

Options for ABB drives

Supplement

SynRM motor control program (option +N7502) for ACS880-01, ACS880-07, ACS850-04 and ACQ810-04 drives



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List of related manuals

ACS880-01 hardware and firmware manuals

	Code (English)
<i>ACS880-01 hardware manual</i>	3AUA0000078093
<i>ACS880 primary control program firmware manual</i>	3AUA0000085967

ACS880-07 hardware and firmware manuals

	Code (English)
<i>ACS880-07 (45 to 630 kW, 50 to 700 hp) hardware manual</i>	3AUA0000105718
<i>ACS880-07 (560 to 2800 kW) hardware manual</i>	3AUA0000143261
<i>ACS880 primary control program firmware manual</i>	3AUA0000085967

ACS850-04 hardware and firmware manuals

<i>ACS850-04 (0.37 to 45 kW, 0.5 to 60 hp) hardware manual</i>	3AUA0000045496
<i>ACS850-04 (55 to 200 kW, 60 to 200 hp) hardware manual</i>	3AUA0000045487
<i>ACS850-04 (200 to 500 kW, 250 to 600 hp) hardware manual</i>	3AUA0000026234
<i>ACS850-04 (160 to 560 kW, 200 to 700 hp) hardware manual</i>	3AUA0000081249
<i>ACS850 standard control program firmware manual</i>	3AUA0000045497

ACSQ810-04 hardware and firmware manuals

<i>ACQ810-04 (0.37 to 45 kW, 0.5 to 60 hp) hardware manual</i>	3AUA0000055160
<i>ACQ810-04 (55 to 160 kW, 75 to 200 hp) hardware manual</i>	3AUA0000055161
<i>ACQ810-04 (200 to 500 kW, 300 to 700 hp) hardware manual</i>	3AUA0000120538
<i>ACQ810 Standard pump control program firmware manual</i>	3AUA0000055144

Option manuals and guides

<i>SynRM control program (option +N7502) for ACS880-01/07, ACS850-04 and ACQ810-04 drives supplement</i>	3AXD50000026332
<i>ACS-AP-x Assistant control panels user's manual</i>	3AUA0000085685
<i>DriveSize User Manual</i>	3AXD0000000073
<i>Manuals and quick guides for I/O extension modules, fieldbus adapters, etc.</i>	

You can find manuals and other product documents in PDF format on the Internet. See section [Document library on the Internet](#) on the inside of the back cover. For manuals not available in the Document library, contact your local ABB representative.



[ACS880-01 manuals](#)



[ACS880-07 \(45 to 630 kW\) manuals](#)



[ACS880-07 \(560 to 2800 kW\) manuals](#)



[ACS850-04 manuals](#)



[ACQ810 manuals](#)

Introduction

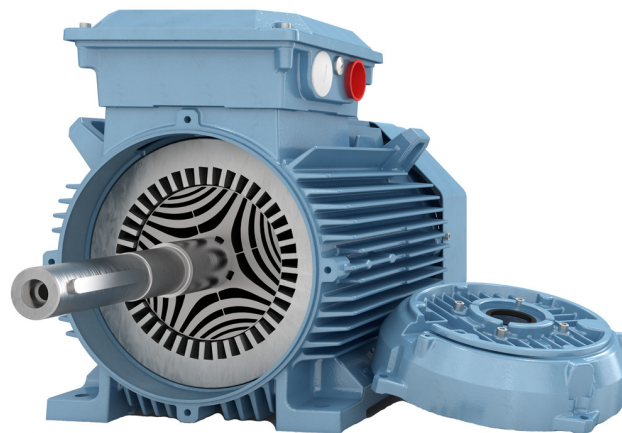
■ Applicability

This manual applies to the ACS880-01, ACS880-07, ACS850-04 and ACQ810-04 drives with the option +N7502 (SynRM motor control program).

■ SynRM motor-drive packages

Synchronous reluctance motors (SynRM) must always be operated by an AC drive. A wide selection of ABB drives is available for different applications:

- Industrial drives: ACS880-01 wall-mounted single drives and ACS880-07 cabinet-built single drives
- Machinery drives: ACS850-04 drive modules
- Industry-specific drives: ACQ810-04 drive modules for water and waste water applications.



■ Contents

This supplement describes the necessary parameter settings for each drive type when it is used with the preselected SynRM motor.

- [Parameter settings](#)
- [Motor rating plate](#)
- [Motor selection tables for ACS880-01 drives](#)
- [Motor selection tables for ACS880-07 drives](#)
- [Motor selection tables for ACS850-04 drive modules](#)
- [Motor selection tables for ACQ810-04 drive modules](#)

Note: The preselected packages in the motor selection tables are made for no overload pump and fan use. Contact your local ABB representative for other selections or use the DriveSize dimensioning tool.

