

# SIRCO

## NON-FUSIBLE DISCONNECT SWITCHES



Ferraz Shawmut SIRCO disconnect switches are extremely durable, manually operated, non-fused disconnect switches. These heavy-duty switches are designed with the most up-to-date disconnect switch technology available. Designed to suit the UL98 standard, the SIRCO gives you a product that “makes and breaks” power circuits on load. The SIRCO switches are tested and approved for use in the most demanding applications, such as “Service Entrance”. Up to 400A, the switches come with visible blade contacts. A wide array of handles are available to meet OSHA padlocking requirements, NEMA configurations, defeater options and NFPA 79 requirements.

### HIGHLIGHTS:

- Service entrance rated
- Compact footprints
- Front operated switches
- Side 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
- Flange operation (For use with side operated switches)




### APPLICATIONS:

- Service entrance or main panel disconnects up to 600VAC, 1200A
- “Make and Break” power circuit applications on load
- NFPA 79 Solutions

### Ratings

- 600 VAC, 250VDC
- 30, 60, 100, 200, 400, 600, 800, 1000, and 1200 amperes
- Up to 200kA Short Circuit Rating with Fuses

### Approvals

- All SIRCO switches meet the requirements of UL98
- UL Listed Guide WHTY, File E191605 
- CSA C22.2 # 4 Class 4652 04, File 703166 
- IEC 947-3 CE mark (other IEC ratings up to 5000 A available on request, please consult us) 



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## SIDE OPERATED NON-FUSIBLE DISCONNECT SWITCHES

### SIRCO RANGE: Side operated Non-Fusible Disconnect Switches from 60 to 400 A



SELECT A SWITCH

AMPERE RATING	60	100	200	400
CATALOG NUMBER: 3 POLE	SCV60SO	SCV100SO	SCV200SO	SCV400SO
CATALOG NUMBER: 4 POLE	SCV604SO	SCV1004SO	SCV2004SO	SCV4004SO

#### FLANGE OPERATED HANDLE (Square D type - class 9422)



SELECT A HANDLE

NEMA TYPE	IEC TYPE	DEFEATABLE	PADLOCKABLE	CATALOG NUMBER <sup>(1)</sup>			
1, 3, 3R, 4, 12	IP54	YES	YES	HAF1 <sup>(2)</sup>	HAF1 <sup>(2)</sup>	HAF1 <sup>(2)</sup>	HAF1 <sup>(2)</sup>
4, 4X	IP65	YES	YES	HAF2 <sup>(3)</sup>	HAF2 <sup>(3)</sup>	HAF2 <sup>(3)</sup>	HAF2 <sup>(3)</sup>



SELECT A CABLE

CABLE LENGTH (Inches/mm)	CATALOG NUMBER			
36 / 914.4	H AFC36	H AFC36	H AFC36	H AFC36
60 / 1524	H AFC60	H AFC60	H AFC60	H AFC60
120 / 3048	H AFC120	H AFC120	H AFC120	H AFC120

#### DIRECT OPERATION



SELECT A HANDLE

PADLOCKABLE	COLOR	CATALOG NUMBER			
YES	Black	HADB4	HADB4	HADB4	HADB4



#### OPTIONS FOR FLANGE & DIRECT OPERATION HANDLE

OPTIONS FOR FLANGE & DIRECT OPERATION HANDLE		CATALOG NUMBER			
Terminal Lugs Kit	(6 lugs per kit - for 3 pole switches) (8 lugs per kit - for 4 pole switches)	Integral	Integral	TL200	TL400
3-pole Terminal Shrouds Kit <sup>(4)</sup>	(for line or load side)	Integral	Integral	TL2004	TL4004
4-pole Terminal Shrouds Kit <sup>(4)</sup>	(for line or load side)	Integral	Integral	TS200SC	—
3-pole Terminal Screen	(for line or load side)	Integral	Integral	TS2004SC	—
4-pole Terminal Screen	(for line or load side)	—	—	—	TS400SC <sup>(6)</sup>
Auxiliary Contacts <sup>(6)</sup>	(1) NO + NC side mount contact block, A600-N600	AC5	AC5	AC5	AC5
	(2) NO + NC side mount contact blocks, A600-N600	AC6	AC6	AC6	AC6

- (1) Flange handle includes the flange operator and the coupling mechanism to connect switch and cable together
  - (2) All external metal parts are sheet steel
  - (3) All external metal parts are either stainless steel or a chrome-plated non-ferrous die casting
  - (4) Line side Shrouding supplied as standard with switch
  - (5) As replacement part (two Terminal Screens supplied as standard with switch)
  - (6) Two auxiliary contacts maximum
- Note: Side-external handle and shaft available, consult with factory.

