

**Type CFS**  
Compact Fusible  
Disconnect Switches



# product GUIDE



**SIEMENS**

Global network of innovation

# Disconnect Switches

## Type CFS – Switches, Shafts & Handles

### General Information

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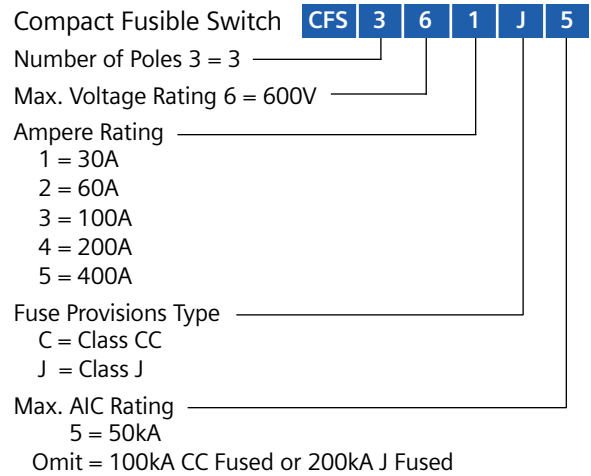
#### Description

Siemens Type CFS compact fusible switches meet UL 98 requirements and can be used in either service entrance or branch circuit applications. 30-400A, 3 pole switches are offered and all are rated 600V AC maximum. 30A switches are available with provisions for either Class CC or J fuses. 60A and larger switches are provided with Class J fuse provisions and can also be used in non-fusible applications with field installable no-fuse kits.

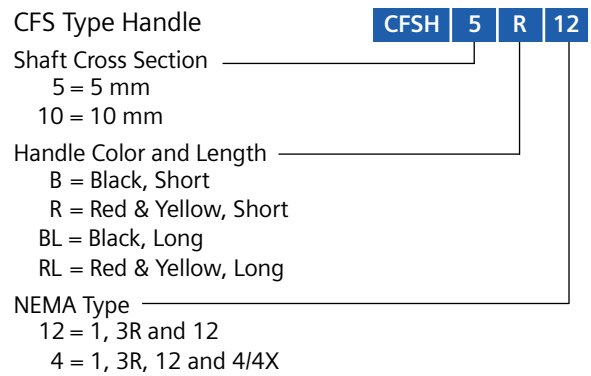
All are open style and are designed to be panel mounted. A variety of door mounted rotary operators are available with Type 1, 3R, 12 or 4/4X ratings. All are UL listed under file number E1211152 and CSA certified under file number 222227.

