

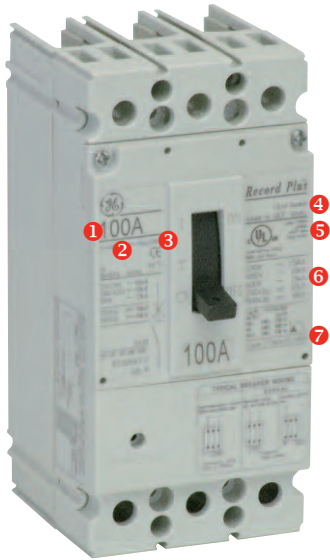
GE Consumer & Industrial  
Electrical Distribution

# Record Plus™ FC 100

Current Limiting Molded Case Circuit Breakers

## Catalog/Selection Guide





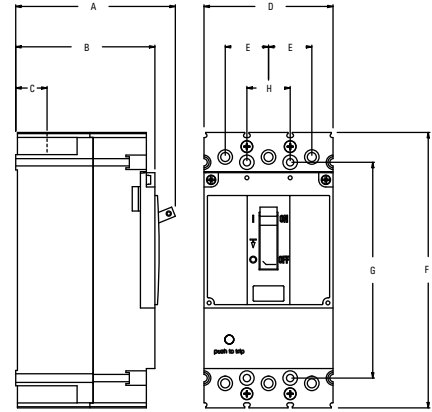
- 1 Breaker Frame Rating
- 2 Rated Voltage
- 3 Breaker Frame Enclosed Rating
- 4 Product Description
- 5 Standards
- 6 Interruption Capacity
- 7 Catalog Number

**Main Standards**

- UL 489
- IEC 947 and associated EN Sections

**FC BiC us Markings**

	UL file E-11592
HACR	15 to 100A
Cu/Al 60/75°C	15 to 100A
Current Limiting	15 to 100A



**Dimensions**

Frame	A		B		C		D	
	in	mm	in	mm	in	mm	in	mm
FC	3.7	29.1	3.2	81.3	.96	24.4	3.0	76.2

Frame	E		F		G		H	
	in	mm	in	mm	in	mm	in	mm
FC	1.0	25.4	6.4	162.6	5.0	127.0	1.0	25.4

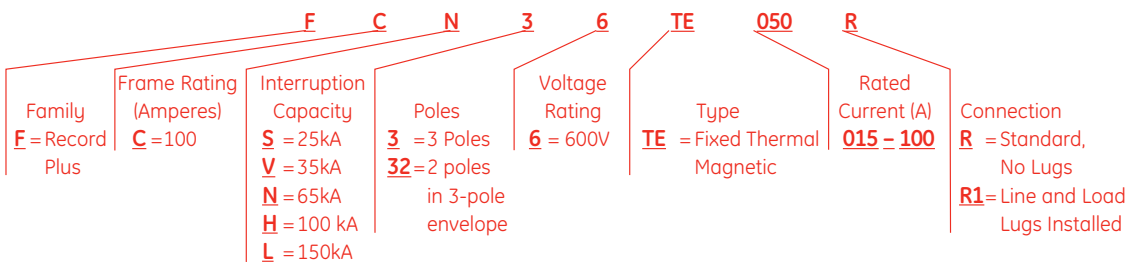
**FC 100 Amp Frame Overview**

**Interrupting Ratings**

Federal Spec C/B Class WC-375B

Type	Ampere Rating	No. Poles	Max AC/DC Voltage	UL Listed Interrupting Ratings - rms Symmetrical Amperes (in Thousands)					IEC Listed Interrupting Ratings, Icu, Amperes (in Thousands)				
				AC Voltage			DC Voltage		AC Voltage			DC Voltage	
				240	480	600/347	250 (2p)	500 (3p)	220-240	400-415	500	250 (2p)	500 (3p)
FCS	15-100	2,3	600Vac, 500Vdc	42	25	18	22	30	36	22	14	22	30
FCV	15-100	2,3	600Vac, 500Vdc	65	35	22	25	35	50	30	18	25	35
FCN	15-100	2,3	600Vac, 500Vdc	150	65	25	30	42	85	50	22	30	42
FCH	15-100	2,3	600Vac, 500Vdc	200	100	35	42	65	100	80	36	42	65
FCL	15-100	2,3	600Vac, 500Vdc	200	150	42	65	80	200	150	50	65	80