Motor selection tables for ACS880-01 drives

IE4 SynRM and ACS880-01							Par 99.09	Par 99.08	Par 99.06	Par 99.12	Par 99.10	Drive type
Output (kW)	Motor type			Product code			n_N (r/min)	f_N (Hz)	I_N (A)	T_N (N·m)	P (kW)	ACS880-01
3000 r/min												
11	M3BL	160	MLA 4	3GBL	162 101	-_SC	3000	100	25.0	35	11	-025A-3
15	M3BL	160	MLB 4	3GBL	162 102	-_SC	3000	100	34.8	48	15	-038A-3
18.5	M3BL	160	MLC 4	3GBL	162 103	-_SC	3000	100	42.8	59	18.5	-045A-3
22	M3BL	180	MLA 4	3GBL	182 101	-_SC	3000	100	50.0	70	22	-061A-3
30	M3BL	200	MLA 4	3GBL	202 101	-_SC	3000	100	68.8	95	30	-072A-3
37	M3BL	200	MLB 4	3GBL	202 102	-_SC	3000	100	84.6	118	37	-087A-3
45	M3BL	225	SMA 4	3GBL	222 101	-_SC	3000	100	103	143	45	-105A-3
55	M3BL	225	SMF 4	3GBL	222 102	-_SC	3000	100	122	175	55	-145A-3
1500 r/min												
11	M3BL	160	MLA 4	3GBL	162 104	-_SC	1500	50	24.9	70	11	-025A-3
15	M3BL	160	MLB 4	3GBL	162 105	-_SC	1500	50	33.7	95	15	-038A-3
18.5	M3BL	180	MLA 4	3GBL	182 102	-_SC	1500	50	42.0	118	18.5	-045A-3
22	M3BL	200	MLF 4	3GBL	202 106	-_SC	1500	50	49.1	140	22	-061A-3
30	M3BL	200	MLA 4	3GBL	202 103	-_SC	1500	50	66.7	191	30	-072A-3
37	M3BL	250	SMF 4	3GBL	252 104	-_SC	1500	50	82.0	236	37	-087A-3
45	M3BL	250	SMG 4	3GBL	252 105	-_SC	1500	50	99.5	286	45	-105A-3
55	M3BL	250	SMA 4	3GBL	252 102	-_SC	1500	50	121	350	55	-145A-3
75	M3BL	280	SMA 4	3GBL	282 213	-_DC	1500	50	173	478	75	-206A-3
90	M3BL	280	SMB 4	3GBL	282 223	-_DC	1500	50	202	573	90	-206A-3
110	M3BL	280	SMC 4	3GBL	282 233	-_DC	1500	50	245	699	110	-246A-3
110	M3BL	315	SMA 4	3GBL	312 213	-_DC	1500	50	244	702	110	-246A-3
132	M3BL	315	SMB 4	3GBL	312 223	-_DC	1500	50	290	842	132	-293A-3
160	M3BL	315	SMC 4	3GBL	312 233	-_DC	1500	50	343	1018	160	-363A-3
200	M3BL	315	MLA 4	3GBL	312 413	-_DC	1500	50	427	1272	200	-430A-3
1000 r/min												
7.5	M3BL	160	MLA 4	3GBL	162 106	-_SC	1000	33	17.3	72	7.5	-025A-3
11	M3BL	160	MLB 4	3GBL	162 107	-_SC	1000	33	25.0	105	11	-025A-3
15	M3BL	200	MLF 4	3GBL	202 107	-_SC	1000	33	34.0	143	15	-038A-3
18.5	M3BL	200	MLA 4	3GBL	202 104	-_SC	1000	33	41.8	177	18.5	-045A-3
22	M3BL	200	MLB 4	3GBL	202 105	-_SC	1000	33	49.5	210	22	-061A-3
30	M3BL	250	SMF 4	3GBL	252 106	-_SC	1000	33	67.2	286	30	-072A-3
37	M3BL	250	SMA 4	3GBL	252 103	-_SC	1000	33	82.6	353	37	-087A-3
45	M3BL	280	SMA 4	3GBL	282 212	-_DC	1000	33	103	430	45	-105A-3
55	M3BL	280	SMB 4	3GBL	282 222	-_DC	1000	33	123	526	55	-145A-3
75	M3BL	280	SMC 4	3GBL	282 232	-_DC	1000	33	166	715	75	-169A-3
75	M3BL	315	SMA 4	3GBL	312 212	-_DC	1000	33	166	717	75	-169A-3
90	M3BL	315	SMB 4	3GBL	312 222	-_DC	1000	33	198	859	90	-206A-3
110	M3BL	315	SMC 4	3GBL	312 232	-_DC	1000	33	241	1051	110	-246A-3
132	M3BL	315	MLA 4	3GBL	312 412	-_DC	1000	33	279	1261	132	-293A-3
160	M3BL	315	LKA 4	3GBL	312 812	-_DC	1000	33	340	1527	160	-363A-3
200	M3BL	315	LKC 4	3GBL	312 832	-_DC	1000	33	418	1910	200	-430A-3

