

Via castellazzo 9 - 20040 Cambiago (MI)
Tel +39 02 95651611 Fax +39 02 95651639
www.bremas.eu info@bremas.it

ISO 9001 Certified Quality System

#### Cod. DM10020120AB140RL6



# Standard and Approvals

Switch according to IEC 60947-3:2015/A2 AnnexD



#### Technical characteristics: Enclosure

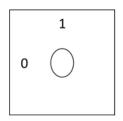
- ABS double insulation thermoplastic enclosure, UV resistant
- Yellow plate 36x36 mm and red padlockable knob (max. 3 padlocks)
- Switching angle: 90°
- · Cover interlock in "ON" position
- Front drive
- IP65 Protection degree
- Fixing enclosure: 4 screws at 60x115 mm or 97x142 mm
- 8x Pg 16/21 traces on each side of enclosure
- Tightening torque M4 screws: 1,4 Nm ±10%



#### Technical characteristics: DC disconnect Switch

- Rated operational current in the enclosure le: 20 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

# Plate and positions



### Electrical scheme

Layer	1	2
Marking	-1	+1
Marking	-1	+1
0/OFF		
I/ON	Х	Х



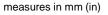
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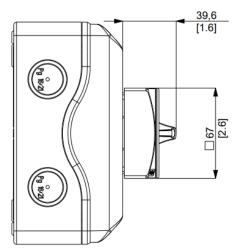
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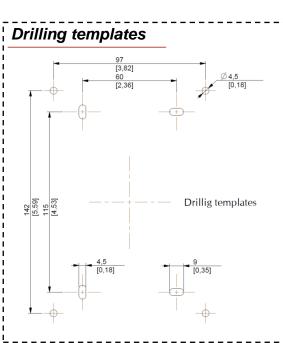
# **Dimensions**

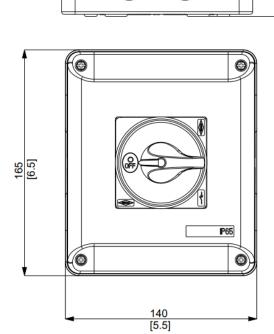


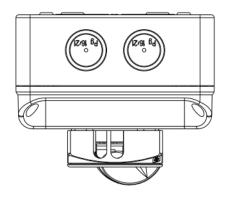
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82 [3.2]









