

Across the line Starters



Across the line starters

Open & enclosed

A9 – A750



Description

A9 – A750

- Maximum UL/CSA horsepower ratings
- UL508A Panel Program, #E105450
- NEMA sizes 00 – 7 available
- Compact space-saving design
- Standard auxiliary contact configurations:
 A9 – A40 1 NO or 1 NC
 A50 – A750 1 NO & 1 NC
- Additional auxiliary contact blocks are available
- DC ratings & DC control operation available
- Fast, snap-on DIN rail mounting (A9 - A110)
- Double break contact design
- Snap-on front and side mounted accessories include mechanical latch, pneumatic timer and 1 & 4 pole auxiliary contact blocks (A9 – A110)
- Easy coil change
- Captive terminal screws
- NEMA, UL, CSA, and most other international standards
- cUL marked
- Operates over an extended voltage range of 85% to 110% of rated control voltage
- Screwdriver guide holes

Enclosure types

- NEMA 1 (Indoor metal)
- NEMA 3R (Outdoor metal)
- NEMA 12 (Metal dusttight)
- NEMA 4X (Stainless steel)
- NEMA 4 (Water tight)
- NEMA 1, 3R, 4, 4X, & 12 (Plastic)
- IP 65 plastic A9 – A16 starters
- NEMA 7 & 9
 Class I, Group C, D, Div 1 & 2
 Class II, Groups E, F, & G, Div 1 & 2
 Class III, 4X

Overload relay protection

Starters, sizes A9–A185, have Class 10 adjustable thermal bimetallic overload relay protection as standard.

Sizes A210 – A750, have selectable Class 10, 20, 30 adjustable electronic overload relay protection as standard.

Electronic overload relay protection is available for other starter sizes.

A110 SR 1 - 84 C A

Starter size

Starter type

- S - Non-reversing
- SR - Reversing
- SS - Single phase, non-reversing
- ST - Multi-speed, 2 speed 1 winding, 2 speed 2 winding

Enclosure

- 1 - UL Type 1
- 2 - UL Type 12
- 3 - UL Type 3R
- 4 - UL Type 4
- X - UL Type 4X stainless steel
- P - Plastic
- 7 - UL Type 7 & 9
 Class I, Group C, D, Div 1 & 2
 Class II, Groups E, F & G, Div 1 & 2
 Class III
- 74 - Hazardous Type 4

Coil voltage/CCT

See Coil Voltage Selection charts on page 3.12

Overload range

See Overload Relay Selection chart, see page 3.6.

Accessories

See Factory modifications, page 3.3



Starter selection by motor horsepower & voltage

Maximum UL/CSA ratings, three phase

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Motor horsepower				Complete starter		Starter components					
3-phase, 1800 RPM ①				Catalog number	List price	Contactors		Overload relays			
200V	230V	460V	575V			Catalog number	List price	Catalog number	List price		
—	—	—	1/4	A9S-84C	\$ 165	A9-30-10-84	\$ 78	TA25DU0.4 (0.25 – .4)	\$ 63		
—	—	1/4,1/3	1/3	A9S-84D		A9-30-10-84		TA25DU0.63 (0.4 – .63)			
—	—	—	1/2	A9S-84E		A9-30-10-84		TA25DU1.0 (0.63 – 1.0)			
—	—	1/2	3/4	A9S-84F		A9-30-10-84		TA25DU1.4 (1.0 – 1.4)			
—	—	3/4	—	A9S-84G		A9-30-10-84		TA25DU1.8 (1.3 – 1.8)			
—	1/2	1	1.5	A9S-84H		A9-30-10-84		TA25DU2.4 (1.7 – 2.4)			
1/2	—	1.5	2	A9S-84J		A9-30-10-84		TA25DU3.1 (2.2 – 3.1)			
3/4	3/4	2	—	A9S-84K		A9-30-10-84		TA25DU4.0 (2.8 – 4.0)			
—	1	—	3	A9S-84L		A9-30-10-84		TA25DU5.0 (3.5 – 5.0)			
1	1.5	3	5	A9S-84M		A9-30-10-84		TA25DU6.5 (4.5 – 6.5)			
2	2	5	—	A9S-84N		A9-30-10-84		TA25DU8.5 (6.0 – 8.5)			
—	—	—	7.5	A9S-84P		A9-30-10-84		TA25DU11 (7.5 – 11)			
3	3	7.5	10	A12S-84Q		171		A12-30-10-84		84	TA25DU14 (10 – 14)
5	5	10	15	A16S-84R		200		A16-30-10-84		102	TA25DU19 (13 – 19)
—	7.5	15	20	A26S-84S		294		A26-30-10-84		183	TA25DU25 (18 – 25)
7.5	10	20	25	A26S-84T				A26-30-10-84			TA25DU32 (24 – 32)
10	10	—	—	A30S-84B	365	A30-30-10-84	252	TA42DU32 (22 – 32)			
—	—	25	30	A30S-84C				TA42DU42 (29 – 42)			
10	15	30	40	A40S-84C	423	A40-30-10-84	297	TA42DU42 (29 – 42)			
15	—	40	50	A50S-84D	458	A50-30-11-84	330	TA75DU52 (36 – 52)			
—	20	—	—	A50S-84E		A50-30-11-84		TA75DU63 (45 – 63)			
20	—	—	—	A63S-84F	522	A63-30-11-84	372	TA75DU80 (60 – 80)			
—	—	50	60	A63S-84F		A63-30-11-84					
25	30	60	75	A75S-84F	563	A75-30-11-84	413				
30	—	—	—	A95S-84A	735	A95-30-11-84	450	TA110DU90 (65 – 90)			
—	40	75	100	A110S-84B		A110-30-11-84		TA110DU110 (80 – 110)			
40	—	—	—	A145S-84C	1315	A145-30-11-84	825	TA200DU135 (100 – 135)			
—	50	100	125	A145S-84D				TA200DU150 (110 – 150)			
50	60	125	150	A185S-84E	1730	A185-30-11-84	1290	TA200DU175 (130 – 175)			
60	—	—	—	A210S-84A	2135	A210-30-11-84	1635	TA450DU185 (130 – 185)			
—	75	150	200	A210S-84A					TA450DU235 (165 – 235)		
75	—	—	—	A260S-84B	2740	A260-30-11-84	1815	TA450DU310 (220 – 310)			
—	100	200	250	A260S-84C							
100	100	250	300	A300S-84C	2890	A300-30-11-84	1875				
125	150	350	400	A400S-70E5	4125	AF400-30-11-70	3120	E500DU500 (170 – 500)			
150	200	400	500	A460S-70E5	5700	AF460-30-11-70	4425				
200	250	500	600	A580S-70E8	8346	AF580-30-11-70	6900	E800DU800 (270 – 800)			
250	300	600	700	A750S-70E8	8646	AF750-30-11-70	7200				

