

**Cod. IBX12030120AR**

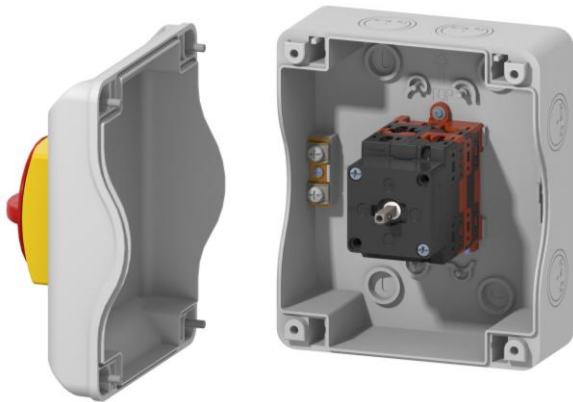
## Standard and Approvals

- Switch according to IEC 60947-3:2021



## Technical features: Enclosure

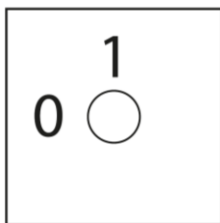
- ABS double insulation thermoplastic enclosure, UV resistant
- Yellow plate 36x36 mm and red padlockable knob (up to 3 padlocks)
- Switching angle: 90°
- Cover interlock in “ON” position
- Front drive
- IP65 Protection degree
- Fixing enclosure: 4 screws at 60x115 mm or 97x142 mm
- Cover fixing screws 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 (Ie): 30 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



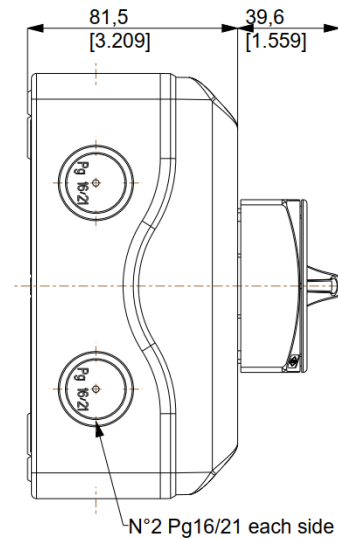
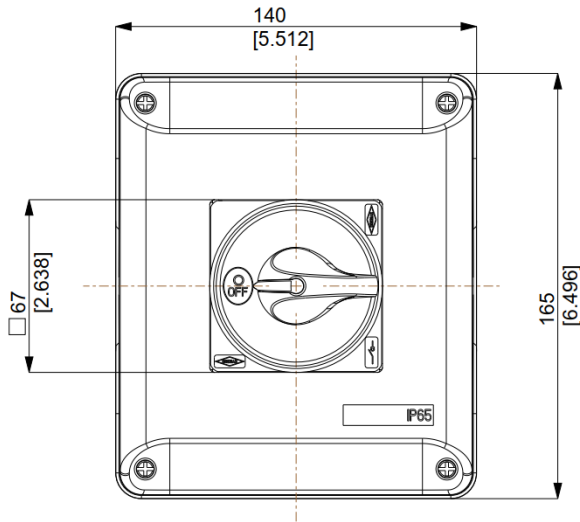
## Electrical diagram

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		

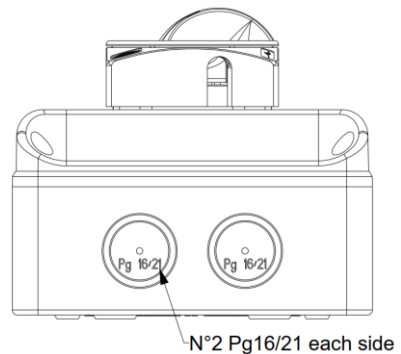
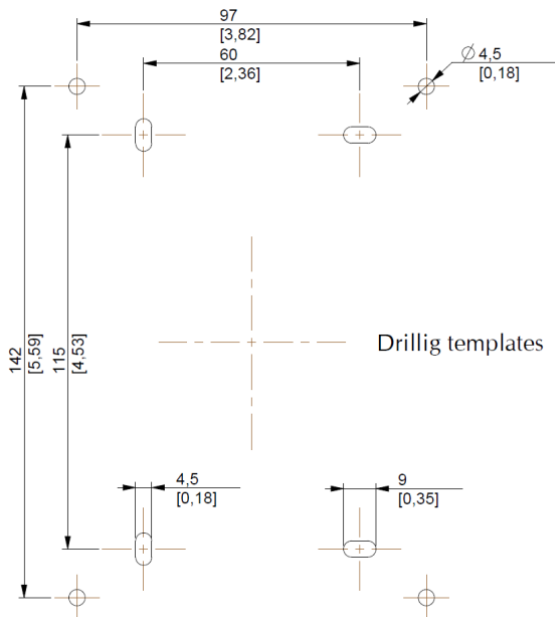
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### Dimensions

measures in mm [in]



### Drilling templates



# Enclosed DC Disconnect Switch

IB Series



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Via Castellazzo 9 – 20040 Cambiago (MI)  
Tel +39 02 95651611 Fax +39 02 95651639  
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ISO 9001 Certified Quality System

## IBX12030120AR

### 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	1500	1500
Rated operational current	Ie	A dc	10	5
Rated operational voltage (second rating)	Ue	V dc	1250	1250
Rated operational current (second rating)	Ie	A dc	20	8
Rated operational voltage (third rating)	Ue	V dc	1000	1000
Rated operational current (third rating)	Ie	A dc	30	12
Rated operational voltage (fourth rating)	Ue	V dc	800	800
Rated operational current (fourth rating)	Ie	A dc	45	17
Rated operational voltage (fifth rating)	Ue	V dc	700	700
Rated operational current (fifth rating)	Ie	A dc	-	25
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 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> AWG	2x 6 2x 10
Cross-section of wires with fork lug	Max.	mm <sup>2</sup> AWG	1x 16 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

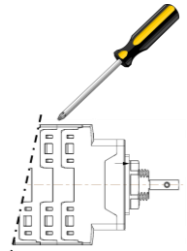
To the terminal			IP20
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#### Ambient conditions

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



**Screwdriver  
orientation for  
terminal fixing**



### Dimensions

