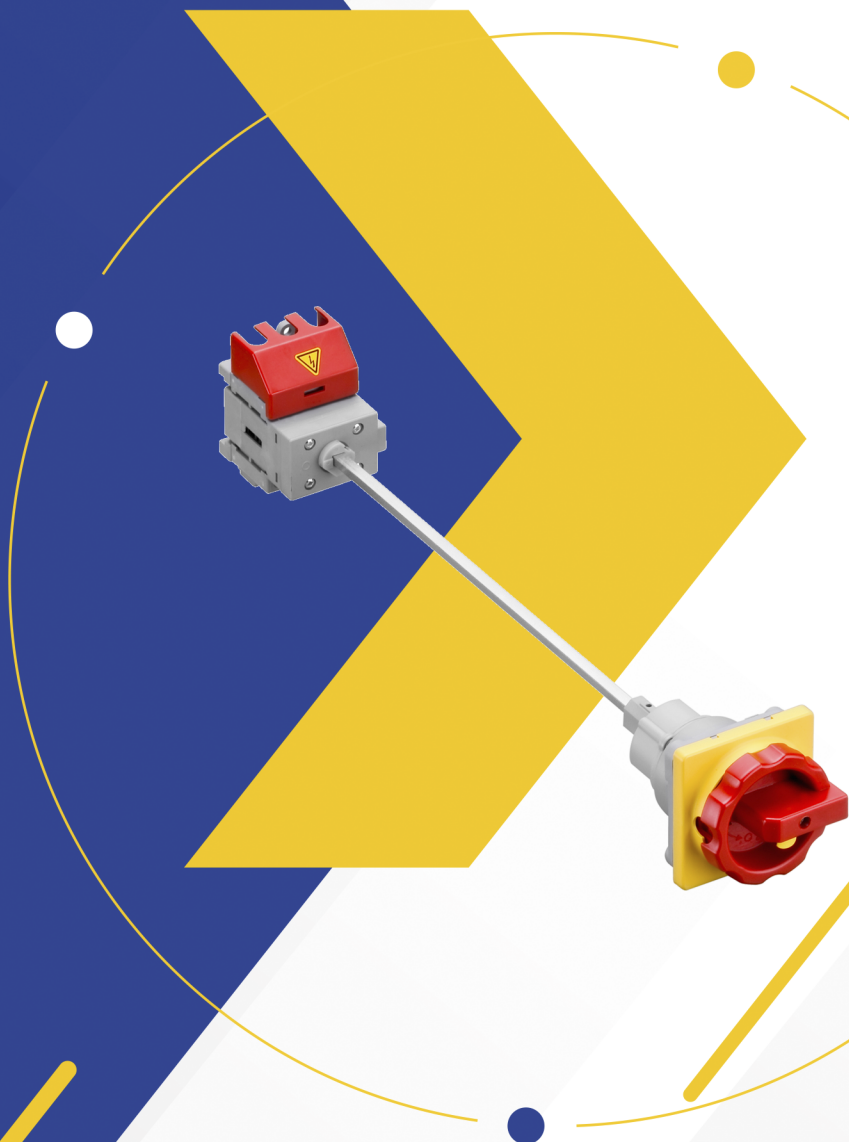
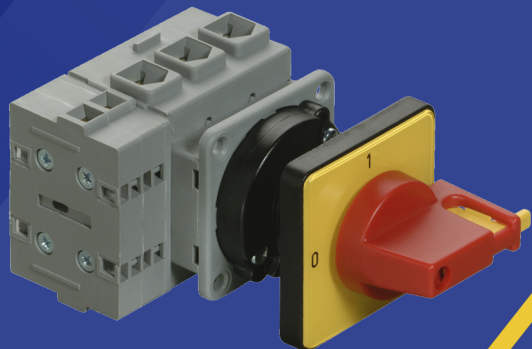
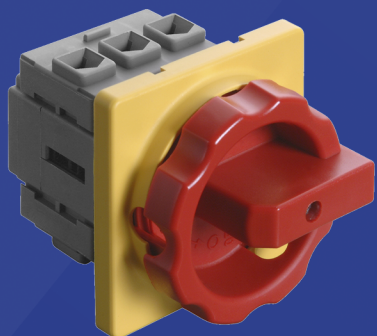




ELECTRICAL COMPONENTS

sontheimer Disconnect Switches

- 16A to 250A
- 3, 4 and 6 Poles
- DIN Rail Mount
- Panel Mount
- Door Mount
- Enclosed



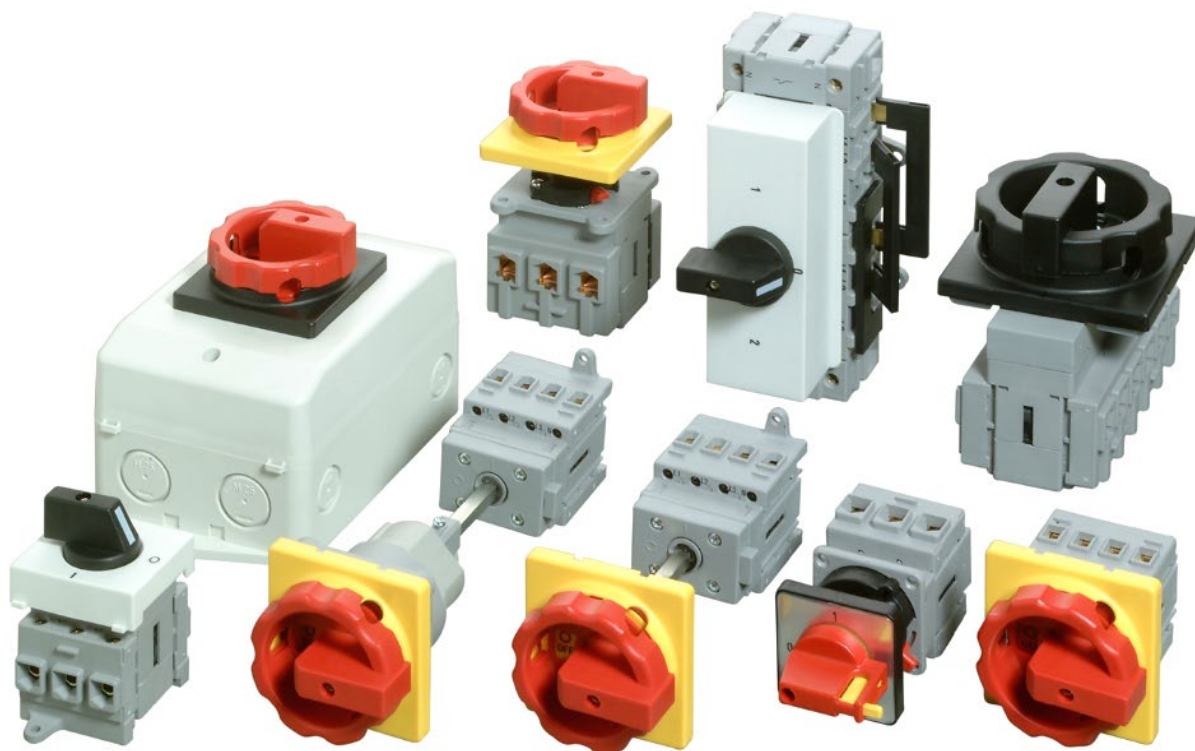
Disconnect Switches

Disconnect Switches are control devices used to turn power “ON-OFF” on most machines, control panels, HVAC equipment. Many models feature a lockout to prevent unauthorized use.

These switches are available in door mount, panel mount, DIN rail mount and fully enclosed, and in models rated from 16A to 250A (UL general use rating), in 3, 4 and 6 poles versions. All ITC by Sontheimer switches have UL and CSA approvals.

