

Bremas Ersce S.p.A. Via Castellazzo 9 – 20040 Cambiago (MI)

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## Cod. IBX1203012UAR



# Standard and Approvals

Switch according to IEC 60947-3:2021



#### Technical features: Enclosure

- ABS double insulation thermoplastic enclosure, UV resistant
- Yellow plate 36x36 mm and red 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)

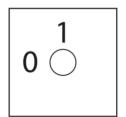




#### Technical features: DC disconnect switch

- Rated operational current in the enclosure (le): 40 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		
			E M P T	E M P T
Marking	-1	+1		
0 / OFF				
I/ON	Х	Х		



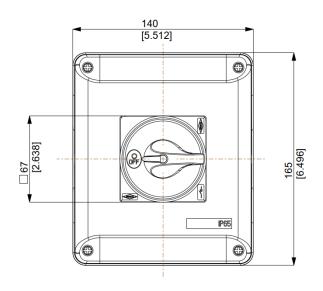
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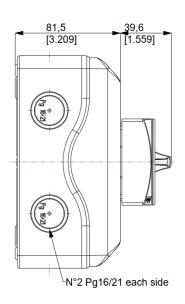
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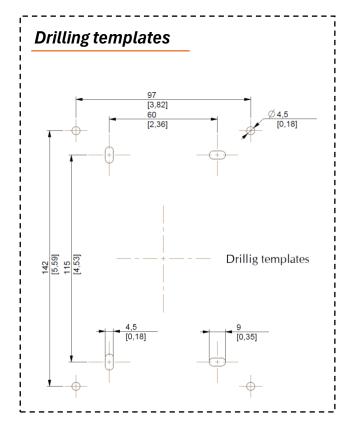
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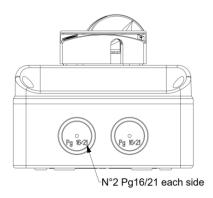
## **Dimensions**

measures in mm [in]











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#### Technical data of the DC disconnect switch

Utilization category			PV1 (DC-21B)	PV2	
Rated operational voltage	Ue	V dc	1500	1500	
Rated operational current	le	Adc	1500	6	
Rated operational voltage (second rating)	Ue	V dc	1250	1250	
Rated operational current (second rating)	le	Adc	25	10	
Rated operational current (second rating)	Ue	V dc	1100	1100	
Rated operational current (third rating)	le	Adc	30	12	
Rated operational current (tillid rating)	Ue	Vdc	1000	1000	
Rated operational current (fourth rating)	le	Adc	40	16	
Rated operational voltage (fifth rating)	Ue	Vdc	-		
Rated operational current (fifth rating)	le	Adc	800 50	800 20	
· · · · · · ·	Ue	Vdc			
Rated operational voltage (sixth rating)  Rated operational current (sixth rating)	le	Adc	700	700	
Rated thermal current	Ith	Auc	- 30 50		
DC Poles	IUI	Nr.	2		
Rated conditional short-circuit current		Nr. kA	5		
Rated conditional short-circuit current Rated insulation voltage	Ui	V dc	-		
	Uimp	kV		1500	
Rated impulse withstand voltage			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.	4		
Terminal screws orientation			Head up		
External metal parts (screws, shaft)			Stainless steel		
Cross-section of flexible/solid wires	Max.	mm <sup>2</sup>	2x 6 2x 10		
		AWG	2x :	10	
Cross-section of wires with fork lug	Max.	AWG mm² AWG	2x 1 1x 1 1x	16	
		mm²	1x:	16	
Minimum required fine wire cross-section: IEC 60947-1, tab		mm²	1x:	16 6	
Minimum required fine wire cross-section: IEC 60947-1, tab Terminal screws type		mm²	1x:	16 6 PH2	
Cross-section of wires with fork lug  Minimum required fine wire cross-section: IEC 60947-1, tab  Terminal screws type  Terminal screws tightening torque  Actuator operation force		mm² AWG	1x: 1x M4 –	16 6 PH2 10%	
Minimum required fine wire cross-section: IEC 60947-1, tab Terminal screws type Terminal screws tightening torque Actuator operation force		mm² AWG	1x 1 1x M4 – 1,7 ±	16 6 PH2 10%	
Minimum required fine wire cross-section: IEC 60947-1, tab Terminal screws type Terminal screws tightening torque Actuator operation force Panel thickness	le 9	nm² AWG Nm Nm	1x1 1x M4 – 1,7 ±	16 6 PH2 10% 5	
Minimum required fine wire cross-section: IEC 60947-1, tab Terminal screws type Terminal screws tightening torque Actuator operation force Panel thickness	le 9	nm² AWG Nm Nm	1x: 1x  M4- 1,7± 1, 4	16 6 PH2 10% 5	
Minimum required fine wire cross-section: IEC 60947-1, tab Terminal screws type Terminal screws tightening torque Actuator operation force Panel thickness Net weight Protection degree IEC 529 EN 60529	le 9	nm² AWG Nm Nm	1x: 1x  M4- 1,7± 1, 4	16 6 PH2 10% 5	
Minimum required fine wire cross-section: IEC 60947-1, tab Terminal screws type Terminal screws tightening torque Actuator operation force Panel thickness Net weight Protection degree IEC 529 EN 60529 To the terminal	le 9	nm² AWG Nm Nm	1x: 1x M4- 1,7±: 1,4 12	16 6 PH2 10% 5	
Minimum required fine wire cross-section: IEC 60947-1, tab Terminal screws type Terminal screws tightening torque Actuator operation force Panel thickness Net weight Protection degree IEC 529 EN 60529 To the terminal Ambient conditions	le 9	nm² AWG Nm Nm	1x: 1x  M4-  1,7±: 1, 4  12	166 6 PPH2 110% 5 5	
Minimum required fine wire cross-section: IEC 60947-1, tab Terminal screws type Terminal screws tightening torque Actuator operation force Panel thickness Net weight Protection degree IEC 529 EN 60529 To the terminal Ambient conditions Pollution degree ins.	le 9	mm² AWG  Nm Nm mm	1x: 1x  M4- 1,7±: 1, 4 12	166 6 PPH2 110% 5 5	
Minimum required fine wire cross-section: IEC 60947-1, tab Terminal screws type Terminal screws tightening torque Actuator operation force Panel thickness Net weight	le 9	nm² AWG Nm Nm	1x: 1x  M4-  1,7±: 1, 4  12	16 6 6 PH2 10% 5	



# Screwdriver orientation for terminal fixing





#### **Dimensions**