**Catalog Number Structure**





**Selection**

Record Plus, Non-Automatic Circuit Breaker (Molded Case Switch), 600Vac

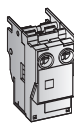
	Ampere Rating	2-Pole	3-Pole	Lug Kit (3 per kit)
		Cat. No.	Cat. No.	Cat. No.
	60	FCY206F060R	FCY306F060R	FCALK13
100	FCY206F100R	FCY306F100R	FCALK14	

## Internal Accessories (supplied with leads attached)





Contacts – Auxiliary and Bell Alarm

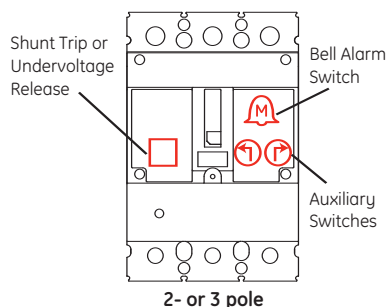
	Accessory	Ratings	Normally Open	Normally Closed	Form C
			Cat. No.	Cat. No.	Cat. No.
	Aux. Switch Right Mounted	5A@240Vac, 0.5A@125Vdc	FAS10RW	FAS01RW	FAS11RW
	Aux. Switch Left Mounted	5A@240Vac, 0.5A@125Vdc	FAS10LW	FAS01LW	FAS11LW
	Bell Alarm Mechanism	5A@240Vac, 0.5A@125Vdc	FABAM10W	FABAM01W	FABAM11W

## Releases – Shunt Trip and Undervoltage

	Voltage	Shunt Trip		Undervoltage Release	
		Rating (Inrush Power Consumption)	Cat. No.	Rating (Inrush Power Consumption)	Cat. No.
	12V DC	200 mA / 2.4W	FASHTBW	—	—
	24V AC/DC	100 mA / 3.6W	FASHTDW	50 mA / 1.2W	FAUVRDW
	48V AC/DC	60 mA / 2.88W	FASHTFW	20 mA / 0.96W	FAUVRFW
	120V AC	40 mA / 4.8W	FASHTKW	—	—
	110/130V AC/DC	40 mA / 4.8W	FASHTJW	15 mA / 1.8W	FAUVRJW
	220/240V AC, 250V DC	20 mA / 4.6W	FASHTNW	15 mA / 3.45W	FAUVRNW
	277V AC	11 mA / 3.0W	FASHT7W	15 mA / 4.0W	FAUVR7W
	400/480V AC	20 mA / 8.4W	FASHTUW	15 mA / 6.3W	FAUVRUW


## Mounting Locations and Limitations

Accessory	Mounting Pocket Location	Accessory Installation	
		2 Pole	3 Pole
Shunt Trip or Under Voltage Release		1	1
Aux. Switch - Left Mount		1	1
Aux. Switch - Right Mount		1	1
Bell Alarm		1	1
Maximum Number of Internal Accessories That Can Be Installed		4	4




## External Accessories

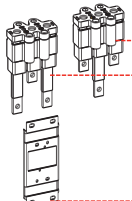
Electrical Operator Motor Drives, Front Mounted

	Voltage	Cat. No.
	120V AC/125V DC	FCEMF3
	220/240V AC, 50/60 Hz	FCEMF6
	48V DC	FCEMFF

Padlocking Devices

	Description	Cat. No.
	Padlocking Fixed Toggle	FC1PF
	Padlocking Euserec Toggle	FC1PE

## Plug-In Types

	Type	Description	Cat. No.
	Base Only	3 Pole - LSL - Horizontal Strap	FCDDF1
		3 Pole - SLS - Horizontal Strap	FCDDF2
		3 Pole - LSL - Vertical Strap	FCDDF3
	Secondary Disconnect	3 Pole - SLS - Vertical Strap	FCDDF4
		Secondary Disconnect Kit	FCDSD
		Secondary Disconnect - Base Part	FCSDP
		Secondary Disconnect - Breaker Part	FCSDB
	Mounting Plate	Mounting Plate	FCDMP

## Hardware Kits

Description	Cat. No.
Mounting screws for mounting plates with tapped holes, quantity 4 (#8-32 x 2 7/8" screws with lockwashers)	FCMSK3
Mounting screws for mounting plates with clearance holes, quantity 4 (#8-32 x 3" screws with nuts lockwashers)	FCMSK4
Nut plates (quantity 3)	FCNP3
Nut plates (quantity 36)	FCNPB

