA0000058194		ACS355-03E-38A0-4	R4	
22	44	3AUA0000058195		ACS355-03E-44A0-4	R4	

*) The rated power and current values are valid for both pump and fan applications and heavy load applications. Examples of typical heavy load applications include most extruders and compressors.

Rated values *)		ABB ordering code Enclosure IP66/IP67	Electrical code/ reference code	ABB type code/order code for IP66/IP67 units	Frame size	Price (Eur)
P_{motor} (kW)	I_{motor} (A)					
3-phase AC supply, 200 to 240 V						
0.37	2.4	3AUA0000058148		ACS355-03X-02A4-2 + B063	R1	
0.55	3.5	3AUA0000058149		ACS355-03X-03A5-2 + B063	R1	
0.75	4.7	3AUA0000058150		ACS355-03X-04A7-2 + B063	R1	
1.1	6.7	3AUA0000058151		ACS355-03X-06A7-2 + B063	R1	
1.5	7.5	3AUA0000058152		ACS355-03X-07A5-2 + B063	R1	
2.2	9.8	3AUA0000058153		ACS355-03X-09A8-2 + B063	R3	
3	13.3	3AUA0000058154		ACS355-03X-13A3-2 + B063	R3	
4	17.6	3AUA0000058155		ACS355-03X-17A6-2 + B063	R3	
3-phase AC supply, 380 to 480 V						
0.37	1.2	3AUA0000058156		ACS355-03X-01A2-4 + B063	R1	
0.55	1.9	3AUA0000058157		ACS355-03X-01A9-4 + B063	R1	
0.75	2.4	3AUA0000058158		ACS355-03X-02A4-4 + B063	R1	
1.1	3.3	3AUA0000058159		ACS355-03X-03A3-4 + B063	R1	
1.5	4.1	3AUA0000058160		ACS355-03X-04A1-4 + B063	R1	
2.2	5.6	3AUA0000058161		ACS355-03X-05A6-4 + B063	R1	
3	7.3	3AUA0000058162		ACS355-03X-07A3-4 + B063	R1	
4	8.8	3AUA0000058163		ACS355-03X-08A8-4 + B063	R1	
5.5	12.5	3AUA0000058164		ACS355-03X-12A5-4 + B063	R3	
7.5	15.6	3AUA0000058165		ACS355-03X-15A6-4 + B063	R3	

Dimensions and weights

Frame size	IP20/UL open				IP66/IP67			
	H (mm)	W (mm)	D (mm)	Weight (kg)	H (mm)	W (mm)	D (mm)	Weight (kg)
R0	239	70	161	1.1	–	–	–	–
R1	239	70	161	1.3	305	195	281	7.7
R2	239	105	165	1.5	–	–	–	–
R3	236	169	169	2.5	436	246	277	13
R4	244	260	169	4.4	–	–	–	–

X within the type code stands for E or U.



For more technical information, see ACS355 catalog (3AUA0000068569 EN) or ABB drives product guide (3AFE68401771 EN)