CAUTION: The above ratings are based on average motor FLA. Actual FLA on the motor nameplate should be used for overload relay setting.

Coil voltage selection

All AC operated catalog numbers include a 120VAC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the two digits after the last dash in the catalog number.

Ex.: A 240V coil is required for an A75 starter: A75S-80F

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
50	AF	68	69	70	71
DC	AF	68	69	70	71

Control transformer voltage selection chart

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.

① For motors with RPM greater or less than 1800 RPM, check full load amp rating on motor nameplate to ensure proper overload protection.
 ② For AF50 – AF 300 starters, consult factory.

Starter selection by motor horsepower & voltage

NEMA sizes & ratings, three phase

Starters **3**

NEMA size	Motor horsepower				Complete starter		Starter components			
	3-phase, 1800 RPM ①				Catalog number	List price	Contactors		Overload relays	
	200V	230V	460V	575V			Catalog number	List price	Catalog number	List price
00	—	—	—	1/4	A9N00S-84C	\$ 165	A9N00-30-10-84	\$ 78	TA25DU0.4 (0.25 - .4)	\$ 63
	—	—	—	1/3	A9N00S-84D		A9N00-30-10-84		TA25DU0.63 (0.4 - .63)	
	—	—	1/4	1/2	A9N00S-84E		A9N00-30-10-84		TA25DU1.0 (0.63 - 1.0)	
	—	1/4	1/3, 1/2	—	A9N00S-84F		A9N00-30-10-84		TA25DU1.4 (1.0 - 1.4)	
	—	1/3	3/4	3/4	A9N00S-84G		A9N00-30-10-84		TA25DU1.6 (1.3 - 1.6)	
	1/3, 1/4	1/2	1	1	A9N00S-84H		A9N00-30-10-84		TA25DU2.4 (1.7 - 2.4)	
	1/2	—	—	1.5, 2	A9N00S-84J		A9N00-30-10-84		TA25DU3.1 (2.2 - 3.1)	
	3/4	3/4	1.5, 2	—	A9N00S-84K		A9N00-30-10-84		TA25DU4.0 (2.8 - 4.0)	
	—	1	—	—	A9N00S-84L		A9N00-30-10-84		TA25DU5.0 (3.5 - 5.0)	
	1	1.5	—	—	A9N00S-84M		A9N00-30-10-84		TA25DU6.5 (4.5 - 6.5)	
1.5	—	—	—	A9N00S-84N	A9N00-30-10-84	TA25DU8.5 (6.0 - 8.5)				
0	—	—	—	3	A16N0S-84L	200	A16N0-30-10-84	102	TA25DU5.0 (3.5 - 5.0)	\$ 63
	—	—	3	5	A16N0S-84M		A16N0-30-10-84		TA25DU6.5 (4.5 - 6.5)	
	2	2	5	—	A16N0S-84N		A16N0-30-10-84		TA25DU8.5 (6.0 - 8.5)	
	3	3	—	—	A16N0S-84P		A16N0-30-10-84		TA25DU11 (7.5 - 11)	
1	—	—	—	7.5	A26N1S-84P	294	A26N1-30-10-84	183	TA25DU11 (7.5 - 11)	\$ 63
	—	—	7.5	10	A26N1S-84Q		A26N1-30-10-84		TA25DU14 (10 - 14)	
	5	5	10	—	A26N1S-84R		A26N1-30-10-84		TA25DU19 (13 - 19)	
	7.5	7.5	—	—	A26N1S-84S		A26N1-30-10-84		TA25DU25 (18 - 25)	
2	—	—	—	15	A50N2S-84R	393	A50N2-30-11-84	330	TA25DU19 (13 - 19) ③	\$ 63
	—	—	15	20	A50N2S-84A		A50N2-30-11-84		TA75DU25 (18 - 25)	
	—	10	20	25	A50N2S-84B		A50N2-30-11-84		TA75DU32 (22 - 32)	
	10	15	25	—	A50N2S-84C		A50N2-30-11-84		TA75DU42 (29 - 42)	
3	—	—	—	30	A75N3S-84C	563	A75N3-30-11-84	413	TA75DU42 (29 - 42)	\$ 63
	15	—	30	40	A75N3S-84D		A75N3-30-11-84		TA75DU52 (36 - 52)	
	20	20	40	50	A75N3S-84E		A75N3-30-11-84		TA75DU63 (45 - 63)	
	25	25, 30	50	—	A75N3S-84F		A75N3-30-11-84		TA75DU80 (60 - 80)	
4	—	—	—	60	A145N4S-84R	1315	A145N4-30-11-84	825	TA200DU90 (65 - 90)	\$ 63
	—	—	60	75	A145N4S-84A		A145N4-30-11-84		TA200DU150 (110 - 150)	
