

**Cod. IBP10012120AB**

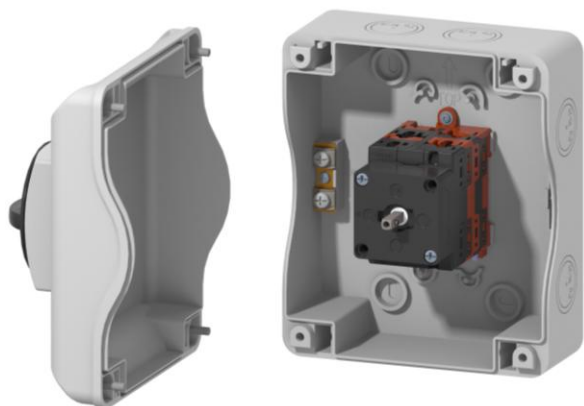
## Standard and Approvals

- Switch according to IEC 60947-3:2021



## Technical features: Enclosure

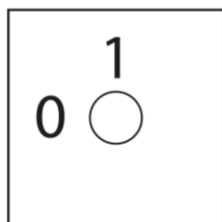
- ABS double insulation thermoplastic enclosure, UV resistant
- Grey plate 36x36 mm and black padlockable knob (up to 3 padlocks)
- Switching angle: 90°
- Cover interlock in “ON” position
- Front drive
- IP65 Protection degree
- Fixing enclosure: 4 screws at 60x115 mm or 97x142 mm
- Cover fixing screws tightening torque: 1,4 Nm ±10%
- 8x Pg 16/21 traces on side of enclosure (2x each side)



## Technical features: DC disconnect switch

- Rated operational current in the enclosure (Ie): 12 A
- Rated operational voltage in the enclosure (Ue): 1000 V
- Rated thermal current (Ith): 50 A
- Rated insulation voltage (Ui): 1500 V
- Switching angle: 90°
- Class V0 self-extinguishing thermoplastic housing
- Assembled with metal shaft to ensure maximum operating reliability

## Position



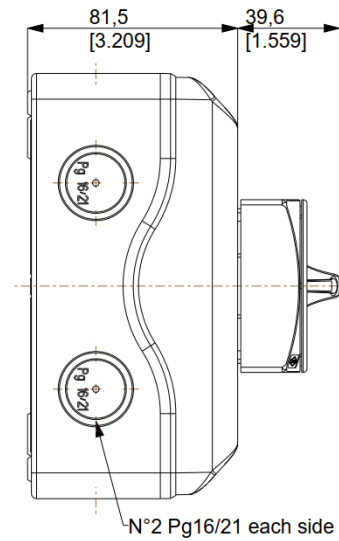
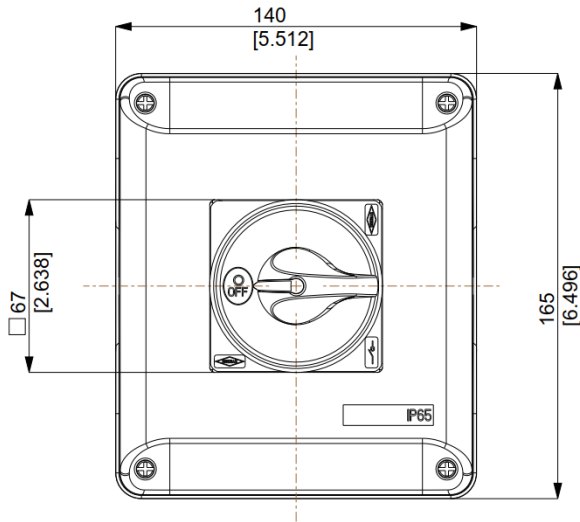
## Electrical diagram

| Layer   | 1  | 2  | 3 | 4 |
|---------|----|----|---|---|
| Marking | -1 | +1 |   |   |
|         |    |    |   |   |
|         |    |    | M | M |
|         |    |    | P | P |
|         |    |    | T | T |
|         |    |    | Y | Y |
| Marking | -1 | +1 |   |   |
| 0 / OFF |    |    |   |   |
| I / ON  | X  | X  |   |   |

