

# Type CFS compact fusible switches

## Features and ordering information

### 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 branch circuit 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
- Catalog number **CFS361C5**, **CFS361J5** & **CNFS361** can be DIN-rail mounted and 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
- 30-200A, 200kA switches are provided with quick connect terminal provisions for voltage sensing or for 10A max. control circuits



### Ordering information

1. 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.
2. Select handle based on environmental rating required.
3. 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.
- Note: Be sure to check shaft and handle compatibility with the switch selected by using information provided in the selection tables.
4. Line & load lugs are provided as standard on 30-100A switches. Terminal kits are available for 200-800A switches if needed.
5. Auxiliary contact are available if needed as follows.
  - A. 30A switch CFS361C5 and non-fusible 30A switch CNFS361 will accept up to (4) aux contacts
  - B. 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 CFS AUXH1. All other switches will accept up to (4) aux contacts.
6. If non-fusible switch is required order a shorting bar for 60-600A switches or catalog number **CNFS361** for 30A.
7. 30-100A switches are designed to prevent inadvertent contact with live parts and shields are not required. 200A, CFS364JN is 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: Availability of new style 400A switch catalog number CFS365JN to be announced.**

# Shaft and handle selection

## Type CFS compact fusible switches

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>

(CFS365JN availability to be announced)

Switch ampere rating	Catalog number	Fuse provisions provided	Max horsepower ratings				AC short circuit rating
			240V 3Ø AC	480V 3Ø AC	600V 3Ø AC	250V DC	
<b>Standard – with right hand mounted mechanism</b>							
30 <sup>①</sup>	CFS361C5	Class CC	7.5	15	20	5 <sup>③</sup>	100kA
30 <sup>①</sup>	CFS361J5	Class J	7.5	15	20	5 <sup>③</sup>	100kA
30 <sup>①</sup>	CFS361JN	Class J	7.5	15	20	5 <sup>③</sup>	200kA
30 <sup>①</sup>	CNFS361 <sup>⑧⑩</sup>	None	7.5	15	20	5 <sup>③</sup>	100kA
60 <sup>①</sup>	CFS362JN1	Class J	15	30	50	10 <sup>③</sup>	100kA
60 <sup>①</sup>	CFS362JN	Class J	15	30	50	10 <sup>③</sup>	200kA
100 <sup>①</sup>	CFS363JN		30	60	75	–	
200 <sup>②</sup>	CFS364JN		60	125	150	40 <sup>④</sup>	
400 <sup>②</sup>	CFS365J		125	250	350	50 <sup>④</sup>	
400 <sup>②</sup>	CFFS365JN		125	250	350	–	
600 <sup>②</sup>	CFS366J <sup>⑨⑩</sup>	200	400	500	–	200kA	
800 <sup>②</sup>	CFS367L <sup>⑨⑩</sup>	200	400	500	–		
<b>Optional – with left hand mounted mechanism</b>							
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>

Catalog number	Shaft length in. (mm)	Switch & handle compatibility
CFSS5200N	7.9 (200)	5mm x 5mm for use with CFS361C5, CFS361J5 & CNFS361 switches & with "CFSS5" handles only
CFSS5400N	15.7 (400)	
CFSS5200HN	7.9 (200)	5mm x 5mm for use with all "CFSS10" handles & with CFS361C5, CFS361J5 & CNFS361 switches only
CFSS5400HN	15.7 (400)	
CFSS10200HN	7.9 (200)	10mm x 10mm for use with all "CFSS10" handles & with all 30-400A switches except CFS361C5, CFS361J5 & CNFS361
CFSS10400HN	15.7 (400)	

### Rotary operating handles – door mounted

(for use with CFS361C5, CFS361J5 & CNFS361 switches only)<sup>⑥</sup>

Catalog number	Color	UL 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)

Catalog number	Color	Description
<b>Type 1, 3R &amp; 12<sup>⑦</sup></b>		
CFSH10B12N	Blue & Black	Heavy duty pistol grip (2.75" long for use with 30A switches & CFS362JN1)
CFSH10R12N	Yellow & Red	
CFSH10BL12N	Blue & Black	Heavy duty pistol grip (4.92" long for 30-400A switches)
CFSH10RL12N	Yellow & Red	
<b>Type 1, 3R, 4/4X &amp; 12<sup>⑦</sup></b>		
CFSH10B4N	Blue & Black	Heavy duty pistol grip (2.75" long for use with 30A switches & CFS362JN1)
CFSH10R4N	Yellow & Red	
CFSH10BL4N	Blue & Black	Heavy duty pistol grip (4.92" 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.



CFS361J5



CFSS5400N



CFSH5B12N

④ DC HP rating shown requires (3) poles to be connected in series.

⑤ Catalog numbers CFS361C5, CFS361J5 & CNFS361 accept 5mm x 5mm operating shafts. All other 30-400A switches accept 10mm x 10mm operating shafts.

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 Catalog 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 100kA when protected by Class J or CC 30A max. fuses.

