

General Information

Type CFS Switches, Shafts and Handles

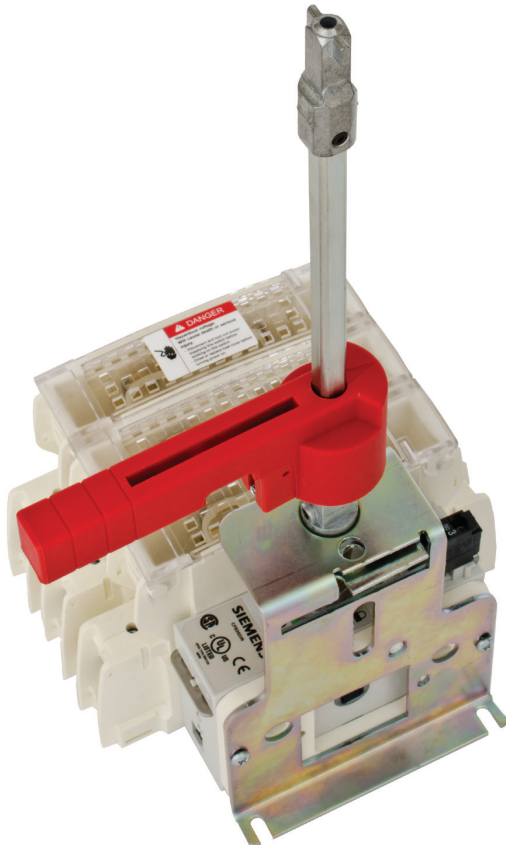
Description

Siemens Type CFS compact fusible switches meet UL 98 requirements and can be used in either service entrance or 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. 60A and larger switches provided with Class J fuse provisions can be used 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.



Catalog Numbering System

CFS Switches

Compact Fusible Switch

CFS 3 6 1 J 5 N

- Number of poles 3 = 3
- Max. Voltage Rating 6 = 600V
- Ampere rating
 - 1 = 30A
 - 2 = 60A
 - 3 = 100A
 - 4 = 200A
 - 5 = 400A
 - 6 = 600A
 - 7 = 800A
- Fuse provisions type
 - C = Class CC
 - J = Class J with right hand mechanism
 - JL = Class J with left hand mechanism
 - L = Class L with right hand mechanism
- Max. AIC rating
 - 5 = 100kA
 - Omit = 200kA J fused
- Version
 - N = New size reduced version
 - N1 = New 100kA 60A switch

Operating Handles

CFS type handle

CFSH 10 R 12 N

- Shaft cross section
 - 5 = 5 mm
 - 10 = 10 mm
 - 12 = 12 mm
- Handle color and length
 - B = Black & blue, short
 - R = Red & yellow, short
 - BL = Black & blue, long
 - RL = Red & yellow, long
- NEMA type
 - 12 = 1, 3R and 12
 - 4 = 1, 3R, 12 and 4/4X
- Version
 - N = New version

CFS Operating Shafts

CFS type shaft

CFSS 10 200 H N

- Shaft cross section
 - 5 = 5 mm
 - 10 = 10 mm
 - 12 = 12 mm
- Shaft length
 - 200 = 200 mm
 - 400 = 400 mm
- Switch compatibility
 - Omit = 30A, 100kA
 - H = 100 or 200 kA
- Version
 - N = New version

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 numbers **CFS361C5** & **CFS361J5** 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

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.
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. 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. 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 information provided in the selection tables.

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^⑨

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	
Standard – With Right Hand Mounted Mechanism							
30 ^①	CFS361C5	Class CC	7.5	15	20	5 ^③	100kA
30 ^①	CFS361J5	Class J	7.5	15	20	5 ^③	100kA
30 ^①	CFS361JN	Class J	7.5	15	20	5 ^③	200kA
60 ^①	CFS362JN1	Class J	15	30	50	10 ^③	100kA
60 ^①	CFS362JN	Class J	15	30	50	10 ^③	200kA
100 ^①	CFS363JN		30	60	75	20 ^③	
200 ^②	CFS364JN ^⑥		60	125	150	–	
400 ^②	CFS365JN ^⑥		125	250	350	–	
600 ^②	CFS366J ^{⑥⑦}		200	400	500	–	
800 ^②	CFS367L ^{⑥⑦}	Class L	200	400	500	–	200kA
Optional – With Left Hand Mounted Mechanism^⑧							
30 ^①	CFS361JLN	Class J	7.5	15	20	5 ^③	200kA
60 ^①	CFS362JLN		15	30	50	10 ^③	
100 ^①	CFS363JLN		30	60	75	20 ^③	

Operating Shafts for 30-400A Switches^⑧

Catalog number	Shaft length in. (mm)	Switch & handle compatibility
CFSS5200N	7.9 (200)	5mm x 5mm for use with CFS361C5 & CFS361J5
CFSS5400N	15.7 (400)	switches & with "CFSH5" handles only
CFSS5200HN	7.9 (200)	5mm x 5mm for use with all "CFSH10" handles & with
CFSS5400HN	15.7 (400)	CFS361C5 & CFS361J5 switches only
CFSS10200HN	7.9 (200)	10mm x 10mm for use with all "CFSH10" handles & with all
CFSS10400HN	15.7 (400)	30-400A switches except CFS361C5 & CFS361J5