The compact LO series of switches range from 16A to 63A, and NT series of disconnects from 63A to 250A.

Rotary switches from Sontheimer in all configurations are available, upon special request.



Index

▪ UL Ratings.....	3
▪ Door mount disconnect switches 4 hole mounting type “E”.....	4
▪ Door mount disconnect switches central hole mounting type “ZM”.....	5
▪ DIN rail mount disconnect switches 4 Hole mounting type “T”	6
▪ Panel mount disconnect switches type “V”	7
▪ Schematic diagrams of Type “E”, “ZM”, “PM” and “V” disconnect switches	9
▪ Enclosed disconnect switches types RLO/RLT	10
▪ MINI25 - Compact Enclosed Disconnect Switch 25A	11
▪ Accessories for disconnect switches	12
▪ Voltmeter and ammeter switches	17
▪ DC disconnect switches	18

UL Ratings

All Sontheimer disconnect switches are suitable for use as a motor disconnect.

NLO & RLO Disconnect Switches

Size	General Use Rating		Motor Rating (UL, CSA)					
			HP		HP			
	1 Phase	3 Phase	1 Phase		3 Phase			
	0 - 240V	0 - 600V	120V	240V	120V	240V	480V	600V
16	16A	16A	0.5	1.5	1	3	7.5	10
25	25A	25A	2	3	3	7.5	10	15
32	32A	32A	2	3	3	10	20	22
40	40A	32A	2	4	5	10	20	20
63	50A	32A	3	10	5	15	25	30

Wire gauge for all above models is 14-6 AWG.

Short circuit rating for all the above is 5kA.

Tightening torque for all the above is 3.0 Nm.

Information subject to change without notice

NLT & RLT Disconnect Switches

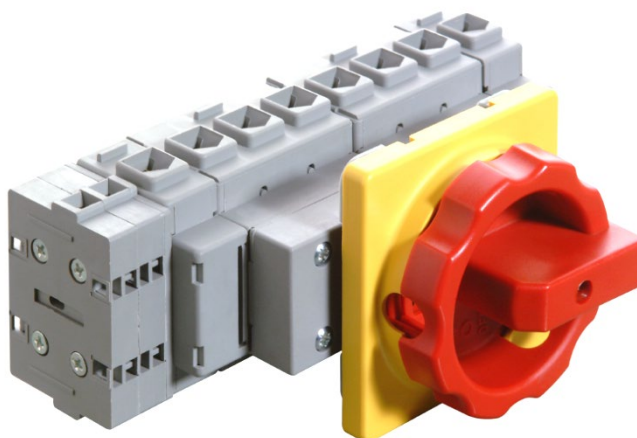
Size	General Use Rating 3 Phase 0-600V	Wire Range		Motor Rating (UL, CSA)			
				Short Circuit Rating	HP 3 Phase		
		AWG	mm ²		240V	480V	600V
63	63A	14 - 6	2.5 - 16	◇	15	40	50
80	63A	14 - 6	2.5 - 16	◇	15	40	50
100	100A	12 - 1	4 - 50	□	30	60	75
125	125A	12 - 1	4 - 50	□	40	75	100
180	180A	1/0-3/0	50 - 95	□	40	75	50
250	250A	250-400 MCM	127-202	□	50	100	75

◇ 5 kA short circuit rating at 600V, when protected by 175A RK5 fuse or by a combination motor controller rated maximum 50hp at 600Vac.

□ 10KA short circuit rating at 600V, when protected by 200A class RK5 fuse.

Tightening torque for 63 to 125 is 3.0 Nm, for 180 & 250 is 10.0 Nm.

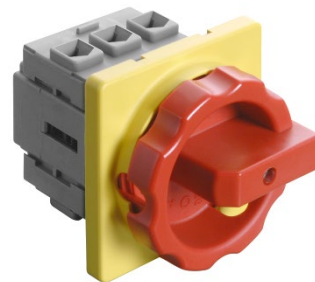
Information subject to change without notice



Door Mount Disconnect Switches 4 Hole Mounting Type “E”

Features and specifications:

- Switches mount directly to door or wall of enclosure with 4 screws
- Red/yellow padlockable handles to prevent unauthorized use
- 3, 4, and 6 pole versions available (6 upon special request)
- Auxiliary and neutral contact blocks available from stock
- IP Rating: IP54, IP65 with Z1 gasket (front), IP20 back



Note: Grey/black padlockable handle available. Change code from “NLO” or “NLT” to “ALO” or “ALT”.

* note Z33 handle above comes on switches 16 to 125

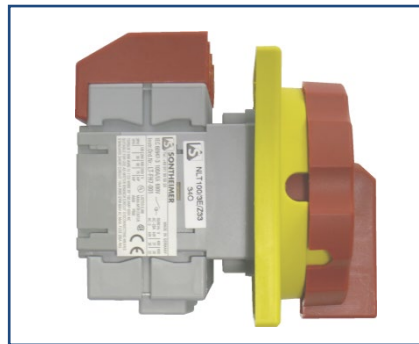
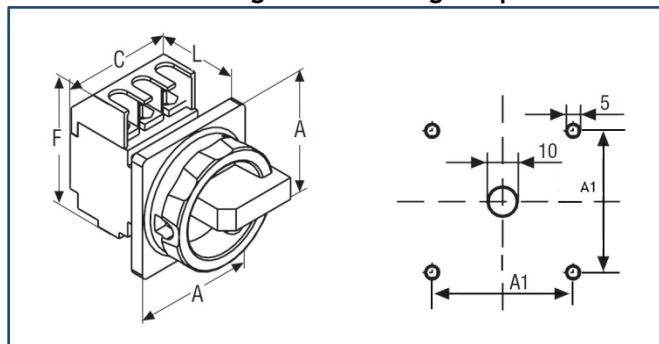
Door Mount Disconnect Switches (Order by Part No.)

Switch Size	3 Pole Part No.	4 Pole Part No.	6 Pole * Part No.
16	LBS-NLO16/3E/Z33	LBS-NLO16/4E/Z33	LBS-NLO16/6E/Z33*
25	LBS-NLO25/3E/Z33	LBS-NLO25/4E/Z33	LBS-NLO25/6E/Z33*
32	LBS-NLO32/3E/Z33	LBS-NLO32/4E/Z33	LBS-NLO32/6E/Z33*
40	LBS-NLO40/3E/Z33	LBS-NLO40/4E/Z33	LBS-NLO40/6E/Z33*
63 (NLO)	LBS-NLO63/3E/Z33	LBS-NLO63/4E/Z33	LBS-NLO63/6E/Z33*
63 (NLT)	LBS-NLT63/3E/Z33	LBS-NLT63/4E/Z33	LBS-NLT63/6E/Z33*
80	LBS-NLT80/3E/Z33	LBS-NLT80/4E/Z33	LBS-NLT80/6E/Z33*
100	LBS-NLT100/3E/Z33	LBS-NLT100/4E/Z33	LBS-NLT100/6E/Z33*
125	LBS-NLT125/3E/Z33	LBS-NLT125/4E/Z33	LBS-NLT125/6E/Z33*
180	LBS-NLT180/3E/Z20	LBS-NLT180/4E/Z20	—
250	LBS-NLT250/3E/Z20	LBS-NLT250/4E/Z20	—

Information subject to change without notice

* Special order

Dimensional drawing and mounting template



Dimensions

Model	A	A1	C	C	C	F	L
			3 Pole	4 Pole	6 Pole		
LBS-NLO16-63	66	48	36.4	49.5	—	73	53.5
LBS-NLO16-63	66	48	—	—	72.1	73	63.7
LBS-NLT63-80	66	48	60	80	121	73	59
LBS-NLT100-125	66	48	70	93	141	96	75
LBS-NLT180-250	94	68	112	150	224	169	93

