

# EB Series Bolt-ON Series Circuit Breakers and Enclosures

## Explosionproof, Dust-Ignitionproof

### CEC:

Class I, Groups B, C, D

Class II, Groups E, F, G

Class III

NEMA 3R, 4<sup>+</sup>, 4X<sup>+</sup>, 7BCD, 9EFG, 12

### Application

- These compact, rugged enclosures are used for protection and control of electrical equipment and circuits in:
  - Hazardous locations
  - Damp or wet locations
  - Corrosive locations
- The thermal magnetic breakers provide short circuit protection and thermal time delay overload protection, plus a disconnect means for service entrance, feeder or branch circuits used for lighting, heating, motors and equipment.

### Features

- Enclosure housings feature lightweight, corrosion resistant, spark-proof, copperfree aluminum with an epoxy coat for corrosion resistant construction.
- Enclosures have hinged, removable covers secured by “quick-bolts”. Mating surfaces are precision ground to explosionproof specifications.
- Captive “quick-bolts” allow fast, easy release of cover with a few turns on each. Bolts have hex head with screwdriver slot.
- Covers are hinged on left side and are removable. Provides easy access to interior for installation and maintenance. The hinged cover may be left in place to help protect the explosionproof machined surface during routine maintenance.
- Breaker handles are rugged and positive operating. The breaker actuator is designed to self-locate on the breaker handle. This unique feature prevents damage to the breaker toggle if the door is closed without aligning handle with breaker toggle position.
- Handle will accommodate up to 3 locks.
- Enclosures feature compact, easy to install design. Four removable mounting lugs with key holes, permitting easy installation for rack or individual mounting.
- Standard conduit openings are located top and bottom for line and load. Additional openings on top and bottom for drain and breather are also provided, with close-up plugs.
- Interior components are mounted on easily removable pan. Complete removal of this assembly gives full access to enclosure interior for wire pulling.

### Standard Materials

- Housings: copperfree (4/10ths of 1%) aluminum
- Operating shafts: stainless steel with stainless steel bushings
- Breaker actuator: spring steel
- Bolts: stainless steel

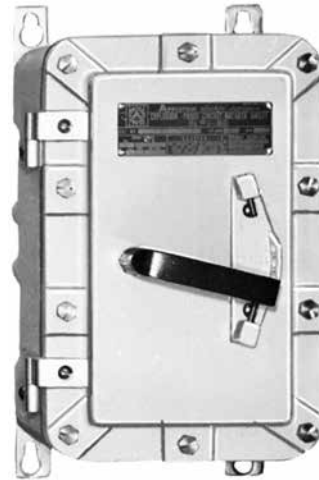
### Standard Finishes

- Exterior housing surfaces: epoxy coated

### Options

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

- Grounded neutral lug, add suffix —**GNL**.
- Insulated neutral lug, add suffix —**INL**.
- Drain and breather set, add suffix —**DV**.
- For CSA 4X, add suffix —**4X**.
- For NEMA 4X (not suitable for Group B), add suffix —**N4**.
- For +50 °C (+122 °F) breaker rating, add suffix —**V**.



### CEC Certifications and Compliances

- CSA Standard: C22.2 No. 5.1, C22.2 No. 25, No. 30
- CSA Certified: 030391, 052308

▼ For NEMA 4X, add —**N4** suffix.

