



2 Speed, 1 winding A9 - A750 Three phase

Open & enclosed

3

UL motor switching current	Maximum ratings – UL Listed				Open type		UL Type 1 (Indoor metal)	
	Maximum motor horsepower ratings ①				Catalog number	List price	Catalog number	List price
	200/208V	230/240V	460/480V	575/600V				
UL rated								
9	2	2	5	7.5	A9ST-84★1★	\$ 504	A9ST1-84★1★	\$ 690
11	3	3	7.5	10	A12ST-84★1★	525	A12ST1-84★1★	771
17	5	5	10	15	A16ST-84★1★	581	A16ST1-84★1★	837
28	7.5	10	20	25	A26ST-84★1★	752	A26ST1-84★1★	1097
34	10	10	25	30	A30ST-84★1★	1038	A30ST1-84★1★	1316
42	10	15	30	40	A40ST-84★1★	1259	A40ST1-84★1★	1577
54	15	20	40	50	A50ST-84★1★	1697	A50ST1-84★1★	1940
65	20	25	50	50	A63ST-84★1★	2150	A63ST1-84★1★	2195
80	25	30	60	75	A75ST-84★1★	2307	A75ST1-84★1★	2592
95	30	30	60	75	A95ST-84★1★	2495	A95ST1-84★1★	2950
110	30	40	75	100	A110ST-84★1★	2681	A110ST1-84★1★	3851
130	40	50	100	125	A145ST-84★1★	4506	A145ST1-84★1★	5079
156	50	60	125	150	A185ST-84★1★	5845	A185ST1-84★1★	6605
192	60	75	150	200	A210ST-84★1★	6895	A210ST1-84★1★	7825
248	75	100	200	250	A260ST-84★1★	8535	A260ST1-84★1★	10,710
302	100	100	250	300	A300ST-84★1★	9171	A300ST1-84★1★	11,391
414	125	150	350	400	A400ST-70★1★	10,100	A400ST1-70★1★	19,460
480	150	200	400	500	A460ST-70★1★	17,995	A460ST1-70★1★	28,910
590	200	250	500	600	A580ST-70★1★	23,735	A580ST1-70★1★	35,400
810	250	300	600	700	A750ST-70★1★	26,645	A750ST1-70★1★	39,195

NEMA rated

NEMA size	Continuous current	200V	230V	460/575V				
00	9	1.5	1.5	2	A9N00ST-84★1★	\$ 504	A9NST1-84★1★	\$ 690
0	18	3	3	5	A16N0ST-84★1★	581	A16NST1-84★1★	837
1	27	7.5	7.5	10	A26N1ST-84★1★	752	A26NST1-84★1★	1097
2	45	10	15	25	A50N2ST-84★1★	1697	A50NST1-84★1★	1940
3	90	25	30	50	A75N3ST-84★1★	2307	A75NST1-84★1★	2589
4	135	40	50	100	A145N4ST-84★1★	4506	A145NST1-84★1★	5079
5	270	75	100	200	A260N5ST-84★1★	8535	A260NST1-84★1★	10,710
6	540	150	200	400	A460N6ST-70★1★	17,995	A460NST1-70★1★	28,910
7	810	—	300	600	A750N7ST-70★1★	26,645	A750NST1-70★1★	39,195

★ Overload relay suffix code. Select from the overload relay selection chart on page 3.6.
1st ★ low speed, 2nd ★ high speed

Description

Motors that have separate windings for each speed provide more combinations of speed variations. Multi-speed starters from ABB Control are available for constant horsepower, constant torque and variable torque motors.

Constant horsepower

Motors that maintain the same horsepower regardless of speed are called constant horsepower motors. These motors are used in applications like metal working.

Constant torque

Motors that maintain constant torque at all speeds are called constant torque motors. In applications like conveyors, horsepower varies directly with speed.

Variable torque motors

Motors that produce a torque characteristic which varies as the square of the speed are called variable torque motors and are used in applications like blowers and fans.

Control transformer option

Contactor size	VA rating	List price adder
A9 – A40	45 ①	\$ 300
A9 – A40	50	360
A9 – A40 (N7 & 9)	50	630
A50 – A75	75	435
A95 – A110	100	560
A145 – A185	150	720
A210 – A300	250	795
A400 – A460	150	720 ③
A580 – A750	250	795 ③

① No primary fusing provided.