#### Catalog Numbering System

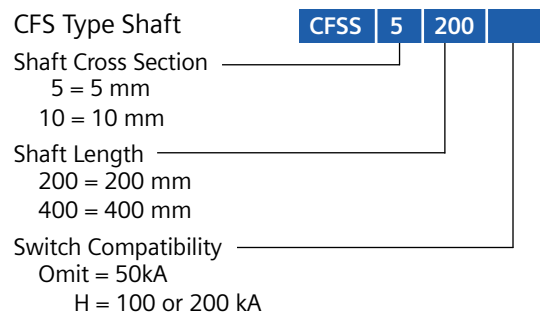
##### CFS Switches



#### Operating Handles



#### CFS Operating Shafts



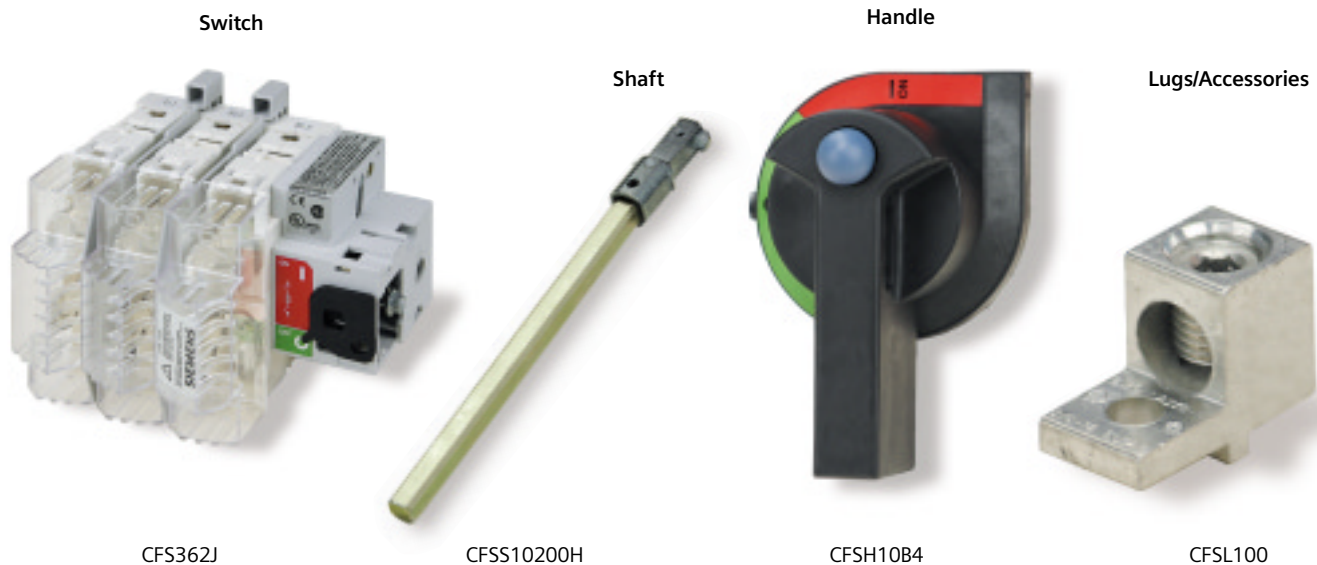
# Disconnect Switches

## Type CFS Compact Fusible UL98 Switches

### Features and Ordering Information

#### Features

- 30 – 400A ratings
- UL Listed and CSA Certified
- IEC 60 947-3 Certified and CE marked
- Door mounted rotary handles with defeatable cover interlock
- Meets UL98 requirements and suitable for both service entrance and branch circuit applications
- Compact size
- 50 or 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 numbers CFS361C5 and CFS361J5 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 and 12 ratings



#### Ordering Information

1. Select the panel mounted switch required based on Ampere, HP and AIC requirements.
2. Select handle based on environment rating required.
3. Select operating shaft (200 or 400mm in length). For enclosure depths of 9.0" or less from panel mounting surface to outside of door, use 200mm long shafts. For deeper enclosures, use 400mm long shafts. 30A 50kA switches can be used in 10.0" deep enclosures (panel to inside of door) with 200mm shaft and CFSH5 handles.
4. Line and load lugs are provided as standard on 30 and 60A switches. Terminal kits are available for 100 – 400A switches if needed.
5. Auxiliary contacts are available if needed as follows:
  - A. 30A, 50kA switch CFS361C5 will accept up to (4) auxiliary contacts without an auxiliary contact holder.
  - B. 30A, 50kA switch CFS361J5 will accept up to (2) auxiliary contacts without an auxiliary contact holder. If more than (2) auxiliary contacts are required, order auxiliary contacts PLUS auxiliary contact holder kit CFS AUXH1.
  - C. For all 100 or 200kA 30–400A switches, order the auxiliary contacts required PLUS auxiliary contact holder kit CFS AUXH2.
6. If a non-fusible switch is required, order a shorting bar.
7. 30 and 60A switches have built in line and load shields. Terminal shroud kits are available for 100–400A switches.

# Disconnect Switches

## Type CFS – Switches, Shafts & Handles

### Selection

#### Fusible Switches, 3 Pole 600V AC Max, 250V DC Max ①

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	
30 ②	CFS361C5	Class CC	7.5	15	20	5 ④	50kA
30 ②	CFS361J5	Class J	7.5	15	20	5 ④	50kA
30 ②	CFS361C	Class CC	7.5	15	20	5 ④	100kA
30 ②	CFS361J	Class J	7.5	15	20	5 ④	200kA
60 ②	CFS362J	Class J	15	30	50	10 ④	200kA
100 ③	CFS363J		30	60	75	20 ④	
200 ③	CFS364J		60	125	150	40 ⑤	
400 ③	CFS365J		125	250	350	50 ⑤	



CFS361J5

#### Operating Shafts

Catalog Numbers	Maximum Enclosure Depth ⑥	Shaft Length In. (mm)	Switch and Handle Compatibility
CFSS5200 CFSS5400	10.04 (255) 18.24 (463)	7.9 (200) 15.7 (400)	5mm x 5mm for use with CFS361C5 and CFS361J5 switches and with "CFSH5" handles only
CFSS5200H CFSS5400H	8.54 (217) 17.19 (437)	7.9 (200) 15.7 (400)	5mm x 5mm for use with all "CFSH10" handles and with CFS361C5 and CFS361J5 switches only
CFSS10200H CFSS10400H	9.08 (231) 16.92 (430)	7.9 (200) 15.7 (400)	10mm x 10mm for use with all "CFSH10" handles and with all switches except CFS361C5 and CFS361J5



CFSS5400  
CFSS5200H

#### Rotary Operating Handles – Door Mounted (for use with 50kA CFS361C5 and CFS361J5 switches only)

Catalog Numbers	Color	Operating Shaft Compatibility
Type 1, 3R & 12 ⑦		
CFSH5B12 CFSH5R12	Black Yellow & Red	CFSS5200 OR CFSS5400 (5mm x 5mm)

#### Rotary Operating Handles – Door Mounted (for use with all operating shafts except CFSS5200 & CFSS5400 and with all CFS switches)

