

Ferraz Shawmut Non-Fusible Disconnects

SIRCO Series

Overview

Ferraz Shawmut SIRCO disconnect switches are heavy duty, manually operated, non-fused disconnect switches, designed using the latest disconnect switch technology available. SIRCO switches meet UL98 standards with a product that “makes and breaks” power circuits on load. These switches have been tested and approved for use in the most demanding applications, including “service entrance”. Visible blade contacts are standard in SIRCO switches up to 400A. Choose from a wide array of handles meeting OSHA padlocking requirements, NEMA configurations, defeater options and NFPA 79 requirements.

Features

- Service entrance rated
- Compact footprints
- Front operated switches
- Visible blade contacts up to 400A
- Line side shrouding supplied with switch
- Defeatable pistol handles automatically re-latch when panel door is closed - no tool necessary to reset latch
- External or direct operation handles

Ratings

- 600 VAC, 250 VDC
- 30, 60, 100, 200, 400, 600, and 800 amperes
- Up to 200 kA short circuit rating when Class CC, J, or L fuses are used externally

Approvals

- All SIRCO switches meet UL 98 requirements
- UL Listed Guide WHTY, File E191605
- CSA C22.2 # 4 Class 4652 04, File 703166
- IEC 947-3 as a load break disconnect
- CE mark

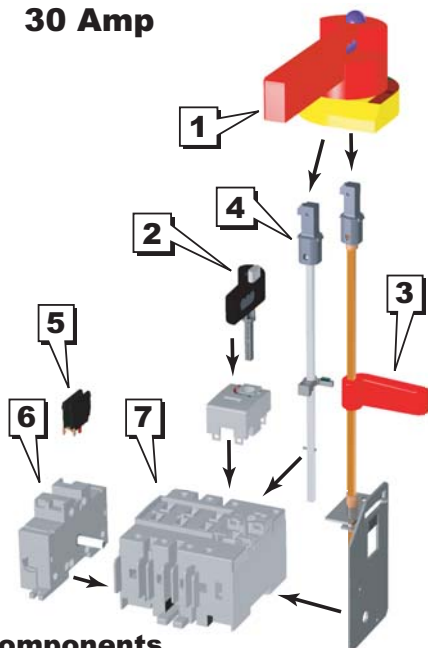
Applications

- Service entrance or main panel disconnects up to 600 VAC, 800 A
- “Make and Break” power circuit applications on load
- NFPA 79 Solutions

SIRCO Range: Non-Fusible Disconnect Switches							
Ampere Rating	30	60	100	200	400	600	800
Catalog Number: 3 Pole	SCV30	SCV60	SCV100	SCV200	SCV400	SC600	SC800

Components

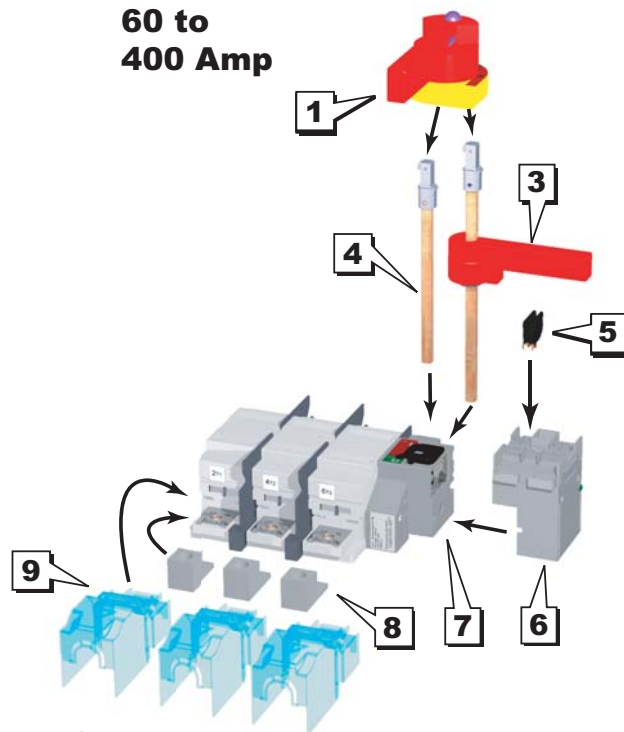
30 Amp



Components

- 1 – External Door Handle
- 2 – Direct Mount Handle Option
- 3 – NFPA 79 Compliant Handle Option
- 4 – Standard Shaft

60 to 400 Amp



- 5 – Auxiliary Contact Block
- 6 – Auxiliary Contact Holder
- 7 – Disconnect Switch Body

- 8 – Terminal Lugs
- 9 – Terminal Shroud

Non-Fusible Disconnects

SIRCO Series Selection Guides

SIRCO Series Front-operated Non-Fusible Disconnects					
Switch Body Part Number	Price	Weight lb(kg)	Ampere Rating	Hp @ Voltage	Interrupt Capacity (kA)*
SCV30	<-->	3.9(1.79)	30	15 Hp @ 480V	50
SCV60	<-->	4.0(1.80)	60	30 Hp @ 480V	200
SCV100	<-->	5.5(2.50)	100	60 Hp @ 480V	200
SCV200	<-->	7.6(3.40)	200	125 Hp @ 480V	200
SCV400	<-->	17.2(7.80)	400	250 Hp @ 480V	200
SC600	<-->	18.7(8.50)	600	400 Hp @ 480V	200
SC800	<-->	19.6(8.90)	800	500 Hp @ 480V	100