High-output SynRM and ACS880-01							Par 99.09	Par 99.08	Par 99.06	Par 99.12	Par 99.10	Drive type
Output (kW)	Motor type			Product code			η_N (r/min)	f_N (Hz)	I_N (A)	T_N (N·m)	P (kW)	ACS880-01
3000 r/min												
1.5	M3AL	90	L 4	3GAL	092 001	-_SB	3000	100	3.9	4.8	1.5	-04A0-3
2.2	M3AL	90	LA 4	3GAL	092 002	-_SB	3000	100	5.6	7.0	2.2	-07A2-3
3	M3AL	90	LB 4	3GAL	092 003	-_SB	3000	100	7.5	9.6	3	-09A4-3
4	M3AL	90	LC 4	3GAL	092 004	-_SB	3000	100	9.8	12.7	4	-12A6-3
5.5	M3AL	90	LDA 4	3GAL	092 005	-_SB	3000	100	13.4	17.5	5.5	-017A-3
7.5	M3AL	100	LB 4	3GAL	102 001	-_SB	3000	100	16.9	23.9	7.5	-017A-3
11	M3AL	112	MB 4	3GAL	112 001	-_SB	3000	100	25.0	35.0	11	-025A-5
15	M3AL	132	SMB 4	3GAL	132 001	-_SB	3000	100	33.5	47.8	15	-038A-3
18.5	M3AL	132	SMC 4	3GAL	132 002	-_SB	3000	100	41.1	58.9	18.5	-045A-3
22	M3AL	132	SMD 4	3GAL	132 003	-_SB	3000	100	48.7	70.0	22	-061A-3
30	M3AL	132	SME 4	3GAL	132 004	-_SB	3000	100	68.7	95.5	30	-072A-3
37	M3AL	132	SMF 4	3GAL	132 005	-_SB	3000	100	84.4	118	37	-087A-3
33	M3BL	160	MLB 4	3GBL	162 001	-_SB	3000	100	76.7	105	33	-087A-3
40	M3BL	160	MLC 4	3GBL	162 002	-_SB	3000	100	92.5	127	40	-105A-3
45	M3BL	160	MLE 4	3GBL	162 003	-_SB	3000	100	103	143	45	-105A-3
62	M3BL	200	MLA 4	3GBL	202 001	-_SB	3000	100	144	197	62	-145A-3
72	M3BL	200	MLC 4	3GBL	202 002	-_SB	3000	100	166	229	72	-166A-3
97	M3BL	250	SMA 4	3GBL	252 001	-_SB	3000	100	224	309	97	-246A-3
112	M3BL	250	SMB 4	3GBL	252 007	-_SB	3000	100	259	357	112	-293A-3
125	M3BL	250	SMC 4	3GBL	252 002	-_SB	3000	100	288	398	125	-293A-3
2100 r/min												
25	M3BL	160	MLB 4	3GBL	162 007	-_SB	2100	70	58.8	114	25	-061A-3
31	M3BL	160	MLC 4	3GBL	162 008	-_SB	2100	70	72.4	141	31	-087A-3
39	M3BL	160	MLE 4	3GBL	162 009	-_SB	2100	70	90.4	177	39	-105A-3
44	M3BL	200	MLA 4	3GBL	202 005	-_SB	2100	70	102	200	44	-105A-3
62	M3BL	200	MLC 4	3GBL	202 006	-_SB	2100	70	143	282	62	-145A-3
88	M3BL	250	SMA 4	3GBL	252 005	-_SB	2100	70	201	400	88	-206A-3
98	M3BL	250	SMB 4	3GBL	252 008	-_SB	2100	70	224	446	98	-246A-3
115	M3BL	250	SMC 4	3GBL	252 006	-_SB	2100	70	258	523	115	-293A-3
124	M3BL	280	SMA 4	3GBL	282 215	-_DB	2100	70	259	564	124	-293A-3
134	M3BL	280	SMB 4	3GBL	282 225	-_DB	2100	70	279	609	134	-293A-3
160	M3BL	280	SMC 4	3GBL	282 235	-_DB	2100	70	329	728	160	-363A-3

High-output SynRM and ACS880-01							Par 99.09	Par 99.08	Par 99.06	Par 99.12	Par 99.10	Drive type
Output (kW)	Motor type			Product code			n_N (r/min)	f_N (Hz)	I_N (A)	T_N (N·m)	P (kW)	ACS880-01
1500 r/min												
1.1	M3AL	90	LA 4	3GAL	092 006	-_SB	1500	50	2.9	7.0	1.1	-03A3-3
1.5	M3AL	90	LB 4	3GAL	092 007	-_SB	1500	50	3.8	9.6	1.5	-04A0-3
2.2	M3AL	90	LDA 4	3GAL	092 008	-_SB	1500	50	5.5	14.0	2.2	-07A2-3
3	M3AL	100	LB 4	3GAL	102 002	-_SB	1500	50	7.1	19.1	3	-07A2-3
4	M3AL	100	LDA 4	3GAL	102 003	-_SB	1500	50	9.4	25.5	4	-09A4-3
5.5	M3AL	112	MB 4	3GAL	112 002	-_SB	1500	50	13.1	35.0	5.5	-017A-3
7.5	M3AL	132	SMB 4	3GAL	132 006	-_SB	1500	50	17.4	47.7	7.5	-025A-3
11	M3AL	132	SMC 4	3GAL	132 007	-_SB	1500	50	25.0	70.0	11	-025A-3
15	M3AL	132	SME 4	3GAL	132 008	-_SB	1500	50	34.5	95.5	15	-038A-3
18.5	M3AL	132	SMF 4	3GAL	132 009	-_SB	1500	50	42.2	118	18.5	-045A-3
17	M3BL	160	MLB 4	3GBL	162 004	-_SB	1500	50	42.6	108	17	-045A-3
20	M3BL	160	MLC 4	3GBL	162 005	-_SB	1500	50	49.2	127	20	-061A-3
25	M3BL	160	MLE 4	3GBL	162 006	-_SB	1500	50	58.5	159	25	-061A-3
33	M3BL	200	MLA 4	3GBL	202 003	-_SB	1500	50	76.9	210	33	-087A-3
40	M3BL	200	MLC 4	3GBL	202 004	-_SB	1500	50	92.9	255	40	-105A-3
71	M3BL	250	SMA 4	3GBL	252 003	-_SB	1500	50	166	452	71	-169A-3
86	M3BL	250	SMB 4	3GBL	252 009	-_SB	1500	50	200	547	86	-206A-3
97	M3BL	250	SMC 4	3GBL	252 004	-_SB	1500	50	225	618	97	-246A-3
103	M3BL	280	SMA 4	3GBL	282 213	-_DB	1500	50	221	656	103	-246A-3
118	M3BL	280	SMB 4	3GBL	282 223	-_DB	1500	50	246	758	118	-246A-3
134	M3BL	280	SMC 4	3GBL	282 233	-_DB	1500	50	279	853	134	-293A-3
155	M3BL	315	SMA 4	3GBL	312 213	-_DB	1500	50	321	987	155	-363A-3
180	M3BL	315	SMB 4	3GBL	312 223	-_DB	1500	50	374	1146	180	-430A-3
205	M3BL	315	SMC 4	3GBL	312 233	-_DB	1500	50	423	1305	205	-430A-3