# **Enclosed disconnector switches**SB Series – Datasheet



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### DM10020120AB140RL6

Handle and plate

Technical data according to IEC 60947-3:2015/A2 A	AnnexD			
Utilization category			PV1 (DC-21B)	PV2
Rated operational voltage	Ue	V dc	1100	1100
Rated operational current	le	A dc	12	5
Rated operational voltage (second rating)	Ue	V dc	1000	1000
Rated operational current (second rating)	le	A dc	20	10
Rated operational voltage (third rating)	Ue	V dc	750	750
Rated operational current (third rating)	le	A dc	32	18
Rated operational voltage (fourth rating)	Ue	V dc	700	700
Rated operational current (fourth rating)	le	A dc	40	20
Rated operational voltage (fifth rating)	Ue	V dc	500	-
Rated operational current (fifth rating)	le	A dc	50	-
Rated operational voltage (sixth rating)	Ue	V dc	-	-
Rated operational current (sixth rating)	le	A dc	-	-
Rated thermal current	Ith	A dc	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)	lcw	Α	780	
Rated short-circuit making capacity	Icm	kA	1,4	
Power loss per layer at 20 A / 50 A		w	0,2 / 1,25	
Max fuse size for short-circuit protection	gPV	A	50	
Mechanical characteristics	8			
Type of mounting				nounting
Type of mounting			Back-side for DIN rail or 2 screws fixing	
1		N.L.		
Layers		Nr.	2	2
Terminal screws orientation		Nr.	Head	2 d up
			Head Stainles	d up ss steel
Terminal screws orientation	Max	mm <sup>2</sup>	Hear Stainles 2x	d up ss steel
Terminal screws orientation  External metal parts (Screws, shaft)	Max	mm² AWG	Hear Stainles 2x 2x	d up ss steel 6
Terminal screws orientation  External metal parts (Screws, shaft)	Max	mm² AWG mm²	Hear Stainles 2x 2x 1x	2 d up ss steel 6 d 10
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug		mm² AWG	2x 1x 2x 2x 1x	2 d up ss steel : 6 10 16
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions		mm² AWG mm² AWG	2x Stainle: 2x 2x 1x 1x	2 d up ss steel 10 16 16
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque		mm² AWG mm² AWG	2x Stainle: 2x 2x 1x 1x M	2 d up ss steel 10 16 6 10 16 16 10 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque  Tightening torque M3 screw in the actuator	Max	mm² AWG mm² AWG Nm	2x 2x 2x 1x 1x M 1,7 ±	2 d up d up ss steel 10 16 6 10 16 16 10 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19
Terminal screws orientation  External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque  Tightening torque M3 screw in the actuator  Tightening torque panel mounting screws	Max	mm² AWG mm² AWG Nm Nm	12 Hear Stainles 2x 2x 2x 1x 1x 1x 1x 1x 1.7 ± 0,6 ± 1,1 ± 1.7 ± 1	2 d up ss steel 10 16 6 10 16 16 10 10 10 10 10 10 10 10 10 10 10 10 10
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque Tightening torque M3 screw in the actuator Tightening torque panel mounting screws Panel thickness	Max	mm² AWG mm² AWG Nm Nm Nm	12 Hear Stainles 2x 2x 1x 1x 1x 0,6 ±	2 d up ss steel 10 16 6 10 16 16 10 10 10 10 10 10 10 10 10 10 10 10 10
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque Tightening torque M3 screw in the actuator Tightening torque panel mounting screws Panel thickness Shaft protrusion	Max	Mm² AWG Mm² AWG Nm Nm Nm	Hear Stainles  2x  2x  1x  1x  M  1,7 ±  0,6 ±  1,1 ±	2 d up ss steel 10 16 6 10 16 16 10 10 10 10 10 10 10 10 10 10 10 10 10
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque Tightening torque M3 screw in the actuator Tightening torque panel mounting screws Panel thickness Shaft protrusion  Actuator operation force	Max	Mm² AWG Mm² AWG Nm Nm Nm Nm	Hear Stainles  2x  2x  1x  1x  M  1,7 ±  0,6 ±  1,1 ±  4  1,1	2 d up ss steel 10 16 6 10 16 16 10 10 10 10 10 10 10 10 10 10 10 10 10
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque Tightening torque M3 screw in the actuator Tightening torque panel mounting screws Panel thickness Shaft protrusion  Actuator operation force Net weight	Max	Mm² AWG Mm² AWG Nm Nm Nm	Hear Stainles  2x  2x  1x  1x  M  1,7 ±  0,6 ±  1,1 ±	2 d up ss steel 10 16 6 10 16 16 10 10 10 10 10 10 10 10 10 10 10 10 10