Compact rotary operating handles - door mounted (for use with CFS361C5 & CFS361J5 switches only)^⑧

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
Type 1, 3R & 12^①		
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	
Type 1, 3R, 4/4X & 12^②		
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	


CFS361J5

CFSS5400N

CFSH5B12N

- 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 Catalog numbers CFS361C5 & CFS361J5 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 4 pole 600 & 800A switches, CFS466J & CFS467L are also available.
- ⑨ CFS366J and CFS367L are rated 250 & 600V DC when (2) poles are connected in series.

Selection and Accessories

Type CFS Compact Fusible Switches

600 & 800A Rotary Operating Handles - Door Mounted (8.27" long)^①

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 12mm x 12mm)

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
Terminals^②	
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)
CNFSL400D	400A lug kit (6 lugs per kit, 2 wires per lug) #6-350kcmil
CFSL400	600-800A lug kit (6 lugs per kit, 2 wires per lug) #2-600kcmil ^③
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)	
CFSAXH1 ^{④⑤}	Aux contact holder (CFS361C5 & CFS361J5)
CFSAX1NO	Aux contact 1 NO (30-800A Sws)
CFSAX1NC	Aux contact 1 NC (30-800A Sws)
CFS11AUX	1NO, 1NC aux contact kit (side mount for 200kA switches)
CFS22AUX	2NO, 2NC aux contact kit (side mount for 200kA switches)
Terminal shrouds (line or load)	
CFSTS200N ^⑥	200A shroud kit (line or load 3-pole kit)
CFSTS400N ^⑥	400A shroud kit (line or load 3-pole kit for CFS365JN only)
CFSTS680 ^⑥	600/800A 3-pole shroud kit
CFSTS6804 ^⑥	600/800A 4-pole shroud kit
30A compact switch kits	
CFSPLK	Shaft padlocking kit for 30A compact switch when door is open ^⑦
CFSH5CDM	Direct mount handle kit for CFS361C5
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.

CFSNFPA1 ^{⑧⑨}	For use with CFS361C5 & CFS361J5
CFSNFPA2N ^⑧	For use with CFS361JN, CFS361CN, CFS362JN1, CFS362JN, CFS363JN & CFS364JN
CFSNFPA3N ^⑧	For use with CFS365JN only

- ① Supplied as standard on 30-100A switches
- ② CFS361C5 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, 100kA compact switches.
- ④ 12.6 in. (320 mm) long operating shaft included
- ⑤ 12.7 in. (323 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 Neither line or load terminal shrouds are supplied as standard with new style 200 & 400A switches.
- ⑨ 2 kits needed for 800A, total 12 lugs to cover line and load sides.
- ⑩ CFSAXH1 contact holder can not be used with NFPA 79 kit. Refer to table below for aux contact capability with NFPA Kit.


CFSL200 & 400

CFSAX1NC

CFSSB100 - CFSSB400



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 ^①
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)
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
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
CFS361C5	CFSNFPA1	(2) Total, CFS AUX1NO or CFS AUX1NC ^②
CFS361J5		(1) CFS AUX1NO or (1) CFS AUX1NC ^②
CFS361JN	CFSNFPA2N	(2) Total, CFS AUX1NO or CFS AUX1NC ^②
CFS362JN1		
CFS362JN		
CFS363JN		
CFS364JN	CFSNFPA3N	(2) Total, CFS AUX1NO or CFS AUX1NC ^②
CFS365JN		

- ① Minimum dimensions from mounting surface to inside of cover. Dimensions shown can be decreased if aux contacts are not required.
 ② For additional auxiliary contacts use side mounted CFS11AUX or CFS22AUX.
 ③ CFS AUXH1 contact holder can not be used with NFPA 79 kit.