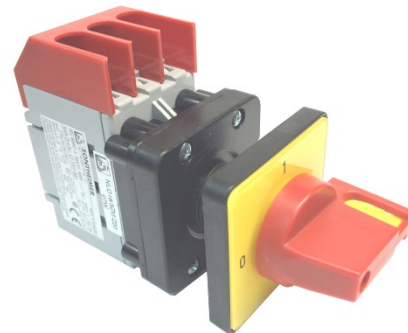
Information subject to change without notice - All dimensions in mm

Door Mount Disconnect Switches Central Hole Mounting Type “ZM”

Features and specifications:

- Switches mount directly to door of enclosure through a single 22.5mm diameter, notched hole
- Red/yellow padlockable handles to prevent unauthorized use
- 3 pole versions available from stock. 4 and 6 pole upon request
- Auxiliary and neutral contact blocks available
- IP Rating:** IP54, IP65 with gasket Z1 (front), IP20 back

Note: Grey/black padlockable handle available. Change code from “NLO” or “NLT” to “ALO” or “ALT”



Z20 handle pictured above

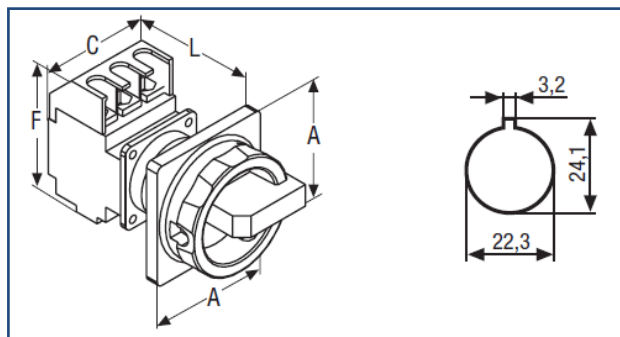
“ZM” Door Mount Disconnect Switches (Order by Part No.)

Switch Size	3 Pole Z20 Part No.	4 Pole Z20 Part No.*	3 Pole Z33 Part No.	4 Pole Z33 Part No.*
16	LBS-NLO16/3ZM/Z20	LBS-NLO16/4ZM/Z20*	LBS-NLO16/3ZM/Z33	LBS-NLO16/4ZM/Z33*
25	LBS-NLO25/3ZM/Z20	LBS-NLO25/4ZM/Z20*	LBS-NLO25/3ZM/Z33	LBS-NLO25/4ZM/Z33*
32	LBS-NLO32/3ZM/Z20	LBS-NLO32/4ZM/Z20*	LBS-NLO32/3ZM/Z33	LBS-NLO32/4ZM/Z33*
40	LBS-NLO40/3ZM/Z20	LBS-NLO40/4ZM/Z20*	LBS-NLO40/3ZM/Z33	LBS-NLO40/4ZM/Z33*
63 (NLO)	LBS-NLO63/3ZM/Z20	LBS-NLO63/4ZM/Z20*	LBS-NLO63/3ZM/Z33	LBS-NLO63/4ZM/Z33*
63 (NLT)	LBS-NLT63/3ZM/Z20	LBS-NLT63/4ZM/Z20*	LBS-NLT63/3ZM/Z33	LBS-NLT63/4ZM/Z33*
80	LBS-NLT80/3ZM/Z20	LBS-NLT80/4ZM/Z20*	LBS-NLT80/3ZM/Z33	LBS-NLT80/4ZM/Z33*

Information subject to change without notice

* Special order

Dimensional drawing and mounting template



Dimensions

Model	Z33 Handle					Z20 Handle				
	A	C	C	F	L	A	C	C	F	L
		3 Pole	4 Pole				3 Pole	4 Pole		
LBS-NLO16-63	66	36	49.5	73	76	48.5	36	49.5	73	77
LBS-NLT63-80	66	60	80	83	84	—	—	—	—	—

Information subject to change without notice - All dimensions in mm

DIN Rail Mount Disconnect Switches Type “T”

Features and specifications:

- Switches mount directly on DIN Rail
- Red/yellow padlockable handles to prevent unauthorized use
- 3, 4, and 6 pole versions available (6 pole upon special request)
- Auxiliary and additional contact blocks available from stock
- Face plate hinged to allow access to screws without removing handle and face plate
- IP Rating: IP20

DIN Rail Mount Disconnect Switches Direct Mount Handle - Type T (Order by Part No.)

Switch Size	3 Pole Part No.	4 Pole Part No.	6 Pole Part No.*
16	LBS-NLO16/3T/Z20	LBS-NLO16/4T/Z20	LBS-NLO16/6T/Z20*
25	LBS-NLO25/3T/Z20	LBS-NLO25/4T/Z20	LBS-NLO25/6T/Z20*
32	LBS-NLO32/3T/Z20	LBS-NLO32/4T/Z20	LBS-NLO32/6T/Z20*
40	LBS-NLO40/3T/Z20	LBS-NLO40/4T/Z20	LBS-NLO40/6T/Z20*
63 (NLO)	LBS-NLO63/3T/Z20	LBS-NLO63/4T/Z20	LBS-NLO63/6T/Z20*
63 (NLT)	LBS-NLT63/3T/Z20	LBS-NLT63/4T/Z20	LBS-NLT63/6T/Z20*
80	LBS-NLT80/3T/Z20	LBS-NLT80/4T/Z20	LBS-NLT80/6T/Z20*
100	LBS-NLT100/3T/Z20	LBS-NLT100/4T/Z20	LBS-NLT100/6T/Z20*
125	LBS-NLT125/3T/Z20	LBS-NLT125/4T/Z20	LBS-NLT125/6T/Z20*

Information subject to change without notice

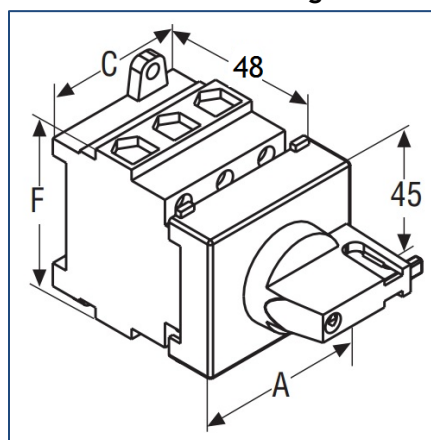
* Special order

Dimensions

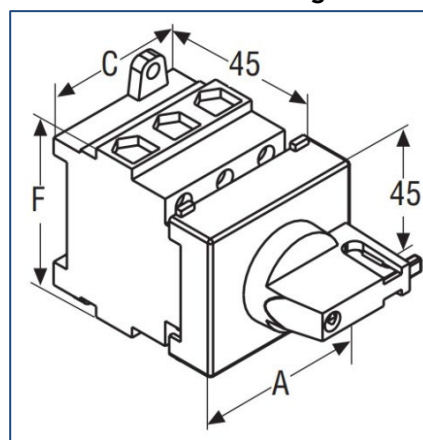
Model	A	A	A	C	C	C	F
	3 Pole	4 Pole	6 Pole	3 Pole	4 Pole	6 Pole	
LBS-NLO16-63	36	36	79	36	49	72	60
LBS-NLT63-80	63	83	125	60	82	121	64
LBS-NLT100-125	70	93	140	70	93	141	83

