

Ø64

LOAD BREAK SWITCHES

Ø12



Switch on to the best

salzer

INDEX

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LB Series Load Break Switches comply with the latest specifications for modern low voltage devices.

Outstanding electrical characteristics of LB Switches with compact design, contribute to space saving installation and operational convenience.

Basic construction and design of the switch makes it compact, safe and highly reliable.

The switch uses polyamide glass filled material, having excellent track resistance (CTI) for Insulation to prevent flashover between phases in the most severe conditions.

The special contact design and configuration makes the switch highly reliable to withstand high short circuit currents.

FEATURES

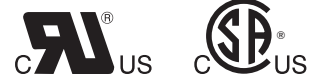
- Double break contacts.
- Polycarbonate shroud for wired terminal protection is included.
- Excellent switching and high short circuit capacity.
- Compact and reliable.
- Easy installation.
- Different mounting options, i.e. front mounting, rear mounting and enclosure mounting.
- Provision to fix on DIN Rail for rear mounting Switches.
- Quick, simple and convenient, dia. 22.5 mm single hole mounting is offered for 16A/20A switches with padlocking option.
- Open terminals for easy access.
- Finger protection.
- Terminal screws with fixed clamp for easy wiring.
- Add-on main/neutral/auxiliary contacts can be mounted on both sides of the switch.
- 4th Pole addition is possible at site.

APPLICATIONS

- Isolator.
- Motor Start and Stop.
- Manual Motor controller as Motor Disconnect.
- Main Switch.
- Emergency ON-OFF.
- Control Switch.
- Changeover Switch.

APPROVALS

- For Canada and US.



- For Europe



Please refer to us for updated status on the approvals and listings.

CSA STANDARD	CAN/CSA-C22.2 NO.14-M91
UL STANDARD	UL508
EUROPEAN STANDARD	IEC947-1 and 3, EN60947, VDE 0660-107

RATING		Measure		LB116	LB120	LB225	LB232	LB240	LB263	LB4080	LB4100	LB4125
Rated Operational Voltage, Ue												
IEC/EN/VDE		Volts	V	690	690	690	690	690	690	690	690	690
UL/CSA		Volts	V	600	600	600	600	600	600	600	600	600
Main Switch: Isolating Voltage Upto		Volts	V	750	750	750	750	750	750	750	750	750
Resistance to Surge Pulse Voltage, Uimp		Volts	kV	6	6	6	6	6	6	6	6	6
Rated Uninterrupted Current, Iu		Amp	A	16	20	25	32	40	63	80	100	125
Rated Operational Current, Ie												
IEC/EN/VDE	AC22	Amp	A	16	20	25	32	40	63	80	100	125
	AC-21A IEC/EN/VDE	Amp	A	16	20	25	32	40	63	80	100	125
	AC-1	Amp	A	20	25	32	40	63	80	80	100	125
UL/CSA		Amp	A	16	20	25	32	40	63	80	100	125
Rated Operational Power at 50 to 60Hz (IEC/EN/VDE)												
IEC/EN/VDE	AC-23A, 3 PHASE, 3 POLE	220-240V	kW	3	4	5.5	7.5	11	15	18.5	22	30
		380-440V	kW	5.5	7.5	11	15	18.5	30	30	37	45
		500-690V	kW	7.5	11	11	15	22	30	37	45	55
	AC-3, 3 PHASE, 3 POLE	220-240V	kW	2	3	4	5.5	7.5	11	15	18.5	22
		380-440V	kW	3	5.5	7.5	11	18.5	22	22	30	37
		500-690V	kW	5.5	7.5	11	11	18.5	22	30	37	45
Short Circuit Capacity (IEC/EN/VDE)												
Max. Fuse Size (Type gL)		Amp	A	16	25	25	32	40	63	80	100	125
Rated fused short circuit current		Amp	kA	5	5	30	30	30	30	30	30	30
UL/CSA Power Rating: Manual Motor Controller, Suitable as Disconnect												
DOL	3 PHASE, 3 POLE	120V	HP	1.5	1.5	3	3	5	7.5	5	7.5	7.5
		240V	HP	3	3	7.5	7.5	10	15	10	15	15
		480V	HP	7.5	7.5	15	20	20	25	30	30	40
		600V	HP	10	10	20	25	30	30	40	40	50
	1 PHASE	120V	HP	0.5	0.5	1.5	2	3	3	3	3	3
		240V	HP	1.5	1.5	2	3	4	7.5	7.5	7.5	10
Short Circuit Capacity (UL/CSA)												
Max. Fuse Size		Amp	A	25	25	50	50	70	70	100	100	125
Fuse Rating, J Type		Amp	A	20	20	45	45	70	70	90	90	90
Rated Fused Short Circuit Current		Amp	kA	10	10	10	10	10	10	10	10	10
Terminal Cross Section												
Single/Multiple Strand Wire	Min-mm ²		1.5	1.5	1	1	4	4	6	6	6	
	Max-mm ²		6	6	10	10	16	16	70	70	70	
Fine-Strand Wire with Sleeve	Min-mm ²		0.5	0.5	0.75	0.75	2.5	2.5	4	4	4	
	Max-mm ²		6	6	6	6	10	10	50	50	50	
American Wire Gauge		-	AWG	12	12	8	8	6	6	1	1	1
Recommended Tightening Torque		-	Nm	0.8	0.8	1.7	1.7	1.7	1.7	2.5	2.5	2.5

SWITCHING PROGRAMMES

SWITCHING PROGRAMMES

Switches : LB225, LB232, LB240, LB263, LB4080, LB4100, LB4125

3 Pole	3 Pole + 1 Main Module	4 Pole + 1 Main Module	6 Pole	8 Pole
31300	31400	31500	31600	31800
31309	31409	31509	31609	31809

3 Pole+ 1 Neutral Module	4 Pole+ 1 Neutral Module	3 Pole+ 1 Auxillary Module	4 Pole+ 1 Auxillary Module	3 Pole+ 2 Neutral Modules	3 Pole+ 2 Auxillary Modules
31310	31410	31320	31420	31330	31340
31319	31419	31329	31429	31339	31349

