

# Molded Case Circuit Breakers

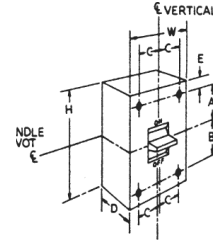
## Industrial Circuit Breakers

# Section 6

### Quick Reference Guide

### 15-600A Record Plus™ Circuit Breakers

The interruption ratings and voltages shown in the table are maximum ratings. A circuit breaker of the type given in the left-hand column may be applied at the given circuit voltage in any electrical distribution system where the available fault current at the load terminals of the breaker does not exceed the value in the table. That circuit breaker type may also be applied at intermediate values of circuit voltage provided the available fault current at the load terminals of the breaker does not exceed the value in the table for the higher value of voltage.



FG 600

### Ratings

#### FC 100 Amp Frame; Current Limiting (UL/cUL File No. E-11592)

Circuit Breaker Type	Ampere Rating	No. Poles	Maximum Voltage Rating		UL Listed Interrupting Ratings - rms Symmetrical Amperes (in Thousands)					IEC Listed Interrupting Ratings, Icu, Amperes (in Thousands)					Dimensions in. (mm.)			Approx. Ship Wt./Std. Pack
					Vac			Vdc		Vac			Vdc		H	W	D	
					240	480	600/347	250 (2p)	500 (3p)	220-240	400-415	500	250 (2p)	500 (3p)				
FCS	15-100	2, 3	600	500	42	25	18	22	30	36	22	14	22	30	6.4 (162.6)	3.0 (76.2)	3.2 (81.3)	2.5 lb/1
FCV	15-100	2, 3	600	500	65	35	22	25	35	50	30	18	25	35	6.4 (162.6)	3.0 (76.2)	3.2 (81.3)	2.5 lb/1
FCN	15-100	2, 3	600	500	150	65	25	30	42	85	50	22	30	42	6.4 (162.6)	3.0 (76.2)	3.2 (81.3)	2.5 lb/1
FCH	15-100	2, 3	600	500	200	100	35	42	65	100	80	36	42	65	6.4 (162.6)	3.0 (76.2)	3.2 (81.3)	2.5 lb/1
FCL	15-100	2, 3	600	500	200	150	42	65	80	200	150	50	65	80	6.4 (162.6)	3.0 (76.2)	3.2 (81.3)	2.5 lb/1

#### FB 100 Amp Frame; Current Limiting (UL/cUL File No. E-11592)

Circuit Breaker Type	Ampere Rating	No. Poles	Maximum Voltage Rating		UL Listed Interrupting Ratings - rms Symmetrical Amperes (in Thousands)					Dimensions in. (mm.)			Approx. Ship Wt./Std. Pack	
					Vac					H	W	D		
					240	277	347	480	600/347					
FBV	15-100	1	600/347	—	35	—	35	—	—	—	6.45 (163.8)	1.36 (34.5)	3.28 (83.3)	1.1 lb/1
		2	600/347	—	65	—	—	—	35	22	6.45 (163.8)	2.74 (69.6)	3.28 (83.3)	2.6 lb/1
		3	600/347	—	65	—	—	—	35	22	6.45 (163.8)	4.11 (104.4)	3.28 (83.3)	3.3 lb/1
FBN	15-100	1	600/347	—	65	—	65	—	—	—	6.45 (163.8)	1.36 (34.5)	3.28 (83.3)	1.1 lb/1
		2	600/347	—	150	—	—	—	65	25	6.45 (163.8)	2.74 (69.6)	3.28 (83.3)	2.6 lb/1
		3	600/347	—	150	—	—	—	65	25	6.45 (163.8)	4.11 (104.4)	3.28 (83.3)	3.3 lb/1
FBH	15-100	1	600/347	—	100	—	100	—	35	—	6.45 (163.8)	1.36 (34.5)	3.28 (83.3)	1.1 lb/1
		2	600/347	—	200	—	—	—	100	35	6.45 (163.8)	2.74 (69.6)	3.28 (83.3)	2.6 lb/1
		3	600/347	—	200	—	—	—	100	35	6.45 (163.8)	4.11 (104.4)	3.28 (83.3)	3.3 lb/1
FBL	15-100	1	600/347	—	100	—	100	—	42	—	6.45 (163.8)	1.36 (34.5)	3.28 (83.3)	1.1 lb/1
		2	600/347	—	200	—	—	—	150	42	6.45 (163.8)	2.74 (69.6)	3.28 (83.3)	2.6 lb/1
		3	600/347	—	200	—	—	—	150	42	6.45 (163.8)	4.11 (104.4)	3.28 (83.3)	3.3 lb/1

