Which switch is right for you?

Compact Fusible Switches



Overview

AutomationDirect Gladiator compact fusible switches provide open fuse indication for faster troubleshooting and reduced downtime. Gladiator switches have Lockout / Tagout capability and finger safe construction to promote safe workplace practices by preventing contact with live components. Positive visible circuit isolation via the disconnect switch makes it easy to view status. Each switch is 35mm DIN rail mountable for ease of installation and requires no tools. Taking up only 1/3 the space of a molded circuit breaker and 2/3 the space of a traditional fusible switch, Gladiator fusible switches save space in your panel.

Features and Benefits

- Class CC and Midget fuse options
- 200kA Short-Circuit Current Rating (SCCR) with Class CC fuses meets high assembly SCCR and reduced personal protective equipment (PPE) requirements
- Full voltage rating up to 600 VAC allows installation flexibility versus slash-rated devices at 480/277 VAC
- Horsepower rated for protecting motor circuits with Class CC units
- UL 98 disconnect rated for protection of branch circuits
- 35mm DIN-rail mountable, utilizing spring

Applications

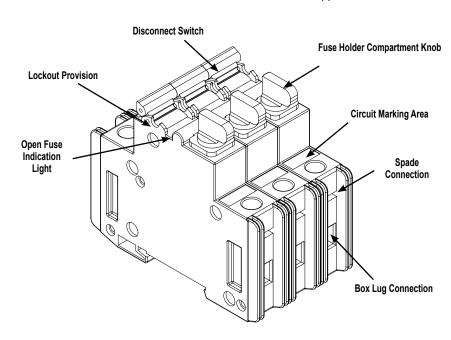
Feeder and Branch Circuit Protection

- Service Entrance or Main Panel Disconnect (UL 98 Class CC)
- Resistive Heating and Lighting Circuit
- Fusible Isolation Switch
- Convenience receptacle circuits (internal / external)
- Motor control circuits
- Load circuits leaving the equipment (external)
- HACR Equipment (Heating Air Conditioning, Refrigeration)
- Computers
- Power supplies

Listings

- UL Class CC fuse version
- UL Listed under UL 98
 File E339079, Guide WHTY
- cULus 22.2, No. 4-04
 File 339079, Guide WHTY7CE Compliant
- RoHS
- UL Class Midget fuse version
- UL Listed under UL 508 File E222847, Guide NRNT
- cULus 22.2, No. 14-05
- CE Compliant
- RoHS





Gladiator Compact Fusible Switches

AC and DC Compact Fusible Switches



Single-Pole



Two-Pole

	Compact Fusible Switch Specifications - AC Switches										
Part Number	Poles	Max Fuse Ampacity	Voltage Range	Fuse Type	SCCR	Agency Approvals	HP Ratings	Price			
CFS-1PCC30	1	1	90 - 600 VAC	Class CC	200 kA	UL 98 Listed cULus 22.2 No. 4-04	0.5 HP @ 120 VAC	Retired			
CFS-1PM30			90 - 240 VAC*	UL Midget	10 kA*	UL 508 Listed CULus 22.2 No.14-05	n/a	Retired			
CFS-2PCC30	2 2 30 3	0	90 - 600 VAC	Class CC	200 kA	UL 98 Listed cULus 22.2 No. 4-04	2.0 HP @ 240 VAC	Retired			
CFS-2PM30		30A	90 - 240 VAC*	UL Midget	10 kA*	UL 508 Listed CULus 22.2 No.14-05	n/a	Retired			
CFS-3PCC30		3	90 - 600 VAC	Class CC	200 kA	UL 98 Listed cULus 22.2 No. 4-04	3.0 HP @ 240 VAC 5.0 HP @ 480 VAC 7.5 HP @ 600 VAC	Retired			
CFS-3PM30			90 - 240 VAC*	UL Midget	10 kA*	UL 508 Listed CULus 22.2 No.14-05	n/a	Retired			

Note: The minimum enclosure size is 14 in. x 12 in. x 6 in. Minimum spacings are 2 inches over surface, 1 inch through air.