	30	40	75	100	A145N4S-84B		A145N4-30-11-84		TA450DU185 (130 - 185)	
	40	50	100	—	A145N4S-84C		A145N4-30-11-84		TA450DU310 (220 - 310)	
5	50	—	—	125	A260N5S-84T	2740	A260N5-30-11-84	1815	TA200DU150 (110 - 150)	\$ 63
	60	60	125	150	A260N5S-8A		A260N5-30-11-84		TA450DU185 (130 - 185)	
	75	75	150	200	A260N5S-8A		A260N5-30-11-84		TA450DU310 (220 - 310)	
	—	100	200	—	A260N5S-8C		A260N5-30-11-84		—	
6	100, 125, 150	125, 150, 200	250, 300, 400	250, 300, 400	A460N6S-70E5	5700	AF460N6-3011-70	4425	E500DU500 (170 - 500)	865
7	—	250, 300	500, 600	500, 600	A750N7S-70E8	8646	AF750N7-3011-70	7200	E800DU800 (270 - 800)	950

CAUTION: The above ratings are based on average motor FLA. Actual FLA on the motor nameplate should be used for overload relay setting.

Coil voltage selection

All AC operated catalog numbers include a 120VAC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the two digits after the last dash in the catalog number.

Ex.: A 240V coil is required for an A75 starter: A75NS-80F

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

Control transformer voltage selection chart

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.

① For motors with RPM greater or less than 1800 RPM, check full load amp rating on motor nameplate to ensure proper overload protection.

② For AF50 - AF 300 starters, consult factory.

③ Overload to be base mounted.



Non-reversing Three phase

Open & enclosed

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UL motor switching current	Maximum ratings – UL Listed				Open type		UL Type1 (Indoor metal) ⑤		UL Type 3R (Outdoor metal)	
	Maximum motor horsepower ratings ④						Catalog number	List price	Catalog number	List price
	200/208V	230/240V	460/480V	575/600V						
UL rated										
9	2	2	5	7.5	A9S-84★	\$ 165	A9S1-84★	\$ 255	A9S3-84★	\$ 330
11	3	3	7.5	10	A12S-84★	171	A12S1-84★	285	A12S3-84★	360
17	5	5	10	15	A16S-84★	200	A16S1-84★	300	A16S3-84★	383
28	7.5	10	20	25	A26S-84★	294	A26S1-84★	405	A26S3-84★	465
34	10	10	25	30	A30S-84★	365	A30S1-84★	473	A30S3-84★	533
42	10	15	30	40	A40S-84★	423	A40S1-84★	525	A40S3-84★	578
54	15	20	40	50	A50S-84★	458	A50S1-84★	600	A50S3-84★	719
65	20	25	50	50	A63S-84★	522	A63S1-84★	713	A63S3-84★	795
80	25	30	60	75	A75S-84★	563	A75S1-84★	975	A75S3-84★	1058
95	30	30	60	75	A95S-84★	735	A95S1-84★	1140	A95S3-84★	1485
110	30	40	75	100	A110S-84★	765	A110S1-84★	1170	A110S3-84★	1515
130	40	50	100	125	A145S-84★	1315	A145S1-84★	1765	A145S3-84★	2130
156	50	60	125	150	A185S-84★	1730	A185S1-84★	2400	A185S3-84★	2805
192	60	75	150	200	A210S-84★	2135	A210S1-84★	2650	A210S3-84★	3375
248	75	100	200	250	A260S-84★	2740	A260S1-84★	3825	A260S3-84★	4650
302	100	100	250	300	A300S-84★	2890	A300S1-84★	4125	A300S3-84★	4875
414	125	150	350	400	A400S-70★	4125	A400S1-70★	7857	A400S3-70★	8625
480	150	200	400	500	A460S-70★	5700	A460S1-70★	9375	A460S3-70★	9435
590	200	250	500	600	A580S-70★	8346	A580S1-70★	12,400	A580S3-70★	13,465
720	250	300	600	700	A750S-70★	8646	A750S1-70★	13,350	A750S3-70★	14,325

