

ACS580-01-	Input rating	Output ratings							Frame
		Max. current	Nominal use		Light-duty use		Heavy-duty use		
	$I_1$	$I_{max}$	$I_2$	$P_n$	$I_{Ld}$	$P_{Ld}$	$I_{Hd}$	$P_{Hd}$	
	A	A	A	kW	A	kW	A	kW	
3-phase $U_n = 400 \text{ V}$ (380...415 V)									

ACS580-01-	Input rating	Output ratings							Frame	
		Max. current	Nominal use		Light-duty use		Heavy-duty use			
			$I_1$	$I_2$	$P_n$	$I_{Ld}$	$P_{Ld}$	$I_{Hd}$		$P_{Hd}$
			A	A	kW	A	kW	A		kW
02A7-4	2.6	3.2	2.6	0.75	2.5	0.75	1.8	0.6	R1	
03A4-4	3.3	4.7	3.3	1.1	3.1	1.1	2.6	0.8	R1	
04A1-4	4.0	5.9	4.0	1.5	3.8	1.5	3.3	1.1	R1	
05A7-4	5.6	7.2	5.6	2.2	5.3	2.2	4.0	1.5	R1	
07A3-4	7.2	10.1	7.2	3.0	6.8	3.0	5.6	2.2	R1	
09A5-4	9.4	13.0	9.4	4.0	8.9	4.0	7.2	3.0	R1	
12A7-4	12.6	15.3	12.6	5.5	12.0	5.5	9.4	4.0	R1	
018A-4	17.0	22.7	17.0	7.5	16.2	7.5	12.6	5.5	R2	
026A-4	25.0	30.6	25.0	11.0	23.8	11.0	17.0	7.5	R2	
033A-4	32.0	44.3	32.0	15.0	30.4	15.0	24.6	11.0	R3	
039A-4	38.0	56.9	38.0	18.5	36.1	18.5	31.6	15.0	R3	
046A-4	45.0	67.9	45.0	22.0	42.8	22.0	37.7	18.5	R3	
062A-4	62	81	62	30	58	30	45	22	R4	
062A-4	62	81	62	30	58	30	45	22	R4 v2	
073A-4	73	110	73	37	68	37	61	30	R4	
073A-4	73	110	73	37	68	37	61	30	R4 v2	
089A-4	89	130	89	45	83	45	72	37	R4 v2	
088A-4	88	130	88	45	83	45	72	37	R5	
106A-4	106	157	106	55	100	55	87	45	R5	
145A-4	145	178	145	75	138	75	105	55	R6	
169A-4	169	247	169	90	161	90	145	75	R7	
206A-4	206	287	206	110	196	110	169	90	R7	
246A-4	246	350	246	132	234	132	206	110	R8	
293A-4	293	418	293	160	278	160	246 <sup>1)</sup>	132	R8	
363A-4	363	498	363	200	345	200	293	160	R9	
430A-4	430	545	430	250	400	200	363 <sup>2)</sup>	200	R9	

ACS580-01-	Input rating	Output ratings							Frame
		Max. current	Nominal use			Heavy-duty use			
			$I_1$	$I_{Ld}$	$P_{Ld}$	$I_{Hd}$	$P_{Hd}$		
			A	A	kW	hp	A	kW	
3-phase $U_n = 480$ V									
02A7-4	2.1	2.9	2.1	0.75	1.0	1.6	0.55	0.75	R1
03A4-4	3.0	3.8	3.0	1.1	1.5	2.1	0.75	1.0	R1

## Definitions

- $U_n$  Nominal output voltage of the drive. For input voltage range [ $U_1$ , see section [Electrical power network specification \(page 286\)](#)]. 50 Hz for IEC ratings and 60 Hz for UL (NEC) ratings.
- $I_1$  Nominal input current (rms) at 40 °C (104 °F).
- $I_{max}$  Maximum output current. Available for two seconds at start.
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<b><math>I_2</math></b>	Nominal output current. Maximum continuous rms output current allowed (no overload).
<b><math>P_n</math></b>	Nominal power of the drive. Typical motor power (no overload). The kilowatt ratings apply to most IEC 4-pole motors. The horsepower ratings apply to most NEMA 4-pole motors.
<b><math>I_{Ld}</math></b>	Maximum current with 10% overload, allowed for one minute every ten minutes.
<b><math>P_{Ld}</math></b>	Typical motor power in light-duty use (10% overload). The horsepower (hp) ratings apply to most NEMA 4-pole motors.
<b><math>I_{Hd}</math></b>	Maximum current with 50% overload, allowed for one minute every ten minutes. 1) Maximum current with 30% overload, allowed for one minute every ten minutes. 2) Maximum current with 25% overload, allowed for one minute every ten minutes.
<b><math>P_{Hd}</math></b>	Typical motor power in heavy-duty use (50% overload).