Three-Pole

Compact Fusible Switch Specifications - DC Switches								
Part Number Poles Max Fuse Voltage Range Fuse Type SCCR Agency Approvals Price								
CFS-1PCC30-DC	_	20.4	12 - 80 VDC*	Class CC	200 kA*	UL 98 Listed cULus 22.2 No. 4-04	Retired	
CFS-1PM30-DC	'	30A	12 - 80 VDC*	UL Midget	10 kA*	UL 508 Listed CULus 22.2 No.14-05	Retired	

^{*} Rating may be lower depending upon installed fuse. Refer to fuse specifications.



DC Single-Pole

General Specifications					
Construct	ion	RoHS compliant, IP20 complian with 10 AWG or larger wire			
Operatir	ng Temperature	-20 °C to 75 °C (-4 °F to 167 °F)			
Flamma	bility Rating	UL 94V0			
Frequency		50/60 Hz			
Padlockable		Yes [4mm (0.16 in) shank]			
Local In	dication	Yes			
Mountin	g	35 mm DIN Rail			
	One-Pole	0.22 lbs. (100g)			
Weight	Two-Pole	0.43 lbs. (195g)			
	Three-Pole	0.65 lbs. (295g)			

Wire Range						
Number of Wires Wire Size						
One Wire	4 AWG	21 mm2				
Two Wires	18 to 6 AWG	0.75 to 13 mm2				

Note: The use of wire ferrules or crimping terminals is not recommened in box lugs.

Tightening Torque							
Cable Size Tightening Torque							
18 - 10 AWG	2.3 Nm	20 lb-in					
8 - 4 AWG	4.0 Nm 35 lb-in						

Recommended Fuse Types								
	AC Voltage	e Class CC						
Edison	Bussmann	Gould	Littlefuse					
HCLR	KTK-R	ATMR	KLKR					
HCTR	FNQ-R	ATQR	KLDR					
EDCC	LP-CC	ATDR	CCMR					
	AC Voltage (Class Midget						
Edison	Bussmann	Gould	Littlefuse					
MCL	KTK	ATM	KLK					
MOL	BAF / BAN	OTM	BLF					
MEQ	FNQ	ATQ	FLQ					
MEN	FNM	TRM	FLM					
	DC Voltage	e Class CC						
Edison	Bussmann	Gould	Littlefuse					
EDCC	LP-CC	ATDR	CCMR					
	DC Voltage Class Midget							
Edison	Bussmann	Gould	Littlefuse					
N/A	KLM	ATM	KLKD					
	DCM							

^{*} Rating may be lower depending upon installed fuse. Refer to fuse specifications.



