

Size 3 Starter

**Product Selection —  
Non-reversing, Sizes 00 – 9**

**When Ordering Specify**

Order by Catalog Number from **Table 33-191**, plus Suffix for coil voltages, verifying usage of appropriate sizes.

**Heaters**

Enter heaters as separate item by listing Catalog Number from tables, **Pages 33-148 – 33-149**, as required per starter.

**Table 33-191. Non-reversing Starters Selection**

Size	Amps	Max. UL Horsepower						2 Poles <sup>③</sup>		3 Poles	
		1-Phase		3-Phase				Open Catalog Number <sup>①</sup>	Price U.S. \$	Open Catalog Number <sup>①</sup>	Price U.S. \$
		115V	230V	208V	240V	480V	600V				
<b>Sizes 00 – 6</b>											
00	9	1/3	—	1-1/2	1-1/2	2	2	A200MABR	193.	A200MAC_	193.
0	18	1	—	3	3	5	5	A200M0BR	217.	A200M0C_	242.
1	27	2	—	7-1/2	7-1/2	10	10	A200M1BR	279.	A200M1C_	279.
1-1/2	36	3	—	—	—	—	—	A200MDBR	330.	—	—
2	45	7-12	—	10	15	25	25	A200M2BR	505.	A200M2C_	505.
3	90	—	—	25	30	50	50	—	—	A200M3C_	820.
4	135	—	—	40	50	100	100	—	—	A200M4C_	1,870.
5	270	—	—	75	100	200	200	—	—	A200M5C_	4,565.
6	540	—	—	150	200	400	400	—	—	A200M6C_	10,840.
<b>Sizes 7 – 9</b>											
7 <sup>②</sup>	810	—	—	200	300	600	600	—	—	A200M7C_	16,100.
8 <sup>②</sup>	1215	—	—	400	450	900	900	—	—	A200M8C_	24,100.
9 <sup>②</sup>	2250	—	—	—	800	1600	—	—	—	A200M9C_ <sup>④</sup>	38,900.

- ① For ambient compensated overload relay with auto-reset, add Suffix D.
- ② Sizes 7 – 9 use rectifier with DC coil.
- ③ Single-phase with one single-pole overload relay.
- ④ For Size 9, only available coil voltage is 120V.

**Table 33-192. Coils for Sizes 00 – 6**

Coil Volts and Hz	Code Suffix
120/60 or 110/50	AC
200 – 208/60	B
240/60	W
480/60	X
600/60	E

**Table 33-193. Coils for Sizes 7, 8 and 9 <sup>⑤</sup>**

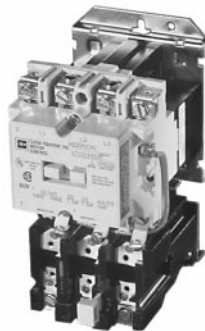
Coil Volts and Hz	Code Suffix
110 – 120/50 or 60	J
220 – 240/50 or 60	W
440 – 480/50 or 60	X
600/60	E

- ⑤ For Size 9, only available coil voltage is 120V.

Factory Modifications . . . . . **Page 33-133**  
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 Accessories . . . . . **Pages 33-133 – 33-135**  
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Size 1 Starter

**Product Description —  
Sizes 00 – 4**

**General**

Magnetic starters are used for full-voltage, across-the-line starting and stopping of squirrel cage motors. They can be operated locally or remotely by manual or automatic pilot devices.

**NEMA Sizes 00 – 4;  
Three-Phase, 1-1/2 – 100 hp**

These starters use Class A201 contactors as described on **Page 33-115**. Contactor features are enhanced through the ability to provide positive motor protection in the form of several types of overload relays. See **Pages 33-141 – 33-149**.

**Type B Overload Relay, Manual Reset Only**

Supplied as standard on Class A200 and A900 starters (two-speed). The bi-metallic overload relay offers ambient compensation and trip-to-test feature (relay contact status check) as standard. In addition, an isolated normally-open contact is available in kit form for customer mounting. Type B overload relays are manual reset only.

**Type A Overload Relay, Manual or Automatic Reset**

This is an optional overload relay, offering the capability of field conversion to automatic reset. It is available as an ambient compensated or non-compensated type.

**Non-reversing Starters**

Non-reversing starters are supplied as open devices. All starters are supplied with a normally-open holding circuit interlock.

Class A200 starters are available as UL listed or recognized components, as well as with CSA certification.

**Reversing Starters**

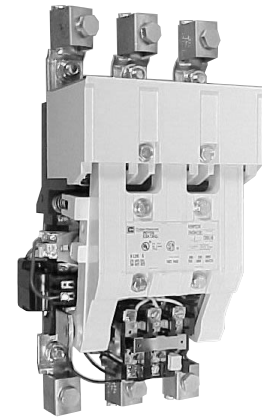
For reversing applications (Class A210), a starter and a contactor electrically and mechanically interlocked are supplied on a common baseplate. Reversing starters are used to start, stop and reverse AC squirrel cage motors and for primary control of reversing wound-rotor motors.

For plugging or inching, when operations exceed five times per minute, decreased horsepower ratings in accordance with NEMA Standard ICS 2-321 are recommended.

**Two-Speed Starters, A900s**

For across-the-line starting of two-speed constant hp, constant torque and variable torque squirrel cage motors, two-speed starters (Class A900) are available. These starters consist of two starters, one for each motor speed, mechanically and electrically interlocked and wired for manual speed selection by means of pushbuttons. Auxiliary relays may be added to provide automatic acceleration or deceleration.

Starters for two-speed, two independent winding motors consist of two-, three- or four-pole starters electrically and mechanically interlocked. Starters for two-speed, single reconnectable winding motors consist of one three-pole and one five-pole starter mechanically and electrically interlocked.



Size 5 Starter

**Product Description —  
Sizes 5 – 9**

**NEMA Sizes 5 – 9;  
Three-Phase 75 to 1600 hp**

Non-reversing (Class A200), and reversing (Classes A210, A250) full voltage starters are used for across-the-line starting of squirrel cage induction motors. They are used with motors rated above 50 hp at 230V, and above 100 hp at 460 through 600V.

Sizes 5 and 6 starters use Class A201 contactors as described on **Page 33-116**. In addition to standard motor starters, special application devices are available: Sizes 5 and 6 starters with integrally rectified AC to DC coils for applications where low voltage problems are prevalent are available.

Class A200 starters are UL listed and recognized and also carry CSA certification.

**Front Removable Parts** — All operating parts can be removed quickly and easily from the front. Straight-through wiring and conveniently located connection points for external wires and cables minimize installation time.

**Type B Block Type Thermal Overload Relay** — Dependable overload protection is assured by these snap-action, manual reset relays. Automatic reset Type A relays are available as an option.

Technical Data . . . . . **Pages 33-129 – 33-132**