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Motor selection tables for ACS880-07 drives

IE4 SynRM and ACS880-07							Par 99.09	Par 99.08	Par 99.06	Par 99.12	Par 99.10	Drive type
Output (kW)	Motor type			Product code			n_N (r/min)	f_N (Hz)	I_N (A)	T_N (N·m)	P (kW)	ACS880-07
3000 r/min												
45	M3BL	225	SMA 4	3GBL	222 101	-_SC	3000	100	103	143	45	-105A-3
55	M3BL	225	SMF 4	3GBL	222 102	-_SC	3000	100	122	175	55	-145A-3
1500 r/min												
45	M3BL	250	SMG 4	3GBL	252 105	-_SC	1500	50	99.5	286	45	-105A-3
55	M3BL	250	SMA 4	3GBL	252 102	-_SC	1500	50	121	350	55	-145A-3
75	M3BL	280	SMA 4	3GBL	282 213	-_DC	1500	50	173	478	75	-206A-3
90	M3BL	280	SMB 4	3GBL	282 223	-_DC	1500	50	202	573	90	-206A-3
110	M3BL	280	SMC 4	3GBL	282 233	-_DC	1500	50	245	699	110	-246A-3
110	M3BL	315	SMA 4	3GBL	312 213	-_DC	1500	50	244	702	110	-246A-3
132	M3BL	315	SMB 4	3GBL	312 223	-_DC	1500	50	290	842	132	-293A-3
160	M3BL	315	SMC 4	3GBL	312 233	-_DC	1500	50	343	1018	160	-363A-3
200	M3BL	315	MLA 4	3GBL	312 413	-_DC	1500	50	427	1272	200	-430A-3
250	M3BL	315	LKA 4	3GBL	312 813	-_DC	1500	50	542	1591	250	-585A-3
315	M3BL	315	LKC 4	3GBL	312 833	-_DC	1500	50	650	2006	315	-650A-3
1000 r/min												
45	M3BL	280	SMA 4	3GBL	282 212	-_DC	1000	33	103	430	45	-105A-3
55	M3BL	280	SMB 4	3GBL	282 222	-_DC	1000	33	123	526	55	-145A-3
75	M3BL	280	SMC 4	3GBL	282 232	-_DC	1000	33	166	715	75	-169A-3
75	M3BL	315	SMA 4	3GBL	312 212	-_DC	1000	33	166	717	75	-169A-3
90	M3BL	315	SMB 4	3GBL	312 222	-_DC	1000	33	198	859	90	-206A-3
110	M3BL	315	SMC 4	3GBL	312 232	-_DC	1000	33	241	1051	110	-246A-3
132	M3BL	315	MLA 4	3GBL	312 412	-_DC	1000	33	279	1261	132	-293A-3
160	M3BL	315	LKA 4	3GBL	312 812	-_DC	1000	33	340	1527	160	-363A-3
200	M3BL	315	LKC 4	3GBL	312 832	-_DC	1000	33	418	1910	200	-430A-3