* When fused separately

Ferraz Non-Fusible Disconnects Component Selection Guide				
Part Number	Price	Weight lb(kg)	Description	Use with
SD200-5	<-->	0.2(0.09)	Operator shaft, type D, 7.9" (200 mm) length, 5x5 mm thick (purchase handle separately)	SCV30
SD320-5	<-->	0.3(0.14)	Operator shaft, type D, 12.6" (320 mm) length, 5x5 mm thick (purchase handle separately)	SCV30
SG120-5	<-->	0.15(0.07)	Operator shaft, type G, 4.7" (120 mm) length, 5x5 mm thick (purchase handle separately)	SCV30
SG200-10	<-->	0.3(0.14)	Operator shaft, type G, 7.9" (200 mm) length, 10x10 mm thick (purchase handle separately)	SCV60 thru SCV400
SG200-5	<-->	0.2(0.09)	Operator shaft, type G, 7.9" (200 mm) length, 5x5 mm thick (purchase handle separately)	SCV30
SG320-10	<-->	0.5(0.23)	Operator shaft, type G, 12.6" (320 mm) length, 10x10 mm thick (purchase handle separately)	SCV60 thru SCV400
SG320-5	<-->	0.2(0.09)	Operator shaft, type G, 12.6" (320 mm) length, 5x5 mm thick (purchase handle separately)	SCV30
SG400-10	<-->	0.7(0.32)	Operator shaft, type G, 15.7" (400 mm) length, 10x10 mm thick (purchase handle separately)	SCV60 thru SCV400
SH400-15	<-->	2.1(0.95)	Operator shaft, type H, 17.7" (450 mm) length, 15x15 mm thick (purchase handle separately)	SC600, SC800
HADB1	<-->	0.1(0.05)	Direct operation handle	SCV30
HADB6	<-->	0.4(0.18)	Direct operation, optional handle, 12.415" (315.314 mm) long padlocking on the switch, NFPA 79 compliant	SCV30
HADB8	<-->	0.4(0.18)	Direct operation, optional handle, 12.415" (315.314 mm) long padlocking on the switch, NFPA 79 compliant	SCV60 thru SCV400
HDPB	<-->	0.2(0.09)	Black Pistol handle, NEMA 12, 2.48" (63 mm) long, Type D, defeatable and lockable	SCV30
HDPR	<-->	0.2(0.09)	Red and yellow Pistol handle, NEMA 12, 2.48" (63 mm) long, Type D, defeatable and lockable	SCV30
HGPB	<-->	0.5(0.23)	Black Pistol handle, NEMA 12, 2.78" (70.6 mm) long, Type G, defeatable and lockable	SCV30
HGPB4	<-->	0.6(0.27)	Black Pistol handle, NEMA 4X, 2.78" (70.6 mm) long, Type G, defeatable and lockable	SCV30
HGPB4L	<-->	0.7(0.32)	Black long Pistol handle, NEMA 4X, 4.98" (126.49 mm) long, Type G long, defeatable and lockable	SCV60 thru SCV400
HGPBL	<-->	0.6(0.27)	Black long Pistol handle, NEMA 12, 4.98" (126.49 mm) long, Type G long, defeatable and lockable	SCV60 thru SCV400
HGPR	<-->	0.6(0.27)	Red and yellow Pistol handle, NEMA 12, 2.78" (70.6 mm) long, Type G, defeatable and lockable	SCV30
HGPR4	<-->	0.6(0.27)	Red and yellow Pistol handle, NEMA 4X, 2.78" (70.6 mm) long, Type G, defeatable and lockable	SCV30
HGPR4L	<-->	0.6(0.27)	Red and yellow long Pistol handle, NEMA 4X, 4.98" (126.49 mm) long, Type G long, defeatable and lockable	SCV60 thru SCV400
HGPRL	<-->	0.6(0.27)	Red and yellow long Pistol handle, NEMA 12, 4.98" (126.49 mm) long, Type G long, defeatable and lockable	SCV60 thru SCV400
HHPB4SC	<-->	1.3(0.59)	Black Pistol handle, NEMA 4X, 7.48" (190 mm) long, Type H, defeatable and lockable	SC600, SC800

Ferraz Non-Fusible Disconnects Accessories Selection Guide				
Part Number	Price	Weight lb(kg)	Description	Use with
ACHCD	<-->	0.2(0.09)	Auxiliary contact holder (accommodates up to 4 auxiliary contacts)	SCV30
ACH	<-->	0.2(0.09)	Auxiliary contact holder (accommodates up to 8 auxiliary contacts)	SCV60 thru SCV400
ACHSC	<-->	0.1(0.05)	Auxiliary contact holder (accommodates up to 4 auxiliary contacts)	SC600, SC800
AC3	<-->	0.1(0.05)	Auxiliary contact for SIRCO non-fused disconnect switches. One N.O. contact. 10 Amp, 600 VAC	All SIRCO switches
AC4	<-->	0.1(0.05)	Auxiliary contact for SIRCO non-fused disconnect switches. One N.C. contact. 10 Amp, 600 VAC	All SIRCO switches
TL200	<-->	0.4(0.18)	Terminal lug kit, Aluminum, tin-plated, 3/0 to #6, 6 lugs per kit	SCV200
TL400	<-->	5.0(2.27)	Terminal lug kit, Aluminum, tin-plated, 600Mcm to #2, 6 lugs per kit	SCV400
TL600	<-->	5.0(2.27)	Terminal lug kit, Aluminum, tin-plated, (2) 600Mcm to #2, 6 lugs per kit	SC600
TL800	<-->	10.0(4.5)	Terminal lug kit, Aluminum, tin-plated, (3) 600Mcm to #2, 6 lugs per kit	SC800
TS200SC*	<-->	0.7(0.32)	Terminal shroud kit - 3 pole, Use with 200 amp non-fusible switch. For line or load side.	SCV200
TS1200SC*	<-->	0.7(0.32)	Terminal screen kit - 3 pole, Use with 800 amp non-fusible switch. For line or load side.	SC800

