



—  
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)

Type code	Frame Size	Max. output current	Light overload use		Heavy-duty use	
		$I_{max}$ (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					Recommended UL Input Protection fuses			
		Heat dissipation*		Air flow		Max. noise level**	I <sub>N</sub>	Voltage rating	Bussmann type***	UL class
		W	BTU/Hr	m3/h	ft3/min					
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 dissipation 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.