

DC Load Break Switch



Photovoltaic
Applications

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DC Load Break Switches

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.

Applications

- Photovoltaic - Isolators
- Isolator
- Main Switch
- Emergency ON / OFF
- Inverter Applications
- AC / DC Changeover in Solar Pumps

Features

- Compact and reliable
- Finger Protection
- Easy Installation
- Wiping Contacts
- Excellent switching and high short circuit capacity
- Optional Extended Terminals
- DIN rail mounting - Suitable for DB boards
- Various Panel mounting Options - Front mounting, Rear mounting
Enclosure mounting



IEC - Technical Specification

| Type | Configuration | IEC Rating 60947-3 - DC21B | | | UL Rating 508i | | |
|----------|---------------------------------------|----------------------------|------|-------|----------------|------|-------|
| | | 500V | 700V | 1000V | 500V | 700V | 1000V |
| DCLB 216 | 2 poles in series | 20 | 16 | 9 | 16 | 16 | 10 |
| | 2 poles in series + 2 poles in series | - | - | - | 16 | 16 | 16 |
| | 2 poles in series + 2 parallel | 29 | 16 | 9 | 32 | 16 | 10 |
| | 4 poles in series | 20 | 20 | 20 | 16 | 16 | 16 |
| | 4 poles in series + 2 parallel | 29 | 29 | 29 | 29 | - | - |
| DCLB 225 | 2 poles in series | 25 | 23 | 11 | 25 | 23 | 12 |
| | 2 poles in series + 2 poles in series | - | - | - | 25 | 25 | 25 |
| | 2 poles in series + 2 parallel | 45 | 23 | 11 | 40 | 23 | 12 |
| | 4 poles in series | 25 | 25 | 25 | 25 | 25 | 25 |
| | 4 poles in series + 2 parallel | 45 | 45 | 45 | 45 | - | - |
| DCLB 232 | 2 poles in series | 40 | 32 | 25 | 32 | 27 | 16 |
| | 2 poles in series + 2 poles in series | - | - | - | 32 | 32 | 32 |
| | 2 poles in series + 2 parallel | 63 | 40 | 25 | 63 | 27 | 16 |
| | 4 poles in series | 40 | 40 | 40 | 36 | 36 | 36 |
| | 4 poles in series + 2 parallel | 63 | 63 | 63 | 58 | - | - |

| TERMINAL CROSS SECTION | Measure | DCLB220 | DCLB225 | DCLB232 | DCLB240 | |
|---------------------------------------------|---------|-----------------|---------|---------|---------|------|
| Single / Multi Strand wire | Min | mm ² | 2.5 | 2.5 | 2.5 | 2.5 |
| | Max | mm ² | 16 | 16 | 16 | 16 |
| Fine Strand Wire with Sleeve | Min | mm ² | 0.75 | 0.75 | 0.75 | 0.75 |
| | Max | mm ² | 10 | 10 | 10 | 10 |
| American Wire Gauge | - | AWG | - | 10 | 6 | - |
| Recommended Tightening Torque for terminals | - | Nm | 1.7 | 1.7 | 2 | 2 |