Ferraz Shawmut Non-Fusible Disconnects SIRCO Series - Build a Complete Switch

30 Amp

STEP 1

Choose a switch body



DIN-rail mountable

Switch body

Switch Body	Ampere Rating	Hp @ Voltage	Interrupt Capacity (kA)
SCV30*	30	15 Hp @ 480V	50

*Note: Lugs, shrouds, and screens are integrated into this switch

STEP 2

Choose a handle



Short handles

Short Handle	
HDPB	Pistol, Black, NEMA 1, 3R, 12, Type D
HDPR	Pistol, Red/yellow, NEMA 1, 3R, 12, Type D



Standard handles

Standard Handle	
HGPB	Pistol, Black, NEMA 1, 3R, 12, Type G.
HGPB4	Pistol, Black, NEMA 4, 4X, Type G,
HGPR	Pistol, Red /yellow, NEMA 1, 3R, 12, Type G
HGPR4	Pistol, Red /yellow, NEMA 4, 4X, Type G

Direct handles

Direct Mount Handle	
HADB1	Direct mount, Black. No shaft required.

NFPA 79 compliant handle

NFPA 79 Compliant Handle	
HADB6	NFPA 79-compliant, allows operation and padlocking the switch when door is open. Red. No shaft required.

STEP 3

Choose a shaft



Short handle shafts

Shaft for Short Handle	
SD200-5	Type D, 7.9" (200 mm) long
SD320-5	Type D, 12.6" (320 mm) long



Standard handle shafts

Shaft for Standard Handle	
SG120-5	Type G, 4.7" (120 mm) long
SG200-5	Type G, 7.9" (200 mm) long
SG320-5	Type G, 12.6" (320 mm) long

Shaft not used with Direct Handle

Select a standard handle.

Note: Short handle cannot be used with NFPA79-compliant handle.

STEP 4

Choose your Accessories

Accessories	Description	Use With
ACHCD	Auxiliary contact holder (accommodates up to 4 auxiliary contacts). REQUIRED when using AC3 or AC4.	SCV30
AC3	Auxiliary contact. One N.O. contact. 10 Amp. 600 VAC REQUIRES ACHCD . Please purchase separately.	SCV30
AC4	Auxiliary contact. One N.C. contact. 10 Amp. 600 VAC REQUIRES ACHCD . Please purchase separately.	SCV30



Ferraz Shawmut Non-Fusible Disconnects

SIRCO Series - Build a Complete Switch

60 Amp to 400 Amp

STEP 1

Choose a switch body



Switch body

Switch Body	Ampere Rating	Hp @ Voltage	Interrupt Capacity (kA)
SCV60*	60	30 Hp @ 480V	200
SCV100*	100	60 Hp @ 480V	200
SCV200**	200	125 Hp @ 480V	200
SCV400***	400	200 Hp @ 480V	200

*Note: Lugs, shrouds, and screens are integrated into this switch.

**Note: Line side screen included with this switch. Use TL200 lugs and TS200SC screen, sold separately, for load side.

***Note: Screens and shrouds are integrated into this switch. Use TL400 lugs, sold separately.

STEP 2

Choose a handle



Standard handles

Standard Handle	
HGPBL	Pistol, Long Black, NEMA 1, 3R, 12; 4.98" long, Type G
HGPB4L	Pistol, Long Black, NEMA 4, 4X, 4.98" long, Type G
HGPRL	Pistol, Long Red/yellow NEMA 1, 3R, 12; 4.98" long, Type G
HGPR4L	Pistol, Long Red/yellow NEMA 4, 4X, 4.98" long, Type G



NFPA 79 compliant handle

NFPA 79 Compliant Handle	
HADB8	NFPA 79-compliant, allows operation and padlocking the switch when door is open. Red. No shaft required.

STEP 3

Choose a shaft



Standard handle shafts

Shaft for Standard Handle	
SG200-10	Type G, 7.9" (200 mm) long
SG320-10	Type G, 12.6" (320 mm) long
SG400-10	Type G, 15.7" (400 mm) long

Select a standard handle

STEP 4

Choose your Accessories



ACH



AC3



AC4



TL200



TL400



TS200SC

Accessories	Description	Use With
ACH	Auxiliary contact holder (accommodates up to 8 auxiliary contacts). REQUIRED when using AC3 or AC4.	SCV60 thru SCV400
AC3	Auxiliary contact. One N.O. contact. 10 Amp. 600 VAC. REQUIRES ACH . Please purchase separately.	
AC4	Auxiliary contact. One N.C. contact. 10 Amp. 600 VAC. REQUIRES ACH . Please purchase separately.	
TL200	Terminal lug kit, Aluminum, tin-plated, 3/0 to #6, 6 lugs per kit	SCV200
TL400	Terminal lug kit, Aluminum, tin-plated, 600Mcm to #2, 6 lugs per kit	SCV400
TS200SC	Terminal shroud kit, - 3 pole, Use with 200 amp non-fusible switch. For line or load side. 3 shrouds per kit.	SCV200

Non-Fusible Disconnects SIRCO Series - Build a Complete Switch

600 Amp to 800 Amp

STEP 1

Choose a switch body



Switch Body

Switch Body	Ampere Rating	Hp @ Voltage	Interrupt Capacity (kA)
SC600*	600	400 Hp @ 480V	200
SC800**	800	500 Hp @ 480V	100

*Note: Line side screen included with this switch. Use TL600 lugs, sold separately.

**Note: Line side screen included with this switch. Use TL800 lugs and TS1200SC screen, sold separately, for load side.

STEP 2

Choose a handle



Long Handle

Long Handle	
HHPB4SC	Black, NEMA 4, 4X; 7.48" long, Type H.