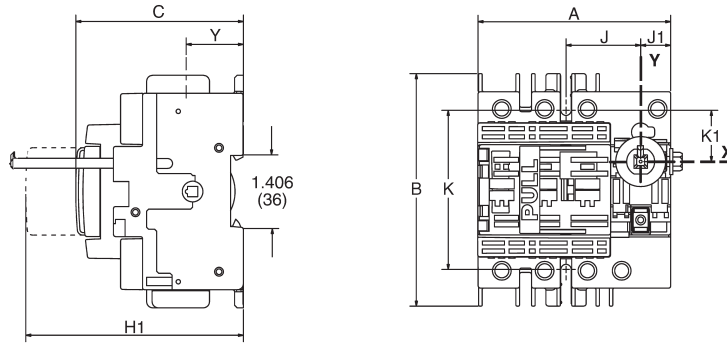


Dimensions

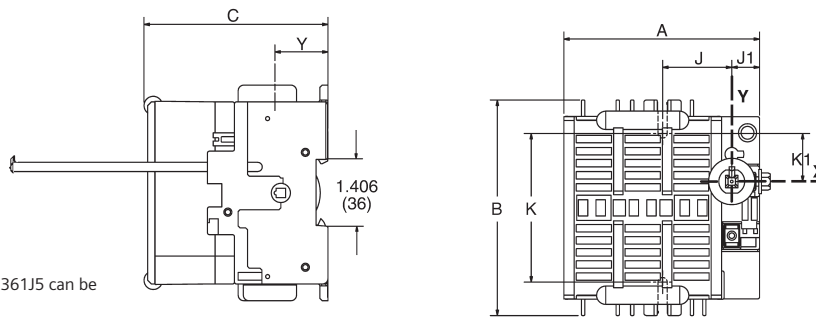
Type CFS Compact Fusible UL98 Switches

Dimensions - 30A, 100kA switches

CFS361C5



CFS361J5

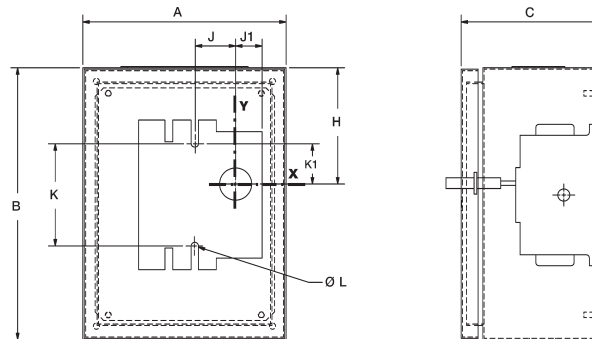


Note: CFS361C5 & CFS361J5 can be DIN-rail mounted

Dimensions - in. (mm)

Catalog No.	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 - in. (mm)

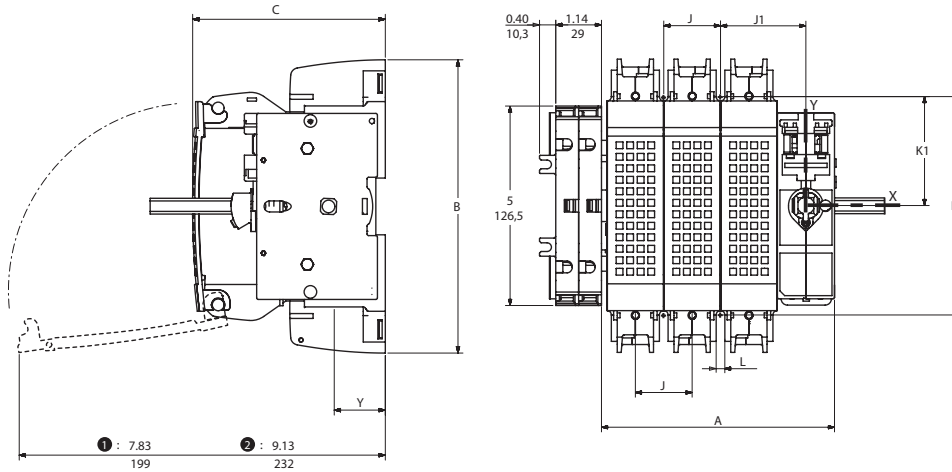
Catalog No.	A	B	C	H	J	J1	K	K1	ØL
CFS361C5	6.0 (152)	8.00 (203)	6.0 (152)	3.5 (89)	1.47 (37)	0.59 (15)	3.13 (80)	1.00 (25)	0.21 (5)
CFS361J5	6.0 (152)	8.00 (203)	6.0 (152)	3.5 (89)	1.47 (37)	0.59 (15)	3.30 (84)	1.00 (25)	0.21 (5)

Dimensions

Type CFS Compact Fusible UL98 Switches

Dimensions - 30-100A, 100kA & 200kA switches

CFS361JN
CFS362JN1
CFS362JN
CFS363JN

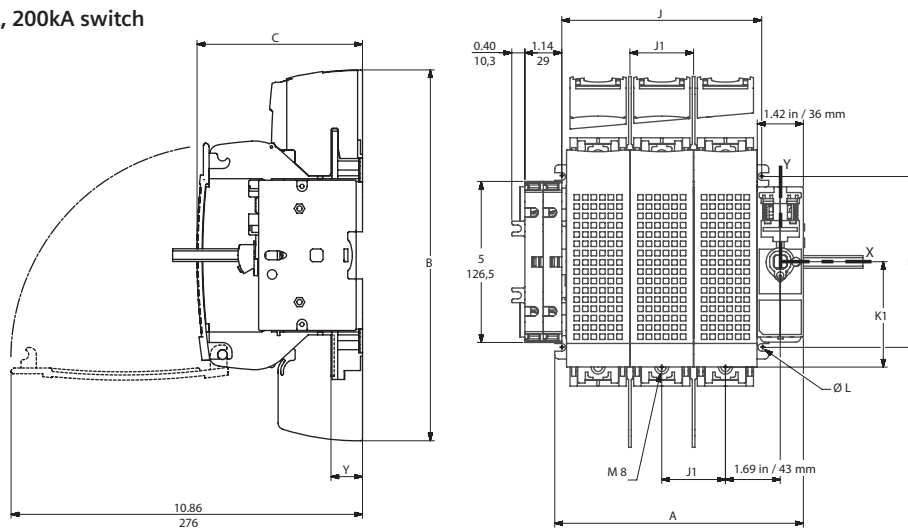


Dimensions - in. (mm)