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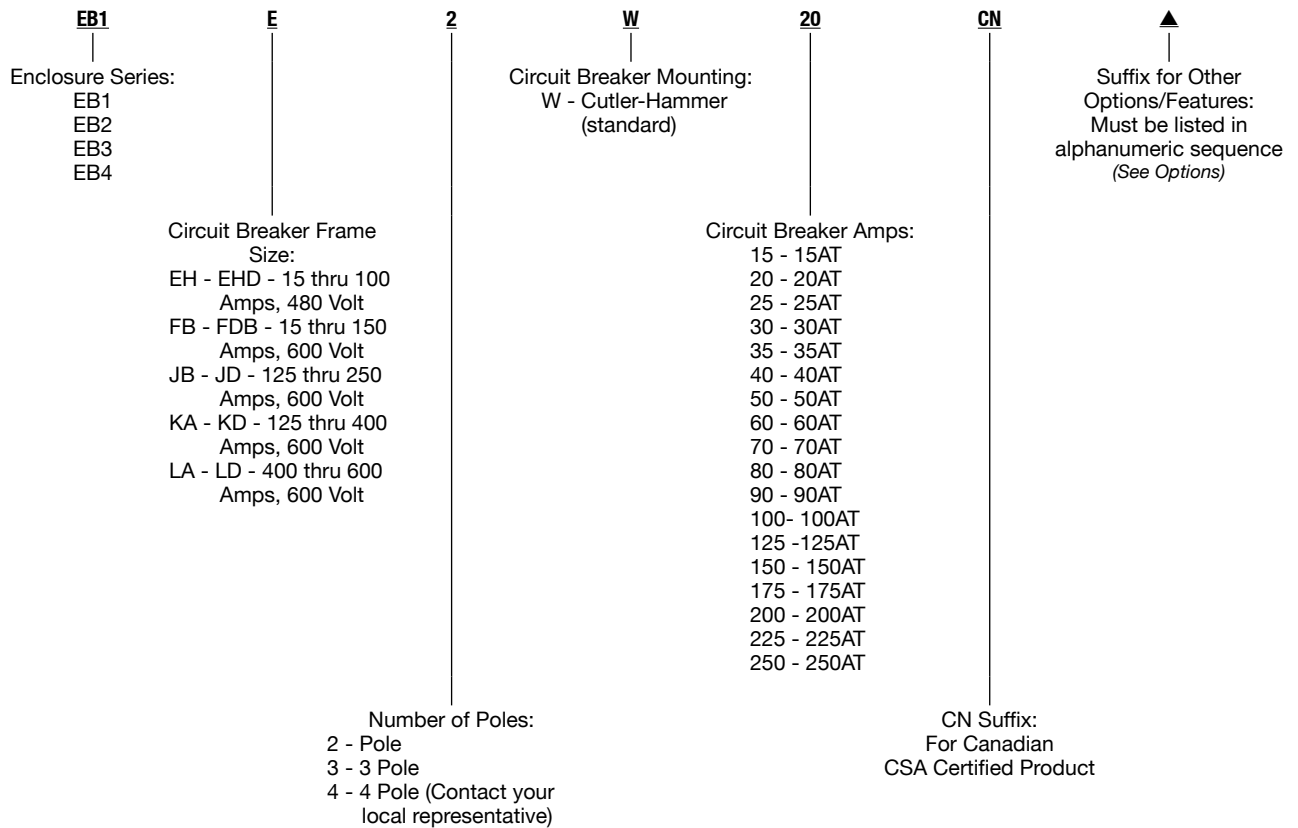
**Ordering Instructions**

Provide catalog number from listing tables. Enclosures are supplied with Cutler-Hammer circuit breakers as standard.

**Catalog Number Explanation**

Appleton catalog numbers incorporate a simple, systemized method of designating enclosure and component specifications. For example, an EB Series enclosure with breaker is cataloged as follows:

**Catalog Numbering Guide**



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▲ 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.  
 ▼ For NEMA 4X, add **-N4** suffix.  
 † Cutler-Hammer is a registered trademark of Eaton Corporation.