Catalog Numbers	Color	Description
Type 1, 3R & 12 ⑧		
CFSH10B12 CFSH10R12	Black Yellow & Red	Heavy duty pistol grip (3.78" long)
CFSH10BL12 CFSH10RL12	Black Yellow & Red	Heavy duty pistol grip (6.00" long)
Type 1, 3R, 4/4X & 12 ⑧		
CFSH10B4 CFSH10R4	Black Yellow & Red	Heavy duty pistol grip (3.78" long)
CFSH10BL4 CFSH10RL4	Black Yellow & Red	Heavy duty pistol grip (6.00" long)



CFSH5R12

- ① Catalog numbers CFS361C5 and CFS361J5 accept 5mm x 5mm operating shafts. All others accept 10mm x 10mm operating shafts.
- ② Line and load lugs included.
- ③ Line and load lugs are not included. Order from table on next page if required.
- ④ DC HP rating requires (2) poles to be connected in series.
- ⑤ DC HP rating requires (3) poles to be connected in series.
- ⑥ Dimensions shown are inches (mm) from mounting pan to outside of door.
- ⑦ Compact pistol grip design (3.25" long) with defeatable cover interlock. Cover can be opened when handle is padlocked in the OFF position.
- ⑧ Defeatable cover interlock provided. Cover cannot be opened when handle is padlocked in the OFF position.



CFSAUXH2 & CFSAUX1NO



CFSL100 & CFSL400

## Type CFS Fusible Switch Accessories

Catalog Numbers	Description
<b>Terminals ①</b>	
CFSL100	100A Lug Kit (6 lugs per kit)
CFSL200	200A Lug Kit (6 lugs per kit)
CFSL400	400A Lug Kit (6 lugs per kit)
<b>Shorting Bars (no fuse kits)</b>	
CFSSB60	60A Shorting Bar Kit (3 lines per kit)
CFSSB100	100A Shorting Bar Kit (3 lines per kit)
CFSSB200	200A Shorting Bar Kit (3 lines per kit)
CFSSB400	400A Shorting Bar Kit (3 lines per kit)
<b>Auxiliary Contacts ②</b>	
CFSAUXH1 ②	Auxiliary Contact Holder (30A–50kA Sws)
CFSAUXH2 ②	Auxiliary Contact Holder (30–400A 100 & 200kA Sws)
CFSAUX1NO ②	Auxiliary Contact 1 NO (30–400A Sws)
CFSAUX1NC ②	Auxiliary Contact 1 NC (30–400A Sws)
<b>Terminal Shrouds</b>	
CFSTS100	100A Shroud Kit
CFSTS200	200A Shroud Kit
CFSTS400	400A Shroud Kit
<b>Padlock Kit (when door is open) ③</b>	
CFSPK	Shaft Padlocking Kit for 30A Compact Switch

① Supplied as standard on 30 and 60A switches.

② CFS361C5 will accept (4) auxiliary contacts without an auxiliary contact holder. CFS361J5 will accept (2) auxiliary contacts without an auxiliary contact holder. ON ALL OTHER SWITCHES, CFSAUXH2 IS REQUIRED TO MOUNT AUXILIARY CONTACTS.

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



CFSAUX1NO



CFSSB60 & CFSSB100

# Disconnect Switches

## Type CFS – Dimensions & Technical Characteristics

### Selection

#### UL & CSA Technical Characteristics

Description	Catalog Number							
	CFS361C5	CFS361J5	CFS361C	CFS361J	CFS362J	CFS363J	CFS364J	CFS365J
Amp Rating	30	30	30	30	60	100	200	400
Max AC Volts	600	600	600	600	600	600	600	600
Max Horsepower Ratings								
240V 3Ø AC	7.5	7.5	7.5	7.5	15	30	60	125
480V 3Ø AC	15	15	15	15	30	60	125	250
600V 3Ø AC	20	20	20	20	50	75	150	350
250V DC	5 <sup>①</sup>	5 <sup>①</sup>	5 <sup>①</sup>	5 <sup>①</sup>	10 <sup>①</sup>	20 <sup>①</sup>	40 <sup>②</sup>	50 <sup>②</sup>
AC Short Circuit Rating	50kA	50kA	100kA	200kA	200kA	200kA	200kA	200kA
Fuse Type (Class)	CC	J	CC	J	J	J	J	J
Electrical Endurance	6000	6000	6000	6000	6000	6000	6000	1000
Mechanical Endurance	10000	10000	10000	10000	10000	10000	8000	6000
Shaft Cross Section	5mm	5mm	10mm	10mm	10mm	10mm	10mm	10mm
Operating Torque (lb.in.)	21	21	53	88	88	88	106	132
Aux Contacts								
NEMA Rating AC	A600	A600	A600	A600	A600	A600	A600	A600
NEMA Rating DC	N600	N600	N600	N600	N600	N600	N600	N600