② For AF50 – AF 300 starters, consult factory.

③ A400 - A750 utilizes the AF wide range coil with a lower coil consumption than A210 - A300.

④ AF400 - AF750 only.

Coil voltage selection

All catalog numbers include a 120V coil. To select other coil voltages, substitute the code from the coil voltage selection chart for the first digit after the dash in the catalog number.

Ex.: A 240V coil is required for an A95-starter: A95ST-80★1B★

D.C. operated starters

If DC operation is required, consult factory.

Factory modifications

See page 3.3

Coil voltage selection – A9 - A300 ②

Hz	type	Volts																														
		12		24		48		110		120		125		208		220		240		277		380		415		440		480		500		600
60	A			81		83		84		84				34		36		80		42				86		86		51		53		55
50	A			81		83		84								80								85		86					55	

For other voltages, see page 1.26.

Coil voltage selection – A400 - A750 ②

Hz	type	Volts			
		24 - 60		48 - 130	
60	AF	68		69	
50	AF	68		69	
DC	AF	68		69	

Control transformer voltage selection

Hz	Type	Volts			
		208/120	230 – 240/120	460 – 480/120	575 – 600/120
50/60	A/AF	0	7	8	9

For other voltages, consult factory.

2 Speed, 1 winding
A9 - A750
Three phase



UL Type 3R (Outdoor metal)		UL Type 12 (Metal dustight)		UL Type 4 (Watertight)		UL Type 4X (Stainless steel)		UL Type 1, 3R, 4, 4X & 12 (Plastic)	
Catalog number	List price	Catalog number	List price	Catalog number	List price	Catalog number	List price	Catalog number	List price

UL rated									
A9ST3-84★1★	\$ 810	A9ST2-84★1★	\$ 810	A9ST4-84★1★	\$ 1020	A9STX-84★1★	\$ 1305	A9STP-84★1★	\$ 788
A12ST3-84★1★	891	A12ST2-84★1★	891	A12ST4-84★1★	1095	A12STX-84★1★	1416	A12STP-84★1★	869
A16ST3-84★1★	957	A16ST2-84★1★	957	A16ST4-84★1★	1215	A16STX-84★1★	1520	A16STP-84★1★	972
A26ST3-84★1★	1187	A26ST2-84★1★	1187	A26ST4-84★1★	1515	A26STX-84★1★	2012	A26STP-84★1★	1247
A30ST3-84★1★	1406	A30ST2-84★1★	1406	A30ST4-84★1★	1688	A30STX-84★1★	2231	A30STP-84★1★	1466
A40ST3-84★1★	1802	A40ST2-84★1★	1802	A40ST4-84★1★	2100	A40STX-84★1★	2507	A40STP-84★1★	1727
A50ST3-84★1★	2307	A50ST2-84★1★	2307	A50ST4-84★1★	2528	A50STX-84★1★	2757	A50STP-84★1★	2075
A63ST3-84★1★	2945	A63ST2-84★1★	2945	A63ST4-84★1★	3285	A63STX-84★1★	3777	A63STP-84★1★	2330
A75ST3-84★1★	3500	A75ST2-84★1★	3500	A75ST4-84★1★	3788	A75STX-84★1★	4287	A75STP-84★1★	2835
A95ST3-84★1★	3900	A95ST2-84★1★	3900	A95ST4-84★1★	4250	A95STX-84★1★	4850	A95STP-84★1★	3200
A110ST3-84★1★	4511	A110ST2-84★1★	4511	A110ST4-84★1★	4800	A110STX-84★1★	5358	A110STP-84★1★	4300
A145ST3-84★1★	5784	A145ST2-84★1★	5784	A145ST4-84★1★	6265	A145STX-84★1★	7175	A145STP-84★1★	5513
A185ST3-84★1★	7059	A185ST2-84★1★	7059	A185ST4-84★1★	7440	A185STX-84★1★	8400	A185STP-84★1★	6729
A210ST3-84★1★	8500	A210ST2-84★1★	8500	A210ST4-84★1★	8890	A210STX-84★1★	9925	A210STP-84★1★	8103
A260ST3-84★1★	11,455	A260ST2-84★1★	11,455	A260ST4-84★1★	12,940	A260STX-84★1★	15,090	A260STP-84★1★	10,919
A300ST3-84★1★	12,155	A300ST2-84★1★	12,155	A300ST4-84★1★	13,425	A300STX-84★1★	16,275	A300STP-84★1★	11,586
A400ST3-70★1★	20,135	A400ST2-70★1★	20,135	A400ST4-70★1★	21,600	A400STX-70★1★	24,700	—	—
A460ST3-70★1★	29,652	A460ST2-70★1★	29,652	A460ST4-70★1★	30,000	A460STX-70★1★	30,675	—	—
A580ST3-70★1★	35,850	A580ST2-70★1★	35,850	A580ST4-70★1★	36,225	A580STX-70★1★	38,097	—	—
A750ST3-70★1★	40,170	A750ST2-70★1★	40,170	A750ST4-70★1★	40,875	A750STX-70★1★	42,570	—	—