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque Tightening torque M3 screw in the actuator Tightening torque panel mounting screws Panel thickness Shaft protrusion  Actuator operation force Net weight  Protection degree IEC 529 EN 60529	Max	Mm² AWG Mm² AWG Nm Nm Nm Nm	Hear Stainles  2x  2x  1x  1x  N  1,7 ±  0,6 ±  1,1	2 d up d up ss steel 10 16 6 10 16 16 10 10 10 10 10 10 10 10 10 10 10 10 10
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque Tightening torque M3 screw in the actuator Tightening torque panel mounting screws Panel thickness Shaft protrusion  Actuator operation force Net weight  Protection degree IEC 529 EN 60529 To the erminal	Max	Mm² AWG Mm² AWG Nm Nm Nm Nm	2x Hear Stainler 2x 2x 1x 1x N 17 1,7 ± 0,6 ± 1,1 ± 1 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1,1	2 d up 3 ss steel 6 10 16 6 16 10 17 10 18
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque Tightening torque M3 screw in the actuator Tightening torque panel mounting screws Panel thickness Shaft protrusion Actuator operation force Net weight  Protection degree IEC 529 EN 60529 To the erminal With product mounted on panel	Max	Mm² AWG Mm² AWG Nm Nm Nm Nm	Hear Stainles  2x  2x  1x  1x  N  1,7 ±  0,6 ±  1,1	2 d up 3 ss steel 6 10 16 6 16 10 17 10 18
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque Tightening torque M3 screw in the actuator Tightening torque panel mounting screws Panel thickness Shaft protrusion Actuator operation force Net weight  Protection degree IEC 529 EN 60529 To the erminal With product mounted on panel Ambient conditions in enclosure	Max	Mm² AWG Mm² AWG Nm Nm Nm Nm	12 Hear Stainler 2x 2x 2x 1x	2 d up 3 d up 3 s steel 6 6 10 16 6 14 110% 110% 13 8 8 5 5 25
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque Tightening torque M3 screw in the actuator Tightening torque panel mounting screws Panel thickness Shaft protrusion Actuator operation force Net weight  Protection degree IEC 529 EN 60529  To the erminal With product mounted on panel Ambient conditions in enclosure Pollution degree ins.	Max	mm² AWG mm² AWG Nm Nm Nm Nm	1 Hear Stainler 2x 2x 2x 1x	2 d up 3 s steel 6 6 10 16 6 14 110% 110% 1 8 8 5 5 20 655
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque Tightening torque M3 screw in the actuator Tightening torque panel mounting screws Panel thickness Shaft protrusion Actuator operation force Net weight  Protection degree IEC 529 EN 60529 To the erminal With product mounted on panel Ambient conditions in enclosure	Max	mm² AWG mm² AWG Nm Nm Nm Rm mm Rm Nm	12 Hear Stainler 2x 2x 2x 1x	2 d up 3 s steel 6 6 10 16 6 14 10% 110% 1 8 8 5 5 20 655
Terminal screws orientation External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque Tightening torque M3 screw in the actuator Tightening torque panel mounting screws Panel thickness Shaft protrusion Actuator operation force Net weight  Protection degree IEC 529 EN 60529  To the erminal With product mounted on panel Ambient conditions in enclosure Pollution degree ins. Operational ambient temperature  Storage ambient temperature	Max	mm² AWG mm² AWG Nm Nm Nm Nm	### Application	2 d up ss steel 6 6 10 16 6 14 10% 110% 1 8 8 5 5 20 655
Terminal screws orientation  External metal parts (Screws, shaft)  Cross-section of flexible/solid wires  Cross-section of wires with fork lug  Screws thread dimensions  Terminal screws tightening torque Tightening torque M3 screw in the actuator Tightening torque panel mounting screws  Panel thickness  Shaft protrusion  Actuator operation force  Net weight  Protection degree IEC 529 EN 60529  To the erminal  With product mounted on panel  Ambient conditions in enclosure  Pollution degree ins.  Operational ambient temperature	Max	mm² AWG mm² AWG Nm Nm Nm Rm mm Rm Nm	12 Hear Stainler 2x 2x 2x 1x	2 d up ss steel 6 6 10 16 6 14 10% 10% 1 8 8 5 5 20 655





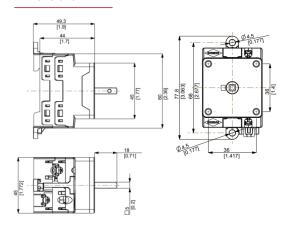


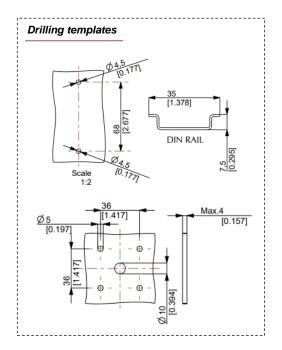
# Screwdriver orientation for terminals





#### **Dimensions**





UV resistant