TECHNICAL CATALOG

Low voltage AC drives

ABB general purpose drives
ACS580, 1 to 350 hp

Ratings, types and voltages

Wall-mounted drives, ACS580-01						
3-phase, U_N = 240 V (range 208 to 240V)						
		Max. output current	**Light overload use**		**Heavy-duty use**	
Type code	**Frame Size**	I_{max} **(A)**	I_{Ld} **(A)**	P_{Ld} **(hp)**	I_{Hd} **(A)**	P_{Hd} **(hp)**
ACS580-01-04A6-2	R1	6.3	4.6	1	3.5	0.75
ACS580-01-06A6-2	R1	8.9	6.6	1.5	4.6	1
ACS580-01-07A5-2	R1	11.9	7.5	2	6.6	1.5
ACS580-01-10A6-2	R1	14.3	10.6	3	7.5	2
ACS580-01-017A-2	R1	22.6	16.7	5	10.6	3
ACS580-01-024A-2	R2	32.7	24.2	7.5	16.7	5
ACS580-01-031A-2	R2	43.6	30.8	10	24.2	7.5
ACS580-01-046A-2	R3	62.4	46.2	15	30.8	10
ACS580-01-059A-2	R3	83.2	59.4	20	46.2	15
ACS580-01-075A-2	R4	107	74.8	25	59.4	20
ACS580-01-088A-2	R5	135	88	30	74.8	25
ACS580-01-114A-2	R5	158	114	40	88	30
ACS580-01-143A-2	R6	205	143	50	114	40
ACS580-01-169A-2	R7	257	169	60	143	50
ACS580-01-211A-2	R7	304	211	75	169	60
ACS580-01-273A-2	R8	380	100	273	75	211

Nominal ratings	
I_N	Rated current available continuously without overloadability at 40 °C
P_N	Typical motor power in no-overload use.
Maximum output current	
I_{max}	Maximum output current. Available for 2 seconds at start, then as long as allowed by drive temperature.
Light-overload use	
I_{Ld}	Continuous current allowing 110% I_{Ld} for 1 minute every 10 minutes at 40 °C.
P_{Ld}	Typical motor power in light-overload use.
Heavy-duty use	
I_{Hd}	Continuous current allowing 150% I_{Hd} for 1 minute every 10 minutes at 40 °C. * Continuous current allowing 130% I_{Hd} for 1 minute every 10 minutes at 40 °C. ** Continuous current allowing 125% I_{Hd} for 1 minute every 10 minutes at 40 °C
P_{Hd}	Typical motor power in heavy-duty use.

The ratings apply for the frames R1 to R9 up to +40 °C. For derating at higher altitudes, temperatures, or switching frequencies, see the HW manuals, document codes: 3AXD50000018826 and 3AXD50000015497

Cooling and fuses

Cooling
ACS580 drives are fitted with variable-speed cooling air fans. The cooling air must be free from corrosive materials and not exceed the maximum ambient temperature of 40°C for frames R1 to R9 (50°C with derating). The speed-controlled fans cool the drive only when needed, which reduces overall noise level and energy consumption.

Fuse connections
Standard fuses can be used with ABB general purpose drives. For input fuses, see the table below.

Wall-mounted drives, ACS580-01

Cooling air flow and recommended input protection fuses for 200 to 240 V units

Type designation	Frame size	Cooling Air Flow 200 to 240 V units					Reccomended UL Input Protection fuses			
		Heat dissipation*		Air flow		Max. noise level**	I_N	Voltage rating	Bussmann type***	UL class
		W	BTU/Hr	m3/h	ft3/min	dBA	A	V		
ACS580-01-04A6-2	R1	45	155	43	25	59	15	600	KTK-R-15 or JJS-15	CC or T
ACS580-01-06A6-2	R1	55	187	43	25	59	15	600	KTK-R-15 or JJS-15	CC or T
ACS580-01-07A5-2	R1	66	224	43	25	59	15	600	KTK-R-15 or JJS-15	CC or T
ACS580-01-10A6-2	R1	84	288	43	25	59	15	600	KTK-R-15 or JJS-15	CC or T
ACS580-01-017A-2	R1	133	454	43	25	59	30	600	KTK-R-30 or JJS-30	CC or T
ACS580-01-024A-2	R2	174	593	101	59	64	40	600	JJS-40	T
ACS580-01-031A-2	R2	228	777	101	59	64	40	600	JJS-40	T
ACS580-01-046A-2	R3	322	1100	179	105	76	80	600	JJS-80	T
ACS580-01-059A-2	R3	430	1469	179	105	76	80	600	JJS-80	T
ACS580-01-075A-2	R4	525	1791	288	170	69	100	600	JJS-100	T
ACS580-01-088A-2	R5	619	2114	139	82	63	150	600	JJS-150	T
ACS580-01-114A-2	R5	835	2852	139	82	63	150	600	JJS-150	T
ACS580-01-143A-2	R6	1035	3535	435	256	67	200	600	JJS-200	T
ACS580-01-169A-2	R7	1251	4272	450	265	67	250	600	JJS-250	T
ACS580-01-211A-2	R7	1521	5194	450	265	67	300	600	JJS-300	T
ACS580-01-273A-2	R8	2061	7039	550	324	65	400	600	JJS-400	T

* Heat dissapation value is a reference for cabinet thermal design
** The maximum noise level is at full fan speed. When the drive is not operating at full load and at maximum ambient temperature the noise level is lower.
***ABB does not require Bussmann brand fuses. Fuses which meet the appropriate UL class type, current rating, and are rated at 600V, 200 kA may be used.