Catalog No.	A	B	C	J	J1	K	K1	L	Y
CFS361JN ^a	5.88 (149.5)	5.35 (136)	4.84 (123)	1.41 (36)	2.12 (54)	4.25 (108)	1.12 (54)	0.25 (6.5)	1.43 (36.5)
CFS362JN1 ^a									
CFS362JN ^b	5.88 (149.5)	7.32 (186)	4.84 (123)	1.41 (36)	2.12 (54)	5.45 (138.5)	2.73 (69.5)	0.21 (5.5)	1.16 (29.5)
CFS363JN ^b									

Dimensions - 200A, 200kA switch

CFS364JN



Dimensions - in. (mm)

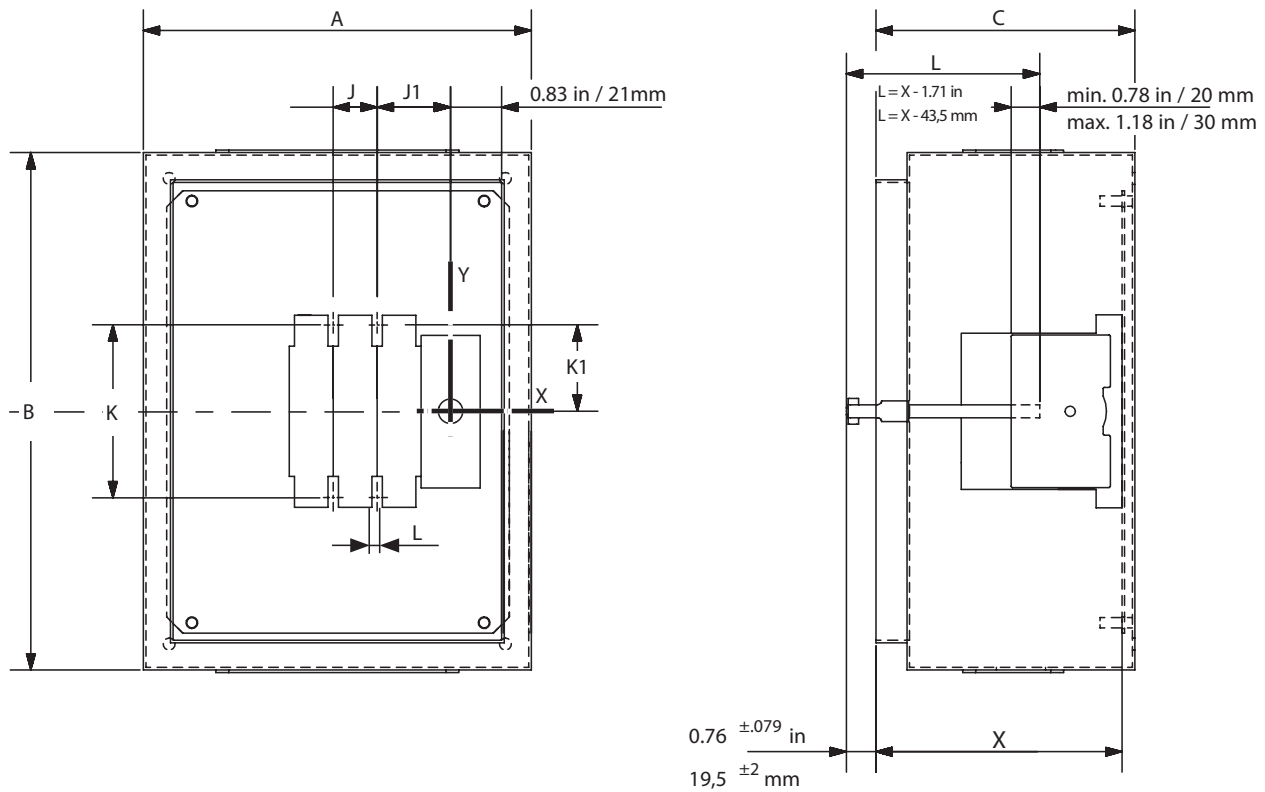
Catalog No.	A	B	C	J	J1	K	K1	ØL	Y
CFS364JN	7.67 (195)	11.45 (291)	5.11 (130)	6.18 (157)	1.96 (50)	5.27 (134)	3.24 (82.5)	0.23 (6)	0.96 (24.5)

