

AE Series Bolted Circuit Breakers and Enclosures

Explosionproof, Dust-Ignitionproof, Watertight

2- and 3-Pole, Non-Interchangeable Trip. Bolted Enclosure Type.

NEC/CEC:

Class I, Division 1 and 2, Groups B, C, D

Class II, Division 1 and 2, Groups E, F, G

Class III

NEMA 4, 4X

Application

- Explosionproof circuit breaker enclosures are used where hazardous materials are handled or stored.
- These units are used for overload and short circuit protection, control of lighting and power circuits.

Features

- Precision machined flame path between box and cover.
- Bolt on stainless steel slotted mounting feet.
- Stainless steel, captive Quad-Lead® cover bolts are standard (disengaged in 1-1/2 turns).
- Ground lug package and installation instructions for termination of ground wire enclosed.
- External operating handle with stops for limiting handle travel.
- Breaker operators can be locked in the ON or OFF position (up to 3 padlocks).
- External flange maximizes internal space.
- Standard outlets top and bottom for line and load wiring.
- Plugged 1/2" outlets top and bottom for breather and drain.
- Breakers mounted on a galvanized steel removable pan.
- Enclosures are designed to accept GE[®], Square D[®], and Cutler-Hammer [†] circuit breakers.
- O-ring gasket insures watertight integrity.

Standard Materials

- Bodies and covers: copperfree (4/10 of 1% max.) aluminum
- Cover bolts, hinges, breaker and operator shafts: stainless steel
- Hinges: stainless steel
- O-ring: neoprene

Standard Finishes

- Bodies and covers: gray epoxy powder coat inside and outside standard

Options

Must be listed in alphanumeric sequence at the end of the catalog number.

- Auxiliary switch (1NC, 1NO), add suffix —**AS1**.
- Auxiliary switch (2NC, 2NO), add suffix —**AS2**.
- Breather, NEMA 4X (includes outlet and installation), add suffix —**BR**.
- Drain, NEMA 4X (includes outlet and installation), add suffix —**DN**.
- External grounding stud, add suffix —**EGS**.
- Plastic nameplate, 2" x 4", 1/8" black letters on white surface, 3 lines max, specify legend, add suffix —**NP**.
- Shunt trip (specify voltage), add suffix —**ST**.
- Under voltage release (specify voltage), add suffix —**UV**.
- For +50 °C (+122 °F) breaker rating, add suffix —**V**.

NEC/CEC Certifications and Compliances

- UL Standard: UL 1203
- UL Classified: E84577
- CSA Standard: C22.2 No. 0, C22.2 No. 4, C22.2 No. 5, C22.2 No. 25, C22.2 No. 30
- CSA Certified (800A Max): 150757



► GE is a registered trademark of General Electric Company.

■ Square D is a registered trademark of Schneider Electric.