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## NON-FUSIBLE DISCONNECT SWITCHES FROM 30 TO 1200 A

### UL, cUL AND CSA TECHNICAL CHARACTERISTICS FOR FRONT & SIDE OPERATION

Catalog number		SCV30	SCV60/SCV604 SCV60SO/SCV604SO	SCV100/SCV1004 SCV100SO/SCV1004SO	SCV200/SCV2004 SCV200SO/SCV2004SO	SCV400/SCV4004 SCV400SO/SCV4004SO
<b>Rating</b>	<b>A</b>	<b>30</b>	<b>60</b>	<b>100</b>	<b>200</b>	<b>400</b>
Operating voltage	V	600	600	600	600	600
<b>Max horsepower rating/ Max motor FLA current</b>						
Three phase						
208 V		5/17.5	15/48.5	25/78.5	50/150	100/286
240 V		7.5/22	15/42	30/80	60/154	125/312
480 V		15/21	30/40	60/77	125/156	250/302
600 V		20/22	50/52	75/77	150/144	350/336
DC 125 V		(1) 3/25	(1) 3/25	(1) 7.5/58	(1) 15/112	(1) 20/148
DC 250 V		(1) 5/20	(2) 10/38	(2) 20/72	(2) 40/140	(2) 50/173
Short circuit rating with fuses	kA	65	200	200	200	200
Branch circuit fuse type		J or CC	J	J	J	J
Max fuse rating (A)		30	60	100	200	400
Dimension 3 pole (front operated switches)	H in	4.56	5.87	5.87	8.13	14.31
	W in	3.78	6.69	6.69	9.52	11.93
	D in	2.59	3.89	3.89	3.42	4.92
Shaft size square (front operated switches)	in	0.2 x 0.2	0.4 x 0.4	0.4 x 0.4	0.4 x 0.4	0.4 x 0.4
	mm	5 x 5	10 x 10	10 x 10	10 x 10	10 x 10
3-pole switch operating torque (front operation)	lb. in.	21	88	88	106	130
Terminal lugs kit (# lugs per kit)		Integral	Integral	Integral	Optional (6)	Optional (6)
Wire range AWG (# wire holes per lug)		#10-#14 (1)	#3-#10 (1)	#3-#10 (1)	3/0-#6 (1)	600 kcmil-#2 (2)
Wire tightening torque	lb. in.	27	58	58	200	500

(1) 2 pole in series

(2) 3 pole in series

### IEC 947-3 TECHNICAL CHARACTERISTICS FOR FRONT & SIDE OPERATION

Catalog number		SCV30	SCV60/SCV604 SCV60SO/SCV604SO	SCV100/SCV1004 SCV100SO/SCV1004SO	SCV200/SCV2004 SCV200SO/SCV2004SO	SCV400/SCV4004 SCV400SO/SCV4004SO
<b>Rating</b>	<b>A</b>	<b>32</b>	<b>63</b>	<b>100</b>	<b>200</b>	<b>400</b>
Rated Insulation voltage Ui (V)	V	800	750	750	750	800
Rated impulse voltage (Uimp)		8 kV	8 kV	8 kV	8 kV	8 kV
Operation current Ie (A)						
400 V AC	AC 22A	32	63	100	200	400
	AC 23A	32	63	100	200	400
690 V AC	AC 22A	32	63	100	200	400
	AC 23A	32	63	100	200	315
<b>Motor Power (kW)</b>						
400 V AC	AC 23A	15	30	51	100	220
500 V AC	AC 23A	18.5	40	63	140	220
690 V AC	AC 23A	25	55	90	185	295
Max. peak let through current (gG)	kA peak	5.5	17.6	17.6	32	40
<b>Connection</b>						
Minimum Cu cable section	mm <sup>2</sup>	6	10	25	50	185
Minimum CU busbar section	mm <sup>2</sup>	—	—	—	—	—



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## NON-FUSIBLE DISCONNECT SWITCHES FROM 30 TO 1200 A

