

# AEB Series Bolted Motor Starters and Contactors

## Explosionproof, Dust-Ignitionproof, Watertight

Full Voltage. Combination and Non-Combination.

### NEC/CEC:

Class I, Division 1 and 2, Groups B, C, D  
Class I, Zone 1 and 2, Groups IIB + H<sub>2</sub>  
Class II, Division 1 and 2, Groups E, F, G  
Class III

### NEC/CEC:

NEMA 4, 4X, 7BCD, 9EFG  
CSA Type 4, 4X

### Application

- Combination and non-combination motor starters are used in areas where hazardous materials are handled or stored.
- These units provide disconnecting means, undervoltage protection, circuit protection, and motor running protection.

### Features

- Copperfree cast aluminum.
- Precision machined flame path between box and cover.
- Bolt on slotted mounting feet.
- Stainless steel, captive Quad-Lead® cover bolts (disengage in 1-1/2 turns).
- External stainless steel breaker operating handle.
- Ground lug package and installation instructions for termination of ground wire enclosed.
- Four point control terminal block, NEMA 1B with wire markers.
- Breaker operators can be locked in the ON or OFF position (combination starters only).
- Four plugged 3/4" NPSM outlets drilled and tapped for control devices.
- Standard outlets top and bottom.
- Plugged 1/2" outlets top and bottom for optional breather/drain.
- Components are mounted on a galvanized steel removable pan.
- Enclosures are designed to accept Cutler-Hammer †, or Square D ■ motor starters/circuit breakers. For other manufacturers, contact your local representative.
- O-ring gasket insures watertight integrity.

### Standard Materials

- Bodies and covers: copperfree (4/10 of 1%) aluminum
- Block hinges, cover bolts, handle, breaker and operator shafts: stainless steel
- O-ring: neoprene

### Standard Finish

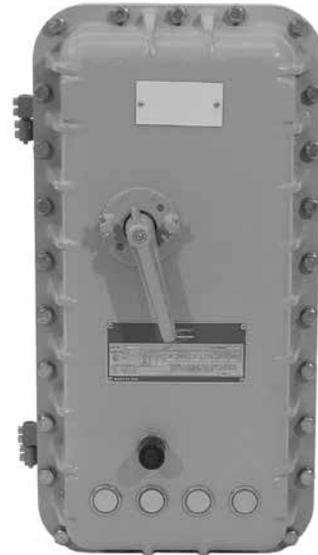
- Corrosion resistant gray powder coat epoxy inside and out

### Options

- See modifications page.

### NEC Certifications and Compliances

- ANSI/UL Standards: UL 508, UL 50, UL 1203
- CSA Standards: C22.2 No. 0-10, C22.2 No. 14-10, C22.2 No. 25-1996, C22.2 No. 30-M1986 and C22.2 No. 94-M91
- cCSAus Certified: 2561837



CONTROLS: NEC/CEC EXPLOSIONPROOF MOTOR STARTERS

Appleton®

† Cutler-Hammer is a registered trademark of Eaton Corporation.

■ Square D is a registered trademark of Schneider Electric.

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### Catalog Numbering Guide

Example: The part number below depicts an Appleton, Class I, Division I, Groups B, C and D, NEMA Size 1, Bolted type, Combination Full Voltage Nonreversing Motor Starter operating at 480 Vac, Cutler-Hammer + starter w/120 Vac control voltage, and a Cutler-Hammer 7A MCP. If a breaker is not required, omit last two characters.