Information subject to change without notice - All dimensions in mm

NLO dimensional drawing



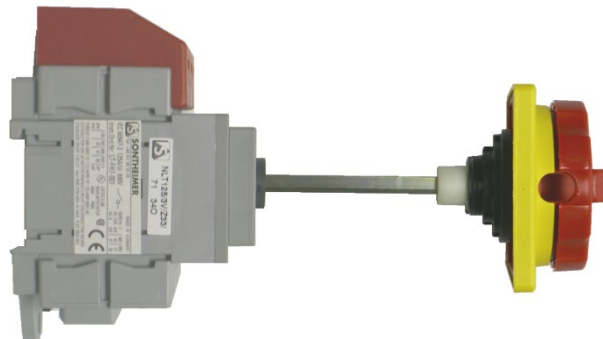
NLT dimensional drawing



Panel Mount Disconnect Switches Type “V”

Features and specifications:

- Switches mount to panel or DIN rail
- Door Interlock Function (door opens in ‘off’ position only)
- Red/yellow padlockable handle to prevent unauthorized use
- Front plate with clutch handle mounted by central hole and 4 screws (code 39 & 45 only, 71 mounted by central hole only)
- Steel shaft (300mm) for reliable operation. Special lengths available on request
- 3 and 4 pole versions available from stock. 6 pole version available upon request
- Auxiliary and additional contact blocks available
- IP Rating:** IP54, IP65 with gasket Z1 (front), IP20 back



The following types of handle/clutch/front plate are available:

- Standard type, Red/Yellow padlockable handle [code 71]
- Self-centering Clutch, Red/Yellow padlockable handle [code 45]
- Self-centering Clutch and defeatable Red/Yellow padlockable handle [code 39]

Note: Grey/black padlockable handle available. Change code from “NLO” or “NLT” to “ALO” or “ALT”.

Panel Mount Disconnect Switch with 300mm Shaft and Standard Red/Yellow Rotary Handle “code 71”

“Code 71” Door Mount Disconnect Switches (Order by Part No.)

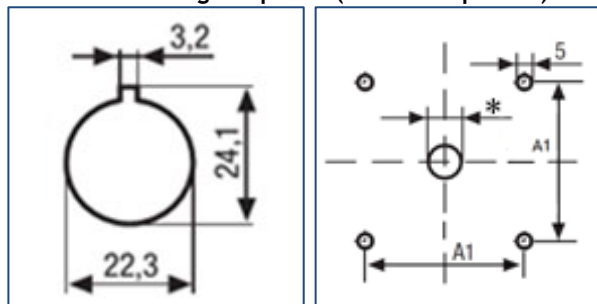
Switch Size	3 Pole Part No.	4 Pole Part No.	6 Pole Part No.*
16	LBS-NLO16/3V/Z33/71	LBS-NLO16/4V/Z33/71	LBS-NLO16/6V/Z33/71*
25	LBS-NLO25/3V/Z33/71	LBS-NLO25/4V/Z33/71	LBS-NLO25/6V/Z33/71*
32	LBS-NLO32/3V/Z33/71	LBS-NLO32/4V/Z33/71	LBS-NLO32/6V/Z33/71*
40	LBS-NLO40/3V/Z33/71	LBS-NLO40/4V/Z33/71	LBS-NLO40/6V/Z33/71*
63	LBS-NLO63/3V/Z33/71	LBS-NLO63/4V/Z33/71	LBS-NLO63/6V/Z33/71*
63	LBS-NLT63/3V/Z33/71	LBS-NLT63/4V/Z33/71	LBS-NLT63/6V/Z33/71*
80	LBS-NLT80/3V/Z33/71	LBS-NLT80/4V/Z33/71	LBS-NLT80/6V/Z33/71*
100	LBS-NLT100/3V/Z33/71	LBS-NLT100/4V/Z33/71	LBS-NLT100/6V/Z33/71*
125	LBS-NLT125/3V/Z33/71	LBS-NLT125/4V/Z33/71	LBS-NLT125/6V/Z33/71*

Information subject to change without notice. See next page for dimensional drawing

* Special order



Code 71 mounting templates (4 screws optional)

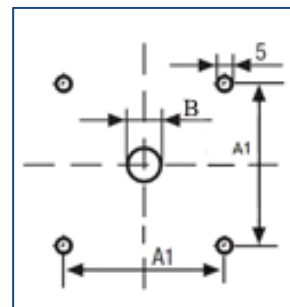


dimensions of the centre hole

* see template on left for

of the centre hole (B)

Code 39, 45, 64 & 65 switches with standard Z33 handle mounting template



See next page for the dimensions



Panel Mount Disconnect Switches with 300mm Shaft & Red/Yellow Rotary Handle with Self-centering Clutch “code 45”

“Code 45” Door Mount Disconnect Switches (Order by Part No.)

Switch Size	3 Pole Part No.	4 Pole Part No.*	6 Pole Part No.*
16	LBS-NLO16/3V/Z33/45	LBS-NLO16/4V/Z33/45*	LBS-NLO16/6V/Z33/45*
25	LBS-NLO25/3V/Z33/45	LBS-NLO25/4V/Z33/45*	LBS-NLO25/6V/Z33/45*
32	LBS-NLO32/3V/Z33/45	LBS-NLO32/4V/Z33/45*	LBS-NLO32/6V/Z33/45*
40	LBS-NLO40/3V/Z33/45	LBS-NLO40/4V/Z33/45*	LBS-NLO40/6V/Z33/45*
63 (NLO)	LBS-NLO63/3V/Z33/45	LBS-NLO63/4V/Z33/45*	LBS-NLO63/6V/Z33/45*
63 (NLT)	LBS-NLT63/3V/Z33/45	LBS-NLT63/4V/Z33/45*	LBS-NLT63/6V/Z33/45*
80	LBS-NLT80/3V/Z33/45	LBS-NLT80/4V/Z33/45*	LBS-NLT80/6V/Z33/45*
100	LBS-NLT100/3V/Z33/45	LBS-NLT100/4V/Z33/45*	LBS-NLT100/6V/Z33/45*
125	LBS-NLT125/3V/Z33/45	LBS-NLT125/4V/Z33/45*	LBS-NLT125/6V/Z33/45*
180	LBS-NLT180/3V/Z20/65/x83	LBS-NLT180/4V/Z20/65/x83*	—
250	LBS-NLT250/3V/Z20/65/x83	LBS-NLT250/4V/Z20/65/x83*	—

NOTE: 180 & 250A switches “code 65”: handle is interlocking in position “ON”. Information subject to change without notice

* Special order. See previous page for mounting template



Panel Mount Disconnect Switches with 300mm Shaft & Defeatable Red/Yellow Rotary Handle with Self-centering Clutch “code 39”

“Code 39” Door Mount Disconnect Switches (Order by Part No.)

Switch Size	3 Pole Part No.	4 Pole Part No.*	6 Pole Part No.*
16	LBS-NLO16/3V/Z39	LBS-NLO16/4V/Z39*	LBS-NLO16/6V/Z39*
25	LBS-NLO25/3V/Z39	LBS-NLO25/4V/Z39*	LBS-NLO25/6V/Z39*
32	LBS-NLO32/3V/Z39	LBS-NLO32/4V/Z39*	LBS-NLO32/6V/Z39*
40	LBS-NLO40/3V/Z39	LBS-NLO40/4V/Z39*	LBS-NLO40/6V/Z39*
63 (NLO)	LBS-NLO63/3V/Z39	LBS-NLO63/4V/Z39*	LBS-NLO63/6V/Z39*
63 (NLT)	LBS-NLT63/3V/Z39	LBS-NLT63/4V/Z39*	LBS-NLT63/6V/Z39*
80	LBS-NLT80/3V/Z39	LBS-NLT80/4V/Z39*	LBS-NLT80/6V/Z39*
100	LBS-NLT100/3V/Z39	LBS-NLT100/4V/Z39*	LBS-NLT100/6V/Z39*
125	LBS-NLT125/3V/Z39	LBS-NLT125/4V/Z39*	LBS-NLT125/6V/Z39*
180	LBS-NLT180/3V/Z20/64/x83	LBS-NLT180/4V/Z20/64/x83*	—
250	LBS-NLT250/3V/Z20/64/x83	LBS-NLT250/4V/Z20/64/x83*	—

