

Motors and drives matched pairings for plastic extruders

Quick selection guide for ACS880 Drives & RPMAC motors



ABB supplies a broad portfolio of drives and motors that provide best-in-class energy efficiency, enable fast machine setup and deliver high torque right down to zero speed.

Flexibility. Dependability. Efficiency.
Everything counts.



Reliable starting

During start-up, an application requires high torque from zero speed to overcome the friction of the material. Baldor-Reliance® RPM AC motors can deliver full torque from zero when paired with ABB ACS880 drives with Direct Torque Control (DTC) technology.



High quality extruding

ABB's DTC technology provides highly accurate speed control in either open or closed loop.



Lifecycle partner

ABB provides customized solutions to obtain top performance, reliability and efficiency. ABB motors and drives are supported by a dedicated services team to help you achieve your goals throughout the lifecycle of your products.



High efficiency

The combination of ABB motor technology with variable frequency drive control offers the highest package efficiency over the whole speed range. Compared to a conventional AC motor and drive, you can achieve a 2-4% reduction in energy consumption. As a result, the payback time for the RPM AC/ACS880 solution could be less than a year.

Extruder selection chart

ACS880 drives and RPM AC motors

ABB has done the hard work of ensuring that our motors and drives work together to make your life easier.

ACS880 selection chart based on motor FLA

460V ratings

380 VAC to 500 VAC Nominal

Hp	RPM	Motor				Wall Mount	Cabinet (6-pulse)		Cabinet (ULH)
		Enclosure	Frame	Catalog number	FLA	Matching ACS880 drive	Matching ACS880 drive	Matching ACS880 drive	
25	1800	DPFV	FL1844	IDDRPM18254C	33	ACS880-01-040A-5	-	-	
	1800	TEBC	FL2162	IDBRPM21254C	34	ACS880-01-040A-5	-	-	
30	1800	DPFV	FL1852	IDDRPM18304C	39	ACS880-01-052A-5	-	-	
	1800	TEBC	FL2162	IDBRPM21304C	40	ACS880-01-052A-5	-	-	
40	1800	DPFV	RL2162	IDDRPM21404	52	ACS880-01-065A-5	-	-	
	1800	TEBC	FL2173	IDBRPM21404	51	ACS880-01-065A-5	-	-	
50	1800	DPFV	RL2168	IDDRPM21504	62	ACS880-01-077A-5	-	-	
	1800	TEBC	FL2570	IDBRPM25504	65	ACS880-01-077A-5	-	-	
60	1800	DPFV	RL2168	IDDRPM21604	74	ACS880-01-096A-5	ACS880-07-0096A-5+C129	ACS880-37-0101A-5+C129	
	1800	TEBC	FL2578	IDBRPM25604	75	ACS880-01-096A-5	ACS880-07-0096A-5+C129	ACS880-37-0101A-5+C129	
75	1800	DPFV	RL2570	IDDRPM25754	95	ACS880-01-124A-5	ACS880-07-0124A-5+C129	ACS880-37-0124A-5+C129	
	1800	TEBC	FL2586	IDBRPM25754	95	ACS880-01-124A-5	ACS880-07-0124A-5+C129	ACS880-37-0124A-5+C129	
100	1800	DPFV	RL2578	IDDRPM251004	119	ACS880-01-156A-5	ACS880-07-0156A-5+C129	ACS880-37-0156A-5+C129	
	1800	TEBC	FL2890	IDBRPM281004R1	124	ACS880-01-156A-5	ACS880-07-0156A-5+C129	ACS880-37-0156A-5+C129	
125	1800	DPFV	RL2586	IDDRPM251254	148	ACS880-01-180A-5	ACS880-07-0180A-5+C129	ACS880-37-0180A-5+C129	