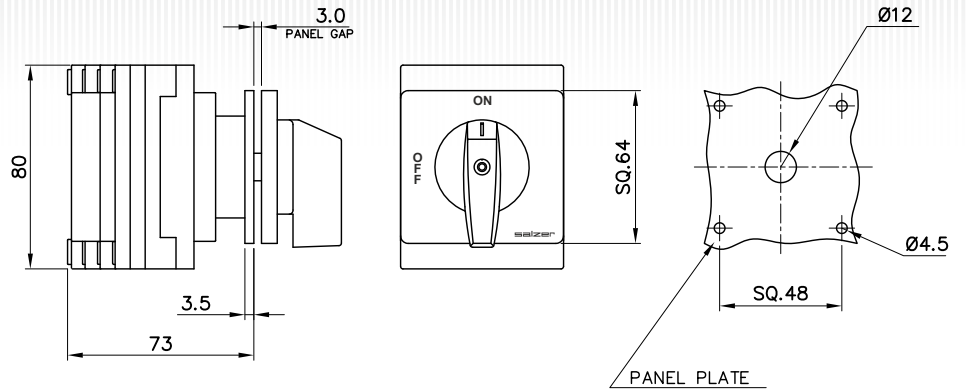
Switching Configurations

| Type | 2 pole | 4 pole (2 + 2 pole) | 4 pole | 4 pole (with jumpers) | 4 pole (with jumpers, both input & output at bottom) |
|-------------------------|--------|--------------------------|--------|----------------------------|--------------------------------------------------------------|
| DC LB216 | 30209 | 32409 | 30409 | 30449 | 30429 |
| DC LB225 | 30209 | 32409 | 30409 | 30449 | 30429 |
| DC LB232 | 30209 | 32409 | 30409 | 30449 | 30429 |
| Contacts Wiring Diagram | | | | | |
| Switching Example | | | | | |

| Type | 8-poles |
|-------------------------|---------|
| DC LB216 | 30809 |
| DC LB225 | 30809 |
| DC LB232 | 30809 |
| Contacts Wiring Diagram | |
| Switching Example | |

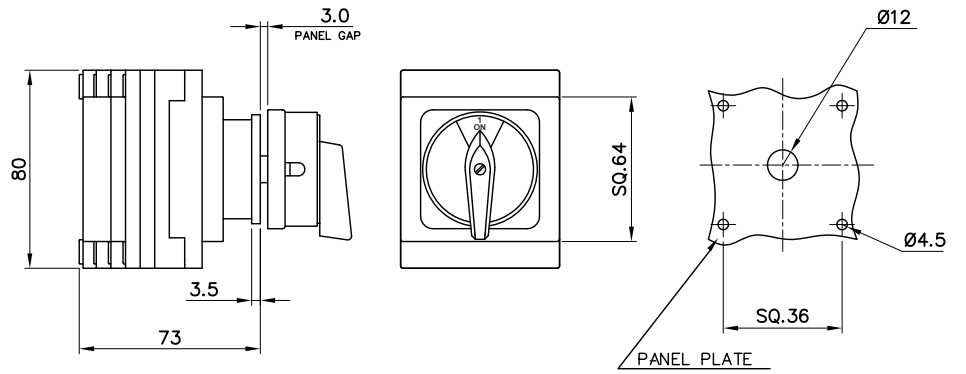
FRONT MOUNTINGS

B13



- 4 hole panel mounting.
- Degree of Protection : Front IP55

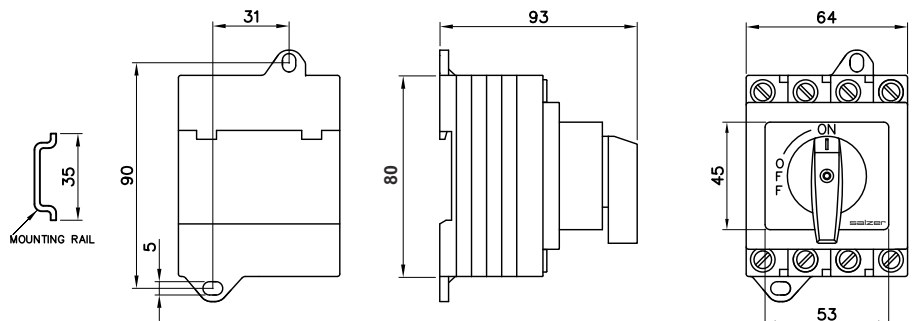
B33



- Degree of Protection : Front IP65
- Max 3 Padlocks
- 4 hole panel mounting
- Round padlocking device to prevent being switched ON by Unauthorized personnel

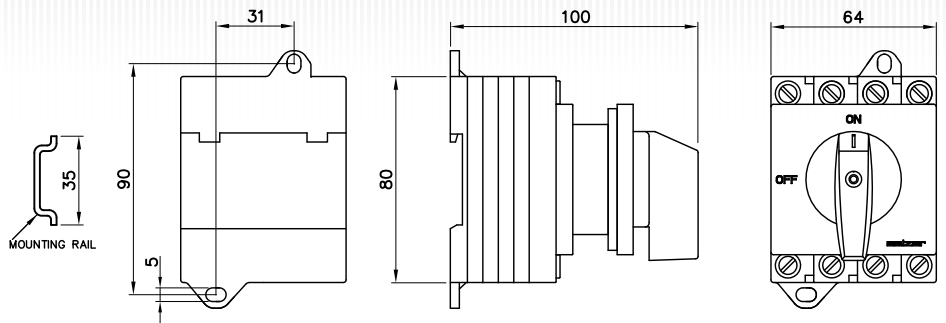
REAR MOUNTINGS

B23DB



- Degree of Protection : Front IP30
- 2 Hole rear mounting.
- Alternately snap mounting on DIN EN50022 rail (35mm).
- DIN Rail mounting with 45mm panel suitable for DB boards.