NEMA rated

NEMA size	Continuous current	200V	230V	460/575V						
00	9	1.5	1.5	2	A9N00S-84★	\$ 165	A9NS1-84★	\$ 255	A9NS3-84★	\$ 330
0	18	3	3	5	A16N0S-84★	200	A16NS1-84★	300	A16NS3-84★	383
1	27	7.5	7.5	10	A26N1S-84★	294	A26NS1-84★	405	A26NS3-84★	465
2	45	10	15	25	A50N2S-84★	458	A50NS1-84★	600	A50NS3-84★	719
3	90	25	30	50	A75N3S-84★	563	A75NS1-84★	975	A75NS3-84★	1058
4	135	40	50	100	A145N4S-84★	1315	A145NS1-84★	1765	A145NS3-84★	2130
5	270	75	100	200	A260N5S-84★	2740	A260NS1-84★	3825	A260NS3-84★	4650
6	540	150	200	400	A460N6S-70★	5700	A460NS1-70★	9375	A460NS3-70★	9435
7	810	—	300	600	A750N7S-70★	8646	A750NS1-70★	13,350	A750NS3-70★	14,325

★ Overload relay suffix code. Select from the overload relay selection chart on page 3.6.

Coil voltage selection

All AC operated catalog numbers include a 120VAC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the two digits after the last dash in the catalog number.

Ex.: A 240V coil is required for an A75 starter: A75S-80F

D.C. operated starters

If DC operation is required, consult factory.

Factory modifications

See page 3.3

Control transformer option

Contacteur size	VA rating	List price adder
A9 – A40	45 ①	\$ 300
A9 – A40	50	360
A9 – A40 (N7 & 9)	50	630 ③
A50 – A75	75	435
A95 – A110	100	560
A145 – A185	150	720
A210 – A300	250	795
A400 – A460	150	720 ④
A580 – A750	250	795 ④

Coil voltage selection – A9 - A300 ②

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

For other voltages, see page 1.26.

Coil voltage selection – A400 - A750 ②

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

Control transformer voltage selection chart

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.

① No primary fusing provided.

② For AF50 – AF 300 starters, consult factory.

③ List price reflects larger enclosure for starters with control transformer.

④ A400 - A750 utilizes the AF wide range coil with a lower coil consumption than A210 - A300.

⑤ A9 – A75 starters are mounted in a UL Type 1 lift-off cover enclosure.