STEP 3

Choose a shaft



Shaft for Long Handle

Shaft for Long Handle	
SH400-15	Type H, 17.7" (450 mm) long

STEP 4

Choose your Accessories



ACHSC



AC3



AC4



TL600



TL800



TS1200SC

Accessories	Description	Use With
ACHSC	Auxiliary contact holder (accommodates up to 4 auxiliary contacts). REQUIRED when using AC3 or AC4.	SC600 thru SC800
AC3	Auxiliary contact. One N.O. contact. 10 Amp. 600 VAC. REQUIRES ACHSC. Please purchase separately.	SC600 thru SC800
AC4	Auxiliary contact. One N.C. contact. 10 Amp. 600 VAC. REQUIRES ACHSC. Please purchase separately.	SC600 thru SC800
TL600	Terminal lug kit, Aluminum, tin-plated, (2) 600Mcm to #2, 6 lugs per kit	SC600
TL800	Terminal lug kit, Aluminum, tin-plated, (3) 600Mcm to #2, 6 lugs per kit	SC800
TS1200SC	Terminal screen kit - 3 pole, Use with 800 amp non-fusible switch, For line or load side. 1 screen per kit.	SC800

Non-Fusible Disconnects SIRCO Series Specifications

SIRCO Non-Fusible Disconnects Technical Specifications According to UL 508, cUL and CSA								
Specifications								
Part Number	SCV30	SCV60	SCV100	SCV200	SCV400	SC600	SC800	
Price	<--->	<--->	<--->	<--->	<--->	<--->	<--->	<--->
Rated Operational Voltage (VAC)	600	600	600	600	600	600	600	
Short Circuit Rating (kA) with fuses	50	200	200	200	200	200	100	
Fuse Type (if fusing separately)	J or CC	J	J	J	J	J	L	
Fuse Rating (A) (if fusing separately)	30	60	100	200	400	600	800	
Maximum UL Horsepower/Maximum Motor FLA Current, Three Phase								
208V	5/17.5	15/48.5	25/78.5	50/150	100/286	150/415	200/554	
240V	7.5/22	15/42	30/80	60/154	125/312	200/480	250/602	
480V	15/21	30/40	60/77	125/156	250/302	400/447	500/590	
600V	20/22	50/52	75/77	150/144	350/336	350/336	500/472	
DC 125V	3/25 ¹	3/25 ¹	7.5/58 ¹	15/112 ¹	20/148 ¹	20/148 ¹	—	
DC 250V	5/20 ¹	10/38 ²	20/72 ²	40/140 ²	50/173 ²	50/173 ²	—	
Switch Operating Torque lb-in	21	88	88	106	130	320	320	
Wire Size Range AWG (# wire holes per lug)	#10 - #14 (1)	#3 - #10 (1)	#3 - #10 (1)	#3/0 - #6 (1)	600 kcmil-#2 (2)	600 kcmil-#2 (2)	600 kcmil-#2 (3)	
Terminal Lugs Kit (# of lugs per kit)	Integral	Integral	Integral	Optional (6)	Optional (6)	Optional (6)	Optional (6)	
Wire Tightening Torque lb-in	27	58	58	200	500	500	500	
Net Weight lb(kg)	3.9(1.79)	4.0(1.80)	5.5(2.50)	7.6(3.40)	17.2(7.80)	18.7(8.50)	19.6(8.90)	

Note: 1: 2-pole in series
2: 3-pole in series

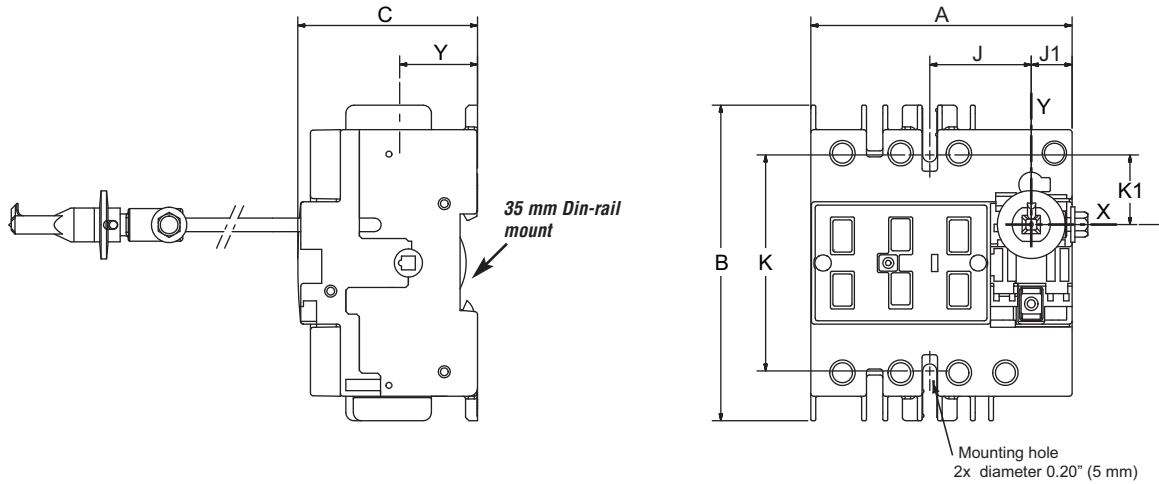
IEC 947-3 Technical Specifications For Front Operation									
Part Number	Unit	SCV30	SCV60	SCV100	SCV200	SCV400	SC600	SC800	
Rating	A	32	63	100	200	400	600	800	
Rated Insulation Voltage Ui (V)	V	800	750	750	750	800	1000	1000	
Rated impulse Voltage (Uimp)		8 kV	8 kV	8 kV	8 kV	8 kV	12 kV	12 kV	
Operation Current Ie (A)									
	IEC Utilization Category	Unit							
400 VAC	AC 22A	A	32	63	100	200	400	630	800
	AC 23A	A	32	63	100	200	400	630	800
690 VAC	AC 22A	A	32	63	100	200	400	500	630
	AC 23A	A	32	63	100	200	315	200	400
Motor Power (kW)									
400 VAC	AC 23A	A	15	30	51	100	220	355	450
500 VAC	AC 23A	A	18.5	40	63	140	220	450	560
690 VAC	AC 23A	A	25	55	90	185	295	185	400
Maximum Peak Let-through Current (gG)	kA peak	5.5	17.6	17.6	32	40	48	75	
Connection									
Minimum CU Cable Section	mm ²	6	10	25	50	185	2x150	2x185	
Minimum CU Busbar Section	mm ²	—	—	—	—	—	2x30x5	2x40x5	

Note: See Appendix for IEC utilization categories.