### UL, cUL AND CSA TECHNICAL CHARACTERISTICS FOR FRONT & SIDE OPERATION

Catalog number	SC400 / SC4004	SC600 / SC6004	SC800 / SC8004	SC1000 / SC10004	SC1200 / SC12004
<b>Rating</b>	<b>400</b>	<b>600</b>	<b>800</b>	<b>1000</b>	<b>1200</b>
Operating voltage	600	600	600	600	600
<b>Max horsepower rating/ Max motor FLA current</b>					
Three phase					
208 V	125/360	150/415	200/554	200/554	200/554
240 V	125/312	200/480	250/602	250/602	250/602
480 V	250/302	400/447	500/590	500/590	500/590
600 V	350/336	350/336	500/472	500/472	500/472
DC 125 V	(1) 20/148	(1) 20/148	—	—	—
DC 250 V	(2) 50/173	(2) 50/173	—	—	—
Short circuit rating with fuses	200	200	100	100	100
Branch circuit fuse type	J	J	L	L	L
Max fuse rating (A)	400	600	800	1000	1200
Dimension 3 pole (front operated switches)	12.60	12.60	13	13	13
	11.02	11.02	14.64	14.64	14.64
	5.51	5.51	5.51	5.51	5.51
Shaft size square (front operated switches)	0.59 x 0.59	0.59 x 0.59	0.59 x 0.59	0.59 x 0.59	0.59 x 0.59
	15 x 15	15 x 15	15 x 15	15 x 15	15 x 15
3-pole switch operating torque (front operation)	320	320	320	320	320
Terminal lugs kit (#lugs per kit)	Optional (6)	Optional (6)	Optional (6)	Optional (12)	Optional (12)
Wire range AWG (# wire holes per lug)	600 kcmil-#2 (2)	600 kcmil-#2 (2)	600 kcmil-#2 (3)	600 kcmil-#2 (2)	600 kcmil-#2 (2)
Wire tightening torque	500	500	500	500	500

(1) 2 pole in series

(2) 3 pole in series

### IEC 947-3 TECHNICAL CHARACTERISTICS FOR FRONT & SIDE OPERATION

Catalog number	SC400 / SC4004	SC600 / SC6004	SC800 / SC8004	SC1000 / SC10004	SC1200 / SC12004
<b>Rating</b>	<b>400</b>	<b>600</b>	<b>800</b>	<b>1000</b>	<b>1250</b>
Rated Insulation voltage Ui (V)	1000	1000	1000	1000	1000
Rated impulse voltage (Uimp)	12 kV	12 kV	12 kV	12 kV	12 kV
Operation current Ie (A)					
400 V AC	400	630	800	1000	1200
	400	630	800	1000	1000
690 V AC	400	500	630	630	630
	200	200	400	400	400
<b>Motor Power (kW)</b>					
400 V AC	220	355	450	560	560
500 V AC	280	450	560	560	560
690 V AC	185	185	400	400	400
Max. peak let through current (gG)	48	48	75	75	75
<b>Connection</b>					
Minimum Cu cable section	185	2 x 150	2 x 185	2 x 240	—
Minimum CU busbar section	—	2 x 30 x 5	2 x 40 x 5	2 x 50 x 5	2 x 60 x 5

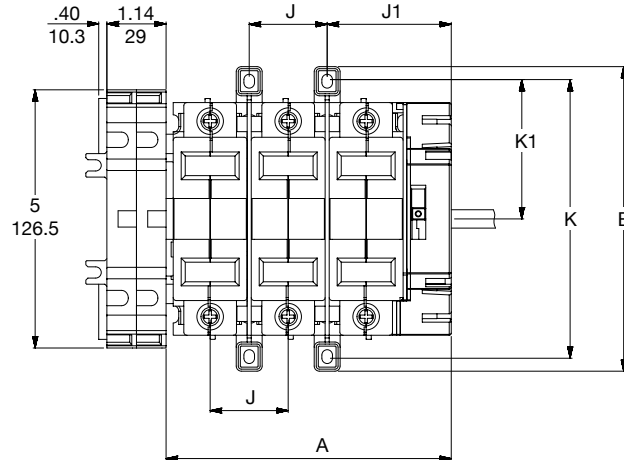
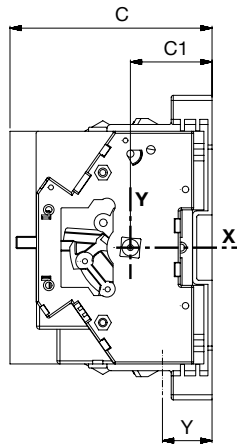
# SIRCO