#### IEC Technical Characteristics

Description	Catalog Number							
	CFS361C5	CFS361J5	CFS361C	CFS361J	CFS362J	CFS363J	CFS364J	CFS365J
Rating Insulation Voltage Ui	800	800	750	750	750	750	750	800
Rated Impulse Voltage (Uimp)	8kV	8kV	8kV	8kV	8kV	8kV	8kV	8kV
Operational Current I <sub>e</sub>								
400V AC (AC22A & AC23A)	32	32	32	32	63	100	200	400
690V AC (AC22A & AC23A)	32	32	32	32	63	100	200	400
Motor Power (kW)								
400V AC	15	15	15	15	30	51	100	220
500V AC	18.5	18.5	18.5	18.5	40	63	140	220
690V AC	25	25	25	25	55	90	185	220
Max Peak (kA peak) let through current	5.5	5.5	7.6	17.6	17.6	22	32	36
Cu cable size (mm <sup>2</sup> )	6	6	6	6	10	25	50	185

#### Wire Ranges Line & Load Lugs<sup>③</sup>

Switch Ampere Rating	UL Approved Wire Size (75°C)	Mechanical Wire Range of Lug (75°C)
30	#10 Cu	#14-10 Cu
60	#6 Cu	#10-3 Cu
100	#3 Cu	#14-2/0 Cu/Al
200	#3/0 Cu	#6-3/0 Cu/Al
400	(2) 300 kcmil AL or (2) 4/0 Cu	(2)#2-600 Kcmil Cu/Al

#### Panel Space Requirements

Catalog Number	Ampere Rating	Dimensions Inches (mm)		
		Height	Width	Depth <sup>④</sup>
CFS361C5	30	4.56 (116)	3.78 (96)	6.00 (152)
CFS361J5	30	4.56 (116)	4.15 (105)	6.00 (152)
CFS361C	30	5.88 (149)	5.62 (143)	7.00 (178)
CFS361J	30	5.88 (149)	6.75 (171)	7.00 (178)
CFS362J	60	5.88 (149)	6.75 (171)	7.00 (178)
CFS363J	100	7.19 (183)	8.25 (210)	7.00 (178)
CFS364J	200	8.13 (206)	9.44 (240)	8.00 (203)
CFS365J	400	14.94 (379)	11.94 (303)	8.00 (203)

① DC HP rating requires (2) poles to be connected in series.

② DC HP rating requires (3) poles to be connected in series.

③ Line and load lugs are factory installed on 30 and 60A switches and are available as field installed kits only on 100–400A switches.

④ Minimum dimension from mounting surface to inside of cover. Dimensions shown can be decreased if auxiliary contacts are not required.