# EB Series Frame Bolt-ON Series Circuit Breakers and Enclosures

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EB2

Circuit Breaker		Catalog Numbers				
No. of Poles	Amp. Rating	Tap Size ①	Enclosure Only	With Breaker		
EHD Frame — 15 Amps thru 100 Amps 480 Vac or 250 Vdc (60 Hz)						
2	15	1-1/2	EB1	EB1EH2W15CN		
	20			EB1EH2W20CN		
	30			EB1EH2W30CN		
	40			EB1EH2W40CN		
	50			EB1EH2W50CN		
	70	2	EB2	EB2EH2W70CN		
	90			EB2EH2W90CN		
	100			EB2EH2W100CN		
	15			1-1/2	EB1	EB1EH3W15CN
	20					EB1EH3W20CN
30	EB1EH3W30CN					
40	EB1EH3W40CN					
50	EB1EH3W50CN					
3	70	2	EB2	EB2EH3W70CN		
	90			EB2EH3W90CN		
	100			EB2EH3W100CN		

① Conduit openings are tapped to size shown. A removable reducer bushing is furnished for each opening which, when installed, makes the conduit opening one size smaller.

▼ For NEMA 4X, add **-N4** suffix.

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 NEMA 3R, 4<sup>▼</sup>, 4X<sup>▼</sup>, 7BCD, 9EFG, 12

Circuit Breaker			Catalog Numbers	
No. of Poles	Amp. Rating	Tap Size ①	Enclosure Only	With Breaker
<b>FDB Frame — 15 Amps thru 150 Amps 600 Vac or 250 Vdc (60 Hz)</b>				
2	15	1-1/2	EB1	EB1FB2W15CN
	20			EB1FB2W20CN
	30			EB1FB2W30CN
	40			EB1FB2W40CN
	50			EB1FB2W50CN
	70	2	EB2	EB2FB2W70CN
	90			EB2FB2W90CN
	100			EB2FB2W100CN
	125			EB2FB2W125CN
	150			EB2FB2W150CN
3	15	1-1/2	EB1	EB1FB3W15CN
	20			EB1FB3W20CN
	30			EB1FB3W30CN
	40			EB1FB3W40CN
	50			EB1FB3W50CN
	70	2	EB2	EB2FB3W70CN
	90			EB2FB3W90CN
	100			EB2FB3W100CN
	125			EB2FB3W125CN
	150			EB2FB3W150CN
<b>JD Frame — 125 Amps thru 250 Amps 600 Vac or 250 Vdc (60 Hz)</b>				
2	175	2-1/2	EB3	EB3JB2W175CN
	200			EB3JB2W200CN
	225			EB3JB2W225CN
3	175	2-1/2	EB3	EB3JB3W175CN
	200			EB3JB3W200CN
	225			EB3JB3W225CN



EB2

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① Conduit openings are tapped to size shown. A removable reducer bushing is furnished for each opening which, when installed, makes the conduit opening one size smaller.

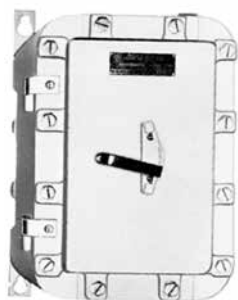
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EB3

Circuit Breaker			Catalog Numbers	
No. of Poles	Amp. Rating	Tap Size ①	Enclosure Only	With Breaker
<b>KD Frame — 125 Amps thru 400 Amps 600 Vac or 250 Vdc (60 Hz)</b>				
2	125	2-1/2	EB3	EB3KA2W125CN
	150			EB3KA2W150CN
	175			EB3KA2W175CN
	200			EB3KA2W200CN
	225			EB3KA2W225CN
3	125	2-1/2	EB3	EB3KA3W125CN
	150			EB3KA3W150CN
	175			EB3KA3W175CN
	200			EB3KA3W200CN
	225			EB3KA3W225CN
<b>LD Frame — 400 Amps thru 600 Amps 600 Vac or 250 Vdc (60 Hz)</b>				
2	250	3	EB4	EB4LA2W250CN
	300			EB4LA2W300CN
	350			EB4LA2W350CN
	400			EB4LA2W400CN
3	250	3	EB4	EB4LA3W250CN
	300			EB4LA3W300CN
	350			EB4LA3W350CN
	400			EB4LA3W400CN