#### FE 250 Amp Frame; Current Limiting (UL/cUL File No. E-11592)

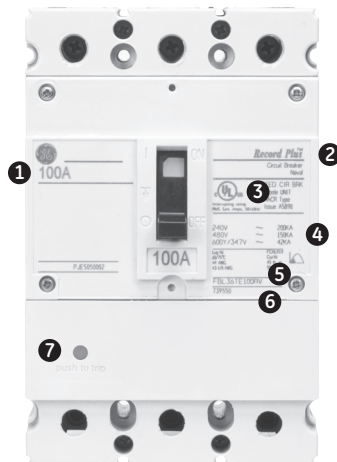
Circuit Breaker Type	Ampere Rating	No. Poles	Maximum Voltage Rating		UL Listed Interrupting Ratings - rms Symmetrical Amperes (in Thousands)			Dimensions in. (mm.)			Approx. Ship Wt./Std. Pack	
					Vac			H	W	D		
					240	480	600					
FEN	250	2	480	-	150	—	65	—	6.70 (170.1)	4.11 (104.4)	3.52 (89.5)	4.5 lb/1
FEN	250	3	480	-	150	—	65	—	6.70 (170.1)	4.11 (104.4)	3.52 (89.5)	4.5 lb/1
FEH	250	2	480	-	200	—	100	—	6.70 (170.1)	4.11 (104.4)	3.52 (89.5)	4.5 lb/1
FEH	250	3	480	-	200	—	100	—	6.70 (170.1)	4.11 (104.4)	3.52 (89.5)	4.5 lb/1

#### FG 600 Amp Frame; Current Limiting (UL/cUL File No. E-11592)

Circuit Breaker Type	Ampere Rating	No. Poles	Maximum Voltage Rating		UL Listed Interrupting Ratings - rms Symmetrical Amperes (in Thousands)			EN 60947-2 Interrupting Ratings, Icu, Amperes (in Thousands)			Dimensions in. (mm.)			Approx. Ship Wt./Std. Pack
					Vac			Vac			H	W	D	
					240	480	600	240	400-415	690				
FGN	250-600	2	600	—	150	65	25	—	—	—	10.31 (262.0)	5.46 (138.7)	4.53 (115.0)	22 lb/1
		3	600	—	150	65	25	85	50	10	10.31 (262.0)	5.46 (138.7)	4.53 (115.0)	22 lb/1
FGH	250-600	2	600	—	200	100	35	—	—	—	10.31 (262.0)	5.46 (138.7)	4.53 (115.0)	22 lb/1
		3	600	—	200	100	35	100	80	22	10.31 (262.0)	5.46 (138.7)	4.53 (115.0)	22 lb/1
FGL	250-600	2	600	—	200	150	42	—	—	—	10.31 (262.0)	5.46 (138.7)	4.53 (115.0)	22 lb/1
		3	600	—	200	150	42	200	150	40	10.31 (262.0)	5.46 (138.7)	4.53 (115.0)	22 lb/1
FGP	250-600	2	600	—	200	200	65	—	—	—	10.31 (262.0)	5.46 (138.7)	4.53 (115.0)	22 lb/1
		3	600	—	200	200	65	—	—	—	10.31 (262.0)	5.46 (138.7)	4.53 (115.0)	22 lb/1