Non-reversing Three phase

Starters
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UL Type 12 (Metal dusttight)		UL Type 4 (Watertight)		UL Type 4X (Stainless steel)		UL Type 1, 3R, 4, 4X & 12 (Plastic)		UL Type 7 & 9 non-reversing (Explosion proof)	
Catalog number	List price	Catalog number	List price	Catalog number	List price	Catalog number	List price	Catalog number	List price
UL rated									
A9S2-84★	\$ 330	A9S4-84★	\$ 495	A9SX-84★	\$ 645	A9SP-84★	\$ 315	A9S7-84★	\$ 1500
A12S2-84★	360	A12S4-84★	540	A12SX-84★	713	A12SP-84★	345	A12S7-84★	1560
A16S2-84★	383	A16S4-84★	570	A16SX-84★	743	A16SP-84★	360	A16S7-84★	1590
A26S2-84★	465	A26S4-84★	630	A26SX-84★	831	A26SP-84★	443	A26S7-84★	1680
A30S2-84★	533	A30S4-84★	690	A30SX-84★	885	A30SP-84★	510	A30S7-84★	2040
A40S2-84★	578	A40S4-84★	1050	A40SX-84★	1275	A40SP-84★	555	A40S7-84★	2410
A50S2-84★	719	A50S4-84★	1103	A50SX-84★	1328	A50SP-84★	698	A50S7-84★	2600
A63S2-84★	795	A63S4-84★	1170	A63SX-84★	1410	A63SP-84★	773	A63S7-84★	3350
A75S2-84★	1058	A75S4-84★	1425	A75SX-84★	2010	A75SP-84★	1035	A75S7-84★	3900
A95S2-84★	1485	A95S4-84★	2070	A95SX-84★	2783	A95SP-84★	1410	A95S7-84★	5510
A110S2-84★	1515	A110S4-84★	2100	A110SX-84★	2813	A110SP-84★	1440	A110S7-84★	5550
A145S2-84★	2130	A145S4-84★	2700	A145SX-84★	3375	A145SP-84★	1950	A145S7-84★	6040
A185S2-84★	2805	A185S4-84★	3340	A185SX-84★	3900	A185SP-84★	2440	A185S7-84★	8100
A210S2-84★	3375	A210S4-84★	3900	A210SX-84★	4785	A210SP-84★	3000	A210S7-84★	9600
A260S2-84★	4650	A260S4-84★	5175	A260SX-84★	5815	A260SP-84★	4200	A260S7-84★	11,740
A300S2-84★	4875	A300S4-84★	5400	A300SX-84★	6040	A300SP-84★	4425	A300S7-84★	11,965
A400S2-70★	8625	A400S4-70★	9000	A400SX-70★	9855	—	—	—	—
A460S2-70★	10,380	A460S4-70★	10,800	A460SX-70★	11,700	—	—	—	—
A580S2-70★	13,465	A580S4-70★	14,250	A580SX-70★	14,590	—	—	—	—
A750S2-70★	14,325	A750S4-70★	14,850	A750SX-70★	15,745	—	—	—	—
NEMA rated									
A9NS2-84★	\$ 330	A9NS4-84★	\$ 495	A9NSX-84★	\$ 645	A9NSP-84★	\$ 315	A9NS7-84★	\$ 1500
A16NS2-84★	383	A16NS4-84★	570	A16NSX-84★	743	A16NSP-84★	360	A16NS7-84★	1590
A26NS2-84★	465	A26NS4-84★	630	A26NSX-84★	831	A26NSP-84★	443	A26NS7-84★	1680
A50NS2-84★	719	A50NS4-84★	1103	A50NSX-84★	1328	A50NSP-84★	698	A50NS7-84★	2600
A75NS2-84★	1058	A75NS4-84★	1425	A75NSX-84★	2010	A75NSP-84★	1035	A75NS7-84★	3900
A145NS2-84★	2130	A145NS4-84★	2700	A145NSX-84★	3375	A145NSP-84★	1950	A145NS7-84★	6040
A260NS2-84★	4650	A260NS4-84★	5175	A260NSX-84★	5815	A260NSP-84★	4200	A260NS7-84★	11,740
A460NS2-70★	10,380	A460NS4-70★	10,800	A460NSX-70★	11,700	—	—	—	—
A750NS2-70★	14,325	A750NS4-70★	14,850	A750NSX-70★	15,745	—	—	—	—

★ Overload relay suffix code. Select from the overload relay selection chart on page 3.6.



Non-reversing Single 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	
	115V	230V					
UL rated							
9	1/2	1	A9SS-84★	\$ 165	A9SS1-84★	\$ 255	
11	3/4	2	A12SS-84★	171	A12SS1-84★	285	
17	1	3	A16SS-84★	200	A16SS1-84★	300	
28	1.5	5	A26SS-84★	294	A26SS1-84★	405	
34	2	7.5	A30SS-84★	372	A30SS1-84★	473	
42	3	7.5	A40SS-84★	423	A40SS1-84★	525	
54	3	7.5	A50SS-84★	458	A50SS1-84★	600	
65	5	10	A63SS-84★	522	A63SS1-84★	713	
80	7.5	15	A75SS-84★	563	A75SS1-84★	975	
95	7.5	20	A95SS-84★	735	A95SS1-84★	1140	
110	10	25	A110SS-84★	765	A110SS1-84★	1170	
130	10	25	A145SS-84★	1315	A145SS1-84★	1765	
156	15	30	A185SS-84★	1728	A185SS1-84★	2400	
NEMA rated							
NEMA size	Continuous current	115V	230V				
00	9	1/3	1	A9N00SS-84★	\$ 165	A9N00SS1-84★	\$ 255
0	18	1	2	A16N0SS-84★	200	A16N0SS1-84★	300
1	27	2	3	A26N1SS-84★	294	A26N1SS1-84★	405
2	45	3	7.5	A50N2SS-84★	458	A50N2SS1-84★	600

★ Overload relay suffix code. Select from the overload relay selection chart on page 3.6.

Coil voltage selection

All AC operated catalog numbers include a 120VAC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the two digits after the last dash in the catalog number.

Ex.: A 240V coil is required for an A75 starter: A75SS-80F

D.C. operated starters

If DC operation is required, consult factory.