## SIDE OPERATED NON-FUSIBLE DISCONNECT SWITCHES

### DIMENSIONS (dual dimensions: in/mm)

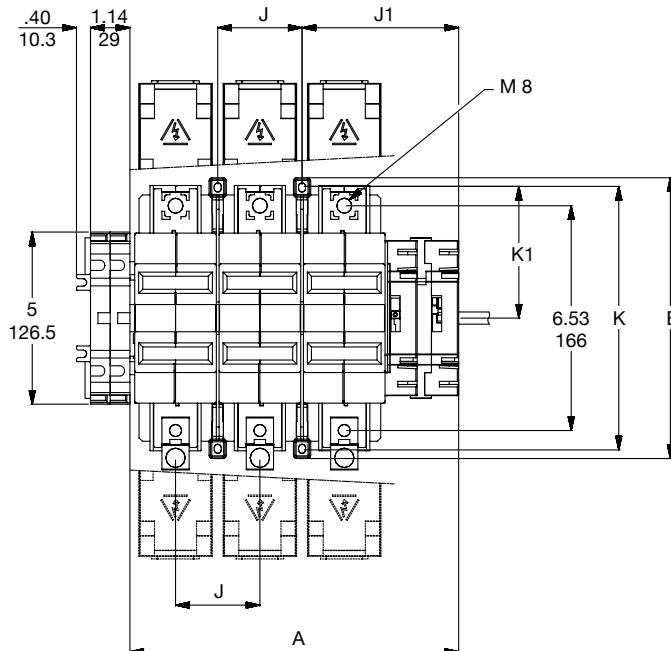
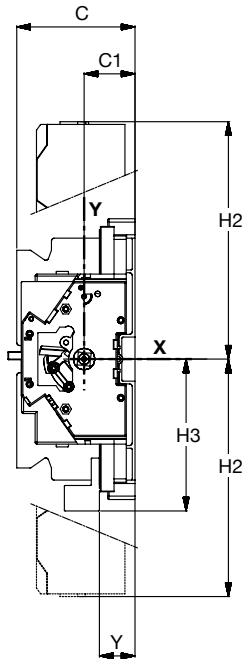
#### SIRCO V 60-100 A

- SCV60SO
- SCV604SO
- SCV100SO
- SCV1004SO



#### SIRCO V 200 A

- SCV200SO
- SCV2004SO



RATING	NUMBER OF POLES	A		B		C		C1		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
V 60 A	3 P	5.45	138.5	5.86	149	3.89	99	1.57	40	—	—	—	—	1.49	38	2.32	59	5.25	133.5	2.62	66.5	0.96	24.5
	4 P	6.95	176.5																				
V 100 A	3 P	7.09	180	5.86	149	3.89	99	1.47	37.5	—	—	—	—	1.49	38	2.32	59	5.25	133.5	2.62	66.5	0.96	24.5
	4 P	9.13	232																				
V 200 A	3 P	9.47	240.5	8.13	206.5	3.42	87	1.47	37.5	6.87	174.5	4.39	111.5	2.44	62	4.47	113.5	7.5	190.5	3.74	95	0.96	24.5
	4 P	11.9	302.5																				