# Molded Case Circuit Breakers Record Plus™ FB 100



- 1 Breaker Frame Rating
- 2 Product Description
- 3 Standards & Ratings
- 4 Interrupting Ratings
- 5 Lug Data & Torque Info
- 6 Product Number
- 7 Push to Trip

### Reference Publications

Available for download from [www.geindustrial.com/publibrary](http://www.geindustrial.com/publibrary)

FB Breaker	
Installation Instructions	DEH-41073
Fact sheet	DET-406
FB Breaker Accessories	
Bell Alarm & Aux. Switch	DEH-40324
Shunt Trip & UVR	DEH-40363
Padlock Device	DEH-40521
Lug Kits	DEH-40532
Panelboards	
A-Series™ AD Plus Catalog/Selection Guide	DEP-134
A-Series™ AD Plus Fact Sheet	DET-397
Spectra™ Power Panel - Plug-in Kits	DEH-41123
Spectra™ Power Panel - Bolt-on Kits	DEH-41124
Spectra™ Power Panel - Filler Plates	DEH-41125
Outline Drawings	
FB 1 pole	10091632SH1
FB 2 pole	10091636SH1
FB 3 pole	10091641SH1
Series Ratings	DET-008

### FB Breaker Markings

cULus	UL File E-11592	
HACR	15 to 100A	1, 2, 3 Pole
HID	15 to 50A	1, 2, 3 Pole
NAVAL	15 to 100A	1, 2, 3 Pole
Cu/Al 60/75°C	15 to 100A	1, 2, 3 Pole
Current Limiting	15 to 100A	1, 2, 3 Pole

FB breakers are NOT marked LINE/LOAD and can be reverse fed.

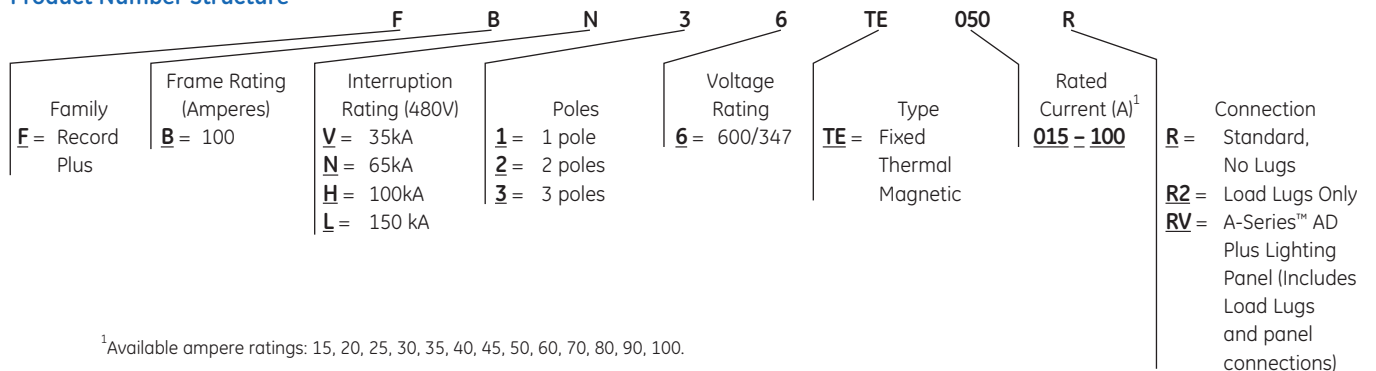
### Trip Curves

Trip Unit Rated Current (A)	Trip Curve
15	DES-013
20	DES-014
25	DES-015
30	DES-016
35	DES-017
40	DES-018
45	DES-019
50	DES-020
60	DES-021
70	DES-022
80	DES-023
90	DES-024
100	DES-025
Peak Current Curves	DES-030
Peak I <sup>2</sup> t Curve	DES-031