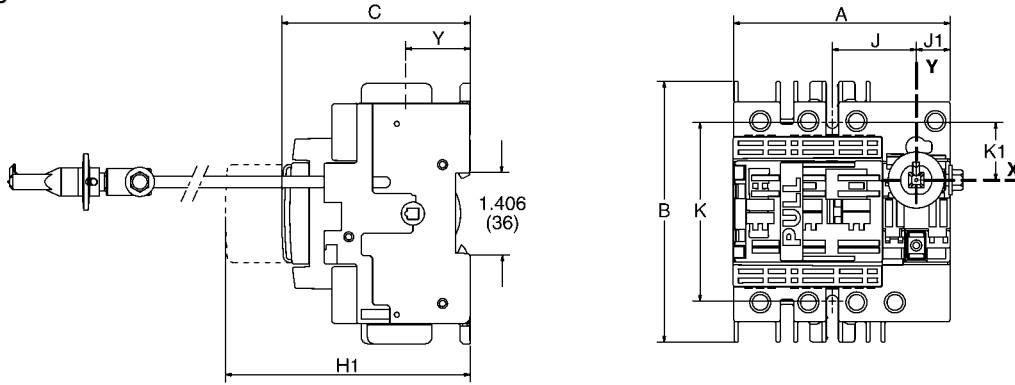
# Disconnect Switches

## Type CFS Compact Fusible UL98 Switches

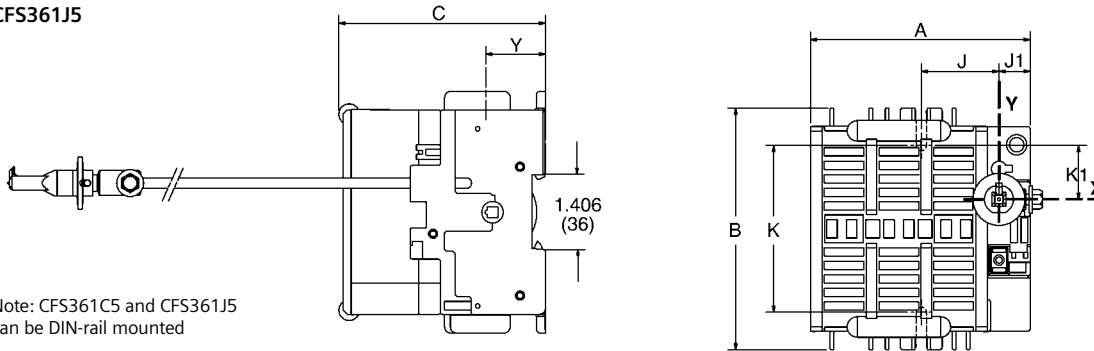
### Dimensions

### Dimensions – 30A, 50kA Switches

CFS361C5



CFS361J5



Note: CFS361C5 and CFS361J5 can be DIN-rail mounted

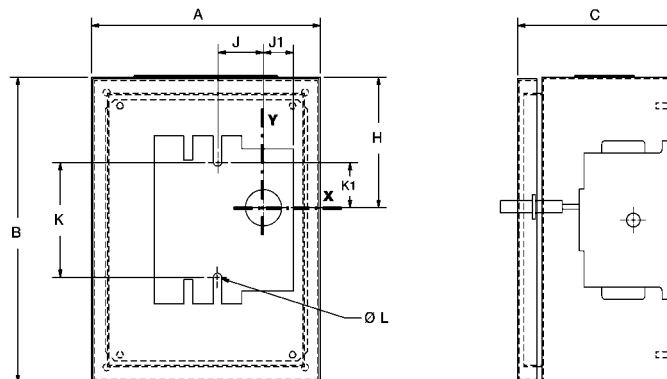
### Dimensions – Inches (mm)

Catalog Number	A	B	C	H1	J	J1	K	K1	Y
CFS361C5	3.78 (96)	4.56 (116)	3.28 (84)	5.19 (132)	1.47 (37)	0.59 (15)	3.13 (80)	1.00 (25)	1.12 (28)
CFS361J5	4.13 (105)	4.56 (116)	3.89 (99)	—	1.47 (37)	0.59 (15)	3.30 (84)	1.00 (25)	1.12 (28)

### Recommended Minimum Enclosure Dimensions

CFS361C5

CFS361J5



### Dimensions – Inches (mm)

Catalog Number	A	B	C	H	J	J1	K	K1	ØL
CFS361C5	6.0 (152)	8.00 (203)	6.0 (152)	3.5 (89)	1.47 (37)	0.59 (15)	3.13 (80)	1.00 (25)	0.21 (5)
CFS361J5	6.0 (152)	8.00 (203)	6.0 (152)	3.5 (89)	1.47 (37)	0.59 (15)	3.30 (84)	1.00 (25)	0.21 (5)

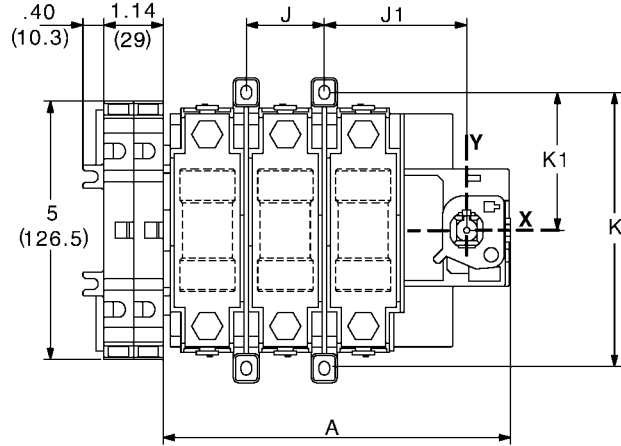
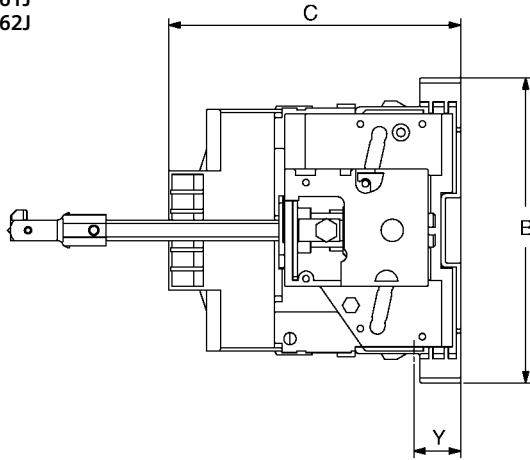
# Disconnect Switches