Dimensions

Type CFS Compact Fusible UL98 Switches

Recommended minimum enclosure dimensions for 30-100A, 100kA & 200kA switches

- CFS361JN
- CFS362JN1
- CFS362JN
- CFS363JN



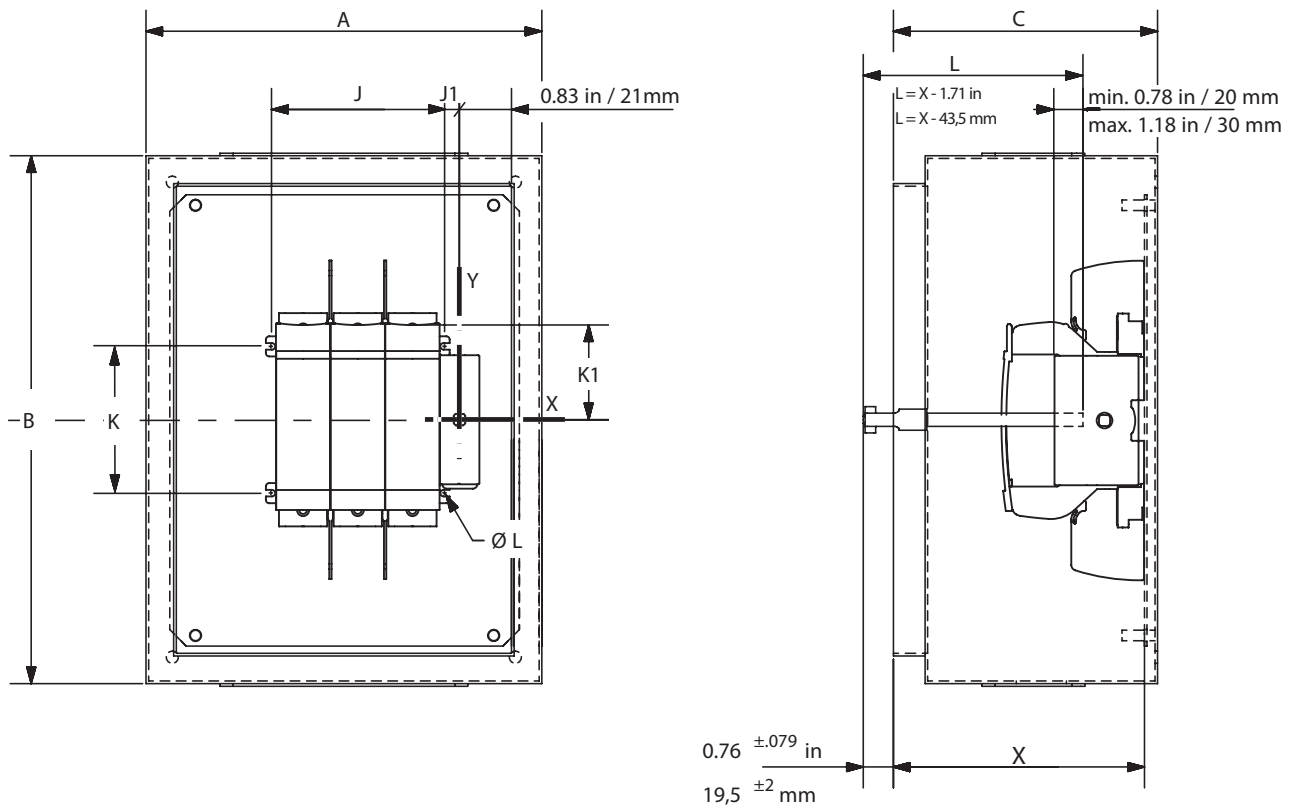
Dimensions - in. (mm)								
Catalog No.	A	B	C	J	J1	K	K1	L
CFS361JN CFS362JN1	10 (254)	10 (254)	6 (153)	1.41 (36)	2.12 (54)	4.25 (106)	1.12 (54)	0.25 (6.5)
CFS362JN CFS363JN	12 (305)	16 (406.5)	6 (153)	1.41 (36)	2.12 (54)	5.45 (138.5)	2.73 (69.5)	0.21 (5.5)

Dimensions

Type CFS Compact Fusible UL98 Switches

Recommended minimum enclosure dimensions for 200A, 200kA switches

CFS364JN



Dimensions - in. (mm)