Factory modifications

See page 3.3

DC ratings

Frame size	Max current	Maximum DC HP ratings (UL)	
		125VDC	250VDC
A9	9.5	1	2
A12	13.2	1.5	3
A16	17	2	3
A26	25	3	5
A30	25	3	7.5
A40	40	5	10
A50	58	7.5	15
A63	76	10	20
A75	76	10	25

Control transformer option

Contactors size	VA rating	List price adder
A9 – A30	45 ①	\$ 300
A9 – A30	50	360
A40 – A75	75	435
A95 – A110	100	560
A145 – A185	150	720

① No primary fusing provided.

② For AF50 – AF 300 starters, consult factory.

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.

Control transformer voltage selection chart

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.

Non-reversing Single phase



3

UL Type 3R (Outdoor metal)		UL Type 12 (Metal dusttight)		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									
A9SS3-84★	\$ 330	A9SS2-84★	\$ 330	A9SS4-84★	\$ 495	A9SSX-84★	\$ 645	A9SSP-84★	\$ 315
A12SS3-84★	360	A12SS2-84★	360	A12SS4-84★	540	A12SSX-84★	713	A12SSP-84★	345
A16SS3-84★	383	A16SS2-84★	383	A16SS4-84★	570	A16SSX-84★	743	A16SSP-84★	360
A26SS3-84★	465	A26SS2-84★	465	A26SS4-84★	630	A26SSX-84★	831	A26SSP-84★	443
A30SS3-84★	533	A30SS2-84★	533	A30SS4-84★	690	A30SSX-84★	885	A30SSP-84★	510
A40SS3-84★	578	A40SS2-84★	578	A40SS4-84★	1050	A40SSX-84★	1275	A40SSP-84★	555
A50SS3-84★	719	A50SS2-84★	719	A50SS4-84★	1103	A50SSX-84★	1328	A50SSP-84★	698
A63SS3-84★	795	A63SS2-84★	795	A63SS4-84★	1170	A63SSX-84★	1410	A63SSP-84★	773
A75SS3-84★	1058	A75SS2-84★	1058	A75SS4-84★	1425	A75SSX-84★	2010	A75SSP-84★	1035
A95SS3-84★	1485	A95SS2-84★	1485	A95SS4-84★	2070	A95SSX-84★	2783	A95SSP-84★	1075
A110SS3-84★	1515	A110SS2-84★	1515	A110SS4-84★	2100	A110SSX-84★	2813	A110SSP-84★	1440
A145SS3-84★	2130	A145SS2-84★	2130	A145SS4-84★	2700	A145SSX-84★	3375	A145SSP-84★	1950
A185SS3-84★	2805	A185SS2-84★	2805	A185SS4-84★	3340	A185SSX-84★	3900	A185SSP-84★	2440
NEMA Rated									
A9N00SS3-84★	\$ 330	A9N00SS2-84★	\$ 330	A9N00SS4-84★	\$ 495	A9N00SX-84★	\$ 645	A9N00SP-84★	\$ 315
A16N0SS3-84★	383	A16N0SS2-84★	383	A16N0SS4-84★	570	A16N0SX-84★	743	A16N0SP-84★	360
A26N1SS3-84★	465	A26N1SS2-84★	465	A26N1SS4-84★	630	A26N1SX-84★	831	A26N1SP-84★	443
A50N2SS3-84★	719	A50N2SS2-84★	719	A50N2SS4-84★	1103	A50N2SX-84★	1328	A50N2SP-84★	698

★ Overload relay suffix code. Select from the overload relay selection chart on page 3.6.



Reversing 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	A9SR-84★	\$ 342	A9SR1-84★	\$ 510
11	3	3	7.5	10	A12SR-84★	387	A12SR1-84★	585
17	5	5	10	15	A16SR-84★	443	A16SR1-84★	630
28	7.5	10	20	25	A26SR-84★	503	A26SR1-84★	810
34	10	10	25	30	A30SR-84★	675	A30SR1-84★	953
42	10	15	30	40	A40SR-84★	765	A40SR1-84★	1080
54	15	20	40	50	A50SR-84★	1152	A50SR1-84★	1395
65	20	25	50	50	A63SR-84★	1515	A63SR1-84★	1780
80	25	30	60	75	A75SR-84★	1620	A75SR1-84★	1905
95	30	30	60	75	A95SR-84★	1697	A95SR1-84★	2767
110	30	40	75	100	A110SR-84★	1800	A110SR1-84★	2970
130	40	50	100	125	A145SR-84★	2997	A145SR1-84★	3570
156	50	60	125	150	A185SR-84★	3996	A185SR1-84★	4755
192	60	75	150	200	A210SR-84★	4650	A210SR1-84★	5580
248	75	100	200	250	A260SR-84★	5436	A260SR1-84★	7615
302	100	100	250	300	A300SR-84★	6190	A300SR1-84★	8070
414	125	150	350	400	A400SR-70★	7980	A400SR1-70★	15,450
480	150	200	400	500	A460SR-70★	14,550	A460SR1-70★	22,482
590	200	250	500	600	A580SR-70★	19,755	A580SR1-70★	25,800
720	250	300	600	700	A750SR-70★	21,105	A750SR1-70★	29,250