NEMA rated									
A9NST3-84★1★	\$ 810	A9NST2-84★1★	\$ 810	A9NST4-84★1★	\$ 1020	A9NSTX-84★1★	\$ 1305	A9NSTP-84★1★	\$ 788
A16NST3-84★1★	957	A16NST2-84★1★	957	A16NST4-84★1★	1215	A16NSTX-84★1★	1520	A16NSTP-84★1★	972
A26NST3-84★1★	1187	A26NST2-84★1★	1187	A26NST4-84★1★	1515	A26NSTX-84★1★	2012	A26NSTP-84★1★	1247
A50NST3-84★1★	2307	A50NST2-84★1★	2307	A50NST4-84★1★	2528	A50NSTX-84★1★	2757	A50NSTP-84★1★	2075
A75NST3-84★1★	3500	A75NST2-84★1★	3500	A75NST4-84★1★	3788	A75NSTX-84★1★	4287	A75NSTP-84★1★	2835
A145NST3-84★1★	5784	A145NST2-84★1★	5784	A145NST4-84★1★	6265	A145NSTX-84★1★	7175	A145NSTP-84★1★	5513
A260NST3-84★1★	11,455	A260NST2-84★1★	11,455	A260NST4-84★1★	12,940	A260NSTX-84★1★	15,090	A260NSTP-84★1★	10,919
A460NST3-70★1★	29,652	A460NST2-70★1★	29,652	A460NST4-70★1★	30,000	A460NSTX-70★1★	30,675	—	—
A750NST3-70★1★	40,170	A750NST2-70★1★	40,170	A750NST4-70★1★	40,875	A750NSTX-70★1★	42,570	—	—

★ Overload relay suffix code. Select from the overload relay selection chart on page 3.6.
 1st ★ low speed, 2nd ★ high speed



2 Speed, 2 winding A9 - A750 Three phase

Open & enclosed

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UL motor switching current	Maximum ratings – UL Listed				Open type		UL Type 1 (Indoor metal)	
	Maximum motor horsepower ratings ^①				Catalog number	List price	Catalog number	List price
	200/208V	230/240V	460/480V	575/600V				
AC3	UL rated							
9	2	2	5	7.5	A9ST-84★2★	\$ 396	A9ST1-84★2★	\$ 582
11	3	3	7.5	10	A12ST-84★2★	426	A12ST1-84★2★	657
17	5	5	10	15	A16ST-84★2★	476	A16ST1-84★2★	702
28	7.5	10	20	25	A26ST-84★2★	552	A26ST1-84★2★	882
34	10	10	25	30	A30ST-84★2★	747	A30ST1-84★2★	1025
42	10	15	30	40	A40ST-84★2★	834	A40ST1-84★2★	1152
54	15	20	40	50	A50ST-84★2★	1224	A50ST1-84★2★	1467
65	20	25	50	50	A63ST-84★2★	1587	A63ST1-84★2★	1632
80	25	30	60	75	A75ST-84★2★	1692	A75ST1-84★2★	1977
95	30	30	60	75	A95ST-84★2★	1795	A95ST1-84★2★	2450
110	30	40	75	100	A110ST-84★2★	1872	A110ST1-84★2★	3042
130	40	50	100	125	A145ST-84★2★	3069	A145ST1-84★2★	3642
156	50	60	125	150	A185ST-84★2★	4068	A185ST1-84★2★	4827
192	60	75	150	200	A210ST-84★2★	4722	A210ST1-84★2★	5652
248	75	100	200	250	A260ST-84★2★	5500	A260ST1-84★2★	7685
302	100	100	250	300	A300ST-84★2★	6340	A300ST1-84★2★	8142
414	125	150	350	400	A400ST-70★2★	6855	A400ST1-70★2★	15,522
480	150	200	400	500	A460ST-70★2★	13,560	A460ST1-70★2★	22,554
590	200	250	500	600	A580ST-70★2★	18,660	A580ST1-70★2★	25,872
810	250	300	600	700	A750ST-70★2★	20,025	A750ST1-70★2★	29,322