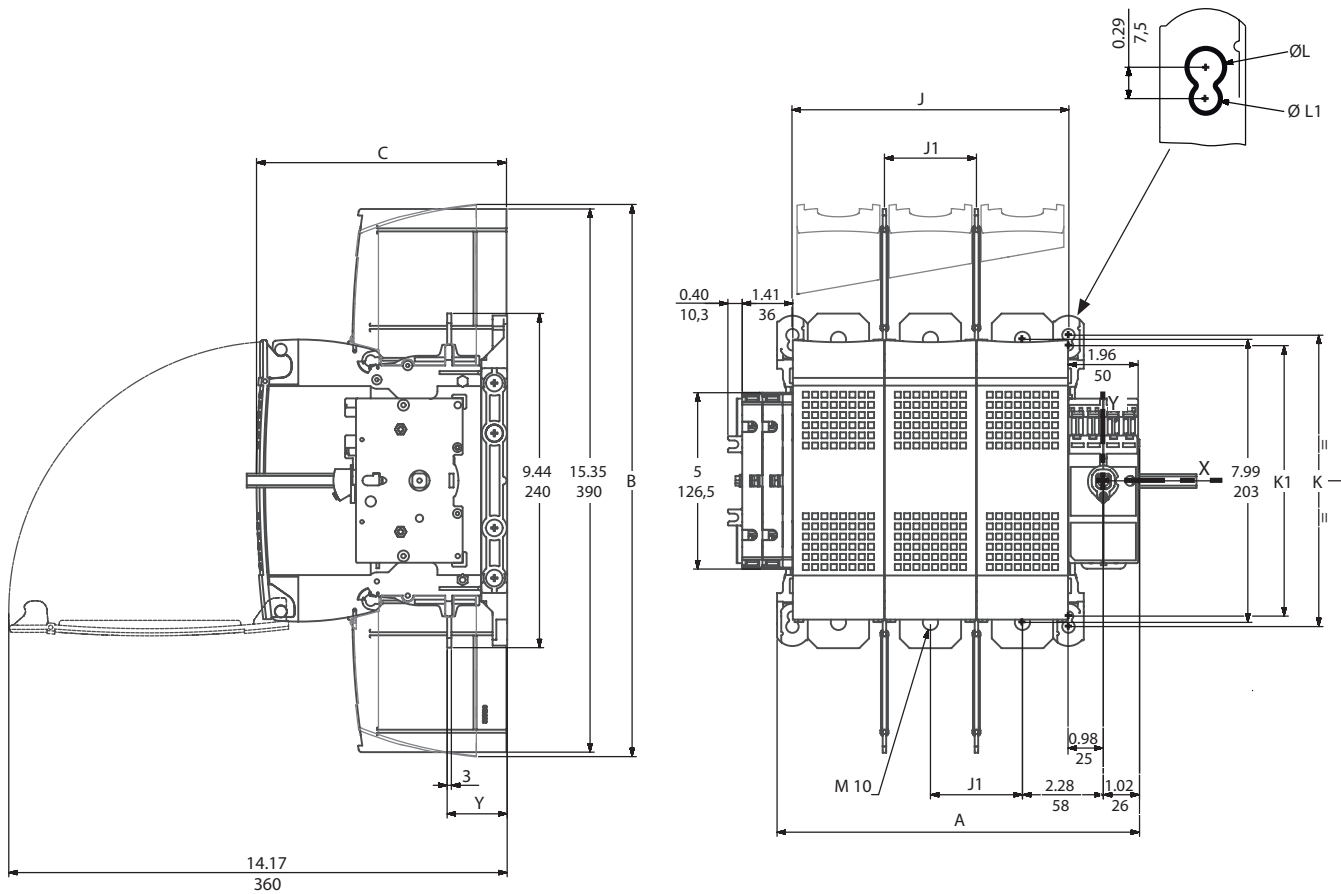
Catalog No.	A	B	C	J	J1	K	K1	ØL
CFS364JN	20 (508)	24 (610)	8 (203.5)	6.18 (157)	1.69 (43)	5.27 (134)	3.24 (82.5)	0.23 (6)

Dimensions

Type CFS Compact Fusible UL98 Switches

Dimensions - 400A, 200kA switch

CFS365JN



Dimensions - in. (mm)