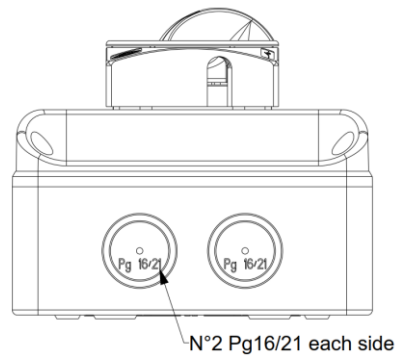
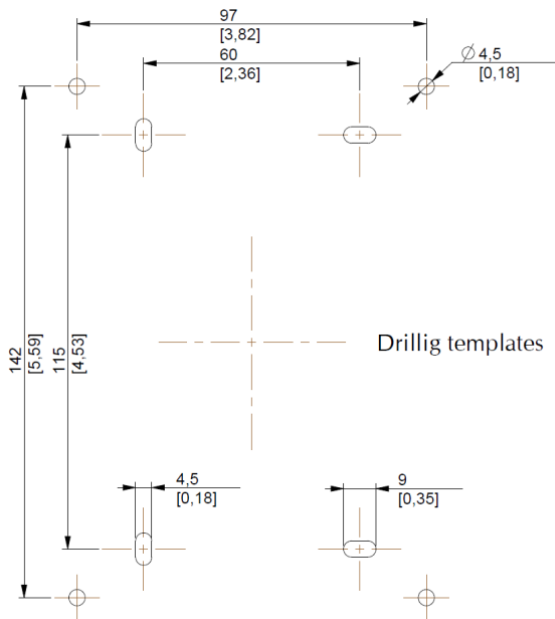
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### Dimensions

measures in mm [in]



### Drilling templates



# Enclosed DC Disconnect Switch

IB Series



Bremas Erscè S.p.A.  
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ISO 9001 Certified Quality System

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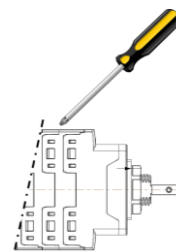
### Technical data of the DC disconnect switch

| Technical data according to IEC 60947-3:2021              |      |      |              |      |
|---|------|------|--------------|------|
| Utilization category                                      |      |      | PV1 (DC-21B) | PV2  |
| Rated operational voltage                                 | Ue   | V dc | 1000         | 1000 |
| Rated operational current                                 | Ie   | A dc | 12           | 4    |
| Rated operational voltage (second rating)                 | Ue   | V dc | 750          | 750  |
| Rated operational current (second rating)                 | Ie   | A dc | 25           | 10   |
| Rated operational voltage (third rating)                  | Ue   | V dc | 600          | 600  |
| Rated operational current (third rating)                  | Ie   | A dc | 32           | 16   |
| Rated operational voltage (fourth rating)                 | Ue   | V dc | -            | -    |
| Rated operational current (fourth rating)                 | Ie   | A dc | -            | -    |
| Rated operational voltage (fifth rating)                  | Ue   | V dc | -            | -    |
| Rated operational current (fifth rating)                  | Ie   | A dc | -            | -    |
| Rated operational voltage (sixth rating)                  | Ue   | V dc | -            | -    |
| Rated operational current (sixth rating)                  | Ie   | A dc | -            | -    |
| Rated thermal current                                     | Ith  | A    | 50           |      |
| DC Poles  |      | Nr.  | 2            |      |
| Rated conditional short-circuit current                   |      | kA   | 5            |      |
| Rated insulation voltage                                  | Ui   | V dc | 1500         |      |
| Rated impulse withstand voltage                           | Uimp | kV   | 8            |      |
| Rated short-time withstand current (1 s)                  | Icw  | A    | 780          |      |
| Rated short-circuit making capacity                       | Icm  | kA   | 1,4          |      |
| Power loss per layer at 20 A / 50 A                       |      | W    | 0,2 / 1,25   |      |
| Maximum size of the fuse for the short-circuit protection | gPV  | A    | 50           |      |

| Mechanical characteristics  |      |                        |  |  |
|---|------|------------------------|--|--|
| Type of mounting  |      |                        | Double mounting<br>Fixing with 4 screws 36x36 mm<br>Back-side for DIN rail or 2 screws |  |
| Layers  |      | Nr.                    | 4  |  |
| Terminal screws orientation   |      |                        | Head up  |  |
| External metal parts (screws, shaft)                                  |      |                        | Stainless steel  |  |
| Cross-section of flexible/solid wires                                 | Max. | mm <sup>2</sup><br>AWG | 2x 6<br>2x 10  |  |
| Cross-section of wires with fork lug                                  | Max. | mm <sup>2</sup><br>AWG | 1x 16<br>1x 6  |  |
| <i>Minimum required fine wire cross-section: IEC 60947-1, table 9</i> |      |                        |  |  |
| Terminal screws type  |      |                        | M4 – PH2   |  |
| Terminal screws tightening torque                                     |      | Nm                     | 1,7 ±10%   |  |
| Actuator operation force  |      | Nm                     | 1,5  |  |
| Panel thickness   | Max. | mm                     | 4  |  |
| Net weight  |      | g                      | 120  |  |
| Protection degree IEC 529 EN 60529                                    |      |                        |  |  |
| To the terminal   |      |                        | IP20   |  |
| Ambient conditions  |      |                        |  |  |
| Pollution degree ins.   |      |                        | 2  |  |
| Operational ambient temperature                                       |      | °C                     | -30 ÷ +50  |  |
| Storage ambient temperature   |      | °C                     | -30 ÷ +85  |  |
| Damp heat test IEC 60068-2-30   |      |                        | 90-100% RH at +55 °C   |  |



**Screwdriver  
orientation for  
terminal fixing**



### Dimensions