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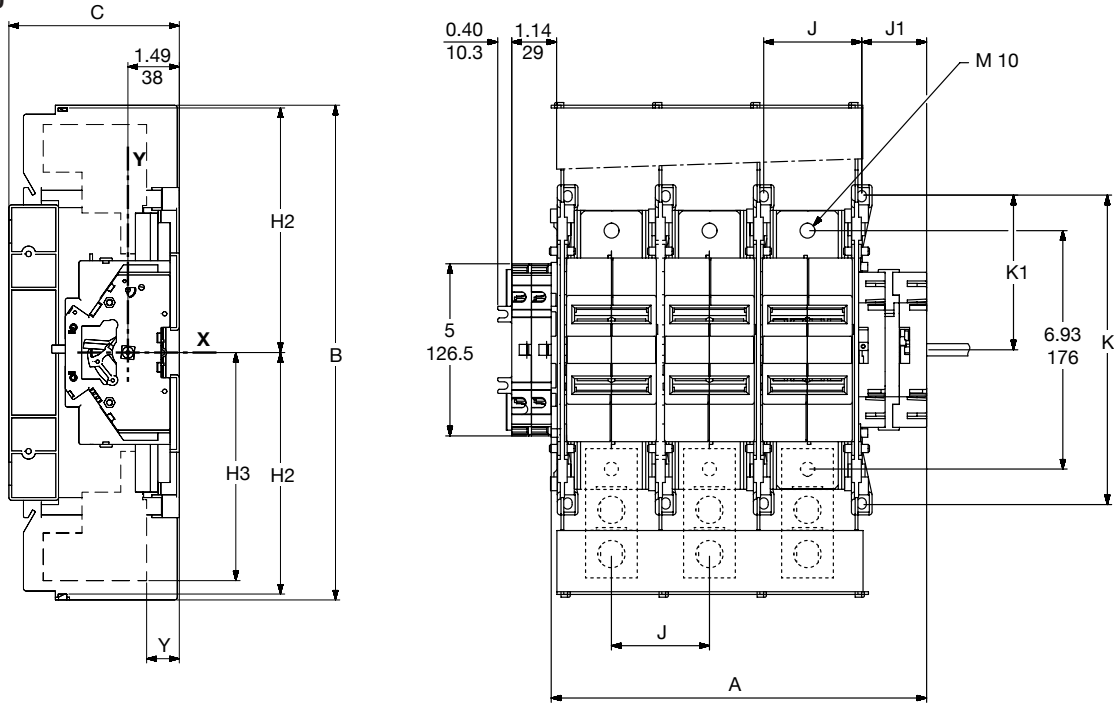
## SIDE OPERATED NON-FUSIBLE DISCONNECT SWITCHES

### DIMENSIONS (dual dimensions: in/mm)

#### SIRCO V 400 A

SCV400S0

SCV4004S0



RATING	NUMBER OF POLES	A		B		C		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
V 400 A	3 P	10.9	277	14.31	363.5	4.92	125	7.04	179	6.59	167.5	2.84	72	1.89	48	8.82	224	4.41	112	1.06	27
	4 P	13.74	349																		

