

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 +, 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

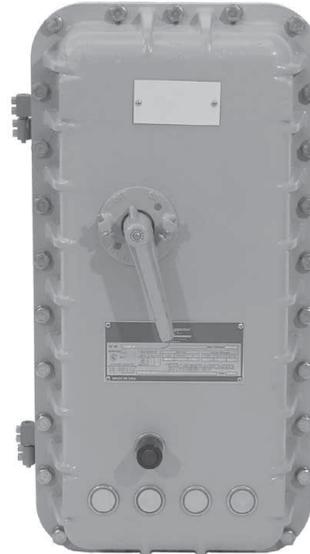
- Corrosion resistant gray powder coat epoxy inside and out

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.

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

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.

CONTROLS: NEC/CEC EXPLOSIONPROOF MOTOR STARTERS

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

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).

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

Combination Full Voltage Motor Starters with Thermal Magnetic Circuit Breaker – Nonreversing — 3-Phase, 60 Hertz, 120 V Coil

Line Voltage	NEMA Size	Maximum Horsepower	Amp Trip	Catalog Number [▲]	Approximate Weight (kg (lb))	Conduit Size (Inches)	Mounting Hardware Set Catalog Number	
480	0	3	15	AE0BB4W1CA	57 (125)	1-1/2	AMH7	
		5	20	AE0BB4W1CB	57 (125)			
	1	7-1/2	30	AE1BB4W1CD	57 (125)			
		10	35	AE1BB4W1CE	57 (125)			
	2	20	50	AE2BB4W1CG	59 (130)			2-1/2
		25	70	AE2BB4W1CJ	59 (130)			
	3	50	100	AE3BB4W1CN	88 (195)			
		60	125	AE3BB4W1CP	88 (195)			
	4	75	150	AE4BB4W1CQ	88 (195)	4	AMH8	
		100	200	AE4BB4W1CS	88 (195)			
		125	250	AE5BB4W1CU	227 (500)			
	5	150	300	AE5BB4W1CV	227 (500)	4	AMH8	
200		400	AE5BB4W1CX	227 (500)				
0		5	15	AE0BB6W1CA	57 (125)			1-1/2
1	7-1/2	20	AE1BB6W1CB	57 (125)				
	10	30	AE1BB6W1CD	57 (125)				
2	15	40	AE2BB6W1CF	59 (130)				
	25	50	AE2BB6W1CG	59 (130)				
3	30	70	AE3BB6W1CJ	88 (195)	2-1/2			
	50	100	AE3BB6W1CN	88 (195)				
4	75	125	AE4BB6W1CP	88 (195)				
	100	150	AE4BB6W1CQ	88 (195)				
5	150	250	AE5BB6W1CU	227 (500)	4	AMH8		
	200	300	AE5BB6W1CV	227 (500)				

CONTROLS: NEC/CEC EXPLOSIONPROOF MOTOR STARTERS



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

AEB Series Bolted Motor Starters and Contactors

Explosionproof, Dust-Ignitionproof, Watertight

Full Voltage. Combination and Non-Combination.

NEC/CEC:

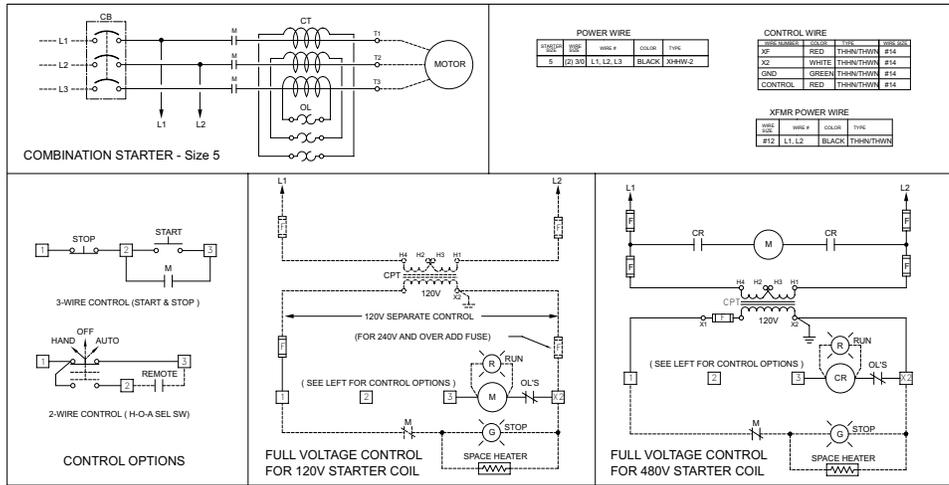
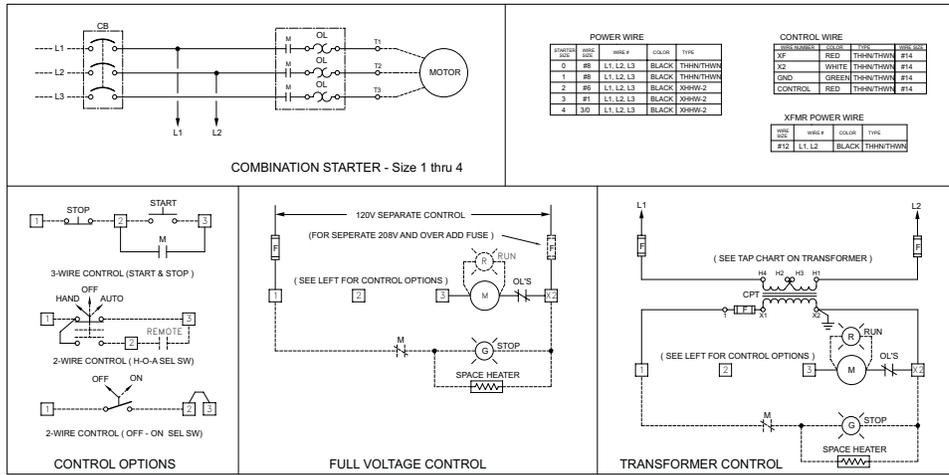
Class I, Division 1 and 2, Groups B, C, D
 Class I, Zone 1 and 2, Groups IIB + H2
 Class II, Division 1 and 2, Groups E, F, G
 Class III