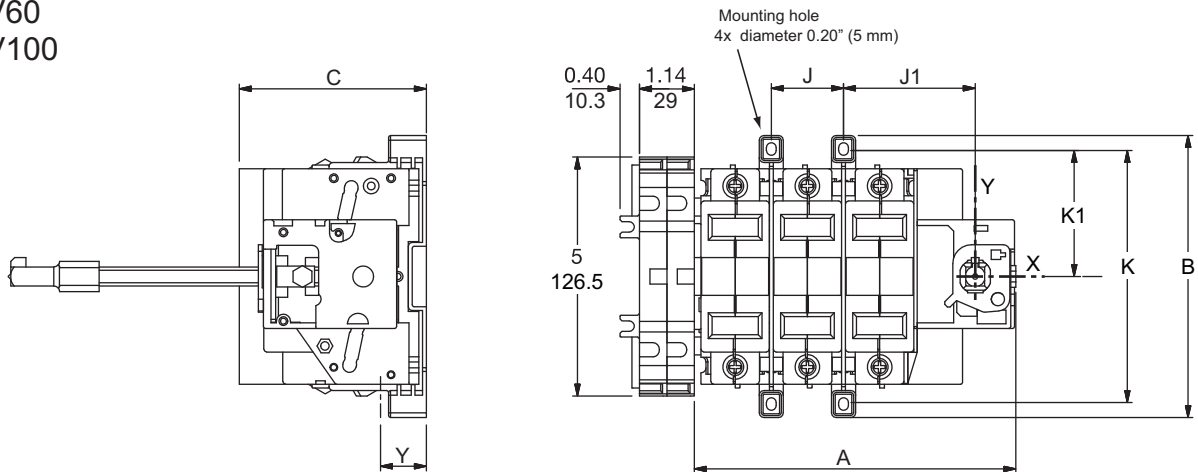
Non-Fusible Disconnects

SIRCO Series Dimensions

SCV30



SCV60 SCV100

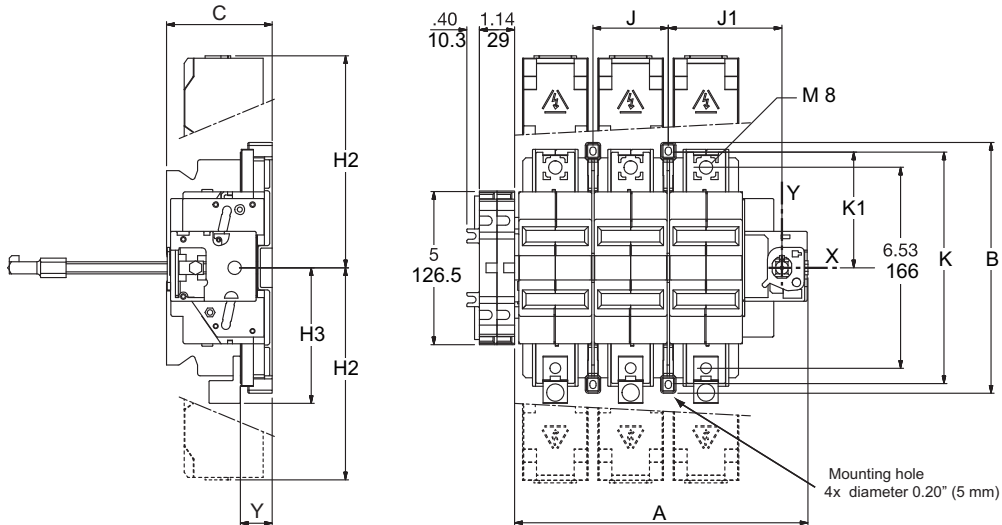


Part Number	Number of Poles	A		B		C		H		H1		H2		H3		J		J1		K		K1		Y	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
SCV30	3	3.78	96	4.56	116	2.59	66	-	-	-	-	-	-	-	-	1.47	37.5	0.59	15	3.13	79.5	1	25.5	1.12	28.5
SCV60	3	6.69	170	5.87	149	3.89	99	-	-	-	-	-	-	-	-	1.5	38	2.75	69.5	5.25	133.5	2.63	66.5	0.95	24.5
SCV100	3	6.69	170	5.87	149	3.89	99	-	-	-	-	-	-	-	-	1.5	38	2.75	69.5	5.25	133.5	2.63	66.5	0.95	24.5