Note: 6P and 8P for LB116 and LB120 are under development. Please refer to us

Switches: LB4080, LB4100, LB4125

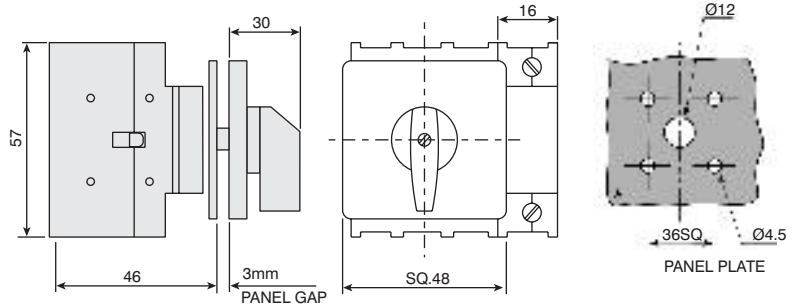
31309	31409	31509	31609	31809

31319	31419	31329	31429	31339	31349

B03



16A-20A



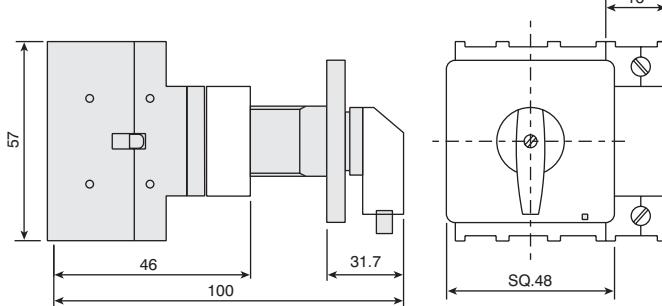
- 4 hole front panel mounting.
- Degree of protection : Front IP55.

● FIFTH POLE CAN BE FITTED ON THE OTHER SIDE OF THE SWITCH

B19



16A-20A



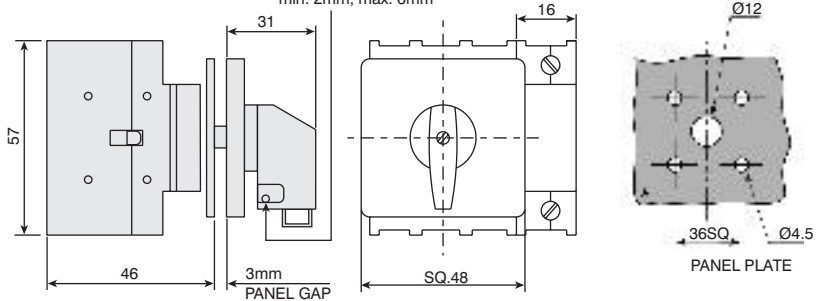
- Dia 22.5mm, single hole panel mounting.

- Degree of protection : Front IP55.

B40



16A-20A



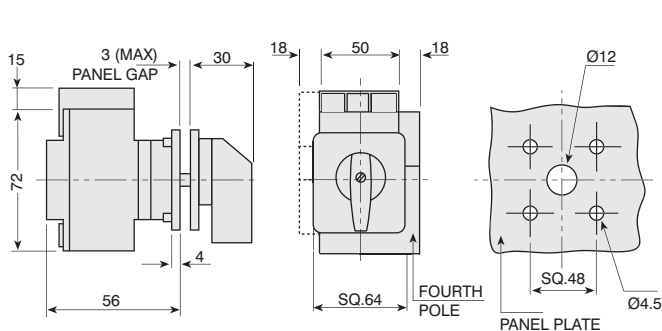
- 4 hole, front panel mounting.
- Degree of protection : Front IP55.

- Switch with padlockable flag knob.
- Max. 1 padlock.

B13



25A-63A



- 4 hole front panel mounting.
- Degree of protection : Front IP55.

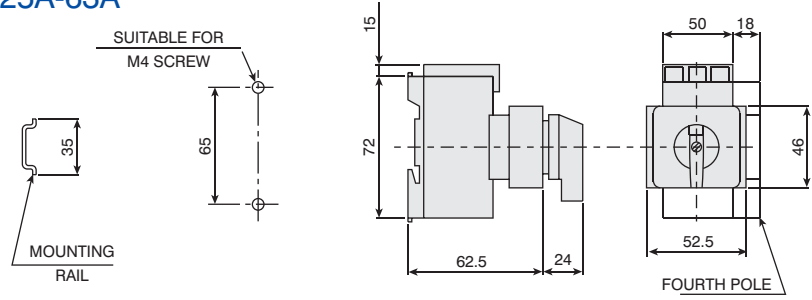
● FIFTH POLE CAN BE FITTED ON THE OTHER SIDE OF THE SWITCH

B23

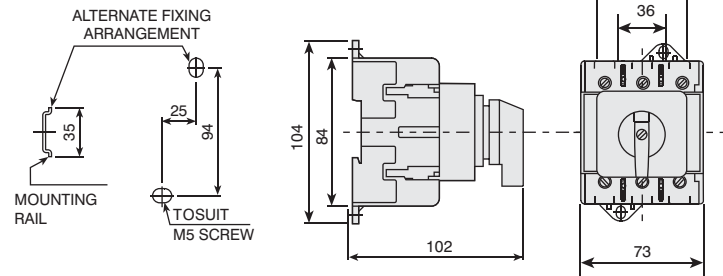


- 2 hole rear mounting.
- Alternately snap mounting on DIN EN50022 rail (35mm).
- Degree of protection : Front IP30.