### Interrupting Ratings

Type	Ampere Rating	Max AC Voltage	No. Poles	UL Listed Interrupting Ratings - rms Symmetrical Amperes (in Thousands) AC Voltage				
				240	277	347	480	600/347
FBV	15-100	600/347VAC	1	35	35	22	-	-
			2	65	-	-	35	22
			3	65	-	-	35	22
FBN	15-100	600/347VAC	1	65	65	25	-	-
			2	150	-	-	65	25
			3	150	-	-	65	25
FBH	15-100	600/347VAC	1	100	100	35	-	-
			2	200	-	-	100	35
			3	200	-	-	100	35
FBL	15-100	600/347VAC	1	100	150	42	-	-
			2	200	-	-	150	42
			3	200	-	-	150	42

### Product Number Structure



<sup>1</sup>Available ampere ratings: 15, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100.



# Molded Case Circuit Breakers

## Record Plus™ FB 100

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### 1-Pole Record Plus™ FB 100 Breakers IC @ 600/347 Vac

Rated Current (A)	35kA Product No.	65kA Product No.	100kA Product No.	150kA Product No.	Connection
15	FBV16TE015R	FBN16TE015R	FBH16TE015R	FBL16TE015R	No Lugs
	FBV16TE015R2	FBN16TE015R2	FBH16TE015R2	FBL16TE015R2	Load Lugs Only
	FBV16TE015RV	FBN16TE015RV	FBH16TE015RV	FBL16TE015RV	Load Lugs and Panel Connections
20	FBV16TE020R	FBN16TE020R	FBH16TE020R	FBL16TE020R	No Lugs
	FBV16TE020R2	FBN16TE020R2	FBH16TE020R2	FBL16TE020R2	Load Lugs Only
	FBV16TE020RV	FBN16TE020RV	FBH16TE020RV	FBL16TE020RV	Load Lugs and Panel Connections
25	FBV16TE025R	FBN16TE025R	FBH16TE025R	FBL16TE025R	No Lugs
	FBV16TE025R2	FBN16TE025R2	FBH16TE025R2	FBL16TE025R2	Load Lugs Only
	FBV16TE025RV	FBN16TE025RV	FBH16TE025RV	FBL16TE025RV	Load Lugs and Panel Connections
30	FBV16TE030R	FBN16TE030R	FBH16TE030R	FBL16TE030R	No Lugs
	FBV16TE030R2	FBN16TE030R2	FBH16TE030R2	FBL16TE030R2	Load Lugs Only
	FBV16TE030RV	FBN16TE030RV	FBH16TE030RV	FBL16TE030RV	Load Lugs and Panel Connections
35	FBV16TE035R	FBN16TE035R	FBH16TE035R	FBL16TE035R	No Lugs
	FBV16TE035R2	FBN16TE035R2	FBH16TE035R2	FBL16TE035R2	Load Lugs Only
	FBV16TE035RV	FBN16TE035RV	FBH16TE035RV	FBL16TE035RV	Load Lugs and Panel Connections
40	FBV16TE040R	FBN16TE040R	FBH16TE040R	FBL16TE040R	No Lugs
	FBV16TE040R2	FBN16TE040R2	FBH16TE040R2	FBL16TE040R2	Load Lugs Only
	FBV16TE040RV	FBN16TE040RV	FBH16TE040RV	FBL16TE040RV	Load Lugs and Panel Connections
45	FBV16TE045R	FBN16TE045R	FBH16TE045R	FBL16TE045R	No Lugs
	FBV16TE045R2	FBN16TE045R2	FBH16TE045R2	FBL16TE045R2	Load Lugs Only
	FBV16TE045RV	FBN16TE045RV	FBH16TE045RV	FBL16TE045RV	Load Lugs and Panel Connections
50	FBV16TE050R	FBN16TE050R	FBH16TE050R	FBL16TE050R	No Lugs
	FBV16TE050R2	FBN16TE050R2	FBH16TE050R2	FBL16TE050R2	Load Lugs Only
	FBV16TE050RV	FBN16TE050RV	FBH16TE050RV	FBL16TE050RV	Load Lugs and Panel Connections
60	FBV16TE060R	FBN16TE060R	FBH16TE060R	FBL16TE060R	No Lugs
	FBV16TE060R2	FBN16TE060R2	FBH16TE060R2	FBL16TE060R2	Load Lugs Only
	FBV16TE060RV	FBN16TE060RV	FBH16TE060RV	FBL16TE060RV	Load Lugs and Panel Connections
70	FBV16TE070R	FBN16TE070R	FBH16TE070R	FBL16TE070R	No Lugs
	FBV16TE070R2	FBN16TE070R2	FBH16TE070R2	FBL16TE070R2	Load Lugs Only
	FBV16TE070RV	FBN16TE070RV	FBH16TE070RV	FBL16TE070RV	Load Lugs and Panel Connections
80	FBV16TE080R	FBN16TE080R	FBH16TE080R	FBL16TE080R	No Lugs
	FBV16TE080R2	FBN16TE080R2	FBH16TE080R2	FBL16TE080R2	Load Lugs Only
	FBV16TE080RV	FBN16TE080RV	FBH16TE080RV	FBL16TE080RV	Load Lugs and Panel Connections
90	FBV16TE090R	FBN16TE090R	FBH16TE090R	FBL16TE090R	No Lugs
	FBV16TE090R2	FBN16TE090R2	FBH16TE090R2	FBL16TE090R2	Load Lugs Only
	FBV16TE090RV	FBN16TE090RV	FBH16TE090RV	FBL16TE090RV	Load Lugs and Panel Connections
100	FBV16TE100R	FBN16TE100R	FBH16TE100R	FBL16TE100R	No Lugs
	FBV16TE100R2	FBN16TE100R2	FBH16TE100R2	FBL16TE100R2	Load Lugs Only
	FBV16TE100RV	FBN16TE100RV	FBH16TE100RV	FBL16TE100RV	Load Lugs and Panel Connections



