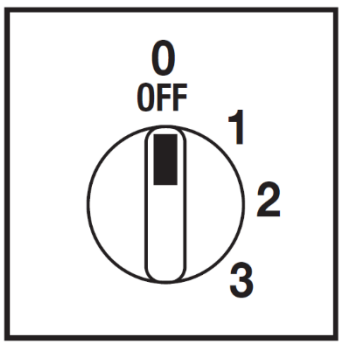
Bremas Ersce SpA
Via castellazzo 9 - 20040 Cambiago (MI)
Tel +39 02 95651611 Fax +39 02 95651639
www.bremas.eu info@bremas.it
ISO 9001 Certified Quality System

Cod. CR012MZ33RT4

(Image is purely indicative)

Positions



Standard and Approvals

- Switch according to IEC/EN 60947-3
- Certified UL60947-4-1A and CAN/CSA C22.2 No. 60947-4-1-07
- Suitable as Manual Motor Controller

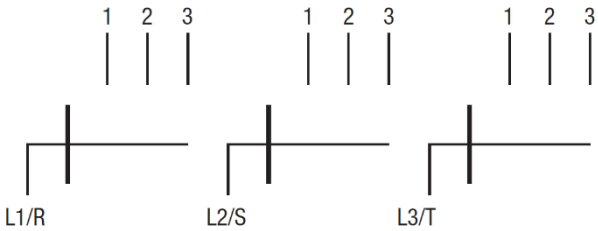
Technical characteristics: Body

- Multi step switch with OFF 3 pole 3 steps
- IP20 Protection degree
- Rated operational current Ie: 12A
- Rated thermal current Ith: 16A
- Rated insulation voltage Ui: 690V
- Rear mounting
- Fixing with 2 screw at 28mm vertical
- Switching angle: 45°
- Class V2 self-extinguishing thermoplastic housing
- Assembled with metal shaft and threaded stud bolts to ensure maximum operating reliability
- Positive opening double break contacts, silver alloy made.

Technical characteristics: Knob

- Grey plate 48x48mm and black knob
- IP66 Protection degree
- Fixing:- 2 screw at 28mm vertical

Electrical diagram and function



	3	X					X	X				CR CA CQ	45°
	2				X	X					X		
	1			X					X	X			
	0												
Contact		1 2	3 4	5 6	7 8	9 10	11 12	13 14	15 16	17 18	19 20	Angle	
Element		1		2		3		4		5			

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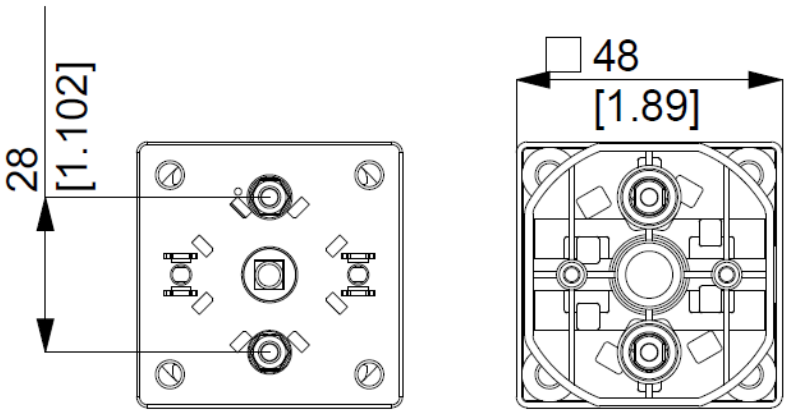
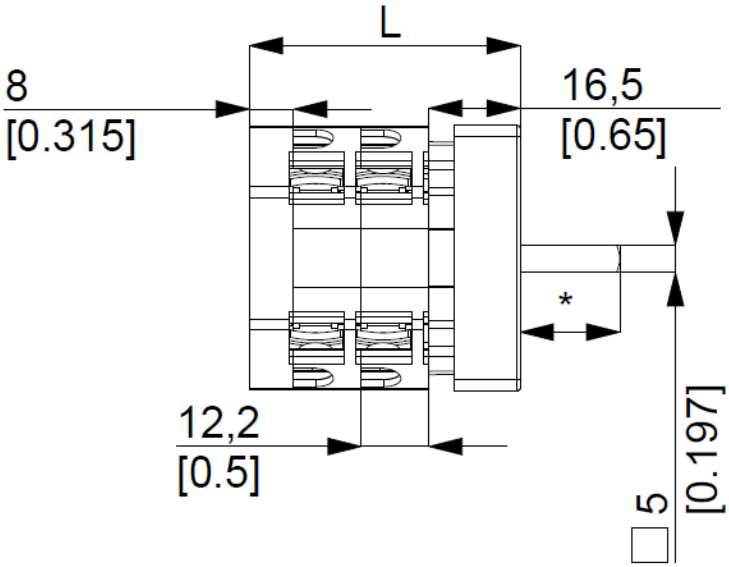
measures in mm (in)