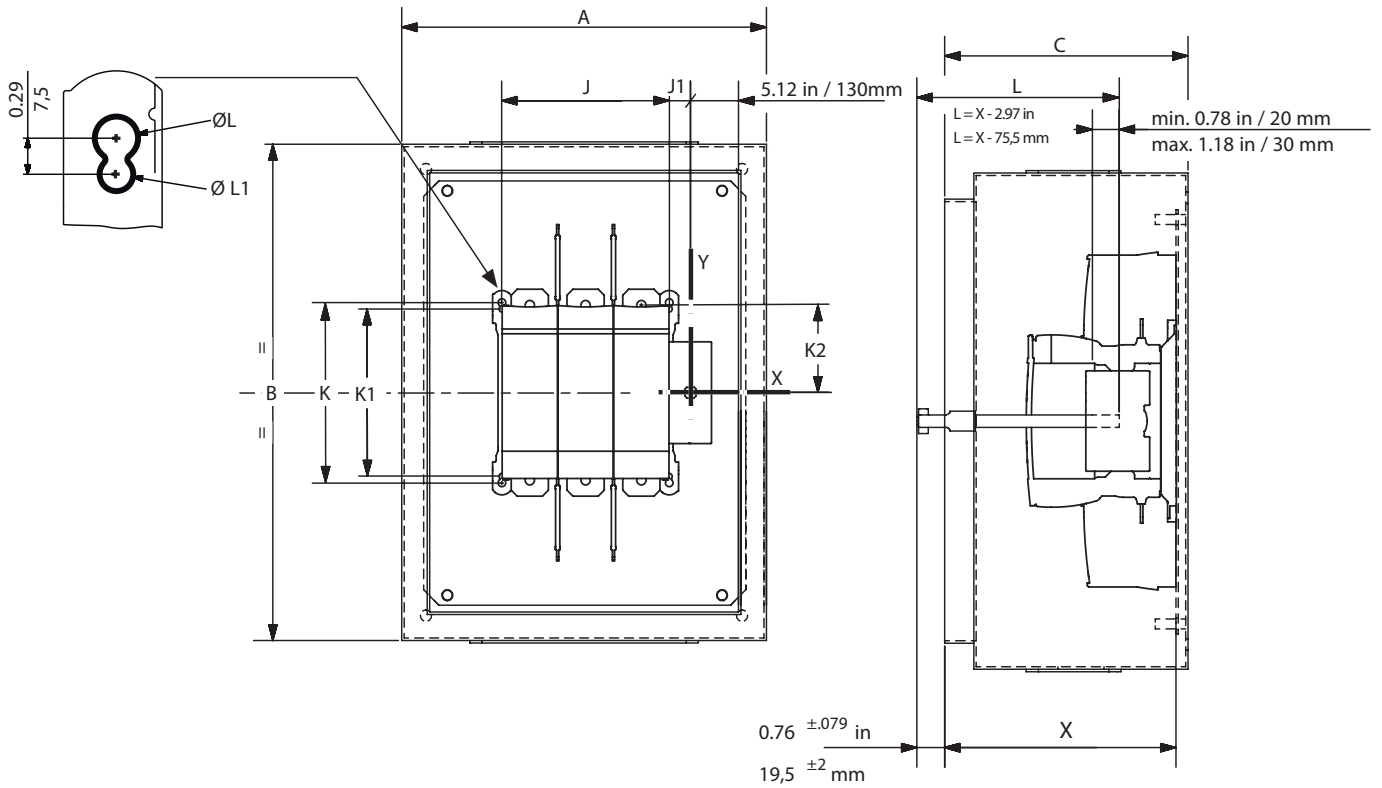
Catalog No.	A	B	C	J	J1	K	K1	ØL	ØL1	Y
CFS365JN	10.24 (260)	15.61 (396.5)	7.09 (180)	7.80 (198)	2.60 (66)	8.23 (209)	7.64 (194)	0.35 (9)	0.27 (7)	1.69 (43)

Dimensions

Type CFS Compact Fusible UL98 Switches

Recommended minimum enclosure dimensions

CFS365JN



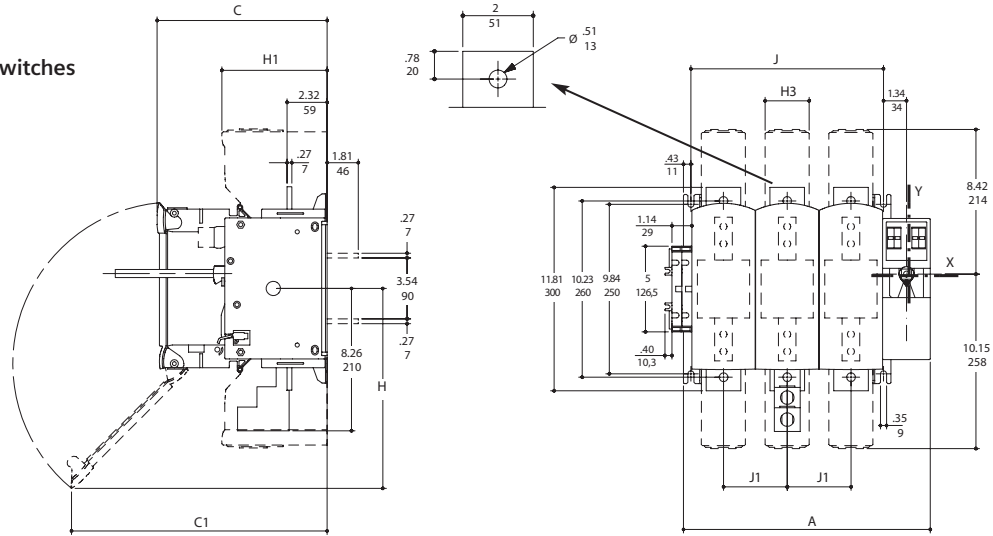
Dimensions - in. (mm)										
Catalog No.	A	B	C	J	J1	K	K1	K2	ØL	ØL1
CFS365JN	31.49 (800)	39.37 (1000)	11.81 (300)	7.80 (198)	0.98 (25)	8.23 (209)	7.64 (194)	3.99 (101.5)	0.36 (9)	0.27 (7)

