

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 + H₂
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 ①, 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

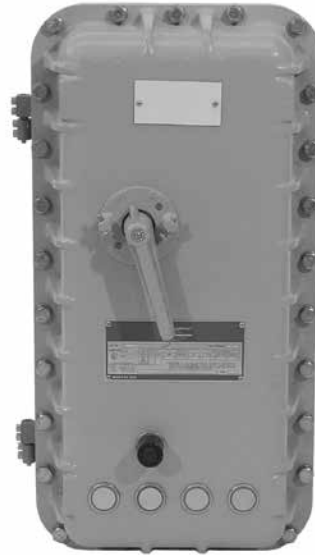
- Corrosion resistant gray powder coat epoxy inside and out

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.

AE	1	B	B	4	W	1	C	2	-
NEC/CEC Certified AE Series	NEMA Size: 0 1 2 3 4 5	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)			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		Breaker Manufacturer: ③ C - Cutler-Hammer S - Square D		Suffix for Other Options/Features: See Modifications
		Enclosure Type: B Series	Operating Voltage: 1 - 120 Vac 2 - 240 Vac 3 - 380 Vac 4 - 480 Vac 6 - 600 Vac 9 - 208 Vac		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		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 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		

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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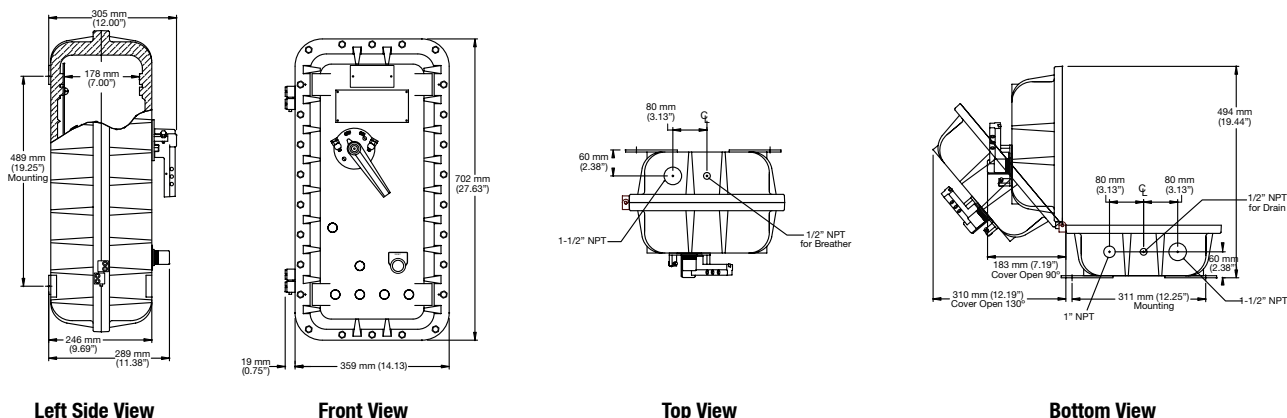
CSA Type 4, 4X

Empty Enclosure

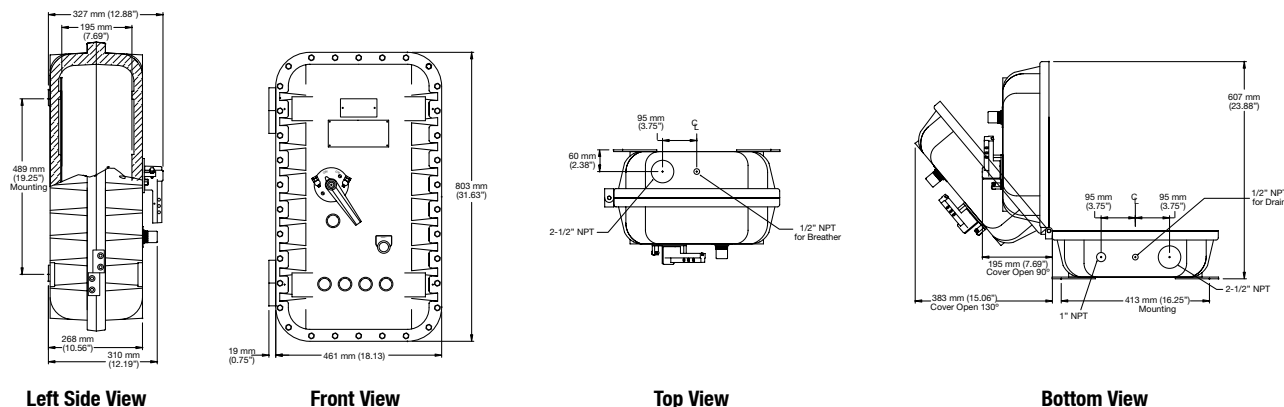
NEMA Size	Catalog Number ①	Approximate Weight kg (lb)	Standard Conduit (Inches)	Mounting Hardware Set Catalog Number
Combination Full Voltage Nonreversing Enclosure Only				
0	AE0BB	36 (80)	1-1/2	AMH7
1	AE1BB	36 (80)		
2	AE2BB	39 (85)		
3	AE3BB	64 (140)	2-1/2	AMH8
4	AE4BB	64 (140)		
5	AE5BB	227 (500)	4	AMH8