Dimensions





* Sporgenza / Ledge 18,00mm
L Lunghezza / Length 85,40mm

Drilling templates

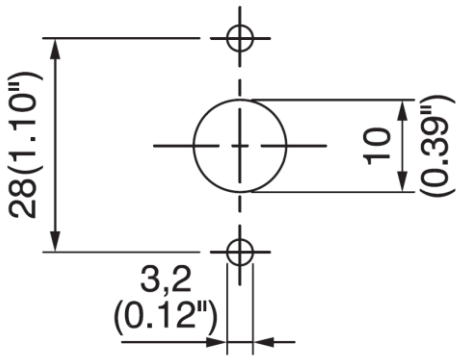
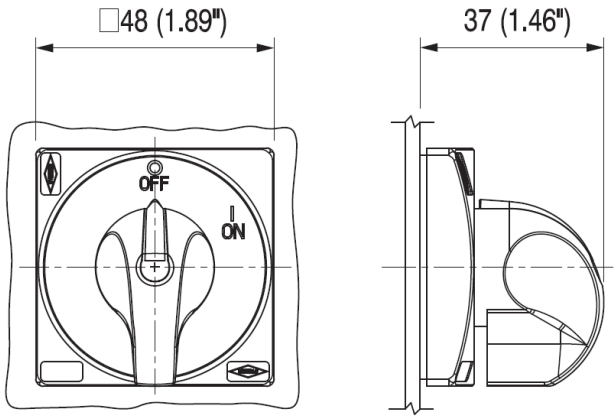


Plate & Knob



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Technical data IEC 947-3 EN 60947-3				
Rated insulation voltage		Ui	V	690
Rated operating voltage		Ue	V	690
Rated impulse withstand voltage		Uimp	kV	6
Rated thermal current for open switch		Ith	A	16
Rated thermal current for enclosed switch		Ithe	A	16
Rated operation frequency			Hz	50/60
Power dissipation for each pole			W	0,27
Rated operating current				
AC-21A Switching resistive loads, including moderate overloads		Ie	A	12
AC-22A Switching of mixed resistive and inductive loads, including moderate overloads		Ie	A	12
AC-20A Connecting and disconnecting under no loads conditions				-
Rated operating power				
AC-23A Switching of motor loads or other highly inductive loads 3 phase - 3 pole		230V	Kw (A)	3 (9)
		400V	Kw (A)	4 (9)
		500V	Kw (A)	-
		690V	Kw (A)	-
AC-23A Switching of motor loads or other highly inductive loads 1 phase - 2 pole		110V	Kw (A)	0,75 (8,5)
		230V	Kw (A)	1,5 (8,5)
AC-3 Squirrel cage motors: starting, swtiching off motors during running 3 phase - 3 pole		230V	Kw (A)	2,2 (7)
		400V	Kw (A)	3,5 (7)
		500V	Kw (A)	-
		690V	Kw (A)	-
AC-3 Squirrel cage motors: starting, swtiching off motors during running 1 phase - 2 pole		110V	Kw (A)	0,37 (4)
		230V	Kw (A)	1,1 (6)
		400V	Kw (A)	-
AC-4 Squirrel cage motors: starting, pluggign, inching		230V	Kw (A)	-
		400V	Kw (A)	-
AC-15 Control of a.c electromagnetic loads		230V	A	4
		400V	A	3
Rated breaking capability in AC-23A (cos φ=0,45)		230V	A	72
		400V	A	72
Short circuit protection				
Rated short time withstand current		Icw	A	150
Rated short-circuit make capacity		Icm	A	-
Rated conditional short-circuit current		-	kA	4
With fuses class gG		500V	A	16
Technical data UL/CSA				
Rated operating voltage		Ue	UL/CSA V	600/ -
General use current		Ie	UL/CSA A	12
Short circuit rating @600Vac			Arms	5000
Fuse size (Class RK5, 600Vac, 200kA A.I.C.)			A	60
Rated operating power				
1 phase - 2 pole		120V	Hp (A)	0,5 (9,8)
		240V	Hp (A)	1,5 (10)
3 phase - 3 pole		200V	Hp (A)	1,5 (6,9)
		240V	Hp (A)	2 (6,8)
		480V	Hp (A)	3 (4,8)
		600V	Hp (A)	5 (6,1)
Mechanical characteristics				
Panel tickness		Max	mm	4
Mechanical life			Cycles x 10^6	2
			Cycles/hr	120
Connection according to IEC 9471-1 and EN 50947-1				
Connecting capability	With flexible wires	Min-Max	mm^2	2x1,5-4
		Min-Max	AWG	16-10
	With solid wires	Min-Max	mm^2	2x1,5-6
Connection terminal screw dimensions			Type	M3,5
Screw tightening torque			Nm	1
Protection degree IEC 529 EN 60529				
Terminals			IP	20
Ambient conditions				
Operating ambient temperature			°C	-25 ÷ +55
Storage ambient temprature			°C	-30 ÷ +70
Withstand to constant humid according to IEC 60068				2-78
Withstand to cyclic humid according to IEC 60068				2-30