25A-63A



80A-125A

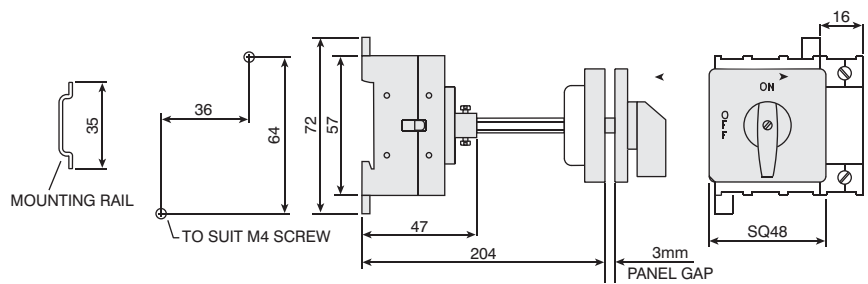


MB42

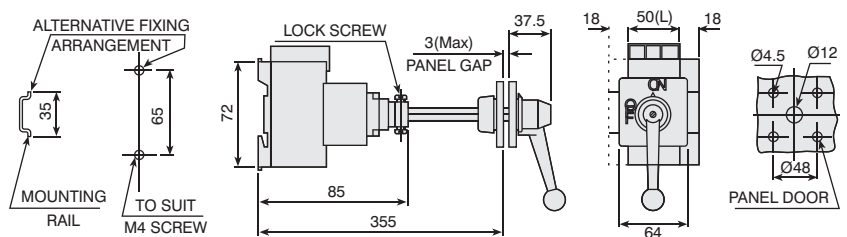


- 2 hole rear mounting or snap mounting on DIN EN50022 rail (35mm) and operable from the front (door) - coupled with door mechanism.
- Door interlock (Door openable only in OFF position.)
- Degree of protection : Front IP55.

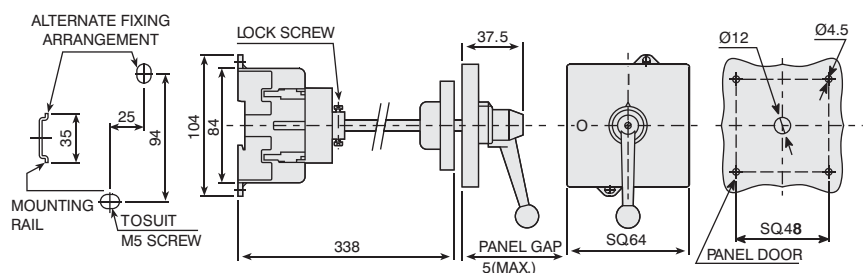
16A-20A



25A-63A



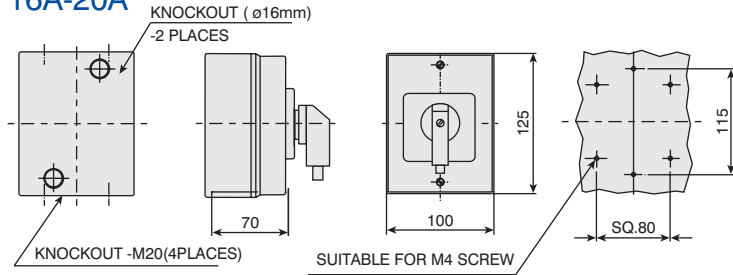
80A-125A



B31SM

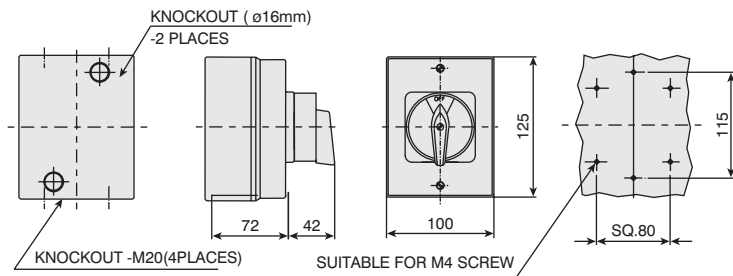


16A-20A



- Switch mounted in ABS / polycarbonate (optional) enclosure.
- Round padlocking device (Max.3 padlocks) to prevent the Switch from being made to ON by unauthorised personnel.
- Knob version available on request.
- Switch rear mounted for easy connection.

25A-32A

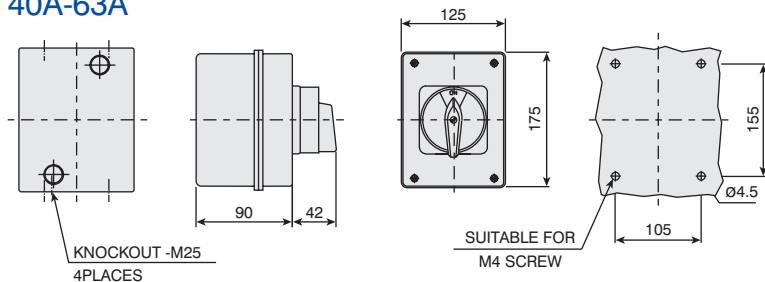


- Degree of protection : IP65.
- RED / YELLOW-handle colour for MAIN / EMERGENCY Switches.
- Enclosure colour : Dark grey base and light grey cover.
- Fourth pole can be added.

B31M



40A-63A



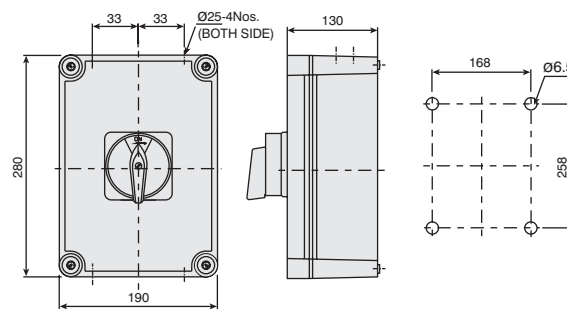
- Switch mounted in ABS enclosure, optional in polycarbonate.

- Round padlocking device (Max.3 padlocks) to prevent the Switch from being made to ON by unauthorised personnel.
- Degree of protection : IP65.
- Switch rear mounted for easy connection.
- RED / YELLOW-handle colour for MAIN / EMERGENCY Switches.
- Enclosure colour : Dark grey base and light grey cover.
- Fourth and Fifth pole can be added.