## Circuit breakers (IEC)

This section does not apply to the North American market. See section Circuit breakers (UL).

The protective characteristics of circuit breakers depend on the type, construction and settings of the breakers. There are also limitations pertaining to the short-circuit capacity of the supply network.



### **WARNING!**

Due to the inherent operating principle and construction of circuit breakers, independent of the manufacturer, hot ionized gases can escape from the breaker enclosure in case of a short-circuit. To make sure of safe use, pay special attention to the installation and placement of the breakers. Obey the manufacturer's instructions.

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You can use the circuit breakers listed below. Other circuit breakers can be used with drive if they provide the same electrical characteristics. ABB does not assume any liability whatsoever for the correct function and protection with circuit breakers not listed below. Furthermore, if the recommendations given by ABB are not obeyed, the drive can experience problems that the warranty does not cover.

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ACS580-01-	MCBs and MCCBs					
	ABB type <sup>1)</sup>	Max. short-circuit	T <sub>max</sub> frame XT / T class	T <sub>max</sub> rating	Electronic release	SACE ordering code for breaker and release unit
		I <sub>sc</sub>				
		kA				
3-phase U <sub>n</sub> = 400 or 480 V						
02A7-4	S 203P-B/C/Z 10	20	N/A	N/A	N/A	N/A
03A4-4	S 203P-B/C/Z 10	20	N/A	N/A	N/A	N/A
04A1-4	S 203P-B/C/Z 10	20	N/A	N/A	N/A	N/A
05A7-4	S 203P-B/C/Z 10	20	N/A	N/A	N/A	N/A
07A3-4	S 203P-B/C/Z 10	20	N/A	N/A	N/A	N/A
09A5-4	S 203P-B/C/Z 10	20	N/A	N/A	N/A	N/A
12A7-4	S 203P-B/C/Z 16	20	N/A	N/A	N/A	N/A
018A-4	S 203P-B/C/Z 20	20	N/A	N/A	N/A	N/A
026A-4	S 203P-B/C/Z 25	20	N/A	N/A	N/A	N/A
033A-4	S 203P-B/C/Z 32	12	N/A	N/A	N/A	N/A
039A-4	S 203P-B/C/Z 40	12	N/A	N/A	N/A	N/A
046A-4	S 203P-B/C/Z 50	12	N/A	N/A	N/A	N/A
062A-4	S 803S-B/C 80	50	N/A	N/A	N/A	N/A
073A-4	S 803S-B/C 80	50	N/A	N/A	N/A	N/A
088A-4	S 803S-B/C 100	50	N/A	N/A	N/A	N/A
089A-4	S 803S-B/C 100	50	N/A	N/A	N/A	N/A
106A-4	S 803S-B/C 125	50	N/A	N/A	N/A	N/A
145A-4	XT4 L 250 Ekip LS/I In=250 3p F F	65	XT4	250	250	1SDA068555R1
169A-4	XT4 L 250 Ekip LS/I In=250 3p F F	65	XT4	250	250	1SDA068555R1
206A-4	T4 L 320 PR221DS-LS/I In=320 3p F F	65	T4	320	320	1SDA054141R1
246A-4	T5 L 400 PR221DS-LS/I In=400 3p F F	65	T5	400	400	1SDA054365R1
293A-4	T5 L 630 PR221DS-LS/I In=630 3p F F	65	T5	630	630	1SDA054420R1
363A-4	T5 L 630 PR221DS-LS/I In=630 3p F F	65	T5	630	630	1SDA054420R1
430A-4	T5 L 630 PR221DS-LS/I In=630 3p F F	65	T5	630	630	1SDA054420R1

<sup>1)</sup> Trip characteristic Z is recommended