NOTE: 180 & 250A switches “code 64”: handle is not interlocking. Information subject to change without notice

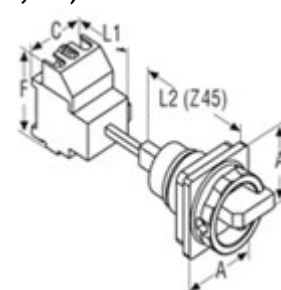
* Special order. See previous page for mounting template



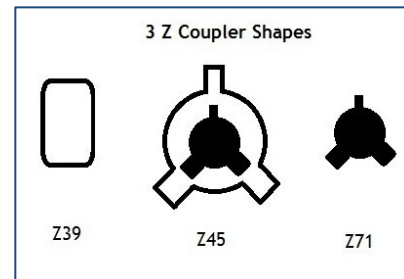
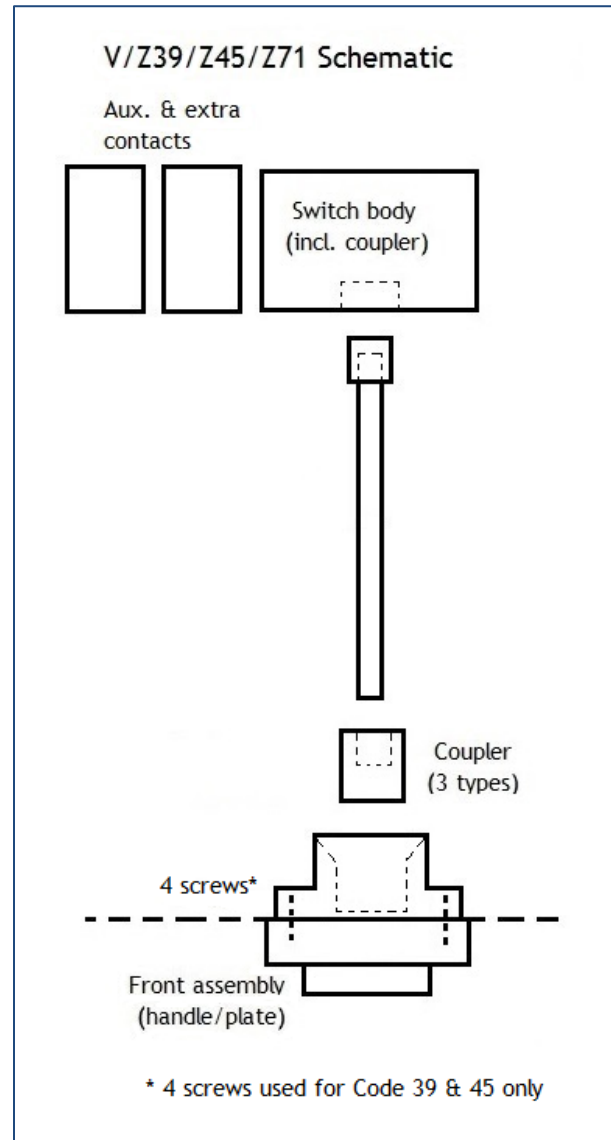
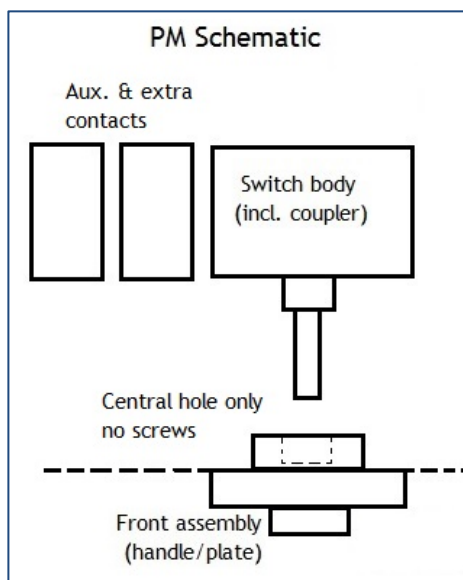
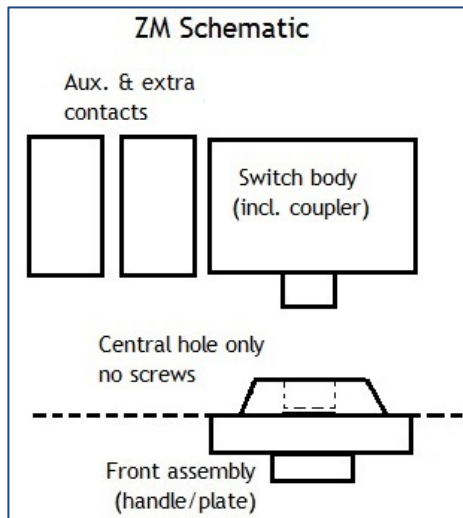
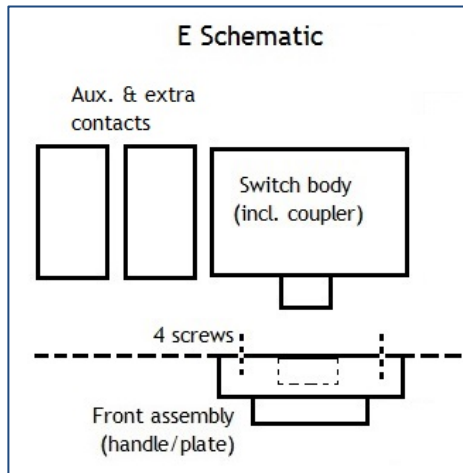
Dimensions for Panel Mount Disconnect Switches Type “V” (codes 39, 45, 64, 65, 71)

Model	A	A1	B	C	C	C	F	L1	L2
				3 Pole	4 Pole	6 Pole			Z45
LBS-NLO16-63	66	48	10	36	49	—	73	66.5	77
LBS-NLT63-80	66	48	10	60	80	121	83	59	80
LBS-NLT100-125	66	48	10	70	93	141	96	75	80
LBS-NLT180-250	94	68	12.5	112	150	224	169	93	47

Information subject to change without notice - All dimensions in mm



Schematics of Disconnect Switches





Enclosed Disconnect Switches Types RLO/RLT

Features and specifications:

- Padlockable handle to prevent unauthorized use
- 3 Enclosure sizes depending on size of switch (D1, D2, D3)
- 3, 4, and 6 pole versions available
- Auxiliary and neutral contact blocks available
- IP Rating: IP65, Type1, 4X and 12
- **Approvals:** Switches mounted in CSA approved non-metallic enclosures
- Metal enclosures available upon request - consult ITC

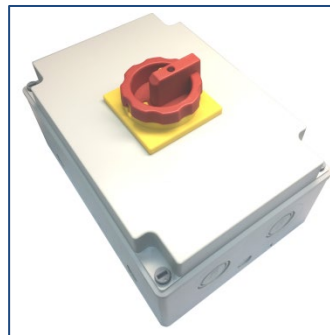
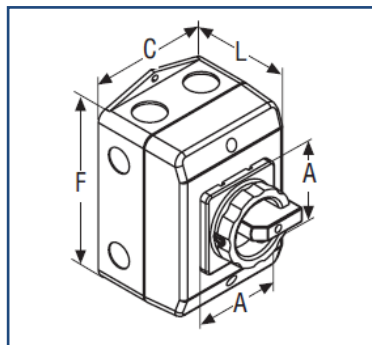


RLT Enclosed Disconnect Switches (Order by Part No.)