B31L



80A-125A



- Switch mounted in ABS / polycarbonate (optional) enclosure.
- Padlocking device (Max.3 padlocks) to prevent the Switch from being

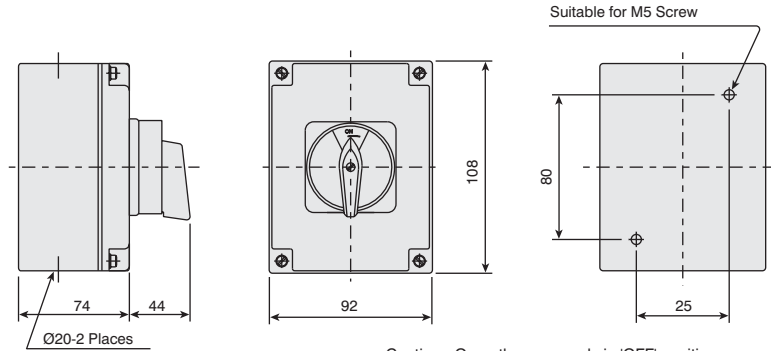
- made to ON by unauthorised personnel.
- Degree of protection : IP65.
- Switch rear mounted for easy connection.
- RED / YELLOW-handle colour for MAIN / EMERGENCY Switches.
- Interlock provided to open the lid only in OFF position.
- Enclosure colour : Grey.
- Fourth and fifth pole can be added.

METAL ENCLOSURE MOUNTING

AB31S



Upto 25A



Caution : Open the cover only in 'OFF' position

- Switch mounted in aluminium enclosure.
- Round padlocking device (max. 3 padlocks) to prevent the Switch

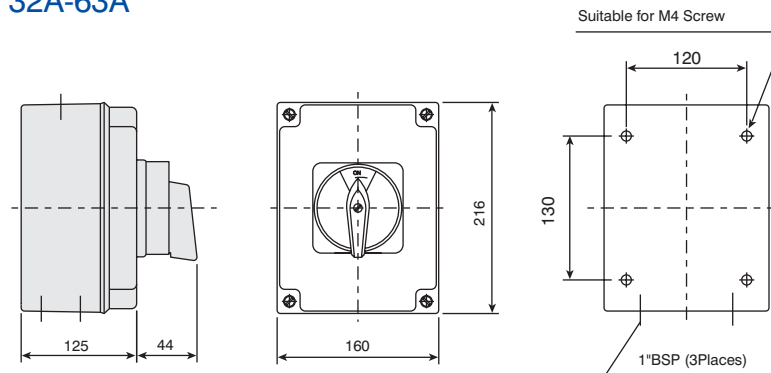
- from being made to ON by unauthorised personnel.
- Degree of protection : IP53.

- RED / YELLOW-handle colour for MAIN / EMERGENCY Switches.
- Enclosure colour : Dark grey base and light grey cover.

AB31M



32A-63A



Caution : Open the cover only in 'OFF' position

- Switch mounted in aluminium enclosure.
- Round padlocking device (max. 3 padlocks) to prevent the Switch

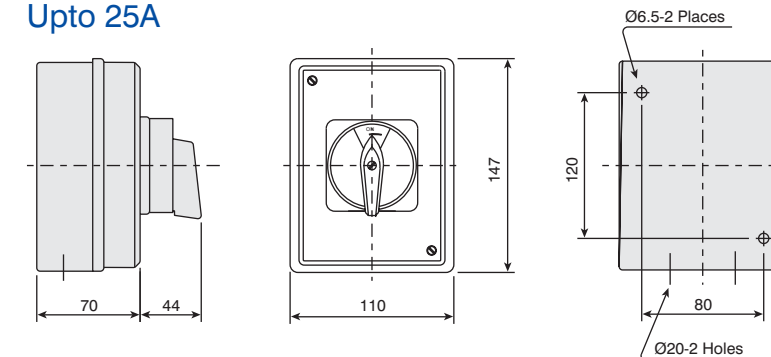
- from being made to ON by unauthorised personnel.
- Degree of protection : IP53.
- RED / YELLOW-handle colour for MAIN / EMERGENCY Switches.

- Enclosure colour : Dark grey base and light grey cover.
- Fourth pole can be added.

SB31S



Upto 25A



Caution : Open the cover only in 'OFF' position

- Switch mounted in Steel enclosure.
- Round padlocking device (max. 3 padlocks) to prevent the Switch from being made to ON by unauthorised personnel.

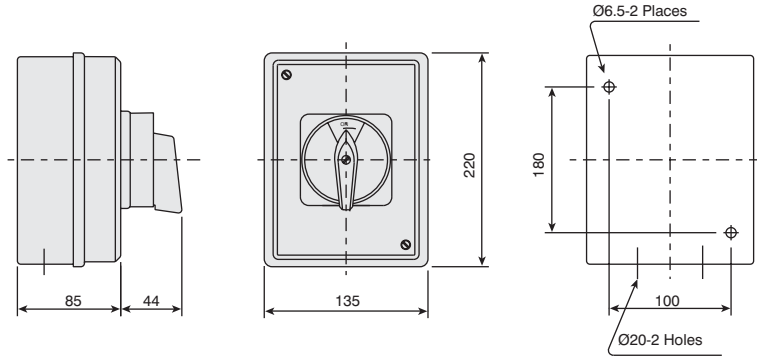
- Degree of protection : IP53.
- Knob version available on request.
- RED / YELLOW-handle colour for MAIN / EMERGENCY Switches.

- Enclosure colour : Dark grey base and light grey cover.