# Selection and accessories

## Type CFS compact fusible switches

### 600 & 800A rotary operating handles - door mounted (8.27" long)⑦

Catalog number	Color	UL 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 12 x 12 mm)

Catalog number	Shaft length in. (mm)	Enclosure depth (switch mounting surface to door OD)
CFSS12200H	12.59 (320)	10.43 – 16.68 in.
CFSS12400H	15.75 (400)	10.43 – 19.84 in.

### Type CFS fusible switch accessories

Catalog number	Description
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#### Terminals①

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	CFS365J & 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)

CFSAUXH1②	Aux contact holder (CFS361J5, CFS361C5 & CNFS361)
CFSAUXH2	Aux contact holder required for CFS365J only
CFSAUX1NO	Aux contact 1 NO (30-800A Sws)
CFSAUX1NC	Aux contact 1 NC (30-800A Sws)
CFS11AUX	1NO, 1NC aux contact kit for use with CFSNFPA2 (side mount)
CFS22AUX	2NO, 2NC aux contact kit for use with CFSNFPA2 (side mount)

#### Terminal shrouds (line or load)

CFSTS200N⑨	200A shroud kit (line or load 3-pole kit)
CFSTS400⑥	400A shroud kit (line or load kit for CFS365J only)
CFSTS400N⑧⑨	400A shroud kit (line or load 3-pole kit for CFS365JN only)
CFSTS680⑥	600/800A 3-pole shroud kit
CFSTS6804⑥	600/800A 4-pole shroud kit

#### 30A compact switch kits

CFSPK	Shaft padlocking kit for 30A compact switch when door is open③
CFSH5CDM	Direct mount handle kit for CFS361C5 & CNFS361
CFSH5JDM	Direct mount handle kit for CFS361J5

### NFPA 79 kits (if auxiliary contacts are needed, see table on page 7)

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.

CFSNFPA1④	For use with CFS361C5, CFS361J5 & CNFS361
CFSNFPA2N⑤	For use with CFS361JN, CFS361CN, CFS362JN1, CFS362JN, CFS363JN & CFS364JN
CFSNFPA2	For use with CFS365J only (requires previous handle design)
CFSNFPA3N⑧	For use with CFS365JN only



① Supplied as standard on 30-100A switches

② CFS361C5 and CNFS361 will accept (4) aux contacts without an aux contact holder. CFS361J5 will accept (2) aux contacts without an aux contact holder.

③ Supplied as standard on all but 30A compact switches.

④ 12.6 in. (320 mm) long operating shaft included

⑤ 11.3 in. (288 mm) long operating shaft included

⑥ Line side terminal shrouds supplied with switch

⑦ Defeatable cover interlock included. Cover cannot be opened when the handle is padlocked in the OFF position.

⑧ Availability to be announced.

⑨ Neither line or load terminal shrouds are supplied as standard with new style 200 & 400A switches.

# Dimensions and technical characteristics

## Type CFS compact fusible switches

### UL & CSA technical characteristics and panel space requirements

Catalog number	Amps	Fuse Class	AC short circuit rating	Electrical endurance	Mechanical endurance	Panel space requirements - in. (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)
CFS361JL	30	J	200kA	6000	10000	5.88 (149)	6.75 (171)	7.00 (178)
CNFS361	30	None	100kA <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)
CFS362JL	60	J	200kA	6000	10000	5.88 (149)	6.75 (171)	7.00 (178)
CFS363JN	100	J	200kA	6000	10000	7.32 (186)	5.89 (150)	6.00 (152)
CFS363JL	100	J	200kA	6000	10000	7.19 (183)	8.25 (210)	7.00 (178)
CFS364JN	200	J	200kA	6000	8000	11.46 (291)	7.72 (196)	6.00 (152)
CFS365J	400	J	200kA	1000	6000	14.94 (363)	11.94 (303)	8.00 (203)
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 ampere rating	UL approved wire size (75° C)	Mechanical wire range of lug (75° C)
30	#6-10 Cu	#14-10 Cu
60	#6-10 Cu	#10-3 Cu
100	#12-1 Cu	#12-1 Cu
200	#3/0 Cu	#6-300 kcmil Cu/Al
400 CFS365J	(2) 300 kcmil Al or (2) 4/0 Cu	(2) #2-600 kcmil Cu/Al
400 CFS365JN	(1) 500 or 600 kcmil Cu	(1) #2-600 kcmil Cu/Al
600	(2) 350 kcmil Cu	(2) #2-600 kcmil Cu/Al
800	(2) 600 kcmil Cu	(2) #2-600 kcmil Cu/Al

### 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		
CFS361J5		
CFS361JN	CFSBFPA2N	(2) Total, CFS AUX1NO or CFS AUX1NC <sup>③</sup>
CFS362JN1		
CFS362JN		
CFS363JN		
CFS364JN	CFSNFPA2	(1) NO, (1) NC or (2) NO, (2) NC use only side mounted CFS11AUX or CFS22AUX
CFS365J		
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 100kA when protected by 30A max. Class J or CC fuses.

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