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High-output SynRM and ACS880-07							Par 99.09	Par 99.08	Par 99.06	Par 99.12	Par 99.10	Drive type
Output (kW)	Motor type			Product code			η_N (r/min)	f_N (Hz)	I_N (A)	T_N (N·m)	P (kW)	ACS880-07
3000 r/min												
45	M3BL	160	MLE 4	3GBL	162 003	-_SB	3000	100	103	143	45	-0105A-3
62	M3BL	200	MLA 4	3GBL	202 001	-_SB	3000	100	144	197	62	-0145A-3
72	M3BL	200	MLC 4	3GBL	202 002	-_SB	3000	100	166	229	72	-0166A-3
97	M3BL	250	SMA 4	3GBL	252 001	-_SB	3000	100	224	309	97	-0246A-3
112	M3BL	250	SMB 4	3GBL	252 007	-_SB	3000	100	259	357	112	-0293A-3
125	M3BL	250	SMC 4	3GBL	252 002	-_SB	3000	100	288	398	125	-0293A-3
2100 r/min												
39	M3BL	160	MLE 4	3GBL	162 009	-_SB	2100	70	90.4	177	39	-0105A-3
44	M3BL	200	MLA 4	3GBL	202 005	-_SB	2100	70	102	200	44	-0105A-3
62	M3BL	200	MLC 4	3GBL	202 006	-_SB	2100	70	143	282	62	-0145A-3
88	M3BL	250	SMA 4	3GBL	252 005	-_SB	2100	70	201	400	88	-0206A-3
98	M3BL	250	SMB 4	3GBL	252 008	-_SB	2100	70	224	446	98	-0246A-3
115	M3BL	250	SMC 4	3GBL	252 006	-_SB	2100	70	258	523	115	-0293A-3
124	M3BL	280	SMA 4	3GBL	282 215	-_DB	2100	70	259	564	124	-0293A-3
134	M3BL	280	SMB 4	3GBL	282 225	-_DB	2100	70	279	609	134	-0293A-3
160	M3BL	280	SMC 4	3GBL	282 235	-_DB	2100	70	329	728	160	-0363A-3
1500 r/min												
40	M3BL	200	MLC 4	3GBL	202 004	-_SB	1500	50	92.9	255	40	-0105A-3
71	M3BL	250	SMA 4	3GBL	252 003	-_SB	1500	50	166	452	71	-0169A-3
86	M3BL	250	SMB 4	3GBL	252 009	-_SB	1500	50	200	547	86	-0206A-3
97	M3BL	250	SMC 4	3GBL	252 004	-_SB	1500	50	225	618	97	-0246A-3
103	M3BL	280	SMA 4	3GBL	282 213	-_DB	1500	50	221	656	103	-0246A-3
118	M3BL	280	SMB 4	3GBL	282 223	-_DB	1500	50	246	758	118	-0246A-3
134	M3BL	280	SMC 4	3GBL	282 233	-_DB	1500	50	279	853	134	-0293A-3
155	M3BL	315	SMA 4	3GBL	312 213	-_DB	1500	50	321	987	155	-0363A-3
180	M3BL	315	SMB 4	3GBL	312 223	-_DB	1500	50	374	1146	180	-0430A-3
205	M3BL	315	SMC 4	3GBL	312 233	-_DB	1500	50	423	1305	205	-0430A-3
250	M3BL	315	MLA 4	3GBL	312 413	-_DB	1500	50	516	1592	250	-0585A-3
275	M3BL	315	MLB 4	3GBL	312 423	-_DB	1500	50	573	1751	275	-0585A-3
315	M3BL	315	LKA 4	3GBL	312 813	-_DB	1500	50	659	2005	315	-0725A-3
350	M3BL	315	LKC 4	3GBL	312 833	-_DB	1500	50	712	2228	350	-0725A-3

Motor selection tables for ACS850-04 drive modules

IE4 SynRM and ACS850-04							Par 99.09	Par 99.08	Par 99.06	Par 99.12	Par 99.10	Drive type
Output (kW)	Motor type		Product code				n_N (r/min)	f_N (Hz)	I_N (A)	T_N (N·m)	P (kW)	ACS850-04
3000 r/min												
11	M3BL	160	MLA 4	3GBL	162 101	-_SC	3000	100	25	35	11	-025A-5
15	M3BL	160	MLB 4	3GBL	162 102	-_SC	3000	100	34.8	48	15	-035A-5
18.5	M3BL	160	MLC 4	3GBL	162 103	-_SC	3000	100	42.8	59	18.5	-044A-5
22	M3BL	160	MLA 4	3GBL	182 101	-_SC	3000	100	50.0	70	22	-050A-5
30	M3BL	200	MLA 4	3GBL	202 101	-_SC	3000	100	68.8	95	30	-078A-5
37	M3BL	200	MLB 4	3GBL	202 102	-_SC	3000	100	84.6	118	37	-094A-5
45	M3BL	225	SMA 4	3GBL	222 101	-_SC	3000	100	103	143	45	-103A-5
55	M3BL	225	SMF 4	3GBL	222 102	-_SC	3000	100	122	175	55	-144A-5
1500 r/min												
11	M3BL	160	MLA 4	3GBL	162 104	-_SC	1500	50	24.9	70	11	-025A-5
15	M3BL	160	MLB 4	3GBL	162 105	-_SC	1500	50	33.7	95	15	-035A-5
18.5	M3BL	180	MLA 4	3GBL	182 102	-_SC	1500	50	42.0	118	18.5	-044A-5
22	M3BL	200	MLF 4	3GBL	202 106	-_SC	1500	50	49.1	140	22	-050A-5
30	M3BL	200	MLA 4	3GBL	202 103	-_SC	1500	50	66.7	191	30	-078A-5
37	M3BL	250	SMF 4	3GBL	252 104	-_SC	1500	50	82.0	236	37	-094A-5
45	M3BL	250	SMG 4	3GBL	252 105	-_SC	1500	50	99.5	286	45	-103A-5
55	M3BL	250	SMA 4	3GBL	252 102	-_SC	1500	50	121	350	55	-144A-5
75	M3BL	280	SMA 4	3GBL	282 213	-_DC	1500	50	173	478	75	-202A-5
90	M3BL	280	SMB 4	3GBL	282 223	-_DC	1500	50	202	573	90	-202A-5
110	M3BL	280	SMC 4	3GBL	282 233	-_DC	1500	50	245	699	110	-260A-5
110	M3BL	315	SMA 4	3GBL	312 213	-_DC	1500	50	244	702	110	-260A-5
132	M3BL	315	SMB 4	3GBL	312 223	-_DC	1500	50	290	842	132	-290A-5
160	M3BL	315	SMC 4	3GBL	312 233	-_DC	1500	50	343	1018	160	-387A-5
200	M3BL	315	MLA 4	3GBL	312 413	-_DC	1500	50	427	1272	200	-500A-5
250	M3BL	315	LKA 4	3GBL	312 813	-_DC	1500	50	542	1591	250	-580A-5
315	M3BL	315	LKC 4	3GBL	312 833	-_DC	1500	50	650	2006	315	-650A-5

