

# DC Disconnect Switch

DX Series



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ISO 9001 Certified Quality System

## DX120305M0AWDSG



### 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.	10	
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 Fixing with 4 screws 36x36 mm Back-side for DIN rail or 2 screws
Layers		Nr.	12
Terminal screws orientation			Head up
External metal parts (screws, shaft)			Stainless steel
Cross-section of flexible/solid wires	Max.	mm <sup>2</sup> AWG	2x 6 2x 10
Cross-section of wires with fork lug	Max.	mm <sup>2</sup> AWG	1x 16 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%
Fixing screws tightening torque		Nm	1,1 ±10%
Panel thickness	Max.	mm	4
Net weight		g	620

#### Protection degree IEC 529 EN 60529

To the terminal			IP20
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#### 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

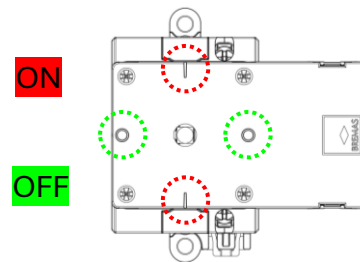
Rated operational voltage	Ue	V dc	24 ±5%
Rated operational current	Ie	A	0,4
Stall current	Max.	A	1,4
Free-load current		A	0,10
Free-load speed	Max.	rpm	20 ±3
Rated load current		A	0,15
Rated load speed		rpm	17,6 ±2
Output power at Max. efficiency		W	1,55
Terminal type			Solder (supplied with wiring)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

#### Operating features

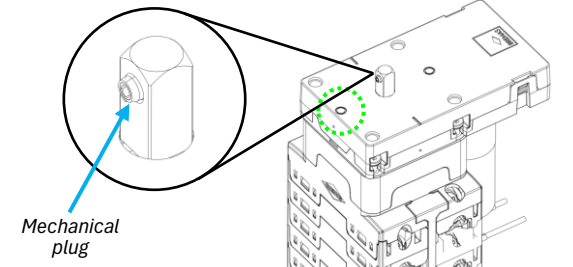
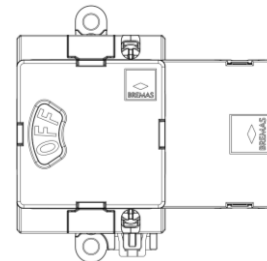
Rotation direction	Clockwise (90deg)		
Position (disconnect switch)	OFF at 09:00 and 03:00 o'clock ON at 12:00 and 06:00 o'clock		
Position (status indicator)	Rotary disc with static window at 09:00 o'clock		

\* Pre soldered wiring with heat-shrink sheath

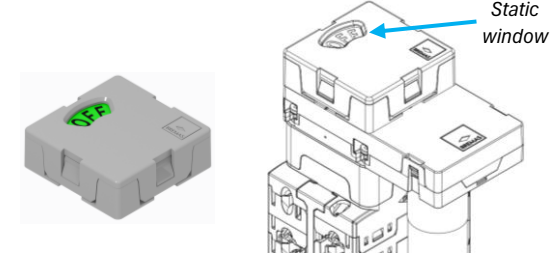
#### Position (disconnect switch)



#### Position (status indicator)



Mechanical plug



Static window

# DC Disconnect Switch

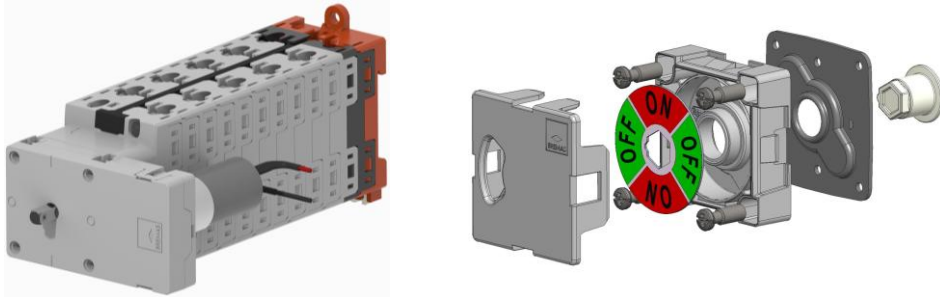
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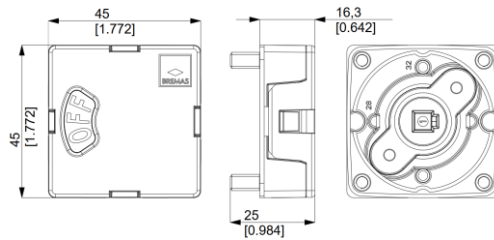
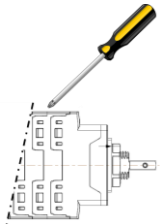


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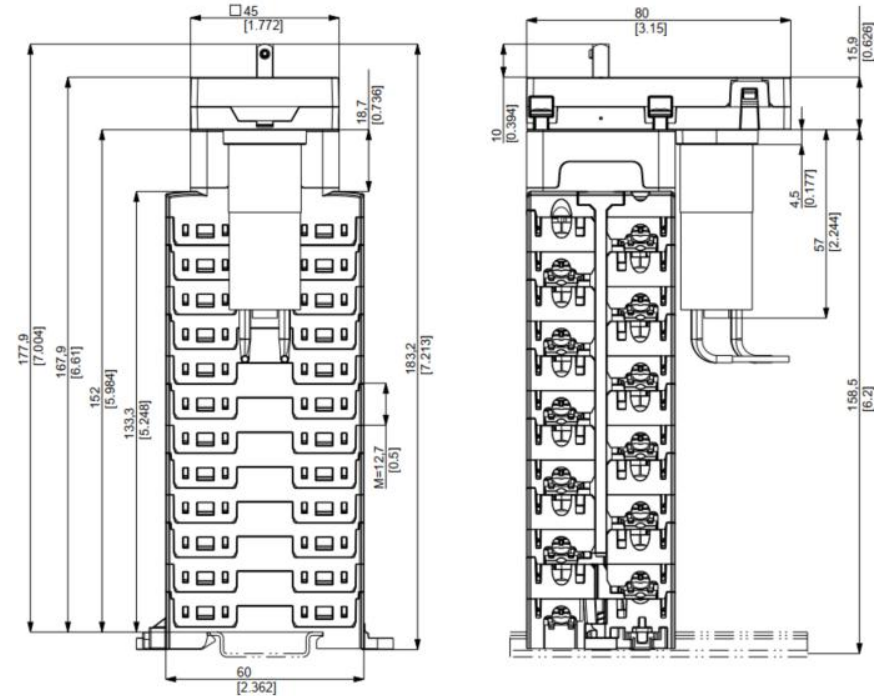
## Product image



Screwdriver orientation for terminal fixing



## Dimensions



## Electrical Diagram



1	2	3	4	5	6	7	8	9	10	11	12	13	14	Layer
-5	+5	-4	+4	-3	+3	-2	+2	-1	+1	14	12			Marking
○	○	○	○	○	○	○	○	○	○	○	○			
○	○	○	○	○	○	○	○	○	○	○	○			
-5	+5	-4	+4	-3	+3	-2	+2	-1	+1	13	11			Marking
X	X	X	X	X	X	X	X	X	X	X	X			0 / OFF
														1 / ON

Power contacts

Used for Motor management

## Drilling templates