# Molded Case Circuit Breakers

## Record Plus™ FB 100

External Accessories

## Section 6

### Padlocking Devices

Description	Product No.
Padlock Fixed Toggle	FB1PF
Padlock EUSERC Toggle	FB1PE

### Lugs and Lug Kits

Amp Range	Wire Range	Strip Length	Single Lug Product No.	Lug Kit Product No. (Set of 3)
15-20A	14-10 Cu/Al	.40-.50"	FCAL12	FCALK12
25-60A	10-4 Cu/Al	.40-.50"	FCAL13	FCALK13
70-100A	4-1/0 Cu/Al	.40-.50"	FCAL14	FCALK14

### Lug Tightening Torque

Wire Size	Torque
#10 AWG	35 in-lb
#8 AWG	40 in-lb
#6-#4 AWG	45 in-lb
#3 AWG - 1/0	50 in-lb

### Dimensions in. (mm)

#### FB 100 Dimensions

Poles	A	B	C	D	E	F	G1	G2	H
1	3.88 (98.6)	3.28 (83.3)	1.06 (26.9)	1.36 (34.5)	N/A	N/A	5.11 (129.8)	5.01 (127.3)	6.45 (163.8)
2	3.88 (98.6)	3.28 (83.3)	1.06 (26.9)	2.74 (69.6)	0.69 (17.5)	1.38 (35.1)	5.11 (129.8)	5.01 (127.3)	6.45 (163.8)
3	3.88 (98.6)	3.28 (83.3)	1.06 (26.9)	4.11 (104.4)	1.38 (35.1)	1.38 (35.1)	5.11 (129.8)	5.01 (127.3)	6.45 (163.8)

