

# DC Disconnect Switch

DX Series



**Bremas Erscse S.p.A.**  
Via Castellazzo 9 – 20040 Cambiago (MI)  
Tel +39 02 95651611 Fax +39 02 95651639  
www.bremas.it info@bremas.it  
ISO 9001 Certified Quality System

## DX120304M0AEDSG



### Disconnect switch

#### Technical data according to IEC 60947-3:2021

| Utilization category                                      |      |      | PV1 (DC-21B) | PV2  |
|---|------|------|--------------|------|
| Rated operational voltage                                 | Ue   | V dc | 1500         | 1500 |
| Rated operational current                                 | Ie   | A    | 10           | 5    |
| Rated operational voltage (second rating)                 | Ue   | V dc | 1250         | 1250 |
| Rated operational current (second rating)                 | Ie   | A    | 20           | 8    |
| Rated operational voltage (third rating)                  | Ue   | V dc | 1000         | 1000 |
| Rated operational current (third rating)                  | Ie   | A    | 30           | 12   |
| Rated operational voltage (fourth rating)                 | Ue   | V dc | 800          | 800  |
| Rated operational current (fourth rating)                 | Ie   | A    | 45           | 17   |
| Rated operational voltage (fifth rating)                  | Ue   | V dc | -            | 700  |
| Rated operational current (fifth rating)                  | Ie   | A    | -            | 25   |
| Rated operational voltage (sixth rating)                  | Ue   | V dc | -            | -    |
| Rated operational current (sixth rating)                  | Ie   | A    | -            | -    |
| Rated thermal current                                     | Ith  | A    | 50           |      |
| DC Poles  |      | Nr.  | 8            |      |
| 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                      |      |                        | Base mounting<br>Back-side for DIN rail or 2 screws fixing<br>For direct operation<br>With pre-mounted status indicator |
| Layers                                |      | Nr.                    | 10  |
| 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   |

Minimum required fine wire cross-section: IEC 60947-1, table 9

|                                   |  |    |          |
|-----------------------------------|--|----|----------|
| Terminal screws type              |  |    | M4 – PH2 |
| Terminal screws tightening torque |  | Nm | 1,7 ±10% |
| Net weight                        |  | g  | 555      |

#### 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 |

### Motor driven actuator

#### Motor characteristics

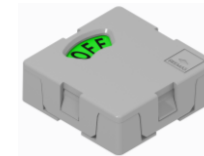
|                                    |      |      |                                  |
|------------------------------------|------|------|----------------------------------|
| Rated operational voltage          | Ue   | V dc | 24 ±5%                           |
| Rated operational current          | Ie   | A    | 0,4                              |
| Stall current                      | Max. | A    | 1,4                              |
| Free-load current                  |      | A    | 0,10                             |
| Free-load speed                    | Max. | rpm  | 20 ±3                            |
| Rated load current                 |      | A    | 0,15                             |
| Rated load speed                   |      | rpm  | 17,6 ±2                          |
| Output power at Max. efficiency    |      | W    | 1,55                             |
| Terminal type                      |      |      | Solder<br>(supplied with wiring) |
| Pre-soldered cables length         |      | mm   | 300                              |
| Protection degree to the terminals |      |      | IP00*                            |

#### Operating features

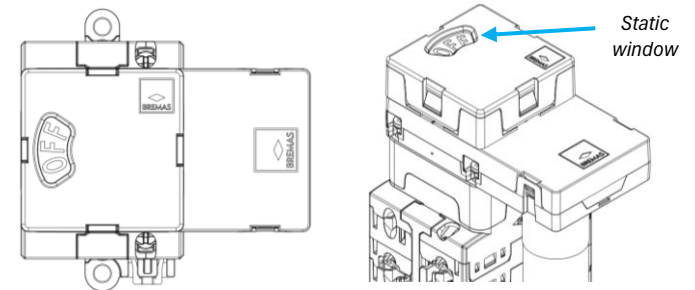
|                             |   |  |  |
|-----------------------------|---|--|--|
| Rotation direction          | Clockwise (90deg)                               |  |  |
| Position (status indicator) | Rotary disc with static window at 09:00 o'clock |  |  |

\* Pre soldered wiring with heat-shrink sheath

#### Status indicator



Rotary disc



Static window

# DC Disconnect Switch

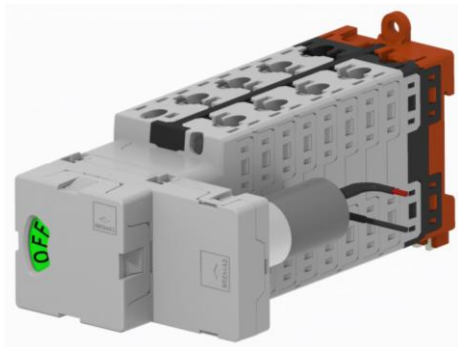
DX Series

DX120304M0AEDSG

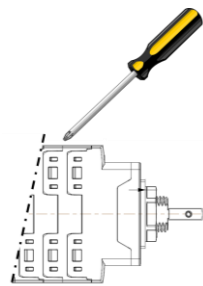


Bremas Erscse S.p.A.  
Via Castellazzo 9 - 20040 Cambiago (MI)  
Tel +39 02 95651611 Fax +39 02 95651639  
www.bremas.it info@bremas.it  
ISO 9001 Certified Quality System

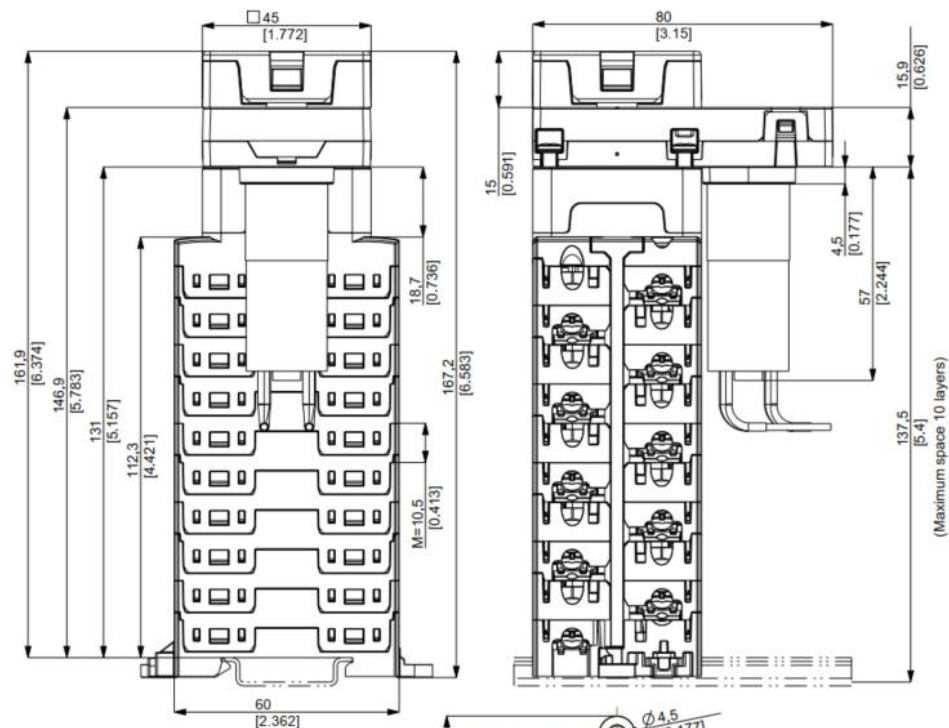
Product image



Screwdriver orientation for terminal fixing



Dimensions



Electrical Diagram