SB31M



32A - 63A



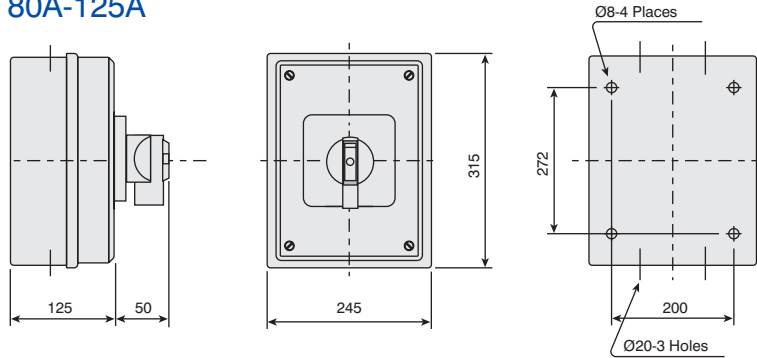
Caution : Open the cover only in 'OFF' position

- Switch mounted in Steel enclosure.
- Round padlocking device (max. 3 padlocks) to prevent the Switch from being made to ON by unauthorised personnel.
- Degree of protection : IP53.
- Knob version available on request.
- RED / YELLOW-handle colour for MAIN / EMERGENCY Switches.
- Enclosure colour : Dark grey base and light grey cover.
- Fourth pole can be added.

SB31L



80A-125A



Caution : Open the cover only in 'OFF' position

- Switch mounted in Steel enclosure.
- Round padlocking device (max. 3 padlocks) to prevent the Switch from being made to ON by unauthorised personnel.
- Degree of protection : IP53.
- Knob version available on request.
- RED / YELLOW-handle colour for MAIN / EMERGENCY Switches.
- Enclosure colour : Dark grey base and light grey cover.
- Fourth pole can be added.

Notes:

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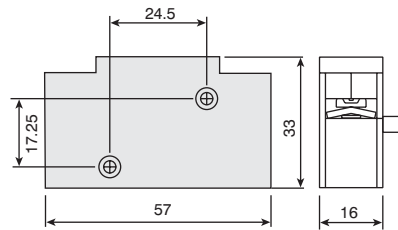
.....

ADD ON MAIN POLE (16A-63A)

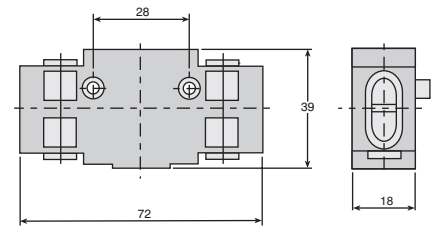


- Equivalent switch electrical rating
- Used as 4th/5th pole on either side of the switch

For Switch Code	Code for Front Mounting Switch	Code for Rear Mounting Switch
	LB116	FMC20
LB120		



For Switch Code	Code for Front Mounting Switch	Code for Rear Mounting Switch
	LB225	FMC32
LB232		
LB240	FMC63	RMC63
LB263		

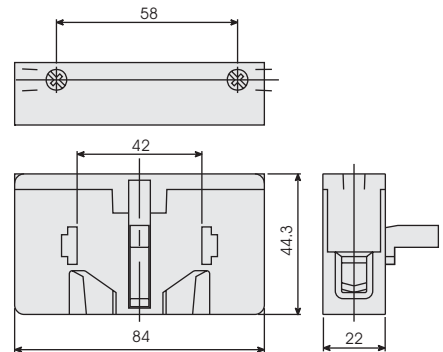


ADD ON MAIN POLE (80A-125A)



For Switch Code	Code for Rear Mounting Switch
LB4080	RMC80
LB4100	RMC125
LB4125	

- Equivalent switch electrical rating.
- Used as 4th/5th pole on either side of the switch.



Applications

For switching action of additional pole, when mounted with the switch. The additional pole on

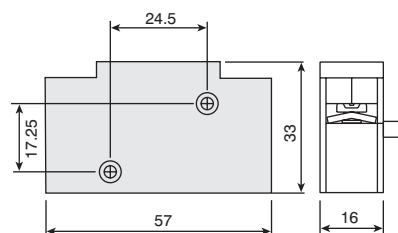
either side of the switch can be used to switch on any single phase requirements simultaneously.

ADD ON NEUTRAL POLE (16A-63A)

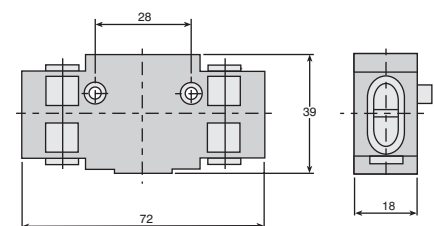


- Early make late break contact.
- Can be fitted on either side of the switch.

For Switch Code	Code for Front Mounting Switch	Code for Rear Mounting Switch
	LB116	FNC20
LB120		



For Switch Code	Code for Front Mounting Switch	Code for Rear Mounting Switch
	LB225	FNC32
LB232		
LB240	FNC63	RNC63
LB263		



Applications

To be used as Neutral Conductor to the switch.

**ADD ON NEUTRAL POLE
(80A-125A)**

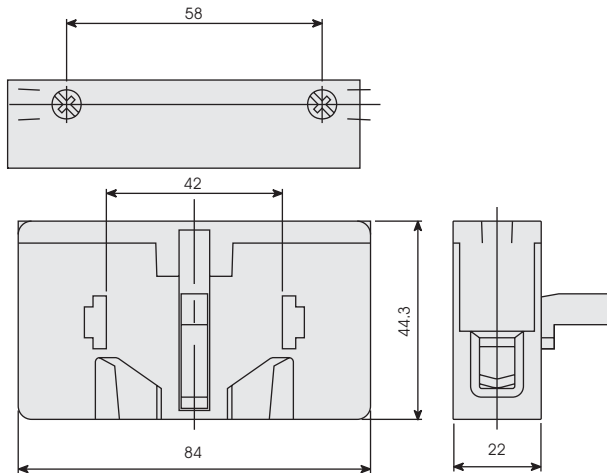


- Early make late break contact.
- Can be fitted on either side of the switch.

Applications

To be used as Neutral Conductor to the switch.

	For Switch Code	Code for Rear Mounting Switch
	LB4080	RNC80
	LB4100 LB4125	RNC125



ADD ON AUXILIARY POLE



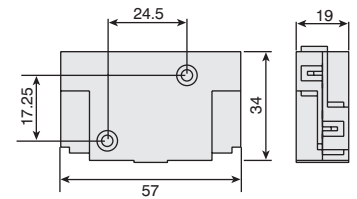
- 1 NO contact early break/late make + 1 NC contact.
- Can be fitted on either side of the Switch.