## Type CFS Compact Fusible UL98 Switches

### Dimensions

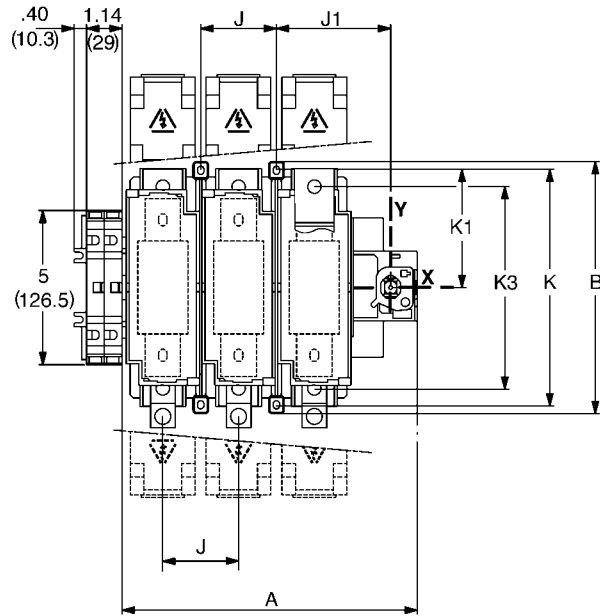
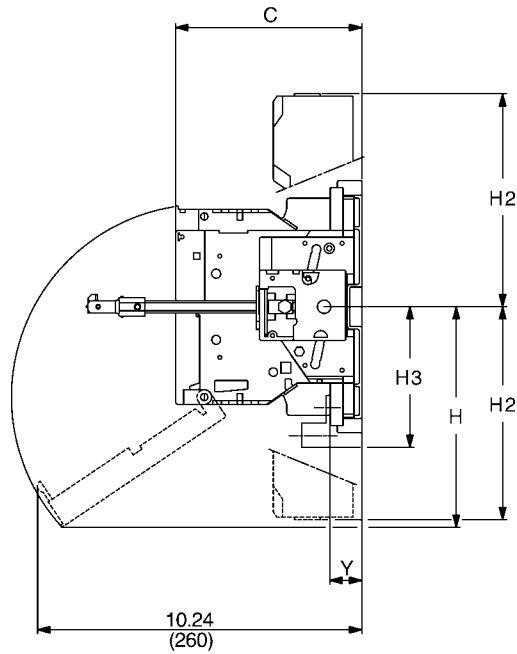
#### Dimensions – 30-200A, 100kA & 200kA Switches

CFS361C  
CFS361J  
CFS362J



Dimensions shown in inches and millimeters ( ).

CFS363J  
CFS364J



Dimensions shown in inches and millimeters ( ).

#### Dimensions – Inches (mm)

Catalog Number	A	B	C	H	H2	H3	J	J1	K	K1	K3	Y
CFS361C	5.63 (143)	5.87 (149)	3.89 (99)	—	—	—	1.14 (29)	2.38 (60)	5.31 (135)	2.63 (67)	—	1.21 (31)
CFS361J	6.72 (171)	5.87 (149)	5.62 (143)	—	—	—	1.5 (38)	2.75 (70)	5.31 (135)	2.63 (67)	—	0.95 (24)
CFS362J	6.72 (171)	5.87 (149)	5.62 (143)	—	—	—	1.5 (38)	2.75 (70)	5.31 (135)	2.63 (67)	—	0.95 (24)
CFS363J	8.26 (210)	7.19 (183)	5.63 (143)	4.06 (103)	5.27 (134)	3.66 (93)	2.05 (52)	3.28 (83)	6.61 (168)	3.28 (83)	5.55 (141)	1.0 (25)
CFS364J	9.44 (240)	8.13 (207)	6.0 (152)	7.27 (185)	6.87 (175)	4.79 (122)	2.44 (62)	3.68 (94)	7.56 (192)	3.75 (95)	6.53 (166)	1.03 (26)

