



## 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 <sup>①</sup>				Catalog number	List price	Catalog number	List price
	200/208V	230/240V	460/480V	575/600V				
AC3	<b>UL rated</b>							
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	Catalog number	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 <sup>①</sup>	\$ 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 <sup>③</sup>
A580 – A750	250	795 <sup>③</sup>

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 <sup>②</sup>

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 <sup>②</sup>

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

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.