	1800	TEBC	FL2898	IDBRPM281254	156	ACS880-01-180A-5	ACS880-07-0180A-5+C129	ACS880-37-0180A-5+C129	
150	1800	DPFV	RL2882	IDDRPM281504	180	ACS880-01-240A-5	ACS880-07-0240A-5+C129	ACS880-37-0260A-5+C129	
	1800	TEBC	FL3203	IDBRPM321504R1	177	ACS880-01-240A-5	ACS880-07-0240A-5+C129	ACS880-37-0260A-5+C129	
200	1800	DPFV	RL2898	IDDRPM282004	237	ACS880-01-260A-5	ACS880-07-0302A-5+C129	ACS880-37-0260A-5+C129	
	1800	TEBC	FL3698	IDBRPM362004R1	227	ACS880-01-260A-5	ACS880-07-0302A-5+C129	ACS880-37-0260A-5+C129	
250	1800	DPFV	RL3203	IDDRPM322504R1	295	ACS880-01-361A-5	ACS880-07-0460A-5+C129	ACS880-37-0361A-5+C129	
	1800	TEBC	FL3614	IDBRPM362504R1	283	ACS880-01-361A-5	ACS880-07-0460A-5+C129	ACS880-37-0361A-5+C129	
300	1800	DPFV	RL3213	IDDRPM323004R1	350	ACS880-01-414A-5	ACS880-07-503A-5+C129	ACS880-37-0414A-5+C129	
	1800	TEBC	FL4034	IDBRPM403004R1	350	ACS880-01-414A-5	ACS880-07-503A-5+C129	ACS880-37-0414A-5+C129	
350	1800	DPFV	RL3698	IDDRPM363504R1	401	-	ACS880-07-0583A-5+C129	ACS880-37-0460A-5+C129	
	1800	TEBC	FL4058	Custom	414	-	ACS880-07-0583A-5+C129	ACS880-37-0460A-5+C129	
400	1800	DPFV	RL3614	IDDRPM364004R1	477	-	ACS880-07-0635A-5+C129	ACS880-37-0503A-5+C129	
	1800	TEBC	FL4440	IDBRPM444004	479	-	ACS880-07-0715A-5+C129	ACS880-37-0503A-5+C129	
500	1800	DPFV	RL4022	IDDRPM405004R1	557	-	ACS880-07-0715A-5+C129	ACS880-37-0780A-5+C129	
	1800	TEBC	FL4451	IDBRPM445004	591	-	ACS880-07-0820A-5+C129	ACS880-37-0780A-5+C129	
600	1800	DPFV	RL4046	IDDRPM406004R1	666	-	ACS880-07-0880A-5+C129	ACS880-37-1010A-5+C129+H359	
	1800	TEBC	FL5824	IDBRPM586004	708	-	ACS880-07-1070A-5+C129+H359	ACS880-37-1010A-5+C129+H359	
700	1800	DPFV	RL4058	IDDRPM407004R1	875	-	ACS880-07-1320A-5+C129+F255+H359	ACS880-37-1530A-5+C129+H359	
	1800	TEBC	FL5826	IDBRPM587004	826	-	ACS880-07-1320A-5+C129+F255+H359	ACS880-37-1110A-5+C129+H359	
800	1800	DPFV	RL4440	IDDRPM448004	980	-	ACS880-07-1320A-5+C129+F255+H359	ACS880-37-1530A-5+C129+H359	
	1800	TEBC	FL5828	Custom	944	-	ACS880-07-1320A-5+C129+F255+H359	ACS880-37-1530A-5+C129+H359	
900	1800	DPFV	RL4451	IDDRPM449004	1094	-	ACS880-07-1580A-5+C129+F255+H359	ACS880-37-1530A-5+C129+H359	
	1800	TEBC	FL5830	IDBRPM589004	1062	-	ACS880-07-1450A-5+C129+F255+H359	ACS880-37-1530A-5+C129+H359	
1000	1800	DPFV	RL4461	IDDRPM4410004R1	1202	-	ACS880-07-1800A-5+C129+F255+H359	ACS880-37-1980A-5+C129+H359	
	1800	TEBC	FL5832	IDBRPM5810004	1180	-	ACS880-07-1580A-5+C129+F255+H359	ACS880-37-1980A-5+C129+H359	
1100	1200	TEBC	FL5832*	Custom	1298	-	ACS880-07-1800A-5+C129+F255+H359	ACS880-37-1980A-5+C129+H359	
1200	1200	TEBC	FL5832*	Custom	1416	-	ACS880-07-1980A-5+C129+F255+H359	ACS880-37-1980A-5+C129+H359	
1250	1800	DPFV	RL5024	IDDRPM5012504	1373	-	ACS880-07-1980A-5+C129+F255+H359	ACS880-37-1980A-5+C129+H359	
1500	1800	DPFV	RL5030	IDDRPM5015004	1633	-	-	ACS880-37-2270A-5+C129+H359	

*PM motor - Requires selection of PM motor control on ACS880 drive