NEMA rated								
NEMA size	Continuous current	200V	230V	460/575V				
00	9	1.5	1.5	2	A9N00ST-84★2★	\$ 396	A9NST1-84★2★	\$ 582
0	18	3	3	5	A16N0ST-84★2★	476	A16NST1-84★2★	702
1	27	7.5	7.5	10	A26N1ST-84★2★	552	A26NST1-84★2★	882
2	45	10	15	25	A50N2ST-84★2★	1224	A50NST1-84★2★	1467
3	90	25	30	50	A75N3ST-84★2★	1692	A75NST1-84★2★	1977
4	135	40	50	100	A145N4ST-84★2★	3069	A145NST1-84★2★	3642
5	270	75	100	200	A260N5ST-84★2★	5508	A260NST1-84★2★	7685
6	540	150	200	400	A460N6ST-70★2★	13,560	A460NST1-70★2★	22,554
7	810	—	300	600	A750N7ST-70★2★	20,025	A750NST1-70★2★	29,322

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Control transformer option

Contactors size	VA rating	List price adder
A9 – A40	45 ①	\$ 300
A9 – A40	50	360
A9 – A40 (N7 & 9)	50	630
A50 – A75	75	435
A95 – A110	100	560
A145 – A185	150	720
A210 – A300	250	795
A400 – A460	150	720 ③
A580 – A750	250	795 ③

① No primary fusing provided.

② For AF50 – AF 300 starters, consult factory.

③ A400 - A750 utilizes the AF wide range coil with a lower coil consumption than A210 - A300.

④ AF400 - AF 750 only.

Coil voltage selection

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Ex.: A 240V coil is required for an A95-starter: A95ST-80★2★

D.C. operated starters

If DC operation is required, consult factory.

Factory modifications

See page 3.3

Coil voltage selection – A9 - A300 ②

Hz	Cntr type	Volts															
		12	24	48	110	120	125	208	220	240	277	380	415	440	480	500	600
60	A		81	83	84	84		34	36	80	42		86	86	51	53	55
50	A		81	83	84					80			85	86			55

For other voltages, see page 1.26.

Coil voltage selection – A400 - A750 ②

Hz	type	Cntr/Volts			
		24 - 60	48 - 130	100 - 250	250 - 500
60	AF	68	69	70	71 ④
50	AF	68	69	70	71 ④
DC	AF	68	69	70	71 ④

Control transformer voltage selection

Hz	Type	Volts			
		208/120	230 – 240/120	460 – 480/120	575 – 600/120
50/60	A/AF	0	7	8	9

For other voltages, consult factory.