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

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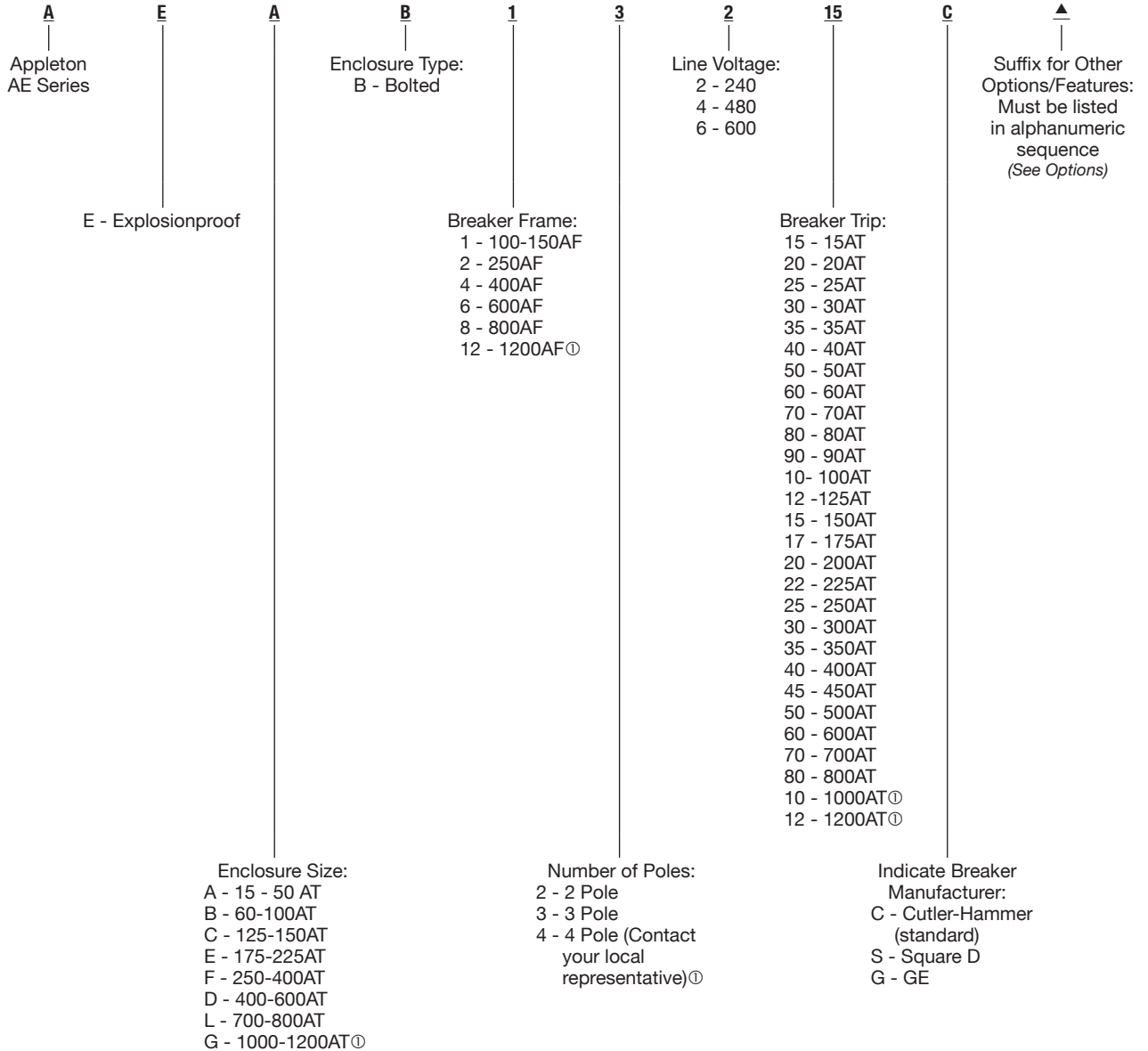
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Catalog Numbering Guide



DISTRIBUTION EQUIPMENT: NEC/CEC EXPLOSIONPROOF CIRCUIT BREAKERS



^① UL Classified. NEC Certification only.

[▲] To complete the catalog number please add the appropriate suffix for other options/features. These suffixes can be found in the modifications table in this section.

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Circuit Breaker Interrupting Ratings (Symmetrical RMS Amps)

Breaker Type	240 Vac	480 Vac	600 Vac
Cutler-Hammer †			
EHD	18,000	14,000	—
FD	65,000	35,000	18,000
HFD	100,000	65,000	25,000
JD	65,000	35,000	18,000
HJD	100,000	65,000	25,000
KD	65,000	35,000	25,000
HKD	100,000	65,000	35,000
LD	65,000	35,000	22,000
HLD	100,000	65,000	35,000
MDL	65,000	50,000	25,000
HMDL	100,000	65,000	35,000
ND	65,000	50,000	25,000
HND	100,000	65,000	35,000
GE ▶			
TED	18,000	18,000	14,000
THED	65,000	25,000	18,000
TFK	25,000	22,000	18,000
THFK	65,000	25,000	18,000
TJK4	42,000	30,000	22,000
THJK4	65,000	35,000	25,000
TJK6	42,000	30,000	22,000
THJK6	65,000	35,000	25,000
TKM8	42,000	30,000	22,000
THKM8	65,000	35,000	25,000
TKM12	42,000	30,000	22,000
THKM12	65,000	35,000	25,000

