

# Disconnect Switches

## Type CFS Compact Fusible Switches

## Features and Ordering Information

### Description

Siemens Type CFS compact fusible switches can be used in branch circuit applications. 30-800A, 3 pole switches are offered and are all rated 600V AC maximum. 30A switches are available with provisions for either Class CC or J fuses. A 30A non-fusible switch, catalogue number CNFS361, is also available. 60A and larger switches provided

with Class J fuse provisions can also be use in non-fusible applications with field installable no-fuse kits.

All are open style, designed to be panel mounted and are UL listed under file number #E121152 or #E68312 and CSA certified under file number #222227. A variety of door mounted rotary operators are available with Type 1, 3R, 12 or 4/4X ratings.

### NFPA79 kits

**CFSNFPA1** and **CFSNFPA2N** kits provide an internal handle and padlocking means to comply with article 5.3.4.2 of the NFPA-2002 standard.

### Features

- 30 - 800A ratings
- UL Listed under file #E121152 & CSA Certified under file #222227
- Door mounted rotary handles with defeatable cover interlock
- Meets UL requirements for both main and branchcircuit applications
- Compact size
- 100kA with Class CC fuses or up to 200kA with Class J fuses
- Load break and horsepower rated
- Quick make and break operation
- All handles are padlockable with up to (3) padlocks with 5/16" hasps in the OFF position
- Catalogue number **CFS361C5**, **CFS361J5** & **CNFS361** can be DIN-rail mounted and can be either front or side operated with standard rotary handles
- All CFS part numbers ending in N can be either front or side operated with standard rotary handles.
- Handles are available in Type 1, 3R, 4/4X & 12 ratings
- NFPA 79 field installed kits are available
- 30-400A, 200kA switches are provided with quick connect terminal provisions for voltage sensing or for 10A max. control circuits



### Ordering Information

- Select the panel mounted switch required based on Ampere, HP and AIC requirements. Switches with a right hand mechanism are standard, 30-100A switches with a left hand mechanism are available.
- Select handle based on environmental rating required.
- Select operating shaft (200 or 400mm in length). For enclosure depths of 9.0" or less from panel mounting surface to inside of door use 200mm long shafts. For deeper enclosures use 400mm long shafts. 30A 100kA switches can be used in 10" deep enclosures (panel to inside of door) with 200mm shaft and **CFSH5N** handles.
- Line & load lugs are provided as standard on 30-100A switches. Terminal kits are available for 200-800A switches if needed.
- Auxiliary contact are available if needed as follows:
  - 30A switch **CFS361C5** and non-fusible 30A switch **CNFS361** will accept up to (4) aux contacts
  - 30A switch **CFS361J5** will accept up to (2) aux contacts without an aux contact holder. If more than (2) aux contacts are required order aux contacts PLUS aux contact holder kit **CFSAUXH1**. All other switches will accept up to (4) aux contacts.
- If non-fusible switch is required order a shorting bar for 60-600A switches or catalogue number **CNFS361** for 30A.
- 30-100A switches are designed to prevent inadvertent contact with live parts and shields are not required. 200 & 400A switches are not supplied with terminal shields. They are available as field installed kits for both line and load terminals. 400-800A switches are supplied as standard with line shields and terminal shroud kits are available for the load side.

Note: Be sure to check shaft and handle compatibility with the switch selected by using the information provided in the selection tables.

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Fusible switches, 3-pole 600V AC Max. 30-100A & 600-800A switches are also rated 250V DC Max when poles are field connected in series<sup>⑤</sup>

Switch Ampere Rating	Catalogue Number	Fuse Provisions Provided	Max Horsepower Ratings				AC Short Circuit Rating
			240V 3Ø AC	480V 3Ø AC	600V 3Ø AC	250V DC	

### Standard—with Right Hand Mounted Mechanism

30 <sup>①</sup>	CFS361C5	Class CC	7.5	15	20	5 <sup>③</sup>	100kA
	CFS361J5	Class J	7.5	15	20	5 <sup>③</sup>	100kA
	CFS361JN	Class J	7.5	15	20	5 <sup>③</sup>	200kA
	CNFS361 <sup>②⑤</sup>	None	7.5	15	20	5 <sup>③</sup>	65kA
60 <sup>①</sup>	CFS362JN1	Class J	15	30	50	10 <sup>③</sup>	100kA
	CFS362JN		15	30	50	10 <sup>③</sup>	200kA
100 <sup>①</sup>	CFS363JN	Class J	30	60	75	20 <sup>③</sup>	200kA
200 <sup>②</sup>	CFS364JN <sup>④</sup>	Class J	60	125	150	—	200kA
400 <sup>②</sup>	CFS365JN <sup>④</sup>	Class J	125	250	350	—	200kA
600 <sup>②</sup>	CFS366J <sup>④⑤</sup>	Class J	200	400	500	—	200kA
800 <sup>②</sup>	CFS367L <sup>④⑤</sup>	Class L	200	400	500	—	200kA