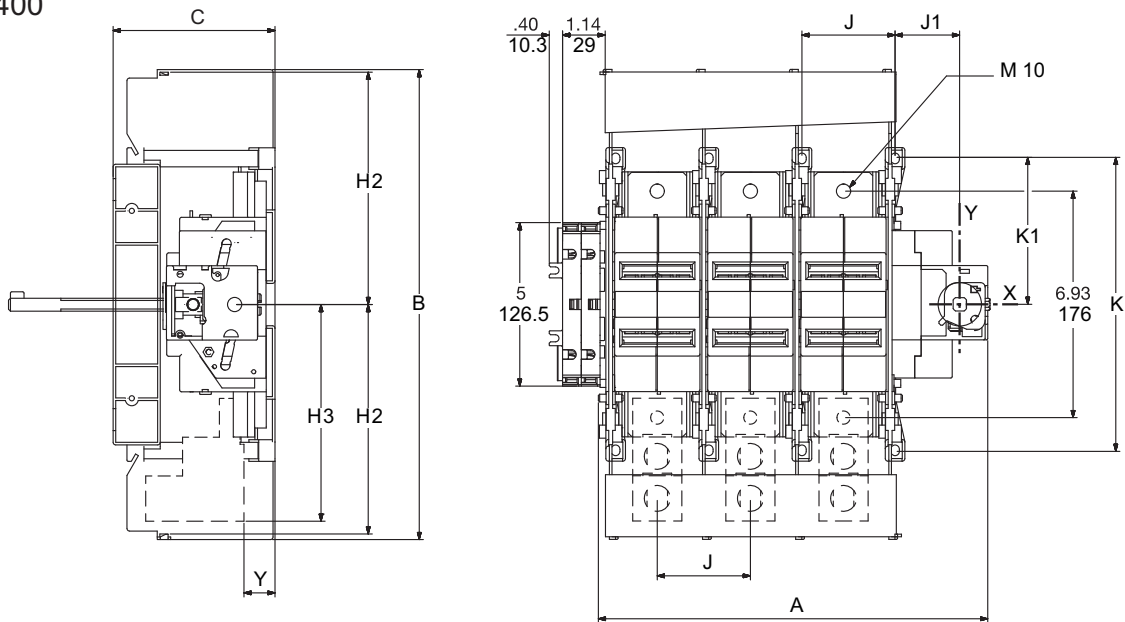
Ferraz Shawmut Non-Fusible Disconnects

SIRCO Series Dimensions

SCV200



SCV400

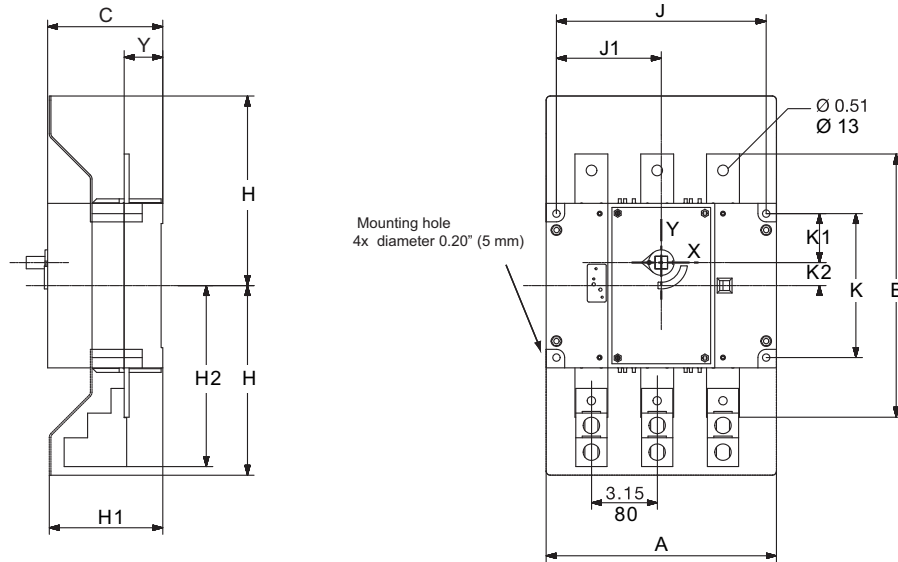


Part Number	Number of Poles	A		B		C		H		H1		H2		H3		J		J1		K		K1		Y	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
SCV200	3	9.52	242	8.13	206.5	3.42	87	-	-	-	-	6.87	174.5	4.39	111.5	2.44	62	3.68	93.5	7.5	190.5	3.74	95	0.95	24.5
SCV400	3	11.93	303	14.31	363.5	4.92	125	-	-	-	-	7.04	179	6.59	167.5	2.84	72	2.04	52	8.82	224	4.41	112	1.06	27