2 Speed, 2 winding A9 - A750 Three phase



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UL Type 3R (Outdoor metal)		UL Type 12 (Metal dustight)		UL Type 4 (Watertight)		UL Type 4X (Stainless steel)		UL Type 1, 3R, 4, 4X & 12 (Plastic)	
Catalog Number	List Price	Catalog Number	List Price	Catalog Number	List Price	Catalog Number	List Price	Catalog Number	List Price
UL rated									
A9ST3-84★2★	\$ 702	A9ST2-84★2★	\$ 702	A9ST4-84★2★	\$ 915	A9STX-84★2★	\$ 1197	A9STP-84★2★	\$ 680
A12ST3-84★2★	777	A12ST2-84★2★	777	A12ST4-84★2★	990	A12STX-84★2★	1302	A12STP-84★2★	755
A16ST3-84★2★	822	A16ST2-84★2★	822	A16ST4-84★2★	1065	A16STX-84★2★	1385	A16STP-84★2★	837
A26ST3-84★2★	972	A26ST2-84★2★	972	A26ST4-84★2★	1200	A26STX-84★2★	1797	A26STP-84★2★	1032
A30ST3-84★2★	1115	A30ST2-84★2★	1115	A30ST4-84★2★	1388	A30STX-84★2★	1940	A30STP-84★2★	1175
A40ST3-84★2★	1377	A40ST2-84★2★	1377	A40ST4-84★2★	1545	A40STX-84★2★	2082	A40STP-84★2★	1302
A50ST3-84★2★	1835	A50ST2-84★2★	1835	A50ST4-84★2★	1988	A50STX-84★2★	2285	A50STP-84★2★	1602
A63ST3-84★2★	2382	A63ST2-84★2★	2382	A63ST4-84★2★	2513	A63STX-84★2★	3215	A63STP-84★2★	1767
A75ST3-84★2★	2885	A75ST2-84★2★	2885	A75ST4-84★2★	3090	A75STX-84★2★	3672	A75STP-84★2★	2200
A95ST3-84★2★	3500	A95ST2-84★2★	3500	A95ST4-84★2★	3700	A95STX-84★2★	3950	A95STP-84★2★	2650
A110ST3-84★2★	3702	A110ST2-84★2★	3702	A110ST4-84★2★	3863	A110STX-84★2★	4550	A110STP-84★2★	3300
A145ST3-84★2★	4347	A145ST2-84★2★	4347	A145ST4-84★2★	4650	A145STX-84★2★	5735	A145STP-84★2★	3919
A185ST3-84★2★	5285	A185ST2-84★2★	5285	A185ST4-84★2★	5740	A185STX-84★2★	6627	A185STP-84★2★	4857
A210ST3-84★2★	6327	A210ST2-84★2★	6327	A210ST4-84★2★	6510	A210STX-84★2★	7752	A210STP-84★2★	5899
A260ST3-84★2★	8427	A260ST2-84★2★	8427	A260ST4-84★2★	9150	A260STX-84★2★	12,065	A260STP-84★2★	7512
A300ST3-84★2★	8905	A300ST2-84★2★	8905	A300ST4-84★2★	9750	A300STX-84★2★	13,025	A300STP-84★2★	7990
A400ST3-70★2★	16,197	A400ST2-70★2★	16,197	A400ST4-70★2★	17,100	A400STX-70★2★	20,760	—	—
A460ST3-70★2★	23,300	A460ST2-70★2★	23,300	A460ST4-70★2★	23,700	A460STX-70★2★	24,320	—	—
A580ST3-70★2★	26,322	A580ST2-70★2★	26,322	A580ST4-70★2★	27,000	A580STX-70★2★	28,570	—	—
A750ST3-70★2★	30,297	A750ST2-70★2★	30,297	A750ST4-70★2★	30,900	A750STX-70★2★	32,697	—	—

NEMA rated									
A9NST3-84★2★	\$ 702	A9NST2-84★2★	\$ 702	A9NST4-84★2★	\$ 915	A9NSTX-84★2★	\$ 1197	A9NSTP-84★2★	\$ 680
A16NST3-84★2★	822	A16NST2-84★2★	822	A16NST4-84★2★	1065	A16NSTX-84★2★	1385	A16NSTP-84★2★	837
A26NST3-84★2★	972	A26NST2-84★2★	972	A26NST4-84★2★	1200	A26NSTX-84★2★	1797	A26NSTP-84★2★	1032
A50NST3-84★2★	1835	A50NST2-84★2★	1835	A50NST4-84★2★	1988	A50NSTX-84★2★	2285	A50NSTP-84★2★	1602
A75NST3-84★2★	2885	A75NST2-84★2★	2885	A75NST4-84★2★	3090	A75NSTX-84★2★	3672	A75NSTP-84★2★	2200
A145NST3-84★2★	4347	A145NST2-84★2★	4347	A145NST4-84★2★	4650	A145NSTX-84★2★	5735	A145NSTP-84★2★	3919
A260NST3-84★2★	8427	A260NST2-84★2★	8427	A260NST4-84★2★	9150	A260NSTX-84★2★	12,065	A260NSTP-84★2★	7512
A460NST3-70★2★	23,300	A460NST2-70★2★	23,300	A460NST4-70★2★	23,700	A460NSTX-70★2★	24,320	—	—
A750NST3-70★2★	30,297	A750NST2-70★2★	30,297	A750NST4-70★2★	30,900	A750NSTX-70★2★	32,697	—	—

★ Overload relay suffix code. Select from the overload relay selection chart on page 3.6.
1st ★ low speed, 2nd ★ high speed