IE4 SynRM and ACS850-04							Par 99.09	Par 99.08	Par 99.06	Par 99.12	Par 99.10	Drive type
Output (kW)	Motor type			Product code			n_N (r/min)	f_N (Hz)	I_N (A)	T_N (N·m)	P (kW)	ACS850-04
1000 r/min												
7.5	M3BL	160	MLA 4	3GBL	162 106	-_SC	1000	33	17.3	72	7.5	-018A-5
11	M3BL	160	MLB 4	3GBL	162 107	-_SC	1000	33	25.0	105	11	-025A-5
15	M3BL	200	MLF 4	3GBL	202 107	-_SC	1000	33	34.0	143	15	-035A-5
18.5	M3BL	200	MLA 4	3GBL	202 104	-_SC	1000	33	41.8	177	18.5	-044A-5
22	M3BL	200	MLB 4	3GBL	202 105	-_SC	1000	33	49.5	210	22	-050A-5
30	M3BL	250	SMF 4	3GBL	252 106	-_SC	1000	33	67.2	286	30	-078A-5
37	M3BL	250	SMA 4	3GBL	252 103	-_SC	1000	33	82.6	353	37	-094A-5
45	M3BL	280	SMA 4	3GBL	282 212	-_DC	1000	33	103	430	45	-103A-5
55	M3BL	280	SMB 4	3GBL	282 222	-_DC	1000	33	123	526	55	-144A-5
75	M3BL	280	SMC 4	3GBL	282 232	-_DC	1000	33	166	715	75	-166A-5
75	M3BL	315	SMA 4	3GBL	312 212	-_DC	1000	33	166	717	75	-166A-5
90	M3BL	315	SMB 4	3GBL	312 222	-_DC	1000	33	198	859	90	-202A-5
110	M3BL	315	SMC 4	3GBL	312 232	-_DC	1000	33	241	1051	110	-260A-5
132	M3BL	315	MLA 4	3GBL	312 412	-_DC	1000	33	279	1261	132	-290A-5
160	M3BL	315	LKA 4	3GBL	312 812	-_DC	1000	33	340	1527	160	-387A-5
200	M3BL	315	LKC 4	3GBL	312 832	-_DC	1000	33	418	1910	200	-500A-5

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High-output SynRM and ACS850-04							Par 99.09	Par 99.08	Par 99.06	Par 99.12	Par 99.10	Drive type
Output (kW)	Motor type			Product code			n_N (r/min)	f_N (Hz)	I_N (A)	T_N (N·m)	P (kW)	ACS850-04
3000 r/min												
1.5	M3AL	90	L 4	3GAL	092 001	-_SB	3000	100	3.9	4.8	1.5	-04A8-5
2.2	M3AL	90	LA 4	3GAL	092 002	-_SB	3000	100	5.6	7.0	2.2	-06A0-5
3	M3AL	90	LB 4	3GAL	092 003	-_SB	3000	100	7.5	9.6	3	-08A0-5
4	M3AL	90	LC 4	3GAL	092 004	-_SB	3000	100	9.8	12.7	4	-010A-5
5.5	M3AL	90	LDA 4	3GAL	092 005	-_SB	3000	100	13.4	17.5	5.5	-014A-5
7.5	M3AL	100	LB 4	3GAL	102 001	-_SB	3000	100	16.9	23.9	7.5	-018A-5
11	M3AL	112	MB 4	3GAL	112 001	-_SB	3000	100	25.0	35.0	11	-025A-5
15	M3AL	132	SMB 4	3GAL	132 001	-_SB	3000	100	33.5	47.8	15	-035A-5
18.5	M3AL	132	SMC 4	3GAL	132 002	-_SB	3000	100	41.1	58.9	18.5	-044A-5
22	M3AL	132	SMD 4	3GAL	132 003	-_SB	3000	100	48.7	70.0	22	-050A-5
30	M3AL	132	SME 4	3GAL	132 004	-_SB	3000	100	68.7	95.5	30	-078A-5
37	M3AL	132	SMF 4	3GAL	132 005	-_SB	3000	100	84.4	118	37	-094A-5
33	M3BL	160	MLB 4	3GBL	162 001	-_SB	3000	100	76.7	105	33	-078A-5
40	M3BL	160	MLC 4	3GBL	162 002	-_SB	3000	100	92.5	127	40	-094A-5
45	M3BL	160	MLE 4	3GBL	162 003	-_SB	3000	100	103	143	45	-103A-5
62	M3BL	200	MLA 4	3GBL	202 001	-_SB	3000	100	144	197	62	-144A-5
72	M3BL	200	MLC 4	3GBL	202 002	-_SB	3000	100	166	229	72	-166A-5
97	M3BL	250	SMA 4	3GBL	252 001	-_SB	3000	100	224	309	97	-225A-5
112	M3BL	250	SMB 4	3GBL	252 007	-_SB	3000	100	259	357	112	-260A-5
125	M3BL	250	SMC 4	3GBL	252 002	-_SB	3000	100	288	398	125	-290A-5