NEMA rated

NEMA size	Continuous current	200V	230V	460/575V				
00	9	1.5	1.5	2	A9N00SR-84★	\$ 342	A9NSR1-84★	\$ 510
0	18	3	3	5	A16N0SR-84★	443	A16NSR1-84★	630
1	27	7.5	7.5	10	A26N1SR-84★	503	A26NSR1-84★	810
2	45	10	15	25	A50N2SR-84★	1152	A50NSR1-84★	1395
3	90	25	30	50	A75N3SR-84★	1620	A75NSR1-84★	1905
4	135	40	50	100	A145N4SR-84★	2997	A145NSR1-84★	3570
5	270	75	100	200	A260N5SR-84★	5436	A260NSR1-84★	7615
6	540	150	200	400	A460N6SR-70★	14,550	A460NSR1-70★	22,482
7	810	—	300	600	A750N7SR-70★	21,105	A750NSR1-70★	29,250

★ Overload relay suffix code. Select from the overload relay selection chart on page 3.6.

Coil voltage selection

All AC operated catalog numbers include a 120VAC coil. To select other coil voltages, substitute the code from the Coil Voltage Selection Chart for the two digits after the last dash in the catalog number.

Ex.: A 240V coil is required for an A75 starter: A75SS-80F

D.C. operated starters

If DC operation is required, consult factory.

Factory modifications

See page 3.3

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

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

Control transformer voltage selection chart

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

For other voltages, consult factory.

^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.

Reversing Three phase



3

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
A9SR3-84★	\$ 630	A9SR2-84★	\$ 630	A9SR4-84★	\$ 810	A9SRX-84★	\$ 1125	A9SRP-84★	\$ 608
A12SR3-84★	705	A12SR2-84★	705	A12SR4-84★	915	A12SRX-84★	1230	A12SRP-84★	683
A16SR3-84★	750	A16SR2-84★	750	A16SR4-84★	990	A16SRX-84★	1313	A16SRP-84★	765
A26SR3-84★	900	A26SR2-84★	900	A26SR4-84★	1125	A26SRX-84★	1725	A26SRP-84★	960
A30SR3-84★	1043	A30SR2-84★	1043	A30SR4-84★	1313	A30SRX-84★	1868	A30SRP-84★	1103
A40SR3-84★	1305	A40SR2-84★	1305	A40SR4-84★	1500	A40SRX-84★	2010	A40SRP-84★	1230
A50SR3-84★	1763	A50SR2-84★	1763	A50SR4-84★	1875	A50SRX-84★	2213	A50SRP-84★	1530
A63SR3-84★	2310	A63SR2-84★	2310	A63SR4-84★	2588	A63SRX-84★	3143	A63SRP-84★	1695
A75SR3-84★	2813	A75SR2-84★	2813	A75SR4-84★	3113	A75SRX-84★	3600	A75SRP-84★	2250
A95SR3-84★	3427	A95SR2-84★	3427	A95SR4-84★	3697	A95SRX-84★	4276	A95SRP-84★	3025
A110SR3-84★	3630	A110SR2-84★	3630	A110SR4-84★	3900	A110SRX-84★	4479	A110SRP-84★	3230
A145SR3-84★	4275	A145SR2-84★	4275	A145SR4-84★	4650	A145SRX-84★	5665	A145SRP-84★	3804
A185SR3-84★	5215	A185SR2-84★	5215	A185SR4-84★	5550	A185SRX-84★	6555	A185SRP-84★	4640
A210SR3-84★	6255	A210SR2-84★	6255	A210SR4-84★	6640	A210SRX-84★	7680	A210SRP-84★	5566
A260SR3-84★	8355	A260SR2-84★	8355	A260SR4-84★	9340	A260SRX-84★	11,995	A260SRP-84★	7434
A300SR3-84★	8835	A300SR2-84★	8835	A300SR4-84★	10,015	A300SRX-84★	12,055	A300SRP-84★	7861
A400SR3-70★	16,125	A400SR2-70★	16,125	A400SR4-70★	17,100	A400SRX-70★	20,690	—	—
A460SR3-70★	23,230	A460SR2-70★	23,230	A460SR4-70★	23,625	A460SRX-70★	24,250	—	—
A580SR3-70★	26,250	A580SR2-70★	26,250	A580SR4-70★	27,000	A580SRX-70★	28,500	—	—
A750SR3-70★	30,225	A750SR2-70★	30,225	A750SR4-70★	31,275	A750SRX-70★	32,625	—	—