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Breaker Frame Size	Breaker Type/ Interrupting Capacity ①	Volts	Amp Rating	Catalog Numbers ② ▲		Standard Conduit Outlets (Inches)
				2-Pole	3-Pole	
100	EHD 18,000 AIC @ 240 Vac	240 Vac, 125/250 Vdc	15	AEAB12215C	AEAB13215C	1-1/2
			20	AEAB12220C	AEAB13220C	
			25	AEAB12225C	AEAB13225C	
			30	AEAB12230C	AEAB13230C	
			35	AEAB12235C	AEAB13235C	
			40	AEAB12240C	AEAB13240C	2
			50	AEAB12250C	AEAB13250C	
			60	AEAB12260C	AEAB13260C	
			70	AEAB12270C	AEAB13270C	
			80	AEAB12280C	AEAB13280C	
150	FD 65,000 AIC @ 240 Vac	240 Vac, 125/250 Vdc	125	AECB12212C	AECB13212C	2-1/2
			150	AECB12215C	AECB13215C	
100	EHD 14,000 AIC @ 480 Vac	480 Vac, 125/250 Vdc	15	AEAB12415C	AEAB13415C	1-1/2
			20	AEAB12420C	AEAB13420C	
			25	AEAB12425C	AEAB13425C	
			30	AEAB12430C	AEAB13430C	
			35	AEAB12435C	AEAB13435C	
			40	AEAB12440C	AEAB13440C	2
			50	AEAB12450C	AEAB13450C	
			60	AEAB12460C	AEAB13460C	
			70	AEAB12470C	AEAB13470C	
			80	AEAB12480C	AEAB13480C	
150	FD 35,000 AIC @ 480 Vac	480 Vac, 125/250 Vdc	125	AECB12412C	AECB13412C	2-1/2
			150	AECB12415C	AECB13415C	
150	FD 18,000 AIC @ 600 Vac	600 Vac, 125/250 Vdc	15	AEAB12615C	AEAB13615C	1-1/2
			20	AEAB12620C	AEAB13620C	
			25	AEAB12625C	AEAB13625C	
			30	AEAB12630C	AEAB13630C	
			35	AEAB12635C	AEAB13635C	
			40	AEAB12640C	AEAB13640C	2
			50	AEAB12650C	AEAB13650C	
			60	AEAB12660C	AEAB13660C	
			70	AEAB12670C	AEAB13670C	
			80	AEAB12680C	AEAB13680C	
150			90	AEAB12690C	AEAB13690C	2
			100	AEAB12610C	AEAB13610C	
			125	AECB12612C	AECB13612C	
150			150	AECB12615C	AECB13615C	2-1/2

① For higher interrupting capacities, contact your local representative.

② Cutler-Hammer breaker provided as standard. For GE breaker change **C** to **G**; For Square D breaker change **C** to **S**.

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Breaker Frame Size	Breaker Type/ Interrupting Capacity ②	Volts	Amp Rating	Catalog Numbers ③ ▲		Standard Conduit Outlets (Inches)
				2-Pole	3-Pole	
250	JD 18,000 AIC @ 600 Vac	600 Vac, 125/250 Vdc	70	AEEB22670C	AEEB23670C	3
			90	AEEB22690C	AEEB23690C	
			100	AEEB22610C	AEEB23610C	
			125	AEEB22612C	AEEB23612C	
			175	AEEB22617C	AEEB23617C	
			200	AEEB22620C	AEEB23620C	
			225	AEEB22622C	AEEB23622C	
400	KD 25,000 AIC @ 600 Vac	600 Vac, 125/250 Vdc	250	AEFB22625C	AEFB23625C	3
			125	AEFB42612C	AEFB43612C	
			175	AEFB42617C	AEFB43617C	
			200	AEFB42620C	AEFB43620C	
			225	AEFB42622C	AEFB43622C	
			250	AEFB42625C	AEFB43625C	
			300	AEFB42630C	AEFB43630C	
			350	AEFB42635C	AEFB43635C	
600	LD 25,000 AIC @ 600 Vac	600 Vac, 125/250 Vdc	450	AEDB62645C	AEDB63645C	4
			500	AEDB62650C	AEDB63650C	
			600	AEDB62660C	AEDB63660C	
800	MDL 25,000 AIC @ 600 Vac	600 Vac, 125/250 Vdc	300	AELB82630C	AELB83630C	(2) 4
			350	AELB82635C	AELB83635C	
			400	AELB82640C	AELB83640C	
			450	AELB82645C	AELB83645C	
			500	AELB82650C	AELB83650C	
			600	AELB82660C	AELB83660C	
			700	AELB82670C	AELB83670C	
1200	MDL 25,000 AIC @ 600 Vac	600 Vac, 125/250 Vdc	600	AEGB122660C ①	AEGB123660C ①	(2) 4
			800	AEGB122680C ①	AEGB123680C ①	
			1000	AEGB122610C ①	AEGB123610C ①	
			1200	AEGB122612C ①	AEGB123612C ①	