Applications

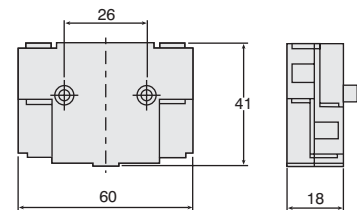
Auxiliary contact module has two contacts, 'NO and NC'. 'NO' contact is early break, late make contact. This is used to trigger

	For Switch Code	Code for Front Mounting Switch	Code for Rear Mounting Switch
	LB116	FAC20	RAC20
	LB120		
	LB225	FAC32	RAC32
	LB232		
	LB240	FAC63	RAC63
	LB263		
	LB4080	—	RAC80
	LB4100	—	RAC125
LB4125	—		

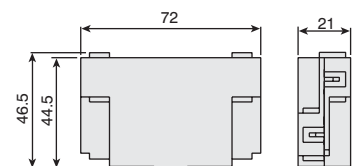
LB116-LB120



LB225-LB263



LB4080-LB4125



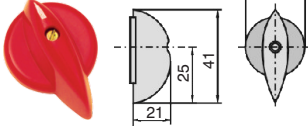
RATING

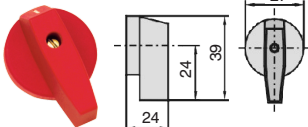
IEC / EN	16A, 500V	
AC-15	220-240V 380-440V	6A 4A

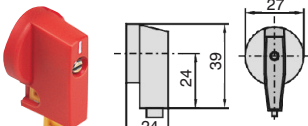
TERMINAL CROSS SECTION

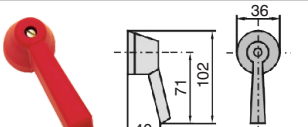
Single/Multiple strand wire	min. mm ²	1.0
	max. mm ²	1.5
American Wire Gauge	AWG	16

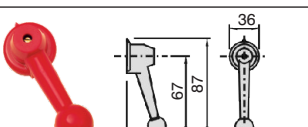
KNOBS & HANDLES

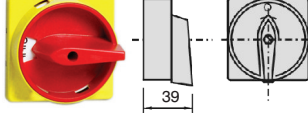
	CODE		TYPE			
	TD		A	B	C	D
	TD ¹		27	41	25	21
	TD		36	52	31	25

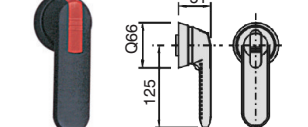
	CODE		TYPE			
	FL		A	B	C	D
	FL ¹		27	39	24	24
	FL		36	50	27	25

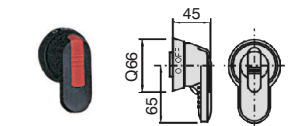
	CODE		TYPE			
	FP		A	B	C	D
	FP		24	39	24	24

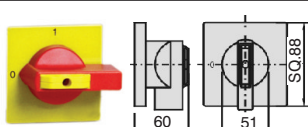
	CODE		TYPE			
	PG		A	B	C	D
	PG		40	71	102	36

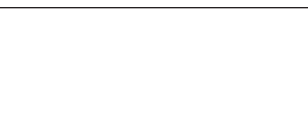
	CODE		TYPE			
	BG		A	B	C	D
	BG		36	67	87	36

	CODE		TYPE			
	RD		A	B	C	D
	RD		17	39	SQ.64	25

	CODE		TYPE			
	RH		A	B	C	D
	RH		125	51	0.66	24

	CODE		TYPE			
	SH		A	B	C	D
	SH		65	45	0.66	24

	CODE		TYPE			
	LH		A	B	C	D
	LH		60	51	SQ.88	25

	CODE		TYPE			
	CG		A	B	C	D
	CG					

LB SWITCHES: KNOB/HANDLE AND MOUNTING OPTIONS

MOUNTING	LB116	LB120	LB225	LB232	LB240	LB263	LB4080	LB4100	LB4125
B03	FL ¹ , TD ¹	FL ¹ , TD ¹	-	-	-	-	-	-	-
B19	FP, FL ¹ , TD ¹	FP, FL ¹ , TD ¹	-	-	-	-	-	-	-
B40	FP	FP	-	-	-	-	-	-	-
B13	-	-	FL, PG, BG	FL, PG, BG	FL, PG, BG	FL, PG, BG	-	-	-
B30	-	-	TD, FL	TD, FL	TD, FL	TD, FL	-	-	-
B33	-	-	RD	RD	RD	RD	-	-	-
B63	-	-	TD, FL	TD, FL	TD, FL	TD, FL	-	-	-
B23	-	-	TD, FL	TD, FL	TD, FL	TD, FL	FL	FL	FL
MB34	FP	FP	SH, RD, CG LH, RH	SH, RD, CG LH, RH	SH, RD, CG LH, RH	SH, RD, CG LH, RH	SH, RD, CG LH, RH	SH, RD, CG LH, RH	SH, RD, CG LH, RH
MB42	FL ¹	FL ¹	BG, PG,	BG, PG,	BG, PG,	BG, PG,	BG, PG,	BG, PG,	BG, PG,
AB31S,SB31S	RD	RD	RD	RD	RD	RD	-	-	-
B31SM	FP	FP	RD	RD	RD	RD	-	-	-
B31M,AB31M,SB31M	-	-	RD	RD	RD	RD	-	-	-
B31L	-	-	-	-	-	-	RD, LH, BG, RH	RD, LH, BG, RH	RD, LH, BG, RH

The knobs/handles highlighted in red are standard, others indicates possible options.

LB SWITCHES: KNOB/HANDLE, ENCLOSURE MOUNTING OPTIONS

ENCLOSURE MOUNTING	B31SM	B31M	B31L	SB31S	SB31M	SB31L	AB31S	AB31M
Knob/Handle	RD, FP	RD	RD, LH	RD, BG, PG, LH	RD, LH BG, PG	LH, BG PG, RD	RD, FL BG, PG	RD, LH BG, PG

The knobs/handles highlighted in red are standard, others indicates possible options.