Motor Sizing - Compact Fusible Switches

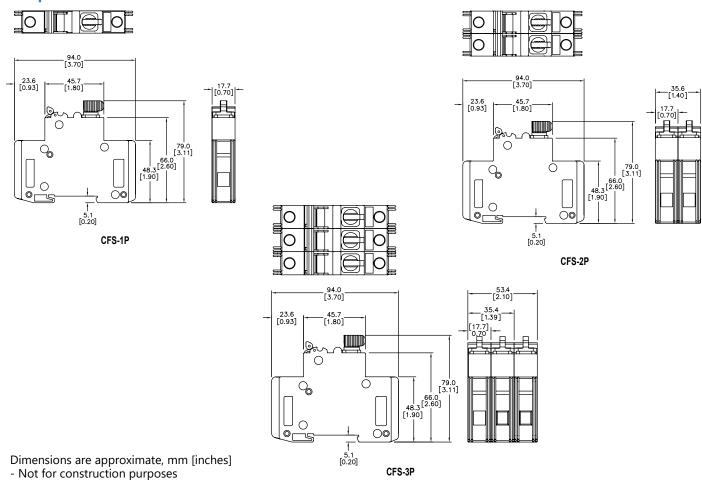
		M	otor Sizing Ch	art		
Voltage	Motor HP	Motor Full Load Amps	Fuse Type	Minimum Fuse Amperage	Code Max Fuse Amperage	Heavy Start Fuse Amperage
	1/6	4.4		9	15	15
445.140.4.51	1/4	5.8	FD00	12	20	20
115 VAC - 1 Phase	1/3	7.2	EDCC	15	25	25
	1/2	9.8		30	30	30
	1/6	2.2		4.5	10	10
	1/4	2.9		6	10	10
	1/3	3.6		7	15	15
230 VAC - 1 Phase	1/2	4.9	EDCC	10	15	15
	3/4	6.9		15	25	25
	1	8.0		25	25	30
	1-1/2	10.0		30	30	30
	1/2	2.5		5	10	10
	3/4	3.7		7.5	15	15
200 VAC - 3 Phase	1	4.8	EDCC	10	15	15
	1-1/2	6.9		15	25	25
-	2	7.8		25	25	30
	1/2	2.4	EDCC	5	10	10
	3/4	3.5		7	15	15
208 VAC - 3 Phase	1	4.6		10	15	15
	1-1/2	6.6		15	20	25
	2	7.5		15	25	30
	1/2	2.2		4.5	10	10
	3/4	3.2		7	10	12
	1	4.2		9	15	15
230 VAC - 3 Phase	1-1/2	6.0	EDCC	12	20	20
	2	6.8		15	25	25
	3	9.6		30	30	30
	1/2	1.1		2.25	6	6
	3/4	1.6		3.2	6	6.25
	1	2.1		4.5	10	10
460 VAC - 3 Phase	1-1/2	3.0	EDCC	6	10	12
	2	3.4		7	15	15
	3	4.8		10	15	15
	5	7.6		25	25	30
	1/2	0.9		1.8	3	3.5
	3/4	1.3		2.8	6	6
	1	1.7		3.5	6	6.25
	1-1/2	2.4	FD 0.0	5	10	10
575 VAC - 3 Phase	2	2.7	EDCC	5.6	10	10
	3	3.9		8	15	15
	5	6.1		15	20	20
	7-1/2	9.0		30	30	30

Note: NEMA motors only (no IEC or Design B Energy Efficient). Minimum size if no more than 1 start / hour. Use Code Max Fuse Amperage in low to moderate reverse / jog / plug applications. Use Heavy Start Fuse Amperage only if Code Max does not allow motor start up. For high reverse / jog / plug applications or larger horsepower motors, Class J fuses are recommended. (Refer to time-current curves for specific applications.) Per NEC 430.52

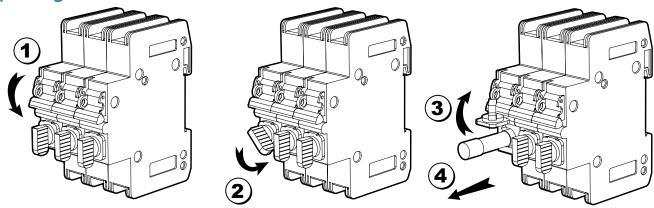
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Gladiator Compact Fusible Switches

Compact Fusible Switches Dimensions



Replacing Fuses



Steps:

- 1. Turn Switch Off.
- 2. Turn fuse holder compartment knob counterclockwise.
- 3. Rotate fuse holder compartment knob up.
- 4. *Remove fuse and replace with appropriate type CC or Midget fuse.

*Note: Insert replacement CC fuse with rejection feature (tip) in first.



Auxiliary Contact

N.O. + N.C. contact output to indicate the status of the switching mechanism on the Gladiator switch. Mounts on the right side of the switch.



General Specifications - CFS-AUX									
Part Number Description Rated Rated Flamibility Agency Approvals Weight Voltage Rating						Price			
CFS-AUX	Auxiliary contact switch 1 NO + 1 NC	5A	240 VAC	UL 94V0	UL 98 Recognized and cURus 22.2 No. 4-04, IEC 60947-5-1 AC15	0.11 lbs. (50g)	Retired		

CFS-AUX

Auxiliary Contact Dimensions