Dimensions in Millimeters (Inches) – Combination

Enclosure Layout for Size 0, 1 and 2 – Combination



Enclosure Layout for Size 3 and 4 – Combination



① 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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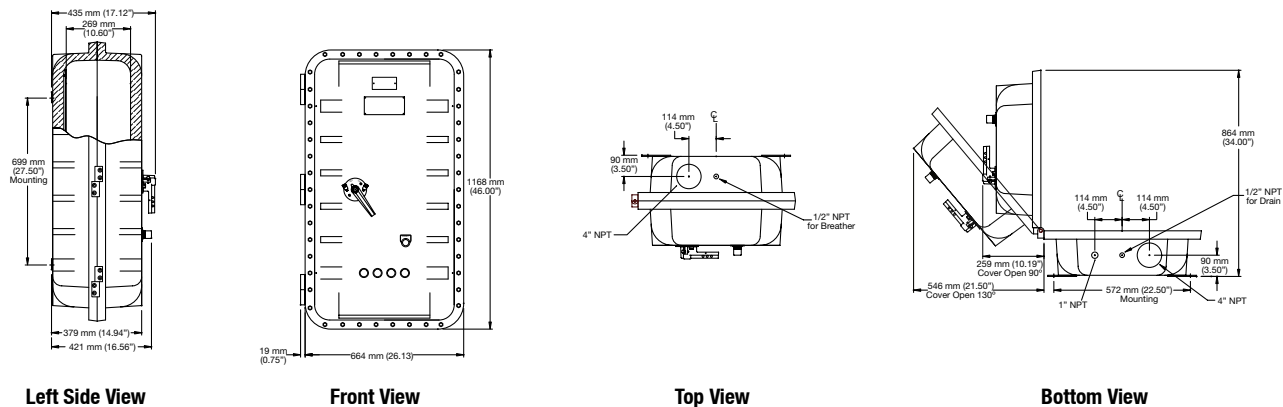
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NEC/CEC:

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

Dimensions in Millimeters (Inches) — Combination

Enclosure Layout for Size 5 — Combination



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CONTROLS: NEC/CEC EXPLOSIONPROOF MOTOR STARTERS

APPLETON™

Combination Full Voltage Motor Starters With Motor Circuit Protector (MCP) — Nonreversing — 3-Phase, 60 Hertz, 120 V Coil

Line Voltage	NEMA Size	Maximum Horsepower	Amp Trip	Catalog Number ①	Approximate Weight kg (lb)	Conduit Size (Inches)	Mounting Hardware Set Catalog Number
480	0	1	3	AE0BB4W1C1	57 (125)	1-1/2	AMH7
		3	7	AE0BB4W1C2	57 (125)		
		5	15	AE0BB4W1C3	57 (125)		
	1	7	15	AE1BB4W1C3	57 (125)		
		10	30	AE1BB4W1C4	59 (130)		
	2	12	30	AE2BB4W1C4	59 (130)	2-1/2	
		25	50	AE2BB4W1C5	59 (130)		
	3	30	50	AE3BB4W1C5	88 (195)		
		50	100	AE3BB4W1C7	88 (195)		
	4	100	150	AE4BB4W1C8	88 (195)	4	
5	200	400	AE5BB4W1C0	227 (500)	AMH8		
600	0	1	3	AE0BB6W1C1	57 (125)	1-1/2	AMH7
		3	7	AE0BB6W1C2	57 (125)		
		5	15	AE0BB6W1C3	57 (125)		
	1	7	15	AE1BB6W1C3	57 (125)		
		10	30	AE1BB6W1C4	57 (125)		
	2	20	30	AE2BB6W1C4	59 (130)	2-1/2	
		25	50	AE2BB6W1C5	59 (130)		
	3	40	50	AE3BB6W1C5	88 (195)		
		50	100	AE3BB6W1C7	88 (195)		
	4	60	100	AE4BB6W1C7	88 (195)	4	
		100	150	AE4BB6W1C8	88 (195)		
5	200	400	AE5BB6W1C0	227 (500)	AMH8		

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