Switch Size	3 Pole Part No.	4 Pole Part No.	6 Pole Part No.*
16	LBS-RLO16/3PM-D1/Z33	LBS-RLO16/4PM-D1/Z33	LBS-RLO16/6PM-D2/Z33*
25	LBS-RLO25/3PM-D1/Z33	LBS-RLO25/4PM-D1/Z33	LBS-RLO25/6PM-D2/Z33*
32	LBS-RLO32/3PM-D1/Z33	LBS-RLO32/4PM-D1/Z33	LBS-RLO32/6PM-D2/Z33*
40	LBS-RLO40/3PM-D1/Z33	LBS-RLO40/4PM-D1/Z33	LBS-RLO40/6PM-D2/Z33*
63 (RLO)	LBS-RLO63/3PM-D1/Z33	LBS-RLO63/4PM-D1/Z33	LBS-RLO63/6PM-D2/Z33*
63 (RLT)	LBS-RLT63/3PM-D2/Z33	LBS-RLT63/4PM-D2/Z33	LBS-RLT63/6PM-D3/Z33*
80	LBS-RLT80/3PM-D2/Z33	LBS-RLT80/4PM-D2/Z33	LBS-RLT80/6PM-D3/Z33*
100	LBS-RLT100/3PM-D3/Z33	LBS-RLT100/4PM-D3/Z33	LBS-RLT100/6PM-D3/Z33*
125	LBS-RLT125/3PM-D3/Z33	LBS-RLT125/4PM-D3/Z33	LBS-RLT125/6PM-D3/Z33*
180	LBS-RLT180/3K4/Z20	—	—
250	LBS-RLT250/3K4/Z20	—	—

Information subject to change without notice

* Special order



Dimensions and Knockouts

Model*	A	C	F	L	Knockouts
D1	66	100	140	81	4xM25, 2xM20
D2	66	146	176	104	4xM32/40, 2xM20
D3	90	212	300	137	4xM32/40, 6xM20
K4	125	373	373	225	2xM40/63, 2xM32/50, 4xM25/40, 28xM16/25, 24xM20, 4xM16

* model can be found in the part number, i.e. LBS-RLO/3PM-D1/Z33

Information subject to change without notice - All dimensions in mm

MINI25 - Compact Enclosed Disconnect Switch 25A

The most cost-effective model of enclosed 25A disconnect switch from SONTHEIMER. Specially designed to control small/medium automation products, single-phase and three-phase electric motors, heating and lighting control panels, etc. Auxiliary contacts cannot be added.

Features and Specifications:

- Small footprint
- Easy to install, wire and maintain
- Conforms to current requirements for use as a motor disconnect
- 2 screw ground/neutral terminals inside the enclosure
- Mounting via 2 external screw slots or 4 internal knock-outs
- **Maximum wire section:** 4mm², 10AWG
- **Cable entry:** 4 pre-threaded M20x1.5
- **Dimensions:** 57.5x64x74mm, 3¼ x 2½ x 3" (HxWxD)
- **Operating temperature:** -20 to 50°C (maximum 80°C)
- **IP Rating:** IP67
- **Voltage rating (CSA/UL):** 600VAC
- **Current rating (CSA/UL):** 25A
- **3-ph HP rating (CSA/UL):** 240V-1HP / 480V-5HP / 600V-5HP
- **Approvals:** CSA, UL, CE-marked, RoHS

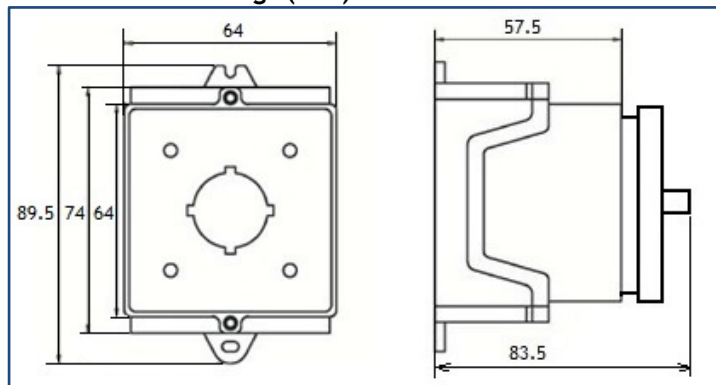


Compact Enclosed Disconnect Switches 25A and Accessories (Order by Part No.)

Part No.	Description
LBS-WAI184/R3/25A	25A compact enclosed 3-ph disconnect switch, 3 pole, red/yellow lockable handle Z33
LBS-WAI185/R3/25A	25A compact enclosed 3-ph disconnect switch, 3 pole, black/grey lockable handle Z33
LBS-WAI184/R4/25A	25A compact enclosed 3-ph disconnect switch, 4 pole, red/yellow lockable handle Z33
LBS-WAI185/R4/25A	25A compact enclosed 3-ph disconnect switch, 4 pole, black/grey lockable handle Z33
180.020	M20x1.5 cable gland, polyamide 6 light grey, range 6-12mm, 0.236-0.472 inches
181.020	M20x1.5 cable gland - reduced seal, polyamide 6 light grey, range 5-9mm, 0.197-0.354 inches
182.020	M20x1.5 cable gland, polyamide 6 light grey, range 10-14mm, 0.394-0.551 inches
193.622	Thread adapter, polyamide, M20(M) to 1/2in NPT(F)

Information subject to change without notice

Dimensional Drawings (mm):

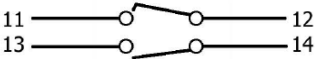


Accessories for Disconnect Switches

Auxiliary Contact Blocks (1 NO + 1 NC)

- Side mount auxiliary contacts for switching signal of 10A or less
UL certified - NEMA rating: A600, P300

Auxiliary Contact Blocks: 1 NO + 1 NC (Order by Part No.)

Contact Diagram	Switch Size	Door Mount Part No.	Panel/Enclosed Mount Part No.
	16A to 250A	LBS-HE11	LBS-HV11



Add-on Contact Blocks

- Side mount power contacts for switching same current rating as main switch
UL certified - NEMA rating: A600, P300

Add-on Contact Blocks (Order by Part No.)

Contact Diagram - Early Make	Switch Size	Door Mount Part No.	Panel/Enclosed Mount Part No.
	16A - 25A 25A - 40A 63A - 80A 100A - 125A 180A - 250A	LBS-NVG-20AE LBS-NVG-40E LBS-NVG-80E LBS-NVG-125E LBS-NVG-250E	LBS-NVG-20AV LBS-NVG-40V LBS-NVG-80V LBS-NVG-125V LBS-NVG-250V
Contact Diagram - Simultaneous Make	Switch Size	Door Mount Part No.	Panel/Enclosed Mount Part No.
	16A - 25A 25A - 40A 63A - 80A 100A - 125A 180A - 250A	LBS-NGG-20AE LBS-NGG-40E LBS-NGG-80E LBS-NGG-125E LBS-NGG-250E	LBS-NGG-20AV LBS-NGG-40V LBS-NGG-80V LBS-NGG-125V LBS-NGG-250V



Add-on Solid Neutral/Ground Block

- Side mount solid clocks for connecting neutral or ground wires

Solid Neutral/Ground Block (Order by Part No.)