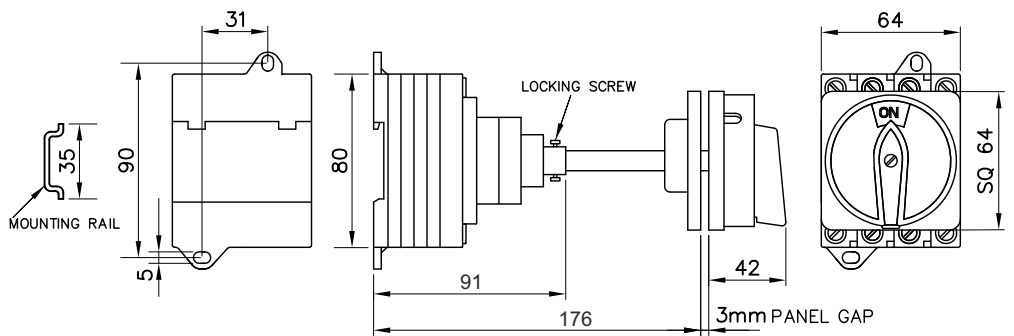
B23



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

DOOR INTERLOCK

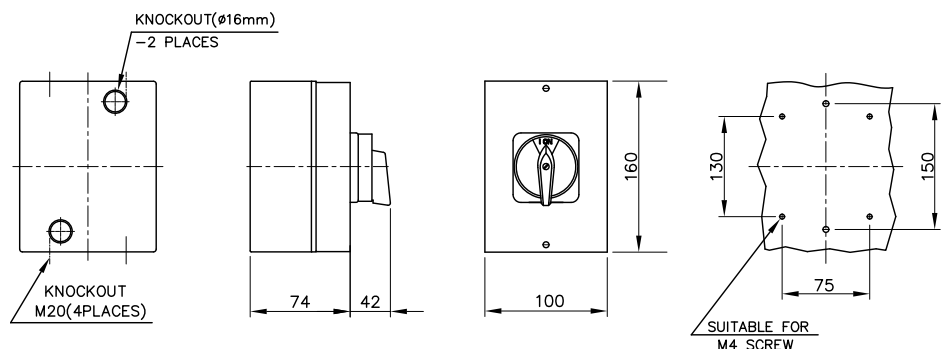
MB34



- Degree of Protection : Front IP65
- Switch with round padlocking device to prevent the Switch from being made ON by unauthorised personnel
- 2 hole rear mounting or snap mounting on DIN EN50022 rail (35mm) and operateable from the front (door) coupled with door mechanism
- Door interlock (door opens only in OFF position)
- Max.3 padlocks

ENCLOSURES

B31SMX



- Degree of Protection : Front IP65
- Switch rear mounted for easy connection
- Enclosure colour : Dark grey base and light grey cover.
- Switch mounted in ABS / polycarbonate (optional) enclosure.
- Round padlocking device (Max.3 padlocks) to prevent the Switch from being made ON by unauthorised personnel
- Interlock Feature (Cover opens only in OFF position)