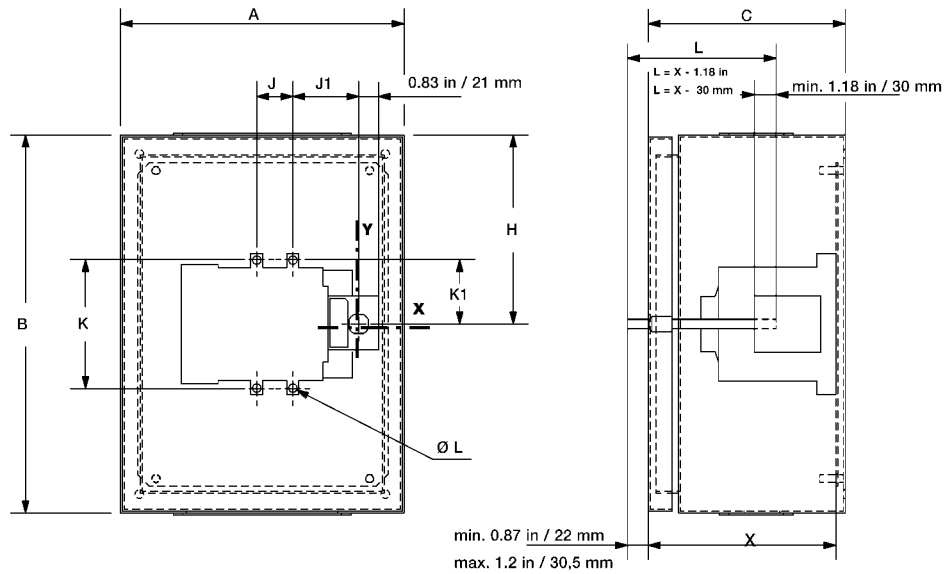
# Disconnect Switches

## Type CFS Compact Fusible UL98 Switches

### Dimensions

#### Recommended Minimum Enclosure Dimensions For 30 – 200A, 100kA and 200kA Switches

CFS361C  
CFS361J  
CFS362J  
CFS363J  
CFS364J



Dimensions shown in inches and millimeters ( ).

#### Dimensions – Inches (mm)

Catalog Number	A	B	C	H	J	J1	K	K1	ØL
CFS361C	12 (305)	10 (254)	5 (127)	3 (76)	1.14 (29)	2.38 (61)	5.31 (135)	2.63 (67)	0.20 (5)
CFS361J	10 (254)	10 (254)	6 (153)	3 (76)	1.5 (38)	2.75 (70)	5.31 (135)	2.63 (67)	0.20 (5)
CFS362J	10 (254)	10 (254)	6 (153)	4.5 (114)	1.5 (38)	2.75 (70)	5.31 (135)	2.63 (67)	0.20 (5)
CFS363J	20 (508)	24 (610)	9 (229)	7.5 (190)	2.05 (52)	3.28 (83)	6.61 (168)	3.28 (83)	0.20 (5)
CFS364J	20 (508)	24 (610)	9 (229)	12 (305)	2.44 (62)	3.68 (94)	7.56 (192)	3.75 (95)	0.20 (5)

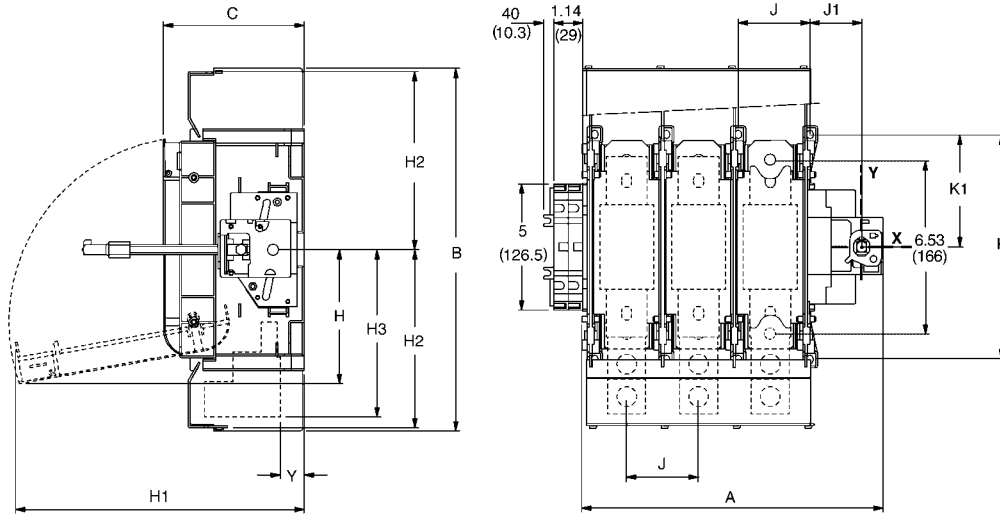
# Disconnect Switches

## Type CFS Compact Fusible UL98 Switches

### Dimensions

### Dimensions – 400A, 200kA Switch

CFS365J



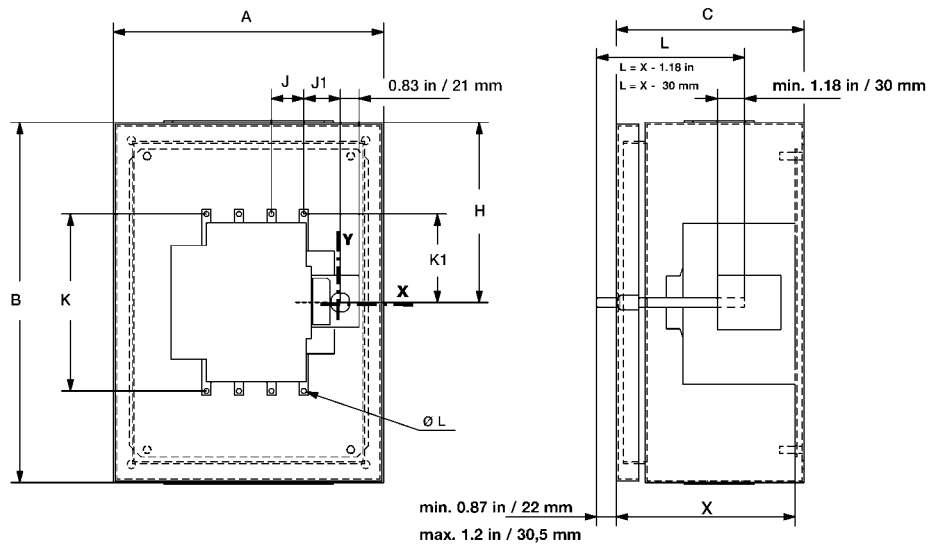
Dimensions shown in inches and millimeters ( ).