High-output SynRM and ACS850-04							Par 99.09	Par 99.08	Par 99.06	Par 99.12	Par 99.10	Drive type
Output (kW)	Motor type			Product code			n_N (r/min)	f_N (Hz)	I_N (A)	T_N (N·m)	P (kW)	ACS850-04
2100 r/min												
25	M3BL	160	MLB 4	3GBL	162 007	-_SB	2100	70	58.8	114	25	-061A-5
31	M3BL	160	MLC 4	3GBL	162 008	-_SB	2100	70	72.4	141	31	-078A-5
39	M3BL	160	MLE 4	3GBL	162 009	-_SB	2100	70	90.4	177	39	-094A-5
44	M3BL	200	MLA 4	3GBL	202 005	-_SB	2100	70	102	200	44	-103A-5
62	M3BL	200	MLC 4	3GBL	202 006	-_SB	2100	70	143	282	62	-144A-5
88	M3BL	250	SMA 4	3GBL	252 005	-_SB	2100	70	201	400	88	-202A-5
98	M3BL	250	SMB 4	3GBL	252 008	-_SB	2100	70	224	446	98	-225A-5
115	M3BL	250	SMC 4	3GBL	252 006	-_SB	2100	70	258	523	115	-260A-5
124	M3BL	280	SMA 4	3GBL	282 215	-_DB	2100	70	259	564	124	-260A-5
134	M3BL	280	SMB 4	3GBL	282 225	-_DB	2100	70	279	609	134	-290A-5
160	M3BL	280	SMC 4	3GBL	282 235	-_DB	2100	70	329	728	160	-387A-5
1500 r/min												
1.1	M3AL	90	LA 4	3GAL	092 006	-_SB	1500	50	2.9	7.0	1.1	-03A0-5
1.5	M3AL	90	LB 4	3GAL	092 007	-_SB	1500	50	3.8	9.6	1.5	-04A8-5
2.2	M3AL	90	LDA 4	3GAL	092 008	-_SB	1500	50	5.5	14.0	2.2	-06A0-5
3	M3AL	100	LB 4	3GAL	102 002	-_SB	1500	50	7.1	19.1	3	-08A0-5
4	M3AL	100	LDA 4	3GAL	102 003	-_SB	1500	50	9.4	25.5	4	-010A-5
5.5	M3AL	112	MB 4	3GAL	112 002	-_SB	1500	50	13.1	35.0	5.5	-014A-5
7.5	M3AL	132	SMB 4	3GAL	132 006	-_SB	1500	50	17.4	47.7	7.5	-018A-5
11	M3AL	132	SMC 4	3GAL	132 007	-_SB	1500	50	25.0	70.0	11	-025A-5
15	M3AL	132	SME 4	3GAL	132 008	-_SB	1500	50	34.5	95.5	15	-035A-5
18.5	M3AL	132	SMF 4	3GAL	132 009	-_SB	1500	50	42.2	118	18.5	-044A-5
17	M3BL	160	MLB 4	3GBL	162 004	-_SB	1500	50	42.6	108	17	-044A-5
20	M3BL	160	MLC 4	3GBL	162 005	-_SB	1500	50	49.2	127	20	-050A-5
25	M3BL	160	MLE 4	3GBL	162 006	-_SB	1500	50	58.5	159	25	-061A-5
33	M3BL	200	MLA 4	3GBL	202 003	-_SB	1500	50	76.9	210	33	-078A-5
40	M3BL	200	MLC 4	3GBL	202 004	-_SB	1500	50	92.9	255	40	-094A-5
71	M3BL	250	SMA 4	3GBL	252 003	-_SB	1500	50	166	452	71	-166A-5
86	M3BL	250	SMB 4	3GBL	252 009	-_SB	1500	50	200	547	86	-202A-5
97	M3BL	250	SMC 4	3GBL	252 004	-_SB	1500	50	225	618	97	-225A-5
103	M3BL	280	SMA 4	3GBL	282 213	-_DB	1500	50	221	656	103	-225A-5
118	M3BL	280	SMB 4	3GBL	282 223	-_DB	1500	50	246	758	118	-260A-5
134	M3BL	280	SMC 4	3GBL	282 233	-_DB	1500	50	279	853	134	-290A-5
155	M3BL	315	SMA 4	3GBL	312 213	-_DB	1500	50	321	987	155	-387A-5
180	M3BL	315	SMB 4	3GBL	312 223	-_DB	1500	50	374	1146	180	-387A-5
205	M3BL	315	SMC 4	3GBL	312 233	-_DB	1500	50	423	1305	205	-500A-5
250	M3BL	315	MLA 4	3GBL	312 413	-_DB	1500	50	516	1592	250	-580A-5
275	M3BL	315	MLB 4	3GBL	312 423	-_DB	1500	50	573	1751	275	-580A-5
315	M3BL	315	LKA 4	3GBL	312 813	-_DB	1500	50	659	2005	315	-710A-5
350	M3BL	315	LKC 4	3GBL	312 833	-_DB	1500	50	712	2228	350	-710A-5