SWITCHING PROGRAMMES

CODE : 31153 3 POLE CHANGEOVER

	R	Y	B	R	Y	B
	X	X	X			
				X	X	X

CODE : 31154 4 POLE CHANGEOVER

	R	Y	B	N	R	Y	B	N
	X	X	X	X				
					X	X	X	X

Features

- 25A - 125A, 3 and 4 Pole, AC 23 duty.
- Available with and without SS enclosure.
- Different mounting options.
- Excellent switching performance.
- High short circuit capacity.
- Door interlock and padlock available.
- Provides adequate space for cable termination and very convenient for installation termination.

B13



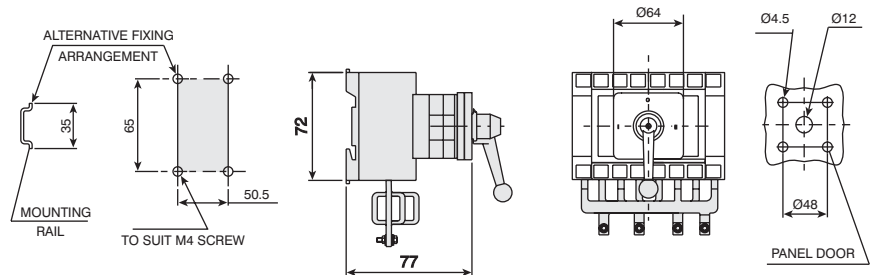
25A-63A, Front Mounting

- 4 hole front panel mounting.
- Degree of protection : Front IP55.

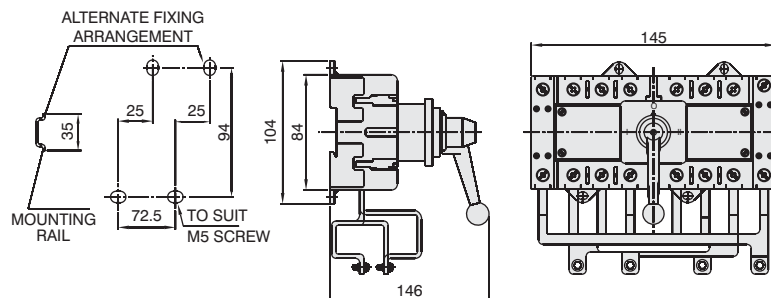
B21



25A-63A, Rear Mounting



80A-125A, Rear Mounting

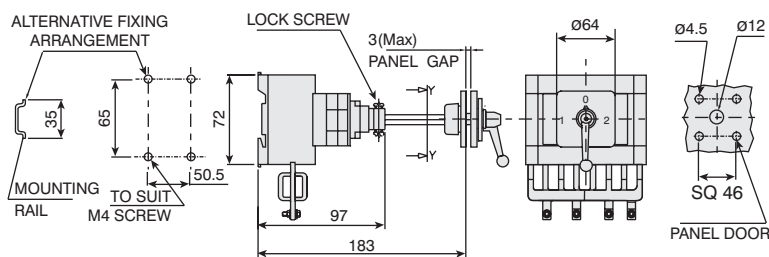


- 4 hole rear mounting.
- Degree of protection : Front IP55.

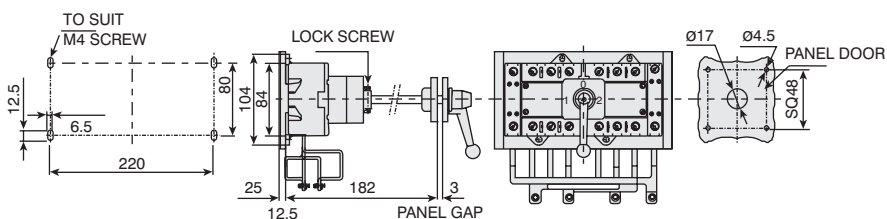
MB42



25A-63A, Rear Mounting



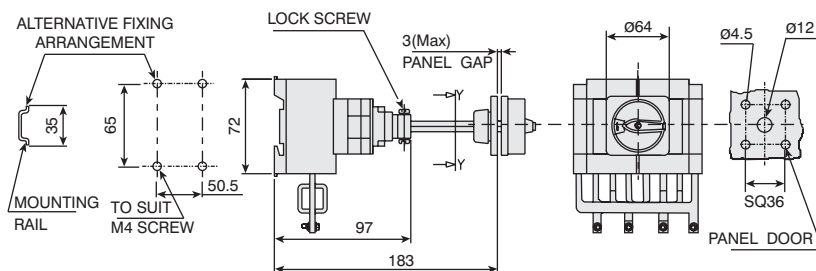
80A-125A, Rear Mounting



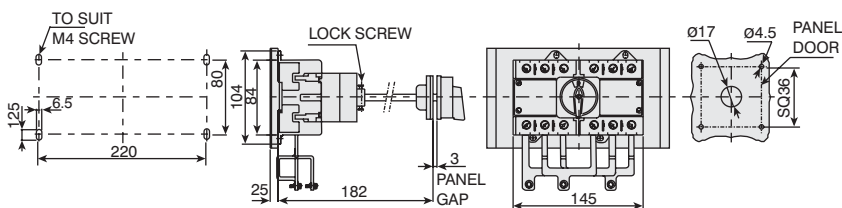
MB34



25A-63A, Rear Mounting



80A-125A, Rear Mounting



- 2 hole rear mounting or snap mounting on DIN EN50022 rail (35mm) and operable from the front (door) coupled with door mechanism.
- Door interlock (door operable only in OFF position)

- Degree of protection : Front IP65.
- Rigid metal shaft/Switch assembly.
- Switch with round padlocking device to prevent the Switch from being made ON by unauthorised persons.

- Max. 3 padlocks.
- Adjustable mounting by cutting the metal shaft to appropriate length to suit panel height.
- Specific length of shaft can be offered on request.