### Dimensions – Inches (mm)

Catalog Number	A	B	C	H	H1	H2	H3	J	J1	K	K1	Y
CFS365J	11.93 (303)	14.31 (363)	5.56 (141)	5.28 (134)	11.41 (290)	7.04 (179)	6.59 (167)	2.84 (72)	2.04 (52)	8.83 (224)	4.41 (112)	1.06 (27)

### Recommended Minimum Enclosure Dimensions

CFS365J



Dimensions shown in inches and millimeters ( ).

### Dimensions – Inches (mm)

Catalog Number	A	B	C	H	J	J1	K	K1	ØL
CFS365J	24 (610)	30 (762)	12 (305)	14 (358)	2.84 (72)	2.04 (52)	8.83 (224)	4.41 (112)	0.26 (7)

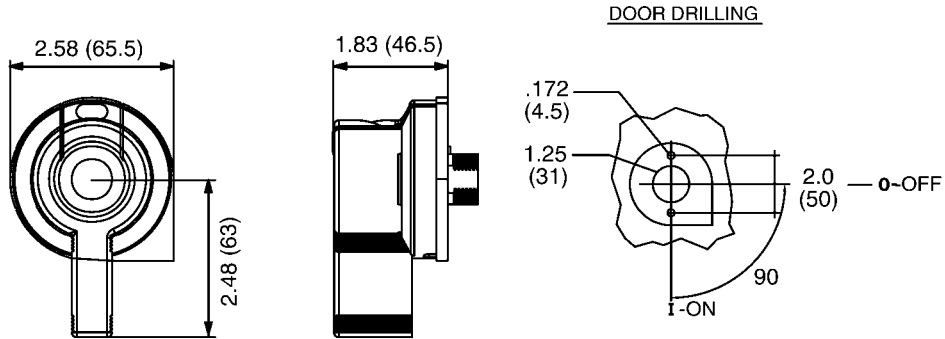
# Disconnect Switches

## Type CFS Compact Fusible UL98 Switches

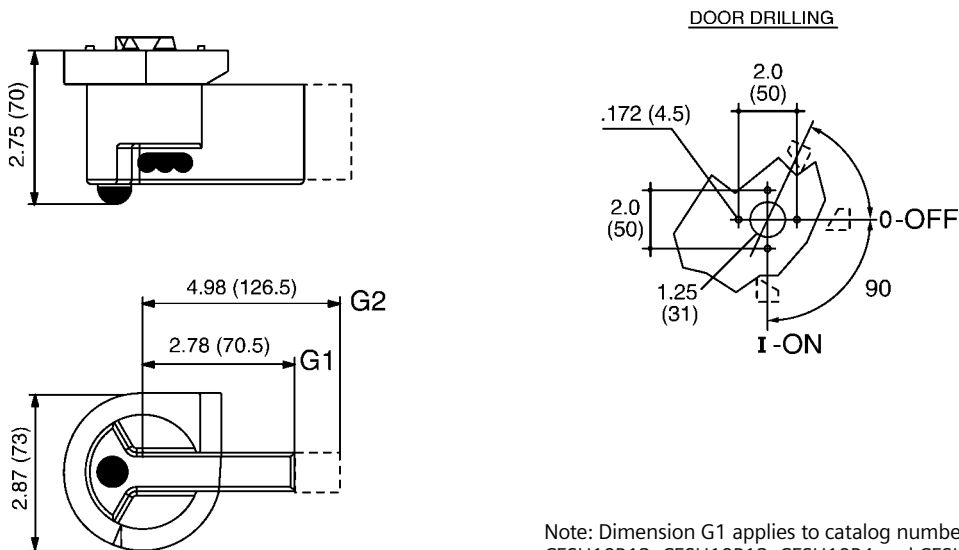
### Dimensions

#### Dimensions – Handles & Door Drillings

##### Compact Handles – CFSH5 Type



##### Heavy Duty Type – CFSH10 Handles



Dimensions shown in inches and millimeters ( ).

Note: Dimension G1 applies to catalog numbers: CFSH10B12, CFSH10R12, CFSH10B4 and CFSH10R4. Dimension G2 applies to catalog numbers CFSH10BL12, CFSHRL12, CFSH10BL4 and CFSH10RL4.

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