Dimensions

Type CFS Compact Fusible UL98 Switches

Dimensions -
600A & 800A, 200kA switches

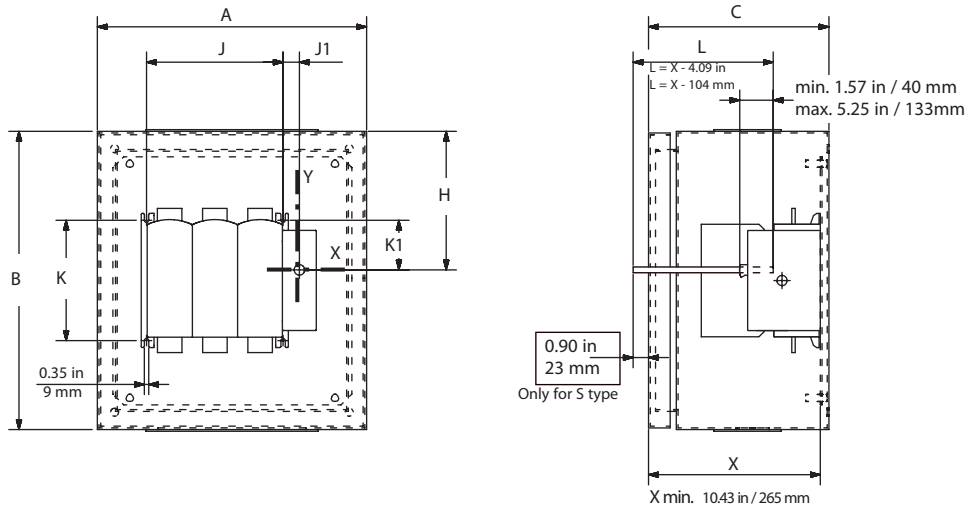
- CFS366J
- CFS466J
- CFS367L
- CFS467L



Dimensions - in. (mm)								
Catalog No.	A	C	C1	H	H1	H3	J	J1
CFS366J CFS367L	14.33 (364)	9.84 (250)	14.72 (374)	11.69 (297)	6.10 (155)	2.56 (65)	11.18 (284)	3.70 (94)
CFS466J CFS467L	18.03 (458)						14.88 (378)	

Recommended minimum enclosure dimensions

- CFS366J
- CFS466J
- CFS367L
- CFS467L



Dimensions - in. (mm)								
Catalog No.	A	B	C	H	J	J1	K	K1
CFS366J CFS367L	36 (914.5)	48 (1219)	12 (305)	23.13 (587.5)	11.18 (284)	1.34 (34)	9.84 (250)	4.05 (103)
CFS466J CFS467L	36 (914.5)	48 (1219)	12 (305)	23.13 (587.5)	14.88 (378)	1.34 (34)	9.84 (250)	4.05 (103)



Dimensions

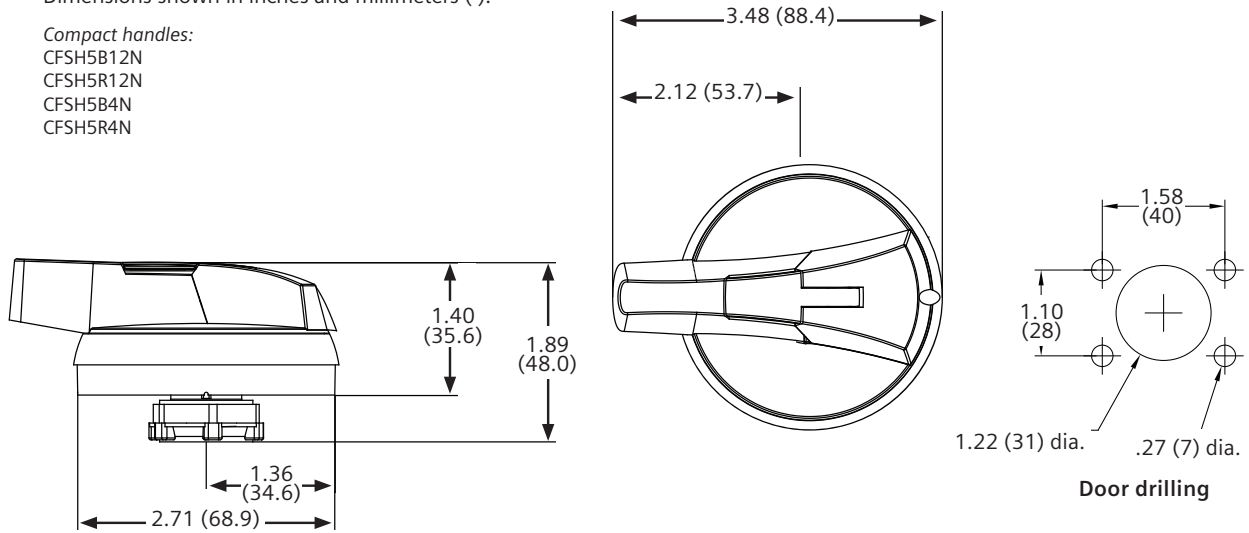
Type CFS Compact Fusible UL98 Switches

Dimensions - handles and door drillings

Dimensions shown in inches and millimeters ().

Compact handles:

- CFSH5B12N
- CFSH5R12N
- CFSH5B4N
- CFSH5R4N



Heavy duty handles:

- | | | |
|------------|-------------|------------|
| CFSH10B12N | CFSH10BL12N | CFSH12BL12 |
| CFSH10R12N | CFSH10RL12N | CFSH12RL12 |
| CFSH10B4N | CFSH10BL4N | CFSH12BL4 |
| CFSH10R4N | CFSH10RL4N | CFSH12RL4 |