NEMA rated

A9NSR3-84★	\$ 630	A9NSR2-84★	\$ 630	A9NSR4-84★	\$ 810	A9NSRX-84★	\$ 1125	A9NSRP-84★	\$ 608
A16NSR3-84★	750	A16NSR2-84★	750	A16NSR4-84★	990	A16NSRX-84★	1313	A16NSRP-84★	765
A26NSR3-84★	900	A26NSR2-84★	900	A26NSR4-84★	1125	A26NSRX-84★	1725	A26NSRP-84★	960
A50NSR3-84★	1763	A50NSR2-84★	1763	A50NSR4-84★	1875	A50NSRX-84★	2213	A50NSRP-84★	1530
A75NSR3-84★	2813	A75NSR2-84★	2813	A75NSR4-84★	3113	A75NSRX-84★	3600	A75NSRP-84★	2250
A145NSR3-84★	4275	A145NSR2-84★	4275	A145NSR4-84★	4650	A145NSRX-84★	5665	A145NSRP-84★	3804
A260NSR3-84★	8355	A260NSR2-84★	8355	A260NSR4-84★	9340	A260NSRX-84★	11,995	A260NSRP-84★	7434
A460NSR3-70★	23,230	A460NSR2-70★	23,230	A460NSR4-70★	23,625	A460NSRX-70★	24,250	—	—
A750NSR3-70★	30,225	A750NSR2-70★	30,225	A750NSR4-70★	31,275	A750NSRX-70★	32,625	—	—

★ Overload relay suffix code. Select from the overload relay selection chart on page 3.6.



2 Speed, 1 winding Three phase

Open & enclosed

3

UL motor switching current	Maximum ratings – UL Listed				Open type		UL Type 1 (Indoor metal)	
	Maximum motor horsepower ratings [Ⓜ]				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
720	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.

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

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 Three phase

Starters
3

3

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 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				
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
720	250	300	600	700	A750ST-70★2★	20,025	A750ST1-70★2★	29,322

NEMA size	Continuous current	NEMA rated			Catalog number	List price	UL Type 1 (Indoor metal)	List price
		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

★ 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

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.

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★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	Ctr/Volts	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	Ctr/Volts			
		24 - 60	48 - 130	100 - 250	250 - 500
60	AF	68	69	70	71
50	AF	68	69	70	71
DC	AF	68	69	70	71

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 Three phase

Starters
3

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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



Plastic enclosed, IP65 Three phase & single phase

Open & enclosed – Three phase

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Maximum motor horsepower ratings				Catalog number with blank cover	List price	Catalog number with reset only	List price	Catalog number with start & stop/reset	List price
208V	240V	480V	575V/600V						
2	2	5	7.5	A9SD-84★	\$ 233	A9SD-84★R	\$ 240	A9SD-84★A	\$ 278
3	3	7.5	10	A12SD-84★	248	A12SD-84★R	255	A12SD-84★A	293
5	5	10	15	A16SD-84★	278	A16SD-84★R	293	A16SD-84★A	330

★ Overload Relay suffix code. Select from the overload relay selection chart on page 3.6.

Open & enclosed – Single phase

Maximum motor horsepower ratings		Catalog number with blank cover	List price	Catalog number with reset only	List price	Catalog number with start & stop/reset	List price
115V	230V						
0.50	1.00	A9SSD-84★	\$ 233	A9SSD-84★R	\$ 240	A9SSD-84★A	\$ 278
0.75	2.00	A12SSD-84★	248	A12SSD-84★R	255	A12SSD-84★A	293
1.00	3.00	A16SSD-84★	278	A16SSD-84★R	293	A16SSD-84★A	330

Overload relay selection chart

For contactor sizes	Current range (motor flA)	Catalog number	Starter suffix code			
A16	A12	A9	0.1 – 0.16	TA25DU0.16	A	
			0.16 – 0.25	TA25DU0.25	B	
			0.25 – 0.4	TA25DU0.4	C	
			0.4 – 0.63	TA25DU0.63	D	
			0.63 – 1.0	TA25DU1.0	E	
			1.0 – 1.4	TA25DU1.4	F	
			1.4 – 1.8	TA25DU1.8	G	
			1.7 – 2.4	TA25DU2.4	H	
			2.2 – 3.1	TA25DU3.1	J	
			2.8 – 4.0	TA25DU4.0	K	
			3.5 – 5.0	TA25DU5.0	L	
			4.5 – 6.5	TA25DU6.5	M	
			6.0 – 8.5	TA25DU8.5	N	
			7.5 – 11	TA25DU11	P	
				10 – 14	TA25DU14	Q
				13 – 19	TA25DU19	R

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 A9 starter: A9SD-80E

D.C. operated starters

If DC operation is required, consult factory.

Coil voltage selection – A9 - A16 starters

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.