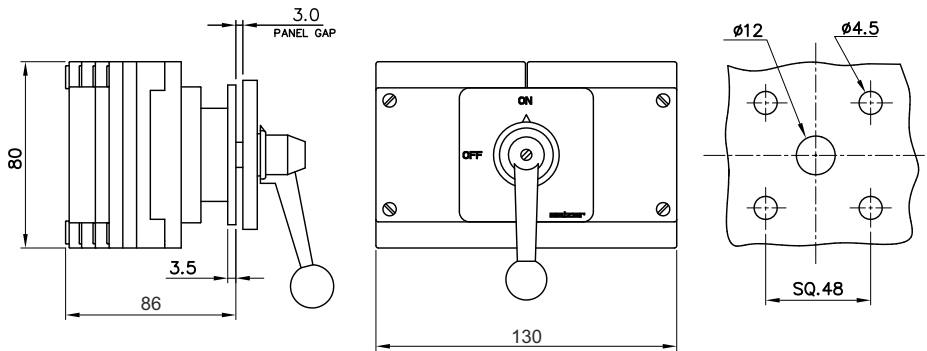
FRONT MOUNTINGS

B13

8 POLE



- Degree of Protection : Front IP55
- 4 hole front panel mounting

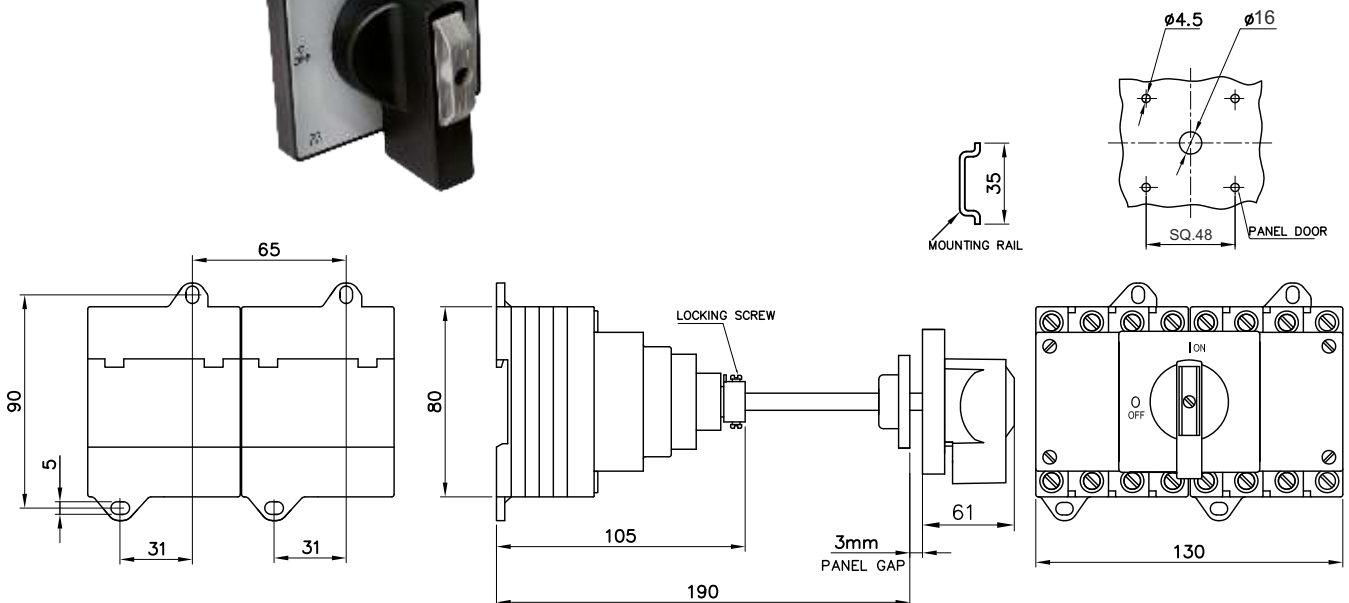


DOOR INTERLOCK

MB34



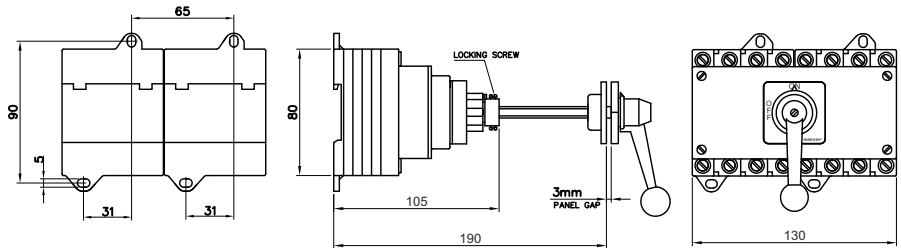
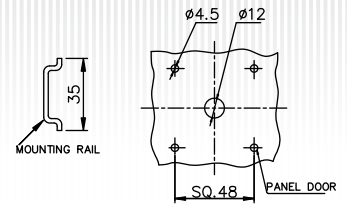
- Degree of Protection : Front IP65
- Switch with padlocking device to prevent the Switch from being made ON by unauthorised personnel
- 4 hole rear mounting or snap mounting on DIN EN50022 rail (35mm) and operateable from the front (door) coupled with door mechanism
- Door interlock (door opens only in OFF position)
- Max.2 padlocks