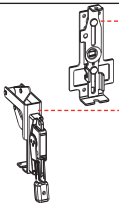
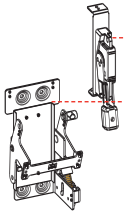
## Lugs and Lug Kits

Amp Range	Wire Type	Strip Length	Single Lug	Lug Kit Cat. No. (Set of 3)
15-20A	#14-#10 Cu/Al	.040-.045"	FCAL12	FCALK12
25-60A	#10-#4 Cu/Al	.040-.045"	FCAL13	FCALK13
70-100A	#4 - 1/0 Cu/Al	.040-.045"	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

## Handles and Handle Accessories

	Type	Description	Cat. No.		
	STDA Flange Handle Operators	Breaker Mechanism	FCNBM		
		Flange Mounted Handle Mechanism for Cable Operator	6 inches for NEMA 1, 3R, 12,13	FCNHM1	
			10 inches for NEMA 1, 3R, 12,13	FCNHM2	
			6 inches for NEMA 4/4X	FCNHM3	
			10 inches for NEMA 4/4X	FCNHM4	
		Operating Cable	3 feet	SC3L	
			4 feet	SC4L	
			5 feet	SC5L	
			6 feet	SC6L	
			7 feet	SC7L	
8 feet	SC8L				
	STDA Flange Handles & Hardware Kits	Flange Handle for Variable Depth Operating Mechanism	Same as Spectra: 6-inch for NEMA 12/13 Same as Spectra: 10-inch for NEMA 12/13 Same as Spectra: 6-inch for NEMA 4/4X Same as Spectra: 10-inch for NEMA 4/4X	STDA1 STDA2 STDA1X STDA2X	
		Flange Operating Mechanism	Operating Mechanism Only	FCNFM	
		Flange Stiffener Kit	Use with FCNFM	TDSR	
		Extender Kit	Use with FCNFM	TDSR	
		Extended Drive Stud	Use with FCNFM	TDS1	
	Auxiliary Contact Kits		Door Hardware Kit NEMA12/13	Door Hinged on Left, NEMA 12/13, 2-point Kit	TDV1
			Door Hardware Kit NEMA 4/4X	Door Hinged on Left, NEMA 4/4X, 2-point Kit	TDV1X
			Third Point Latch Kit	For Use With TDV1/TDV1X Above	TDV3
			Door Hardware Kit NEMA12/13	Door Hinged on Right, NEMA 12/13 2-point Kit	TDV1L
			Door Hardware Kit NEMA 4/4X	Door Hinged on Right, NEMA 4/4X, 2-point Kit	TDV1LX
			Third Point Latch Kit	For Use with TDV1L, TDC1LX Above	TDV3L
			DPDT for STDA Handle on Right		TDAS1L2
			DPDT for STDA Handle on Left		TDAS1R2
			TDR Style Rotary Handles		Vertical Mount
Horizontal Mount		FCNRD			
Door Ring Gasket	Door Ring-Interlock	FCFRDRCK			
Door Gasket Kit		SEFRGSK			
TDM Style Rotary Handles		Direct Mount	Complete Kit for NEMA 1, 3R, 12	FCNRN	
		Direct Through Door	Complete Kit for NEMA 1, 3R, 12	FCNRT	
		Variable Mount	Complete Kit for NEMA 1, 3R, 12	FCNRV	
			For NEMA 1, 3R, 12, 4 and 3/16	FCNRM1	
			For NEMA 4/4X, 4 and 3/16	FCNRM2	
			For NEMA 1, 3R, 12, 6 and 1/8 - 15	FCNRM3	
		Operating Mechanism Only	For NEMA 4/4X, 6 and 1/8 - 15	FCNRM4	
			Handle Only	For NEMA 1, 3R, 12	FNRH
				For NEMA 4/4X	THCH45

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

### Publications & References

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

#### FC Breaker

Installation Instructions DEH-40463

#### FC Breaker Accessories

Bell Alarm & Aux. Switch DEH-40324

Shunt Trip & Undervoltage Release DEH-40363

Lug Kits DEH-40532

#### Outline Drawings

FC 2-3 pole 10085772SH1

#### Series Ratings

DET-008

#### Trip Curves

See table at left

Peak Current Curves

DES-030

Peak I2t Curve

DES-031

Data are subject to change without notice. Should further information be desired, or should particular problems arise that are not sufficiently covered here for the purchaser's purposes, the matter should be referred to the General Electric Company.

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