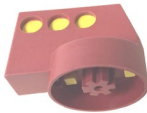
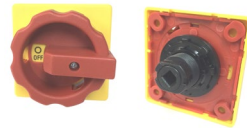
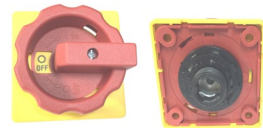
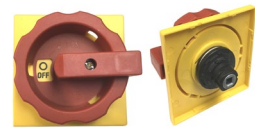
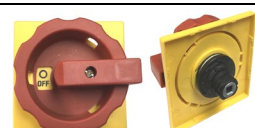
Switch Size	Door Mount Part No.	Panel/Enclosed Mount Part No.
16A - 25A	LBS-N20AE	LBS-N20AV
25A - 40A	LBS-N40E	LBS-N40V
63A - 80A	LBS-N80E	LBS-N80V
100A - 125A	LBS-N125E	LBS-N125V
180A - 250A	LBS-N250E	LBS-N250V

Information subject to change without notice



Replacement Handles

Replacement Handles (Order by Part No.)

Part No	Description	
LBS-Z20/D1/R/Y	Replacement padlockable handle only, type Z20 for 6x6mm shaft, red/yellow	
LBS-Z20/D1/BK	Replacement padlockable handle only, type Z20 for 6x6mm shaft, black	
LBS-Z20/D1/Z39/R/Y	Replacement padlockable handle w/ ON-OFF yellow plate, 4-screw mount For "Z39" type 16 to 125A, red/yellow	
LBS-Z20/D2/Handle/R/S	Replacement handle only, 105mm, 180 to 250A, for 8x8mm shaft, red	
LBS-Z20/D2/Handle/R/L	Replacement handle only, 150mm, 180 to 250A, for 8x8mm shaft, red	
LBS-Z33/D1/R	Replacement padlockable handle only, for all Z33 types 16 to 125A, 6x6mm shaft, red	
LBS-Z33/D1/BK	Replacement padlockable handle only, for all Z33 types 15 to 125A, 6x6mm shaft, black	
LBS-Z33/D1/E/R/Y	Replacement padlockable handle set for type 'E' front 4-screw mount, 16 to 125A, red/yellow	
LBS-Z33/D1/Z45/R/Y	Replacement padlockable handle set Z33 for Z45 interlock, 4-screw mount, 16 to 125A, red/yellow	
LBS-Z33/D1/Z71/R/Y	Replacement padlockable, 4-screw mount For "Z71" type 16 to 125A, red/yellow	
LBS-Z33/D1/ZM/R/Y	Replacement padlockable handle set, Z33 for ZM centre hole mount, 16 to 40A, red/yellow	
LBS-Z33/D2/Z45/R/Y/D1	Replacement padlockable handle set Z33, 90mm, for interlock Z45, 4-screw mount, >100A, red/yellow	
LBS-Z33/D2/ZM/R/Y	Replacement padlockable handle set Z33, 90mm, ZM centre hole mount, >100A, red/yellow	

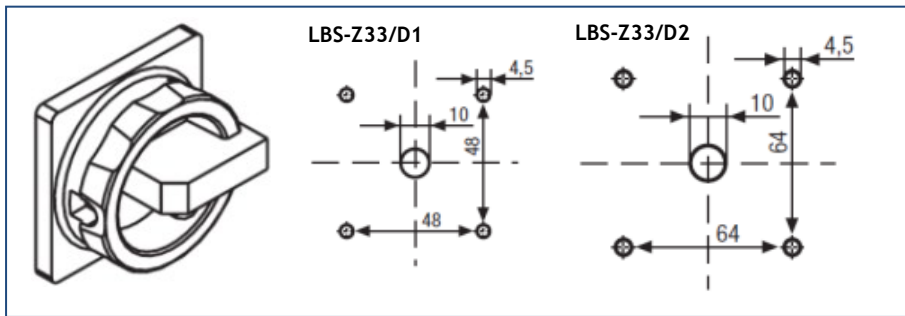
Information subject to change without notice



LBS-Z33 Handle



LBS-Z20 Handle



Replacement Plates

Replacement Plates (Order by Part No.)

Part No.	Description	Switch Sizes	Picture
LBS-X70/D2/S	Front plate only, 90x90mm, plastic, silver, with markings	63A to 250A	
LBS-X70/D2/Y	Front plate only, 90x90mm, plastic, yellow, with markings	63A to 250A	
LBS-X70/D2/S/Blank	Front plate only, 90x90mm, plastic, silver, without markings	63A to 250A	

Information subject to change without notice

Replacement Sealing Gaskets

Sealing Gaskets (IP65) (Order by Part No.)

Part No.	Description
LBS-Z1/D1	Sealing gasket for Z33/D1 handles
LBS-Z1/D2	Sealing gasket for Z33/D2 handles

Information subject to change without notice

Extension Shafts



Shafts (Order by Part No.)

Part No.	Description	Switch Sizes
LBS-Z40/SHAFT D1	Shaft 6x6x300mm	16A to 125A
LBS-Z44/SHAFT D1	Shaft 6x6x500mm	16A to 125A
LBS-Z40/SHAFT D2	Shaft 8x8x300mm	180A to 250A
LBS-Z44/SHAFT D2	Shaft 8x8x500mm	180A to 250A

Information subject to change without notice

Coupling Devices for Shafts

Couplers (Order by Part No)

Part No.	Description	Switch Sizes	
LBS-Z40/D1	Coupling device for shafts 6x6mm	16A to 125A	
LBS-Z40/D2	Coupling device for shafts 8x8mm	180A to 250A	
LBS-Z39/D1/C	Spare male part of coupler for type Z39 panel-mount switch, for a 6x6mm shaft	16A to 125A	
LBS-Z45/D1/C	Spare male part of coupler for type Z45 panel-mount switch, for a 6x6mm shaft (interlocking)	16A to 125A	
LBS-Z45/D1/C/X	Spare male part of coupler for type Z45 panel-mount switch, for a 6x6mm shaft (no interlock)	16A to 125A	
LBS-Z71/D1/C	Spare male part of coupler for type Z71 panel-mount switch, for a 6x6mm shaft	16A to 125A	

Information subject to change without notice



Ground Terminals

Ground Terminals (Order by Part No.)

Part No.	Description	Switch Sizes	
LBS-Z36	Spare ground terminal clamp for enclosed switches	16A to 250A	

Information subject to change without notice

Replacement Plastic Enclosures

Replacement Plastic Enclosures (Order by Part No.)

Part No.	Description	For Switches
LBS-PM-D1/Z1/36	Replacement plastic enclosure for LBS-RLO and RLT switches	LBS-RLO16 to RLO40 (3-6 poles) and LBS-RLT-16 to RLT32 (3-6 poles)
LBS-PM-D2/Z1/36	Replacement plastic enclosure for LBS-RLO and RLT switches	LBS-RLT40 to RLT80 (6 poles) and LBS-RLT 63 to 125 (3 -6 poles)
LBS-PM-D3/Z1/36	Replacement plastic enclosure for LBS-RLO and RLT switches	LBS-RLT180 to RLT250
LBS-PM-D3-SCREW	Replacement locking screws for D3 plastic enclosure	-

Information subject to change without notice

Replacement Contact Covers

Replacement Contact Covers (Order by Part No.)

Part No.	Description	For Switches^
LBS-C100	Protecting cover for line side, 1 pole (pack of 3)	LBS-NLT100 to NLT125
LBS-C16*	Protecting cover for line side - 4 poles (1 piece)*	LBS-NLT16
LBS-C250*	Protecting cover for line side - 1 pole (pack of 3)*	LBS-NLT180 to NLT250
LBS-C32/3*	Protecting cover for line side - 1 pole (1 piece)*	LBS-NLT25 to NLT40
LBS-C63/3	Protecting cover for line side - 3 poles (1 piece)	LBS-NLT63 to NLT80
LBS-Z62/L03	Protecting cover for line side - 3 poles	LBS-NLO16 to NLO63
LBS-Z62/L04	Protecting cover for line side - 4 poles	LBS-NLO16 to NLO63
LBS-Z62/L06	Protecting cover for line side - 6 poles	LBS-NLO16 to NLO63

Information subject to change without notice

^ Note these covers also fit the equivalent ALO and ALT switches

* End of stock



Voltmeter & Ammeter Switches

Instrument switches (Voltmeter and Ammeter selector switches) are used in power distribution panels and switchgear, to select the measurement that the operator needs to read on the panel instrument.