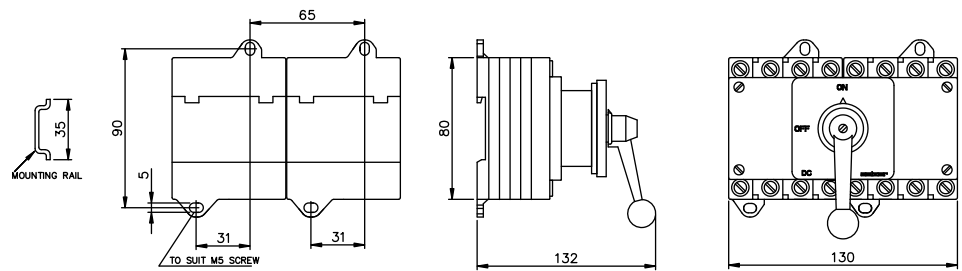
MB42



- Degree of Protection : Front Ip55
- 4 hole rear mounting or snap mounting on DIN EN50022 rail (35mm) and operateable from the front (door) coupled with door mechanism
- Door interlock (door opens only in OFF position)



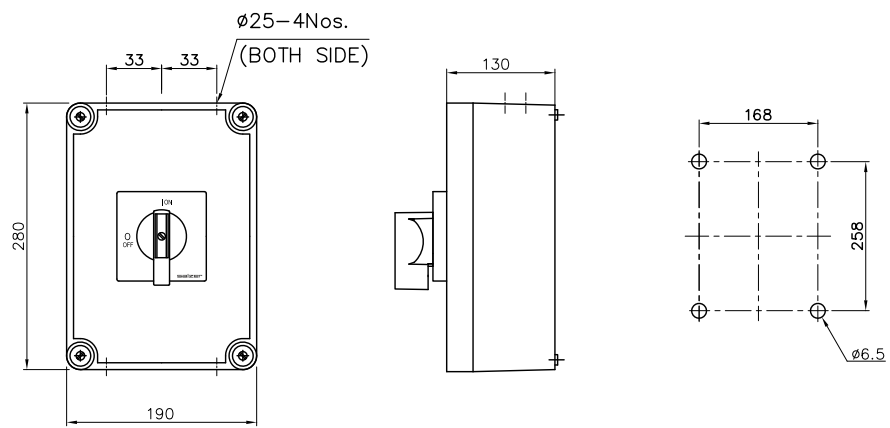
B21



* 4 Hole rear mounting or Snap mounting on DIN EN50022 rail (35mm)