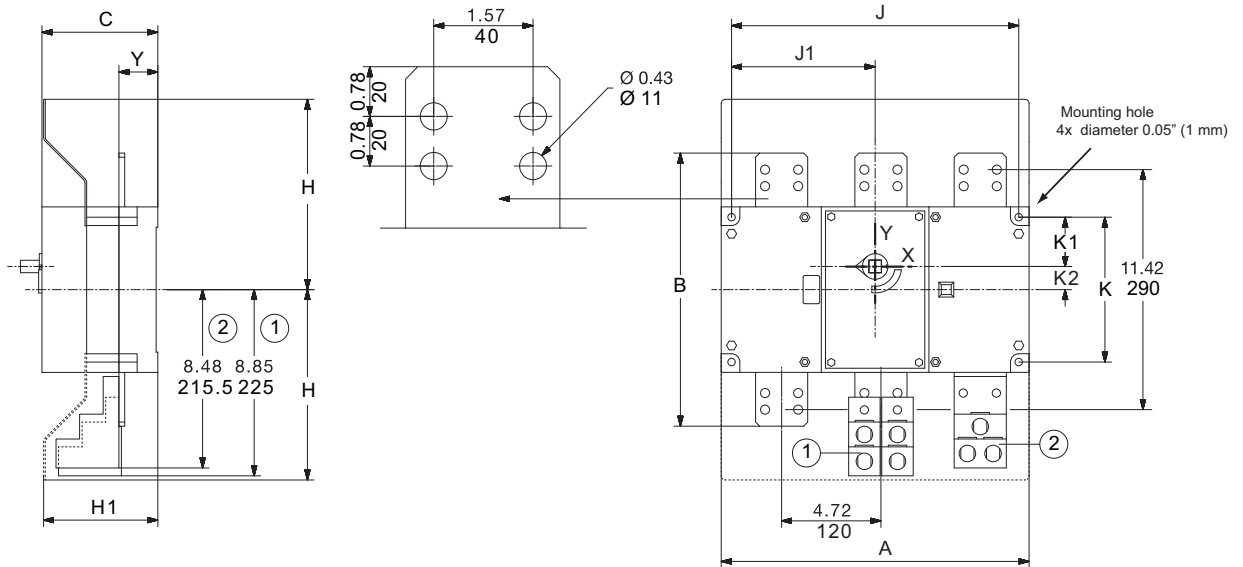
Non-Fusible Disconnects

SIRCO Series Dimensions

SC600



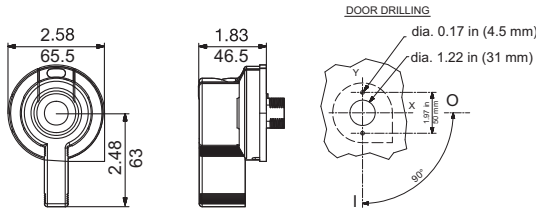
SC800



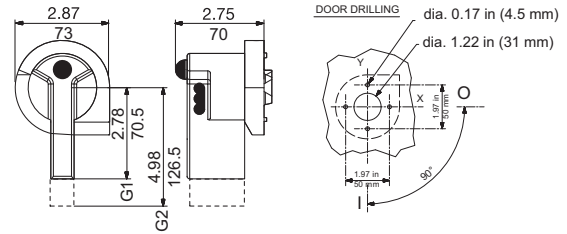
Part Number	Number of Poles	A		B		C		H		H1		H2		J		J1		K		K1		K2		Y	
		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
SC600	3	11.02	280	12.60	320	5.51	140	9.05	230	5.43	138	8.66	220	10.04	255	5	127.5	6.88	175	2.34	59.5	1.10	28	1.85	47
SC800	3	14.64	372	13	330	5.51	140	9.05	230	5.43	138	-	-	13.66	347	6.83	173.5	6.88	175	2.34	59.5	1.10	28	1.85	47

Handles for external front operation

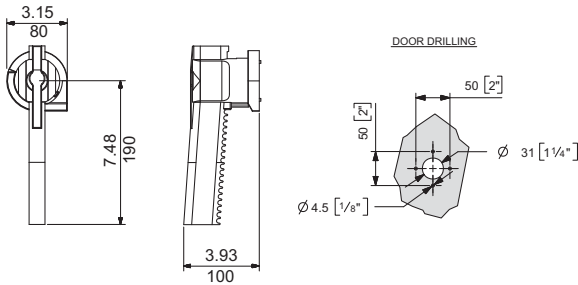
PISTOL HANDLE TYPE D (short)



PISTOL HANDLE TYPE G (standard)

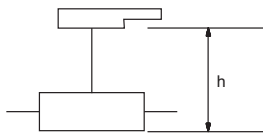


PISTOL HANDLE TYPE H (long)



Backplate-to-door distance with shaft extension (in/mm)

MINIMUM DISTANCE (in/mm)

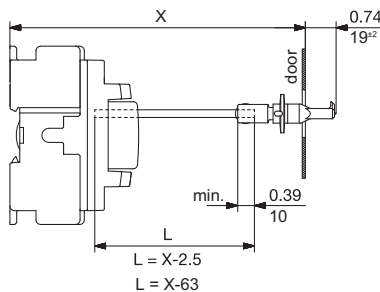


<i>h</i> Minimum Dimension	Handle Type D		Handle Type G		Handle Type H	
	in	mm	in	mm	in	mm
SCV30	4.53	115	3.74	95	–	–
SCV60 to SCV100	–	–	4.73	120	–	–
SCV200	–	–	4.33	110	–	–
SC400 to SC600	–	–	–	–	8.35	212
SC800	–	–	–	–	8.35	212

Shaft trimming length (Dimension L)

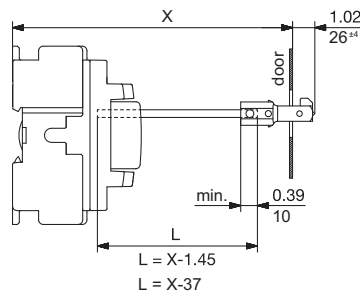
PISTOL HANDLE TYPE D

SCV30



PISTOL HANDLE TYPE G

SCV30

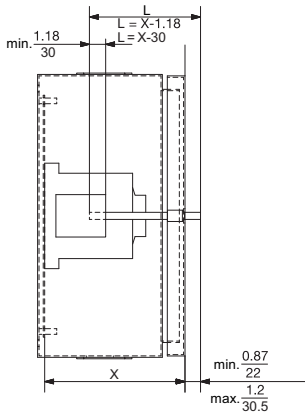


Non-Fusible Disconnects SIRCO Series Dimensions

Backplate-to-door distance with shaft extension, continued (in/mm)