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<b>AE</b> NEC/CEC Certified AE Series	<b>1</b> NEMA Size: 0 1 2 3 4 5	<b>B B</b> Starter Function: A - FVNR (ATL) B - Combination FVNR M - Lighting Contactor (3- thru 12-pole) ① N - Combination Lighting Contactor (3- thru 12-pole) ① Optional Starter Function ②: C - FVR D - Combination FVR E - 2S1W F - Comb. 2S1W G - 2S2W H - Combination 2S2W J - Contactor (3 pole) K - Combination Contactor (3-pole)	<b>4</b> Operating Voltage: 1 - 120 Vac 2 - 240 Vac 3 - 380 Vac 4 - 480 Vac 6 - 600 Vac 9 - 208 Vac	<b>W</b> Starter Manufacturer: ③ W - Standard; Eaton/Cutler-Hammer (A200) C - Freedom (AN16) Bi Metal; Eaton/Cutler-Hammer and A - Freedom (AN19) Electronic; Eaton/Cutler-Hammer S - Square D	<b>1</b> Control Voltage (120 V coil standard): 1 - 120 Vac 2 - 240 Vac 3 - 380 Vac 4 - 480 Vac 6 - 600 Vac 8 - 480 V Coil/120 V Control 9 - 208 Vac 0 - 277 Vac	<b>C</b> Breaker Manufacturer: ③ C - Cutler-Hammer S - Square D	<b>2</b> MCP or Breaker Trip: MCP 1 - 3 Amp 2 - 7 Amp 3 - 15 Amp 4 - 30 Amp 5 - 50 Amp 6 - 70 Amp 7 - 100 Amp 8 - 150 Amp 9 - 250 Amp 0 - 400 Amp	<b>▲</b> Suffix for Other Options/Features: See Modifications Breaker Trip (Thermal Mag): A - 15 Amp B - 20 Amp C - 25 Amp D - 30 Amp E - 35 Amp F - 40 Amp G - 50 Amp H - 60 Amp J - 70 Amp K - 80 Amp M - 90 Amp N - 100 Amp P - 125 Amp Q - 150 Amp R - 175 Amp S - 200 Amp T - 225 Amp U - 250 Amp V - 300 Amp W - 350 Amp X - 400 Amp
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① Standard starter is manufactured by Square D; electrically operated, electrically held. Optional starter manufacture is ASCO; electrically operated, mechanically held. Contact your local sales representative for details.  
 ② Contact your local sales representative for details.  
 ③ Contact your local sales representative for additional UL Classified starters (Allen Bradley 509 and Vacuum, Sprecher and Schuh, Siemens, GE, and Cutler Hammer ITT Softstart and V200 Vacuum).

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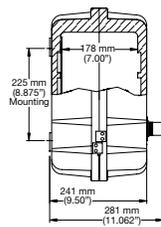
NEMA 4, 4X, 7BCD, 9EFG  
 CSA Type 4, 4X

**Empty Enclosure**

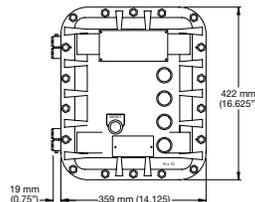
NEMA Size	Catalog Number <sup>▲</sup>	Approximate Weight kg (lb)	Standard Conduit (Inches)	Mounting Hardware Set Catalog Number
<b>Full Voltage Nonreversing Enclosure Only</b>				
0	AE0BA	36 (80)		
1	AE1BA	36 (80)	1-1/2	
2	AE2BA	39 (85)		AMH7
3	AE3BA	64 (140)	2	
4	AE4BA	64 (140)	2-1/2	
5	AE5BA	227 (500)	4	AMH8

**Dimensions in Millimeters (Inches) – Starter Only**

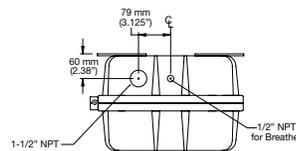
**Enclosure Layout for Size 0, 1 and 2 – Starter Only**



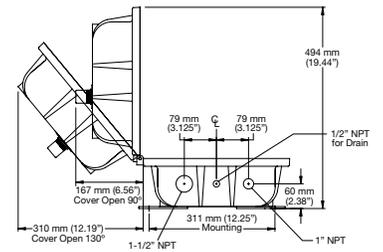
Left Side View



Front View

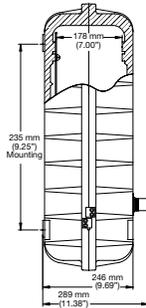


Top View

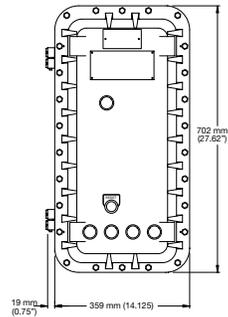


Bottom View

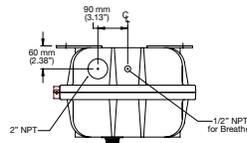
**Enclosure Layout for Size 3 – Starter Only**



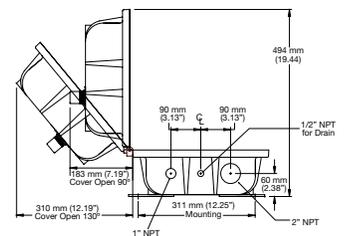
Left Side View



Front View



Top View



Bottom View

<sup>▲</sup> To complete the catalog number please add the appropriate suffix for other options/features. Suffixes, see AEB Series Motor Starters Modifications.