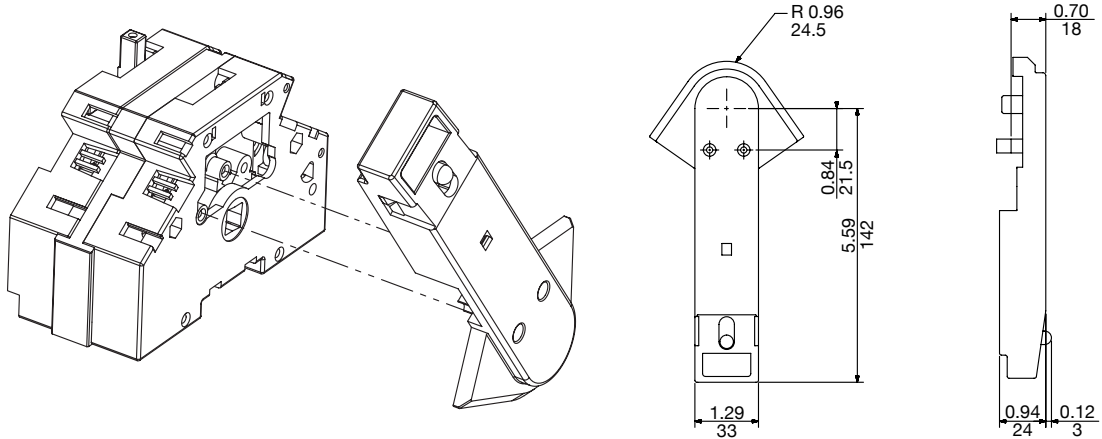
# SIRCO

## NON-FUSIBLE DISCONNECT SWITCHES

### HANDLES FOR DIRECT SIDE OPERATION

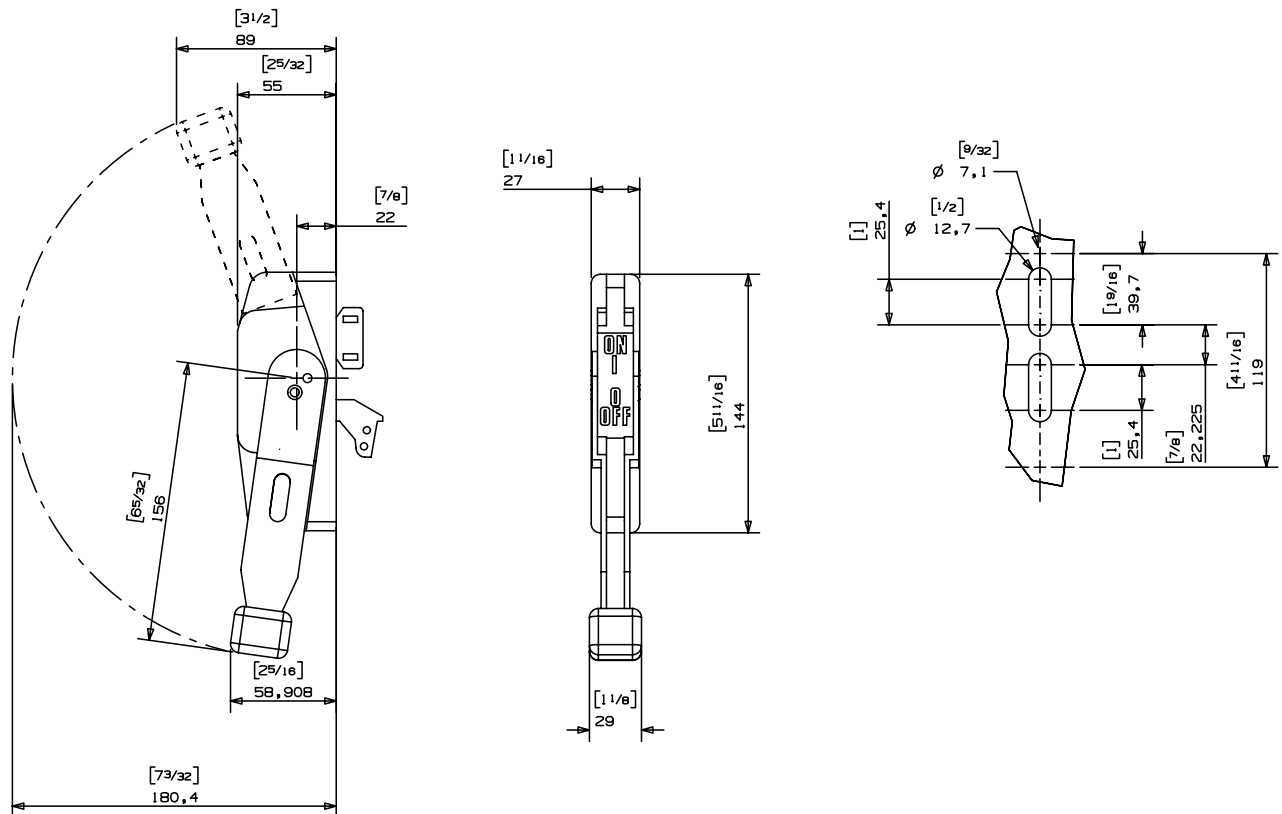
#### HANDLE TYPE F

HADB4



### HANDLE FOR FLANGE OPERATION

#### SQUARE D TYPE FLANGE HANDLE - CLASS 9422 (A1 & A2)



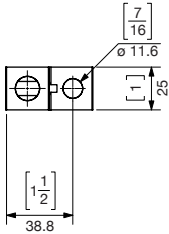
# SIRCO

## NON-FUSIBLE DISCONNECT SWITCHES

### TERMINAL LUGS

#### TL200

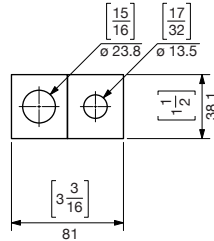
For use with SIRCO V 200 A



1 wire 3/0 - #6

#### TL400

For use with SIRCO 400 A

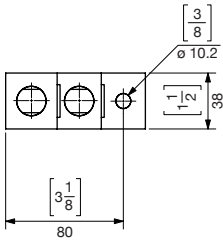


1 wire 600 MCM-2

#### TL600 AND TL1200

TL600: For use with SIRCO 400 & 600 A (1 lug per terminal)

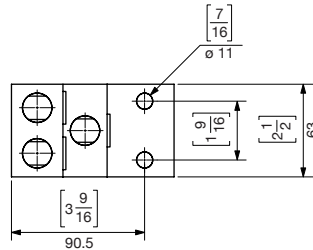
TL1200: For use with SIRCO 800, 1000 & 1200 A (2 lugs per terminal)



2 wires 600 MCM-2

#### TL800

For use with SIRCO 800 A - 1000 A



3 wires 600 MCM-2