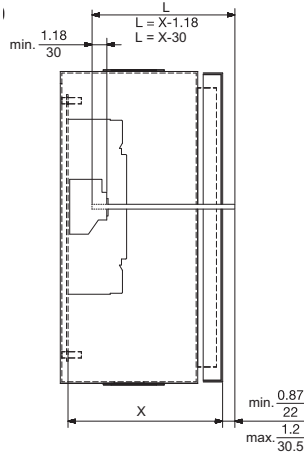
PISTOL HANDLE TYPE G

SCV60
SCV100
SCV200



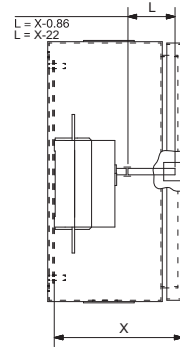
PISTOL HANDLE TYPE G

SCV400



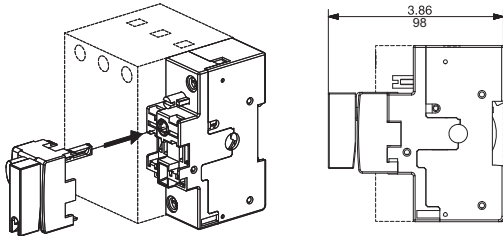
PISTOL HANDLE TYPE H

SC600
SC800



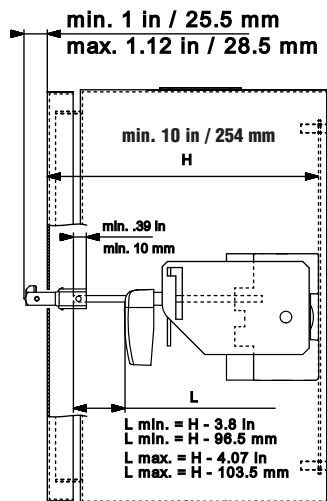
Handle for direct front operation

HADB1

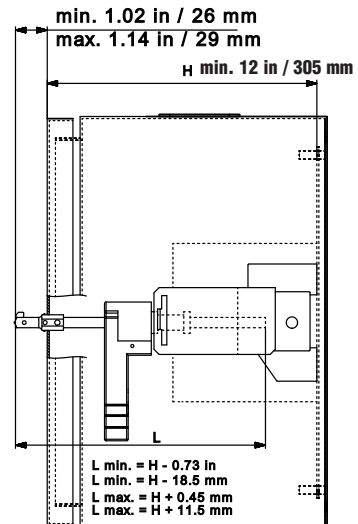


NFPA 79 Compliant Switches

HADB6



HADB8



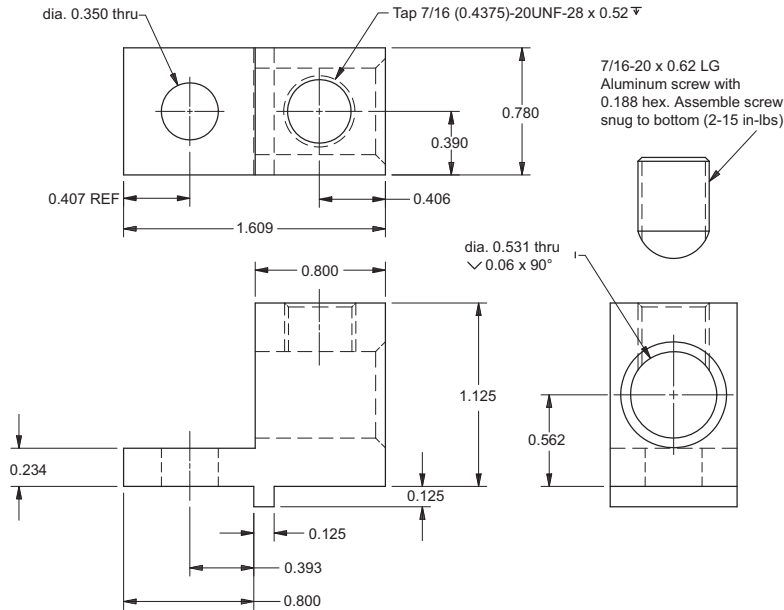
Non-Fusible Disconnects

SIRCO Series Dimensions

Terminal Lugs

TL200

Use with SCV200 switch

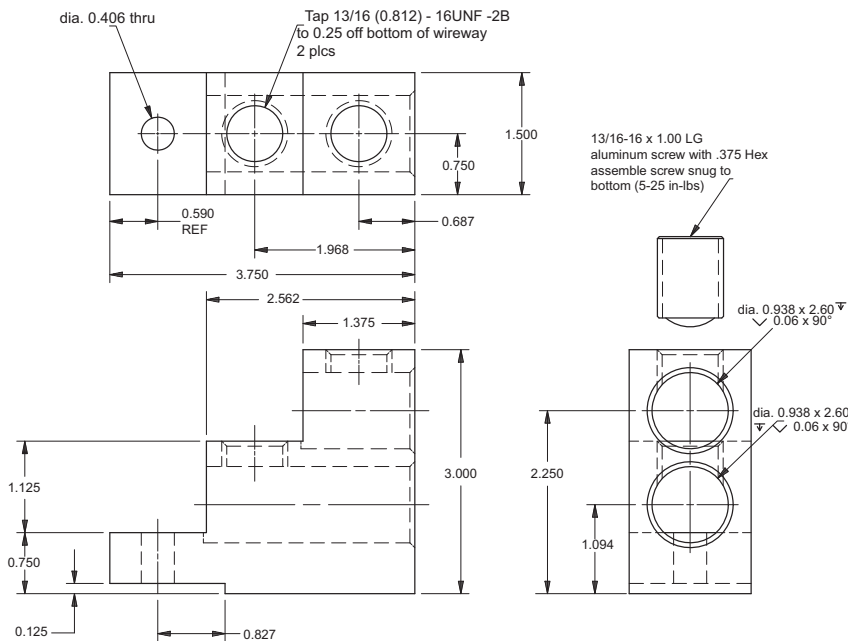


1 wire 3/0 - #6

dimensions = inches

TL400, TL600

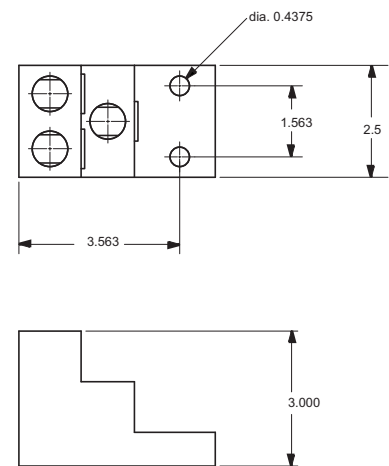
Use with SCV400, SCV600



2 wire Kcmil#2

TL800

Use with SC800



3 wire Kcmil#2