### Optional—with Left Hand Mounted Mechanism<sup>④</sup>

30 <sup>①</sup>	CFS361JLN	Class J	7.5	15	20	5 <sup>③</sup>	200kA
60 <sup>①</sup>	CFS362JLN		15	30	50	10 <sup>③</sup>	
100 <sup>①</sup>	CFS363JLN		30	60	75	20 <sup>③</sup>	

### Operating Shafts for 30–400A switches<sup>⑤</sup>

Catalogue Number	Shaft Length In. (mm)	Switch & Handle Compatibility
CFSS5200N	7.9 (200)	5mm x 5mm for use with CFS361C5, CFS361J5 & CNFS361 switches & with "CFSH5" handles only
CFSS5400N	15.7 (400)	5mm x 5mm for use with all "CFSH10" handles & with CFS361C5, CFS361J5 & CNFS361 switches only
CFSS5200HN	7.9 (200)	10mm x 10mm for use with all "CFSH10" handles & with all 30–400A switches except CFS361C5, CFS361J5 & CNFS361
CFSS5400HN	15.7 (400)	
CFSS10200HN	7.9 (200)	
CFSS10400HN	15.7 (400)	

### Rotary Operating Handles—Door Mounted (for use with CFS361C5, CFS361J5 & CNFS361 switches only)<sup>⑥</sup>

Catalogue Number	Colour	Type	Operating Shaft Compatibility
CFSH5B12N	Blue & Black	1, 3R & 12	CFSS5200N or CFSS5400N
CFSH5R12N	Yellow & Red		
CFSH5B4N	Blue & Black	1, 3R, 12 & 4/4X	
CFSH5R4N	Yellow & Red		

### Rotary Operating Handles—Door Mounted (for use with CFSS5200HN, CFSS5400HN, CFSS10200HN & CFSS10400HN)

Catalogue Number	Colour	Description
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#### Type 1, 3R & 12<sup>⑦</sup>

CFSH10B12N	Blue & Black	Heavy duty pistol grip (2.75" (70mm) long for use with 30A switches & CFS362JN1)
CFSH10R12N	Yellow & Red	
CFSH10BL12N	Blue & Black	Heavy duty pistol grip (4.92" (125mm) long for 30–400A switches)
CFSH10RL12N	Yellow & Red	

#### Type 1, 3R, 4/4X & 12<sup>⑦</sup>

CFSH10B4N	Blue & Black	Heavy duty pistol grip (2.75" (70mm) long for use with 30A switches & CFS362JN1)
CFSH10R4N	Yellow & Red	
CFSH10BL4N	Blue & Black	Heavy duty pistol grip (4.92" (125mm) long for 30–400A switches)
CFSH10RL4N	Yellow & Red	

① Line and load lugs included.  
② Line and load lugs are not included.  
Order from table on next page if required.  
③ DC HP rating shown requires (3) poles to be connected in series.

④ CFS364JN & CFS365JN can be rotated 180° for left hand operation as standard.  
⑤ Catalogue numbers CFS361C5, CFS361J5 & CNFS361 accept 5mm x 5mm operating shafts. All other 30-400A switches accept 10mm x 10mm operating shafts.

## Switch and Handle Selection



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⑥ Compact pistol grip design (2.75" long) with defeatable cover interlock. Cover can be opened when handle is padlocked in the OFF position.  
⑦ Defeatable cover interlock provided. Cover cannot be opened when handle is padlocked in the OFF position.  
⑧ Catalogue number CNFS361 is a non-fusible switch.  
⑨ 4 pole 600 & 800A switches, CFS466J & CFS467L are also available.  
⑩ CFS366J and CFS367L are rated 250 & 600V DC when (2) poles are connected in series.  
⑪ CNFS361 is rated 65kA when protected by Class J or CC 30A max. fuses.