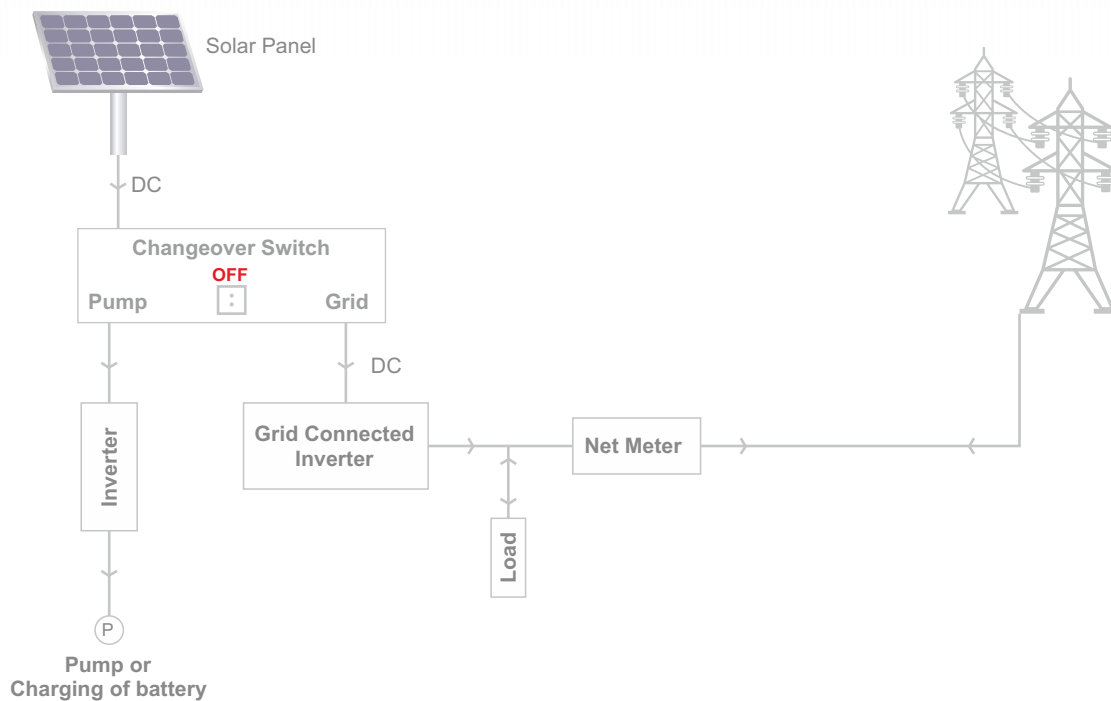
ENCLOSURES

B31L

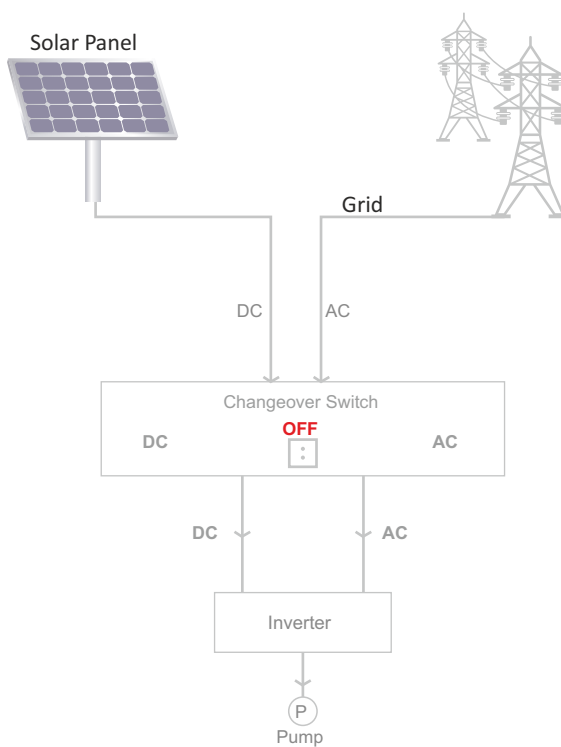


- Degree of Protection : IP65
- Switch rear mounted for easy connection
- padlocking device (Max.2 padlocks) to prevent the Switch from being made ON by unauthorised personnel
- Interlock Feature (Cover opens only in OFF position)
- Enclosure colour : Grey
- Switch mounted in ABS / polycarbonate (optional) enclosure

Changeover Application - I



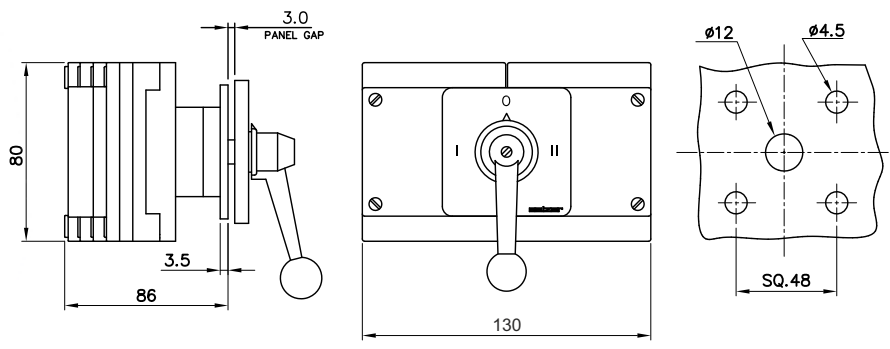
Changeover Application - II



CHANGEOVER SWITCHING PROGRAMME

| 4 Pole Changeover | | | | | | | |
|-------------------|---|---|---|---|---|---|---|
| | | | | | | | |
| I | X | X | X | X | | | |
| O | | | | | | | |
| II | | | | | X | X | X |