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Class III

NEMA 4, 4X

Dimensions in Millimeters (Inches)

Diagram 1—Enclosure Layout for 50 - 250 Amp (Sizes: A - B - C - E)

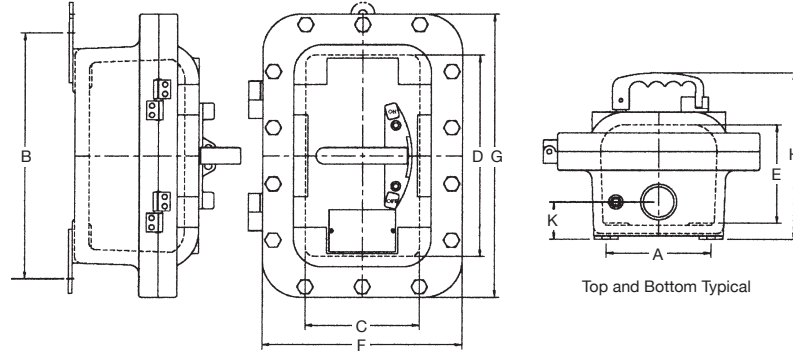
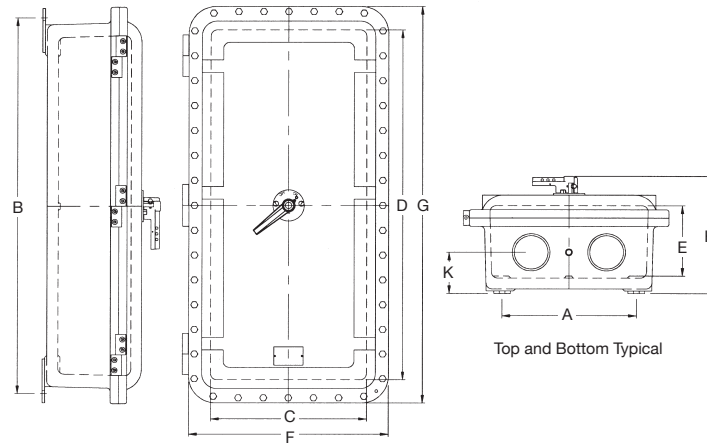


Diagram 2—Enclosure Layout for 400 - 600 Amp (Sizes: F - D)



Enclosure Only

Enclosure Size	Catalog Number	Dia. Number	Dimensions in Millimeters (Inches)								Outlet Size (in)	Number of Outlets	Dimension mm (in)	Approximate Weight kgs (lbs)
			Mounting		Inside			Outside						
			A	B	C	D	E	F	G	H			K	
A	AEAB	1	139.7 (5.50)	333.5 (13.13)	155.7 (6.13)	273.0 (10.75)	133.3 (5.25)	266.7 (10.5)	384.3 (15.3)	165.1 (6.5)	1-1/2	2	50.8 (2.00)	17.24 (38)
B	AEBB	1	152.4 (6.00)	457.2 (18.00)	165.1 (6.50)	406.4 (16.00)	139.7 (5.50)	279.4 (11.00)	502.7 (20.5)	168.4 (6.63)	2	2	58.6 (2.31)	25.85 (57)
C	AECB	1	260.3 (10.25)	574.8 (22.63)	289.0 (11.38)	508.0 (20.00)	162.0 (6.38)	408.94 (16.1)	622.3 (24.5)	206.5 (8.13)	2-1/2	2	88.9 (3.50)	47.17 (104)
E	AEEB	1	215.9 (8.50)	689.1 (27.13)	285.7 (11.25)	758.9 (29.88)	183.8 (7.63)	400.05 (15.75)	746.25 (29.38)	239.77 (9.44)	3	2	101.6 (4.00)	65.77 (145)
F	AEFB	2	241.3 (9.50)	692.1 (27.25)	285.7 (11.25)	758.9 (29.88)	204.7 (8.06)	416.05 (16.381)	889.0 (35.00)	257.3 (10.13)	3	4	106.4 (4.19)	77.11 (170)
D	AEDB	2	409.7 (16.13)	1035.0 (40.75)	457.2 (18.00)	1079.5 (42.50)	193.8 (7.63)	457.2 (18.00)	520.7 (42.5)	250.95 (9.88)	4	4	109.4 (4.31)	103.42 (228)