NEC/CEC:

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

Combination Full Voltage Motor Starters with Thermal Magnetic Circuit Breaker – Nonreversing – 3-Phase, 60 Hertz, 120 V Coil

Wiring Diagram



CONTROLS: NEC/CEC EXPLOSIONPROOF MOTOR STARTERS

Appleton

AEB Series Bolted Motor Starters and Contactors

Explosionproof, Dust-Ignitionproof, Watertight

Full Voltage. Combination and Non-Combination.

NEC/CEC:

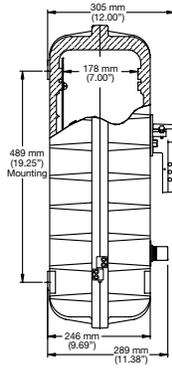
Class I, Division 1 and 2, Groups B, C, D
Class I, Zone 1 and 2, Groups IIB + H₂
Class II, Division 1 and 2, Groups E, F, G
Class III

NEC/CEC:

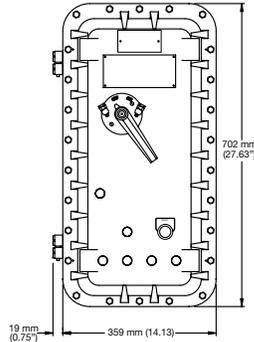
NEMA 4, 4X, 7BCD, 9EFG
CSA Type 4, 4X

Dimensions in Millimeters (Inches) – Combination

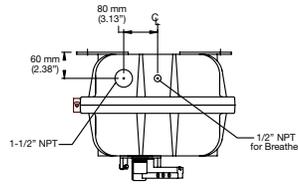
Enclosure Layout for Size 0, 1 and 2 – Combination



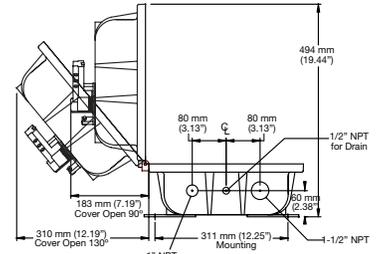
Left Side View



Front View

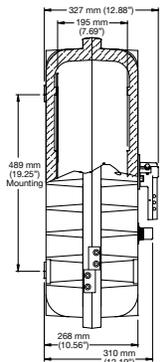


Top View

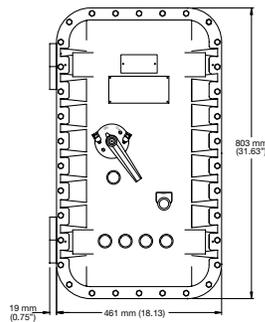


Bottom View

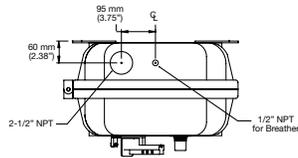
Enclosure Layout for Size 3 and 4 – Combination



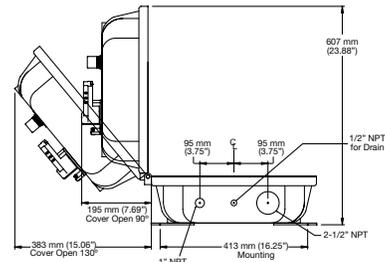
Left Side View



Front View

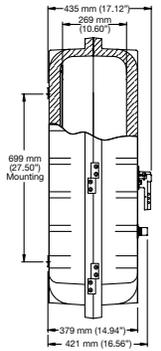


Top View

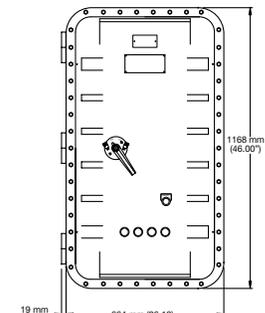


Bottom View

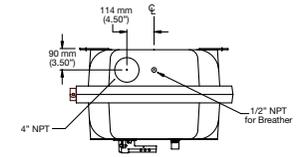
Enclosure Layout for Size 5 – Combination



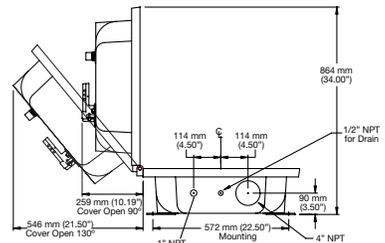
Left Side View



Front View



Top View



Bottom View

CONTROLS: NEC/CEC EXPLOSIONPROOF MOTOR STARTERS