B13

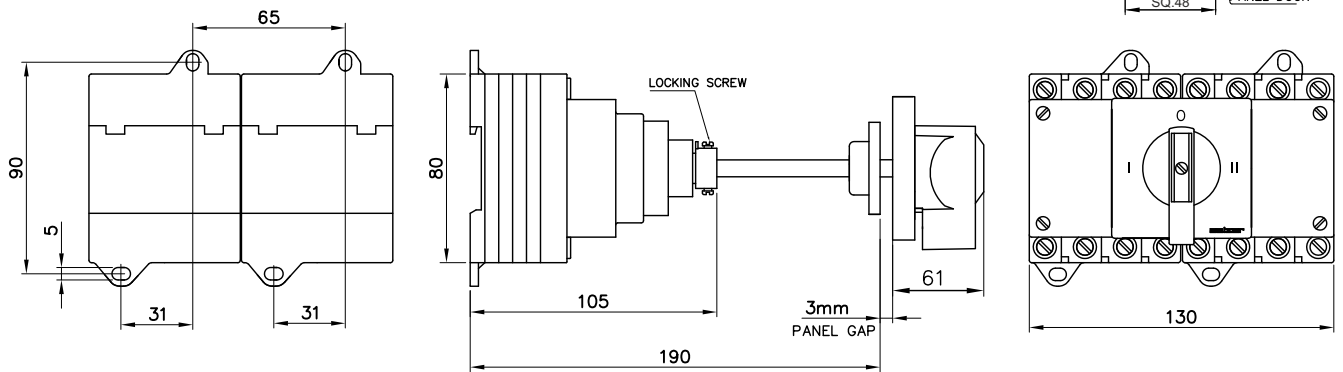


- Degree of Protection : Front IP55
- 4 hole front panel mounting

MB34



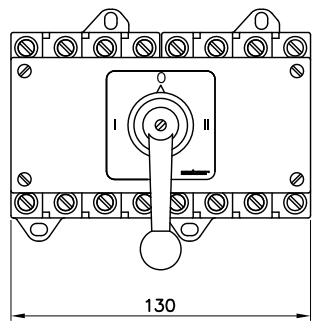
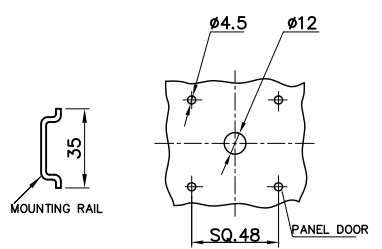
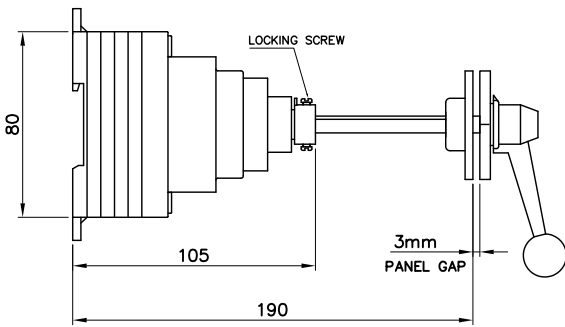
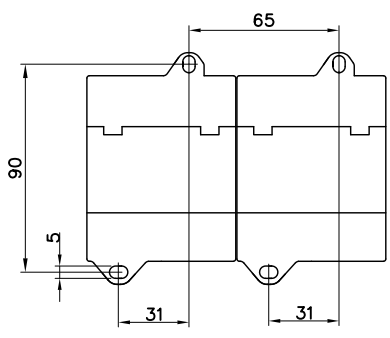
- Degree of Protection : Front IP55
- Switch with padlocking device to prevent the Switch from being made ON by unauthorised personnel
- 4 hole rear mounting or snap mounting on DIN EN50022 rail (35mm) and operable from the front (door) coupled with door mechanism
- Door interlock (door opens only in OFF position)
- Max.2 padlocks