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Dimensions in Millimeters (Inches)

Diagram 3—Enclosure Layout for 800 Amp (Size: L)

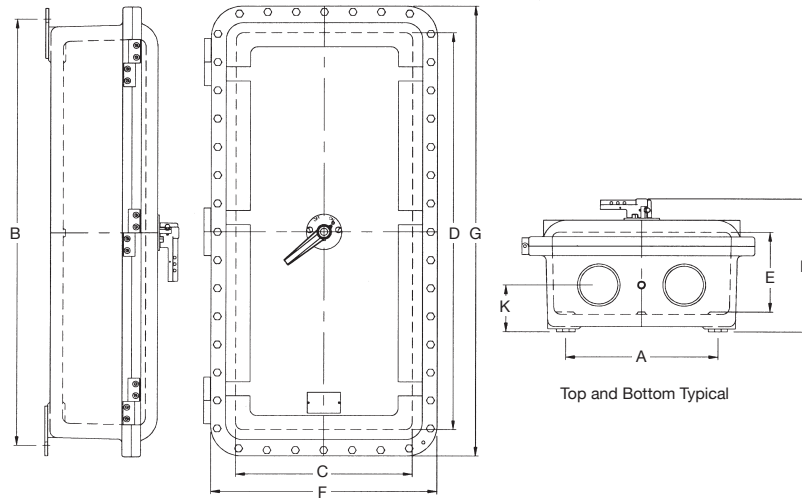
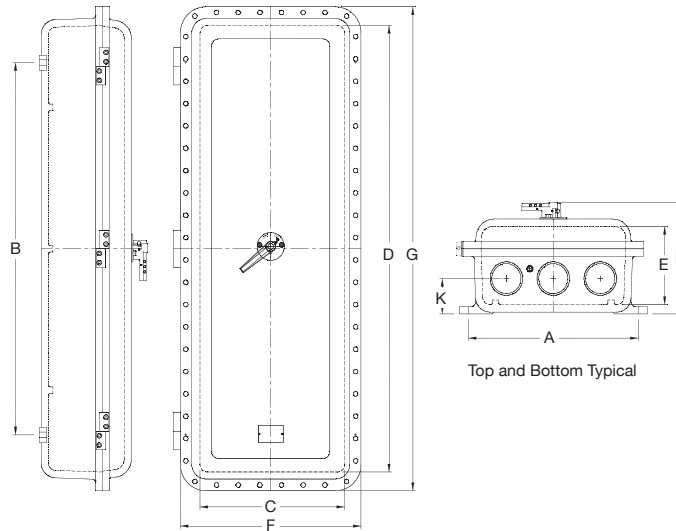


Diagram 4—Enclosure Layout for 1200 Amp (Size: G)



Enclosure Only

Enclosure Size	Catalog Number	Dia. Number	Dimensions in Millimeters (Inches)										Outlet Size (in)	Number of Outlets	Dimension mm (in) K	Approximate Weight kgs (lbs)
			Mounting		Inside				Outside							
			A	B	C	D	E	F	G	H						
L	AELB	3	406.4 (16.00)	1152.6 (45.38)	473.2 (18.63)	1073.1 (42.25)	215.9 (8.50)	606.55 (23.88)	1216.15 (47.88)	287.27 (11.31)	4	4	127.0 (5.00)	190.06 (419)		
G ^①	AEGB	4	543.1 (21.38)	1270.0 (50.00)	508.0 (20.00)	1524.0 (60.00)	254.0 (10.00)	635.0 (25.00)	1651 (65.00)	317.5 (12.5)	4	6	111.2 (4.38)	257.19 (567)		

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