# Disconnect Switches

## Type CFS Compact Fusible Switches

## Selection and Accessories

600 & 800A Rotary Operating Handles—Door Mounted 8.27" (210 mm) long<sup>Ⓞ</sup>

Catalogue Number	Colour	CSA Type
CFSH12BL12	Blue & Black	1, 3R & 12
CFSH12RL12	Yellow & Red	1, 3R & 12
CFSH12BL4	Blue & Black	1, 3R, 12 & 4/4X
CFSH12RL4	Yellow & Red	1, 3R, 12 & 4/4X

600 & 800A Operating Shafts (Cross section 12X12 mm)

Catalogue Number	Shaft Length In. (mm)	Enclosure Depth (switch mounting surface to door OD)
CFSS12200H	12.59 (320)	10.43 – 16.68 inches (265-424 mm)
CFSS12400H	15.75 (400)	10.43 – 19.84 inches (265-504 mm)

### Type CFS Fusible Switch Accessories

Catalogue Number	Description
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#### Terminals<sup>Ⓛ</sup>

CFSL200	200A Lug Kit (6 lugs per kit) (1)#6-3/0
CFSL400N	400A Lug Kit (6 lugs per kit) (1)#2-600kcmil (for CFS365JN only)
CFSL400	600-800A lug kit (6 lugs per kit) (2)#2-600kcmil

#### Shorting Bars (no fuse kits)

CFSSB60	60A Shorting Bar Kit (3 links per kit)
CFSSB100	100A Shorting Bar Kit (3 links per kit)
CFSSB200	200A Shorting Bar Kit (3 links per kit)
CFSSB400	400A Shorting Bar Kit (3 links per kit)
CFSSB680	600 & 800A Shorting Bar Kit (1 link per kit)

#### Auxiliary Contacts (NEMA ratings AC A600 DC N600)

CFSAUXH1 <sup>Ⓢ</sup>	Aux Contact Holder (CFS361J5, CFS361C5 & CNFS361)
CFSAUX1NO	Aux Contact 1 NO (30-800A Sws)
CFSAUX1NC	Aux Contact 1 NC (30-800A Sws)
CF511AUX	1NO, 1NC Aux Contact Kit (side mount for 200kA switches)
CF522AUX	2NO, 2NC Aux Contact Kit (side mount for 200kA switches)

#### Terminal Shrouds (line or load)

CFSTS200N <sup>Ⓢ</sup>	200A Shroud Kit (Line or load 3-Pole kit)
CFSTS400N <sup>Ⓢ</sup>	400A Shroud Kit (Line or Load 3-pole kit for CFS365JN only)
CFSTS680 <sup>Ⓢ</sup>	600/800A 3-Pole Shroud Kit
CFSTS6804 <sup>Ⓢ</sup>	600/800A 4-Pole Shroud Kit

#### 30A Compact Switch Kits

CF5PLK	Shaft Padlocking Kit for 30A Compact Switch when door is open <sup>Ⓢ</sup>
CF5H5CDM	Direct Mount Handle Kit for CFS361C5 & CNFS361
CF5H5JDM	Direct Mount Handle Kit for CFS361J5

#### NFPA 79 Kits (if auxiliary contacts are needed, see table on next page)

Kits provide an operating shaft suitable for use with all heavy duty handles (not for use with CFSH5 handles). Kits also provide an internal operating handle and an internal OFF padlocking provision.

CF5NFPA1 <sup>Ⓢ</sup>	For use with CFS361C5, CFS361J5 & CNFS361
CF5NFPA2N <sup>Ⓢ</sup>	For use with CFS361JN, CFS361CN, CFS362JN1, CFS362JN, CFS363JN & CFS364JN
CF5NFPA3N <sup>Ⓢ</sup>	For use with CFS365JN only

<sup>Ⓛ</sup> Supplied as standard on 30-100A switches  
<sup>Ⓢ</sup> CFS361C5 and CNFS361 will accept (4) aux contacts without an aux contact holder. CFS361J5 will accept (2) aux contacts without an aux contact holder.  
<sup>Ⓢ</sup> Supplied as standard on all but 30A, 65kA & 100kA compact switches.

<sup>Ⓢ</sup> 12.6 in. (320 mm) long operating shaft included  
<sup>Ⓢ</sup> 12.7 in. (323 mm) long operating shaft included  
<sup>Ⓢ</sup> Line side terminal shrouds supplied with switch  
<sup>Ⓢ</sup> Defeatable cover interlock included. Cover cannot be opened when the handle is padlocked in the OFF position.