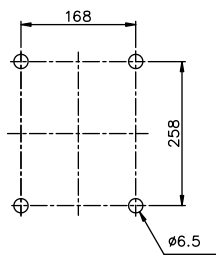
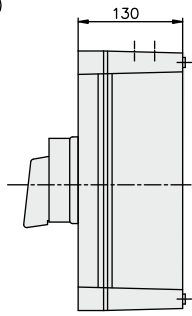
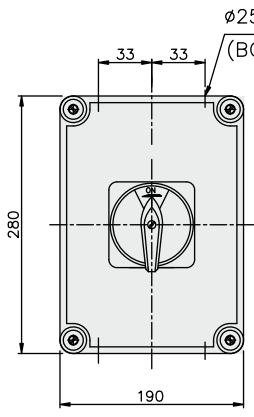
MB42



- Degree of Protection : Front IP55
- 4 hole rear mounting or snap mounting on DIN EN50022 rail (35mm) and operateable from the front (door) coupled with door mechanism
- Door interlock (door opens only in OFF position)

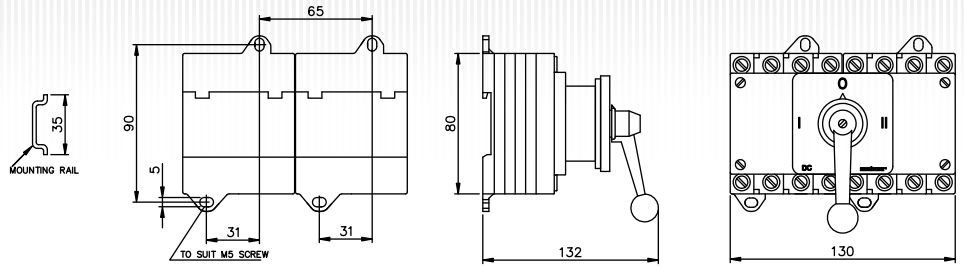


B31L



- Degree of Protection : IP65
- Switch rear mounted for easy connection
- padlocking device (Max.2 padlocks) to prevent the Switch from being made ON by unauthorised personnel
- Interlock Feature (Cover opens only in OFF position)
- Enclosure colour : Grey
- Switch mounted in ABS / polycarbonate (optional) enclosure

B21



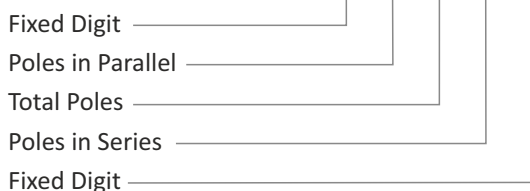
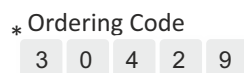
* 4 Hole rear mounting or Snap mounting on DIN EN50022 rail (35mm)

INSULATED JUMPER

| Type | Pack | Weight |
|---------------------------------------------------------------------------------------------------|------|---------|
|  DC LBJ - LH | 100 | 6.8g/pc |
|  DC LBJ - RH | 100 | 6.8g/pc |

PRODUCT CODING

| DCLB | XXX Frame Model | XXX Programme code | XXX Mounting Options | XXX Knob Options | XXX Colours |
|-------------------------------------|-----------------|-----------------------------------------|----------------------------------------|---------------------------------------|-----------------|
| DC Load Break Switch (2 & 4 pole) | 220/225/232/240 | * 30209 / 32409 / 30409 / 30439 / 30429 | B13/ B33 / B23 / B23DB / MB34 / B31SMX | RD - Round Knob FL - Flag Knob | GB - Grey Black |
| DC Load Break Switch (8 Pole) | 220/225/232/240 | * 30809 / 34829 | B13 / MB34 / MB42 / B31L | BG - Ball handle LH - Leech handle | GB - Grey Black |
| DC Load Break Switch (Changeover) | 220/225/232/240 | 30154 | B13 / MB34 / MB42 / B31L | BG - Ball handle LH - Leech handle | GB - Grey Black |



Example

DCLB 232 30429 MB34 RD GB

Stands for DCLB Switch, 232 frame , 4 pole Switching Configuration , with 4 Hole Rear Mounting , Grey Front Plate, Black Round Knob



Switch on to the Best...

salzer

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