Motor selection tables for ACQ810-04 drive modules

IE4 SynRM and ACQ810-04							Par 99.09	Par 99.08	Par 99.06	Par 99.12	Par 99.10	Drive type
Output (kW)	Motor type		Product code				n_N (r/min)	f_N (Hz)	I_N (A)	T_N (N·m)	P (kW)	ACQ810-04
3000 r/min												
11	M3BL	160	MLA 4	3GBL	162 101	-_SC	3000	100	25.0	35	11	-021A-4
15	M3BL	160	MLB 4	3GBL	162 102	-_SC	3000	100	34.8	48	15	-035A-4
18.5	M3BL	160	MLC 4	3GBL	162 103	-_SC	3000	100	42.8	59	18.5	-035A-4
22	M3BL	180	MLA 4	3GBL	182 101	-_SC	3000	100	50.0	70	22	-040A-4
30	M3BL	200	MLA 4	3GBL	202 101	-_SC	3000	100	68.8	95	30	-067A-4
37	M3BL	200	MLB 4	3GBL	202 102	-_SC	3000	100	84.6	118	37	-080A-4
45	M3BL	225	SMA 4	3GBL	222 101	-_SC	3000	100	103	143	45	-098A-4
55	M3BL	225	SMF 4	3GBL	222 102	-_SC	3000	100	122	175	55	-138A-4
1500 r/min												
11	M3BL	160	MLA 4	3GBL	162 104	-_SC	1500	50	24.9	70	11	-021A-4
15	M3BL	160	MLB 4	3GBL	162 105	-_SC	1500	50	33.7	95	15	-035A-4
18.5	M3BL	180	MLA 4	3GBL	182 102	-_SC	1500	50	42.0	118	18.5	-035A-4
22	M3BL	200	MLF 4	3GBL	202 106	-_SC	1500	50	49.1	140	22	-040A-4
30	M3BL	200	MLA 4	3GBL	202 103	-_SC	1500	50	66.7	191	30	-067A-4
37	M3BL	250	SMF 4	3GBL	252 104	-_SC	1500	50	82.0	236	37	-080A-4
45	M3BL	250	SMG 4	3GBL	252 105	-_SC	1500	50	99.5	286	45	-098A-4
55	M3BL	250	SMA 4	3GBL	252 102	-_SC	1500	50	121	350	55	-138A-4
75	M3BL	280	SMA 4	3GBL	282 213	-_DC	1500	50	173	478	75	-162A-4
90	M3BL	280	SMB 4	3GBL	282 223	-_DC	1500	50	202	573	90	-162A-4
110	M3BL	280	SMC 4	3GBL	282 233	-_DC	1500	50	245	699	110	-240A-4
110	M3BL	315	SMA 4	3GBL	312 213	-_DC	1500	50	244	702	110	-240A-4
132	M3BL	315	SMB 4	3GBL	312 223	-_DC	1500	50	290	842	132	-286A-4
160	M3BL	315	SMC 4	3GBL	312 233	-_DC	1500	50	343	1018	160	-377A-4
200	M3BL	315	MLA 4	3GBL	312 413	-_DC	1500	50	427	1272	200	-480A-4
250	M3BL	315	LKA 4	3GBL	312 813	-_DC	1500	50	542	1591	250	-570A-4
315	M3BL	315	LKC 4	3GBL	312 833	-_DC	1500	50	650	2006	315	-634A-4

IE4 SynRM and ACQ810-04							Par 99.09	Par 99.08	Par 99.06	Par 99.12	Par 99.10	Drive type
Output (kW)	Motor type			Product code			n_N (r/min)	f_N (Hz)	I_N (A)	T_N (N·m)	P (kW)	ACQ810-04
1000 r/min												
7.5	M3BL	160	MLA 4	3GBL	162 106	-_SC	1000	33	17.3	72	7.5	-14A4-4
11	M3BL	160	MLB 4	3GBL	162 107	-_SC	1000	33	25.0	105	11	-021A-4
15	M3BL	200	MLF 4	3GBL	202 107	-_SC	1000	33	34.0	143	15	-035A-4
18.5	M3BL	200	MLA 4	3GBL	202 104	-_SC	1000	33	41.8	177	18.5	-035A-4
22	M3BL	200	MLB 4	3GBL	202 105	-_SC	1000	33	49.5	210	22	-040A-4
30	M3BL	250	SMF 4	3GBL	252 106	-_SC	1000	33	67.2	286	30	-067A-4
37	M3BL	250	SMA 4	3GBL	252 103	-_SC	1000	33	82.6	353	37	-080A-4
45	M3BL	280	SMA 4	3GBL	282 212	-_DC	1000	33	103	430	45	-098A-4
55	M3BL	280	SMB 4	3GBL	282 222	-_DC	1000	33	123	526	55	-138A-4
75	M3BL	280	SMC 4	3GBL	282 232	-_DC	1000	33	166	715	75	-162A-4
75	M3BL	315	SMA 4	3GBL	312 212	-_DC	1000	33	166	717	75	-162A-4
90	M3BL	315	SMB 4	3GBL	312 222	-_DC	1000	33	198	859	90	-162A-4
110	M3BL	315	SMC 4	3GBL	312 232	-_DC	1000	33	241	1051	110	-240A-4
132	M3BL	315	MLA 4	3GBL	312 412	-_DC	1000	33	279	1261	132	-286A-4
160	M3BL	315	LKA 4	3GBL	312 812	-_DC	1000	33	340	1527	160	-377A-4
200	M3BL	315	LKC 4	3GBL	312 832	-_DC	1000	33	418	1910	200	-480A-4

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Further information

Product and service inquiries

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