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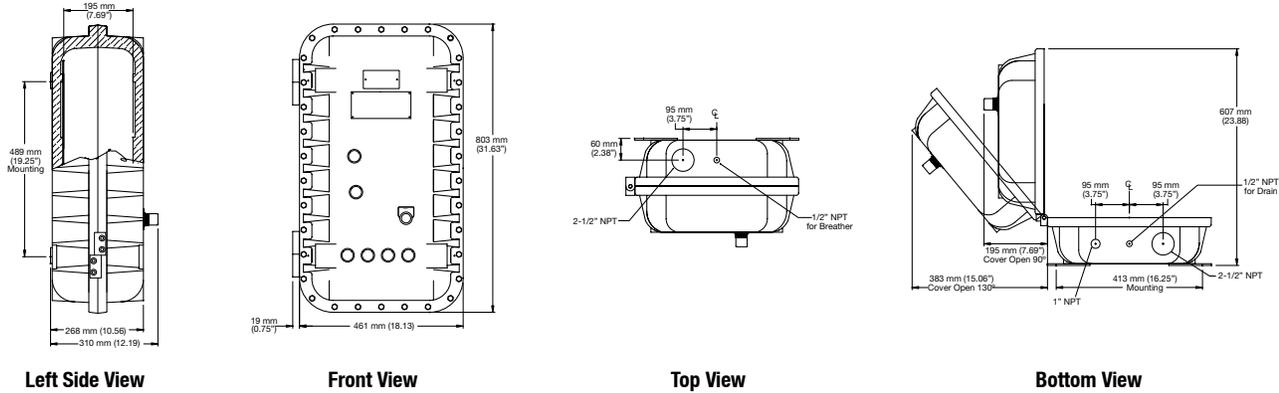
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NEMA 4, 4X, 7BCD, 9EFG  
 CSA Type 4, 4X

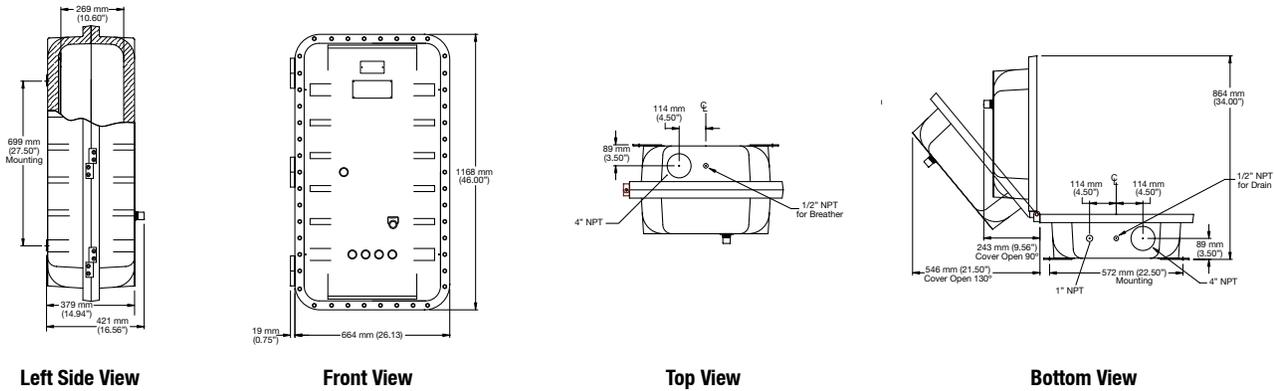
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Dimensions in Millimeters (Inches) – Starter Only

Enclosure Layout for Size 4 – Starter Only



Enclosure Layout for Size 5 – Starter Only



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