ITC offers three types of instrument switches:

- **LBS-V3/8:** a 4-position Voltmeter rotary switch, allowing reading of voltages between phases in a 3-phase system: L1-L2, L2-L3, L1-L3, plus 0
- **LBS-V30/8:** a 7-position Voltmeter rotary switch, allowing reading of voltages between phases as well as between each phase and neutral in a 3-phase system: L1-L2, L2-L3, L1-L3, L1-N, L2-N, L3-N, plus 0
- **LBS-AU31/8:** a 4-position Ammeter switch, allowing reading of currents in a 3-phase system: I1, I2, I3, plus 0



Features and specifications:

- Wire connections are by screw terminals, maximum 10 AWG
- Door mount use 4 screws, centre mount screws not used
- Standard handle is black with a silver plate and black markings, consult ITC for other options
- **Voltage rating (UL/CSA):** 600Vac
- **Current rating:** 16A
- **IP Rating:** IP 65 (front) for center hole mounted models
- **Operating temperature:** -20 to 50 °C (maximum 80 °C)
- **Approvals:** CSA, UL, CE-marked

Instrument Switches (Order by Part No.)

Part No.	Description	Dim. Dwg.
LBS-V3/8/E	16A, 5.5kW(AC3) Voltmeter Switch, 3-line, Door mount	Figure 1
LBS-V3/8/ZM	16A, 5.5kW(AC3) Voltmeter Switch, 3-line, Center-mount	Figure 2
LBS-V30/8/E	16A, 5.5kW(AC3) Voltmeter Switch, 3-line+3-phase, Door mount	Figure 1
LBS-V30/8/ZM	16A, 5.5kW(AC3) Voltmeter Switch, 3-line+3-phase, Center-mount	Figure 2
LBS-AU31/8/E	16A, 5.5kW(AC3) Ammeter Switch, 3-line, Door mount	Figure 1
LBS-AU31/8/ZM	16A, 5.5kW(AC3) Ammeter Switch, 3-line, Center-mount	Figure 2

Information subject to change without notice

Instrument Switch Mounting Templates and Dimensional Drawings

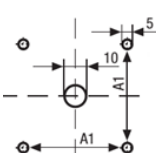


Figure 1 - Door mount (4+1 holes)

	A	A1	C	F	L1	L3	L3
N. contacts					2	4	6
mm	48	36	40	39	34	46	58

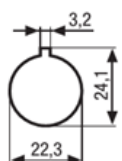
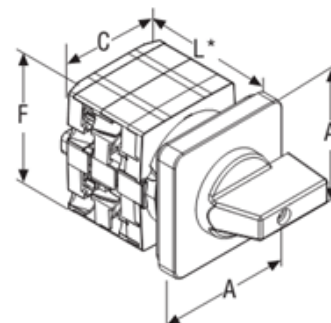


Figure 2 - Center mount Ø22.5mm (Single hole)

	A	C	F	L1	L2	L3
N. contacts				2	4	6
mm	48	40	43	58	70	82





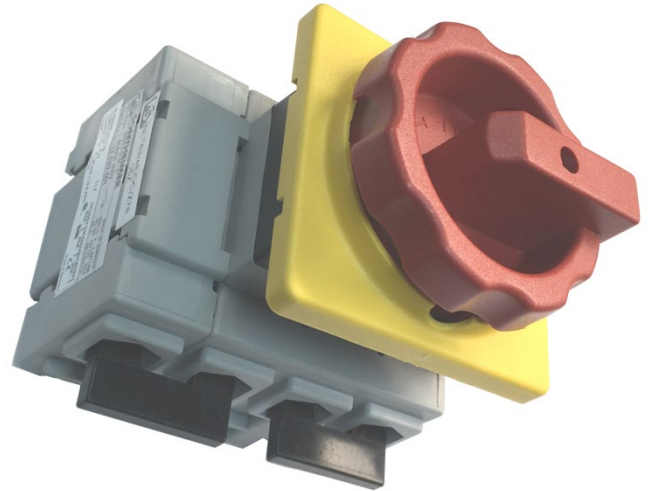
DC Disconnect Switches

Two models of disconnect switches designed and approved for interrupting loads in Direct Current (DC).

These switches are equipped with a special heavy-duty cam system, which provides fast, secure snap action opening of the contacts. Moreover, each pole is interrupted via two contacts in series. Jumpers are already installed.

Features and Specifications:

- **Mounting:** door mounted (4+1 hole). DIN-Rail mounting available upon request
- **Handle:** Lockable knurled-type (Z33), red/yellow. Black/grey available upon request
- **IP Rating:** IP65 (front) if mounted with optional Z1/D1 sealing gasket
- **Operating temperature:** -20 to 50°C (peaks 80°C)



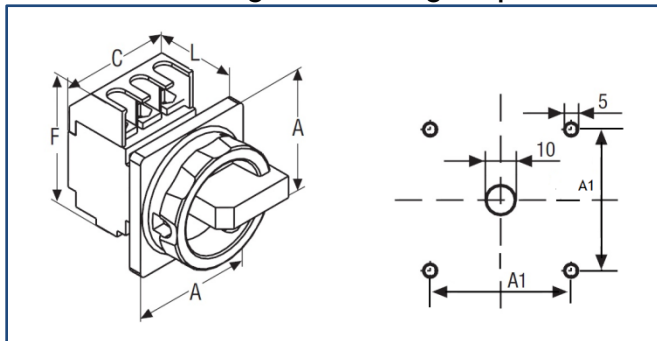
These models are CSA and cCSAus certified. Ratings are as indicated in the table below.

DC Disconnect Switches (Order by Part No.)

Part No.	Description	CSA Rating 600V DC	CSA Rating 500 VDC	CSA Rating 350V DC
LBS-NLT40/4E/DC/Z78	Disconnect switch for DC applications, 20A 600V DC	20A	28A	40A
LBS-NLT63/4E/DC/Z78	Disconnect switch for DC applications, 30A 600V DC	30A	45A	63A

Information subject to change without notice

Dimensional drawing and mounting template



Dimensions

Model	A	A1	C - 4 Pole	F	L
LBS-NLT40	66	48	61	72	50
LBS-NLT63	66	48	80	73	59

Information subject to change without notice - All dimensions in mm

[illegible]



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DIN Rail



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IP68 Connectors



Terminal Blocks



Terminal Strips



Screwless
Parallel Connectors



22.5mm Pushbuttons



LED Indicators



Control Stations



Limit Switches



Micro Limit Switches



Safety Switches



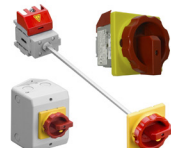
Foot Switches



Circuit Breakers



IEC Contactors



Disconnect Switches



Midget and CC
Fuse Holders



Tower Lights



Power Continuity



Ferrules



Colour Coded Lugs



Crimp Terminals



Termination Kits



Cable Glands



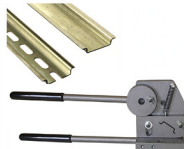
Thread Adapters



Cable Entry Systems



Wire Management



DIN Rail Cutters



Assembly Tables



Cutting & Stripping



Crimping Tools



Hole Cutting &
Punching Tools

SOME OF OUR MANUFACTURING PARTNERS

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DETASULTRA

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