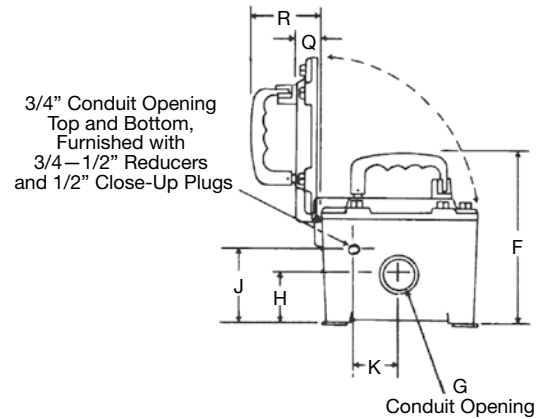
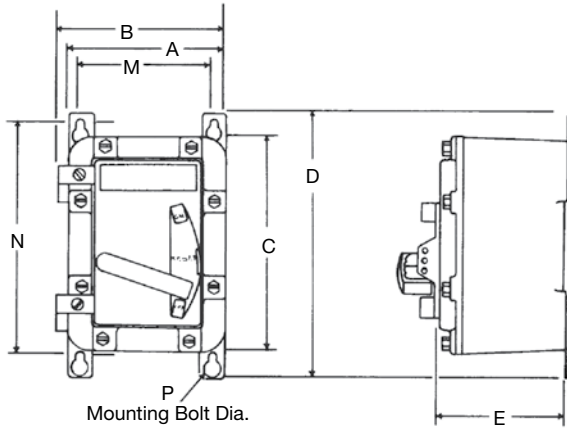
① Conduit openings are tapped to size shown. A removable reducer bushing is furnished for each opening which, when installed, makes the conduit opening one size smaller.

▼ For NEMA 4X, add —N4 suffix.

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### Dimensions in Millimeters (Inches)

Dim.	Catalog Numbers			
	EB1	EB2	EB3	EB4
A	196.8 (7.75)	196.8 (7.75)	393.7 (15.50)	393.7 (15.50)
B	209.5 (8.25)	209.5 (8.25)	406.4 (16.00)	406.4 (16.00)
C ②	308.1 (12.13)	308.1 (12.13)	596.9 (23.50)	800.1 (31.50)
D	374.6 (14.75)	374.6 (14.75)	614.4 (24.19)	817.6 (32.19)
E	165.1 (6.50)	165.1 (6.50)	289.6 (11.40)	289.6 (11.40)
F	225.5 (8.88)	225.5 (8.88)	323.9 (12.75)	323.9 (12.75)
G ③	38.1 (1.50)	38.1 (1.50)	50.8 (2.00)	76.2 (3.00)
H	57.9 (2.38)	57.9 (2.38)	100.1 (3.94)	100.1 (3.94)
J	86.6 (3.41)	86.6 (3.41)	115.8 (4.56)	115.8 (4.56)
K	65.0 (2.56)	65.0 (2.56)	—	—
M	155.7 (6.13)	155.7 (6.13)	298.5 (11.75)	298.5 (11.75)
N	336.5 (13.25)	336.5 (13.25)	576.3 (22.69)	779.5 (30.69)
P	9.5 (0.375)	9.5 (0.375)	—	—
Q	26.6 (1.50)	26.6 (1.50)	—	—
R	98.5 (3.88)	98.5 (3.88)	—	—

### Approximate Weight Kilograms (Pounds) ①

	Catalog Numbers			
	EB1	EB2	EB3	EB4
Enclosure Only	6.34 (14)	12.23 (27)	46 (101)	57 (126)
With Interior	7.70 (17)	14.95 (33)	54 (119)	68 (150)

① Approximate weights with breaker reflect largest size that will fit in each respective enclosure.

② For drain and breather set, add 50.8 mm (2") to dimension "C". Close-up plugs furnished when enclosures are ordered without drains and breathers.

③ Conduit openings are tapped to size shown. A removable reducer bushing is furnished for each opening which, when installed, makes the conduit opening one size smaller.

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