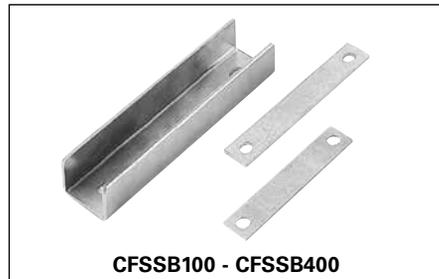
<sup>Ⓢ</sup> Neither line or load terminal shrouds are supplied as standard with new style 200 & 400A switches.



CFSL200 & 400



CFSAUX1NC



CFSSB100 - CFSSB400

# Disconnect Switches

## Type CFS Compact Fusible Switches

## Dimensions and Technical Characteristics

CSA & UL Technical Characteristics and Panel Space Requirements

Catalogue Number	Amps	Fuse Class	AC Short Circuit Rating	Electrical Endurance	Mechanical Endurance	Panel Space Requirements – Inches (mm)		
						Height	Width	Depth <sup>①</sup>
CFS361C5	30	CC	100kA	6000	10000	4.56 (116)	3.78 (96)	6.00 (152)
CFS361J5	30	J	100kA	6000	10000	4.56 (116)	4.15 (105)	6.00 (152)
CFS361JN	30	J	200kA	6000	10000	5.35 (136)	5.89 (150)	6.00 (152)
CFS361JLN	30	J	200kA	6000	10000	5.35 (136)	5.89 (150)	6.00 (152)
CNFS361	30	None	65kA <sup>②</sup>	6000	10000	4.56 (116)	3.78 (96)	6.00 (152)
CFS362JN1	60	J	100kA	6000	10000	5.35 (136)	5.89 (150)	6.00 (152)
CFS362JN	60	J	200kA	6000	10000	7.32 (186)	5.89 (150)	6.00 (152)
CFS362JLN	60	J	200kA	6000	10000	7.32 (186)	5.89 (150)	6.00 (152)
CFS363JN	100	J	200kA	6000	10000	7.32 (186)	5.89 (150)	6.00 (152)
CFS363JLN	100	J	200kA	6000	10000	7.32 (186)	5.89 (150)	6.00 (152)
CFS364JN	200	J	200kA	6000	8000	11.46 (291)	7.72 (196)	6.00 (152)
CFS365JN	400	J	200kA	1000	6000	15.35 (390)	10.19 (259)	8.00 (203)
CFS366J	600	J	200kA	1000	5000	11.81 (300)	14.33 (364)	11 (280)
CFS466J	600	J	200kA	1000	5000	11.81 (300)	18.03 (458)	11 (280)
CFS367L	800	L	200kA	500	3500	11.81 (300)	14.33 (364)	11 (280)
CFS467L	800	L	200kA	500	3500	11.81 (300)	18.03 (458)	11 (280)

### Wire Ranges Line & Load Lugs

Switch	Amperage Rating	UL approved wire size (75° C)
CFS361J5	30	(1)#14-10
CFS361C5	30	(1)#14-10
CNFS361	30	(1)#14-10
CFS361JN	30	(1)#14-6
CFS362JN1	60	(1)#14-6
CFS362JN	60	(1)#12-1
CFS363JN	100	(1)#12-1
CFS364JN	200	(1)#3/0
CFS365JN	400	(1)600MCM
CFS366J	600	(2)350 MCM
CFS367L	800	(2)600 MCM

### Auxiliary contact capability when an NFPA79 kit is used

Switch	NFPA79 kit	Aux contacts that can be installed
CNFS361	CFSNFPA1	(2) Total, CFS AUX1NO or CFS AUX1NC
CFS361C5		(1) CFS AUX1NO or (1) CFS AUX1NC
CFS361J5		
CFS361JN	CFSNFPA2N	(2) Total, CFS AUX1NO or CFS AUX1NC <sup>③</sup>
CFS362JN1		
CFS362JN		
CFS363JN		
CFS364JN		
CFS365JN	CFSNFPA3N	(2) Total, CFS AUX1NO or CFS AUX1NC <sup>③</sup>

① Minimum dimensions from mounting surface to inside of cover. Dimensions shown can be decreased if aux contacts are not required.

② CNFS361 is rated 65kA when protected by 30A max. Class J or CC fuses.

③ For additional auxiliary contacts use side mounted CFS11AUX or CFS22AUX.