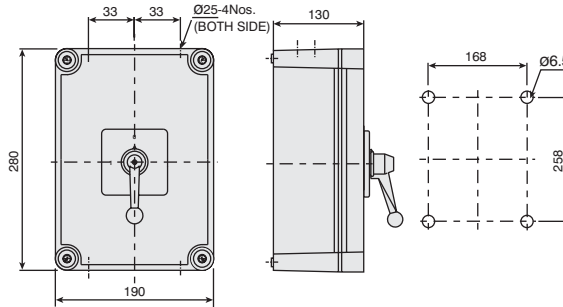
Features

- 25A - 125A, 4 Pole, AC 23 duty.
- Range available : 3 Pole Changeover - 31153, 3 Pole + Neutral Pole Changeover - 31154
- Powder coated steel enclosure with separate earthing or IP65, ABS enclosure having interlock to open the lid only in OFF position for safety.
- Colour : Yellow front plate and Red ball grip handle

B31L



25A-63A



- Switch mounted in grey ABS/ Polycarbonate optional enclosure
- with IP65 protection and interlock provided to open the lid in OFF position.

SB31



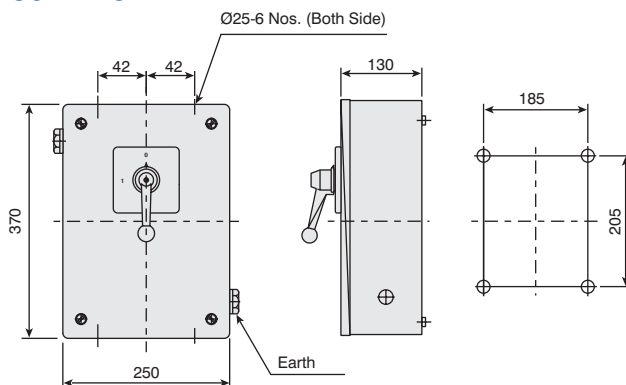
25A-63A

- Powder coated steel enclosure.
- Interlock provided to remove cover only in 'OFF' position for safety.
- Separate earthing provided.
- Colour : Yellow front plate and Red ball grip handle / grey front plate and Black ball grip handle.

SB31XL



80A-125A



- Powder coated steel enclosure.
- Separate earthing provided.
- Interlock provided to remove cover only in 'OFF' position for safety.
- Colour : Yellow front plate and Red ball grip handle / grey front plate and Black ball grip handle.

ENCLOSURE CHANGEOVER SWITCHES

CHANGEOVER SWITCHES: KNOB/HANDLE AND MOUNTING OPTIONS

MOUNTING	LB225	LB232	LB240	LB263	LB4080	LB4100	LB4125
B13	PG, BG	PG, BG	PG, BG	PG, BG	-	-	-
MB34	RD	RD	RD	RD	RD	RD	RD
MB42	PG, BG	PG, BG	PG, BG	PG, BG	PG, BG	PG, BG	PG, BG
B21	BG , PG	BG , PG	BG , PG	BG , PG	PG, BG	BG , PG	BG , PG
SB31	BG , PG	BG , PG	BG , PG	BG , PG	-	-	-
SB31XL	-	-	-	-	BG , PG	BG , PG	BG , PG
B31L	RD , BG	RD , BG	RD , BG , PG	RD , BG , PG	-	-	-

The knobs/handles highlighted in red are standard, others indicates possible options.

PRODUCT CODING

LOAD BREAK AND CHANGEOVER SWITCHES

LB Load Break Switch	XXXX Switch Rating	XXXXX Programme Code	XXXXX Mounting Options	XX Knob Options	XX Colour
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EXAMPLE

LB Switches, 25A, 3P, 9 O'clock, 4 hole front mounting, yellow front plate, red tear drop knob

LB 225 31309 B13 TD YR

LB Switches, 63A, 3P, 9 O'clock, 4 hole front mounting, with metal shaft, yellow front plate, red round knob

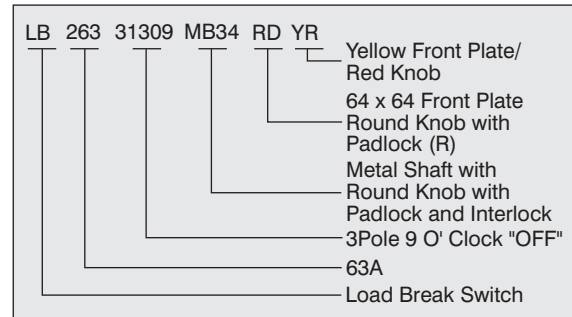
LB 263 31309 MB34 RD YR

LB Switches 40A, 3P, 12 O'clock off in B31SM enclosure, grey front plate, black round knob

LB 240 31300 B31SM RD GB

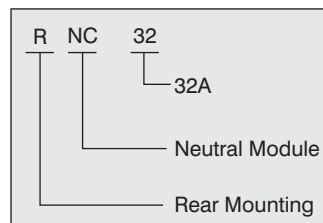
LB Changeover Switch, 63A, 3P, metal enclosure with interlock, yellow front plate, red ball grip handle

LB 263 31153 SB31 BG YR



ACCESSORIES

X	XX	XXX
F-Front Mounting	MC-Main Module	20 - 16A to 20A 32 - 25A to 32A 63 - 40A to 63A 80 - 80A 125 - 100A to 125A
R-Rear Mounting	NC-Neutral Module	
	AC-Auxiliary Module	





Switch with Roll Handle and Short Handle, both Padlockable



Changeover Switch



Switch for Single Hole Mounting with Padlockable Knob



3(Max)
PANEL GAP

72

25

RANGE

- Rated upto 75HP for motor control and upto 125 Amps for switching.
- Optional dia 22.5mm single hole, panel, base, DIN rail or enclosure mounting.
- On Load Changeover Switches with mounting options.

FEATURES

- Padlock and door interlocking facility.
- Double break contacts, with ADD-ON Blocks.
- IP 20, touch proof terminals.
- With shroud for protection.

APPROVALS

- Conform to IEC, VDE, UL and CSA standards.
- Carry CE, UL and CSA marks as applicable.
- Factory ISO 9001 certified by KPMG, US.

salzer

GROUP

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