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ISO 9001 Certified Quality System

## Cod. CR012MZ14RT4



(Image is purely indicative)



### 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



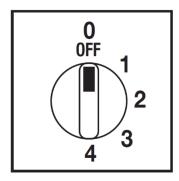
# Technical characteristics: Body

- Multi step switch with OFF 1 pole 4 steps
- IP20 Protection degree
- Rated operational current le: 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.

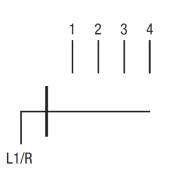
### Technical characteristics: Knob

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

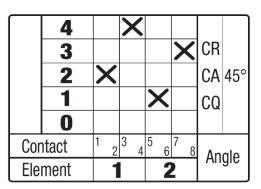
Positions



#### Electrical diagram



# **Electrical function**



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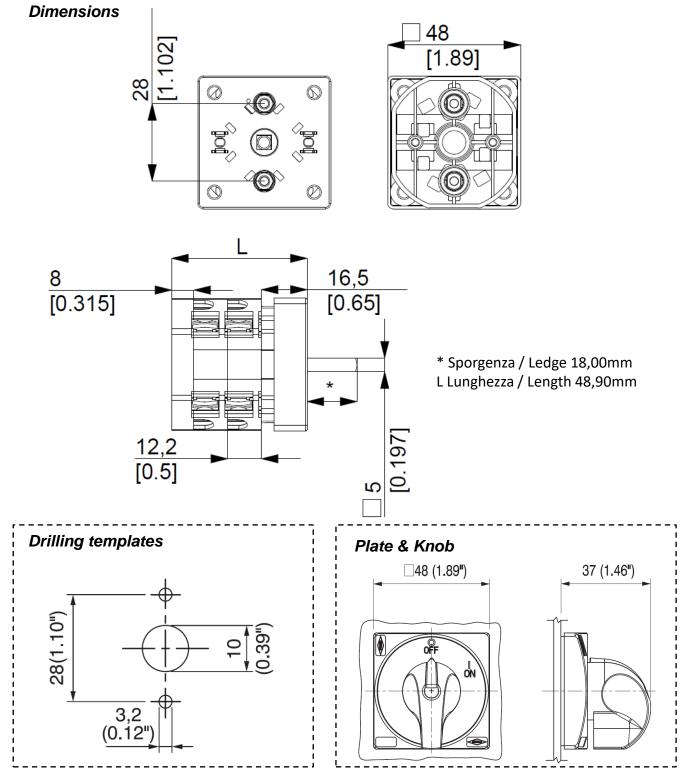
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measures in mm (in)



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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		le	A	12
AC-22A Switching of mixed resistive and inductive loads, including moderate overloads		le	А	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)	-
		110V	Kw (A)	0,75 (8,5)
		230V	Kw (A)	1,5 (8,5)
AC 2 Cautral and material starting surjecting off maters during surplus 2 phase - 2 pale		230V		
AC-3 Squirrel cage motors: starting, swtiching off motors during running 3 phase - 3 pole		400V	Kw (A)	2,2 (7)
			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		lcw	A	150
Rated short-circuit make capacity		Icm	Α	-
Rated conditional short-circuit current		-	kA	4
With fuses class gG		500V	Α	16
Technical data UL/CSA				
Rated operating voltage		Ue	UL/CSA V	600/ -
General use current		le	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 <sup>6</sup>	2
			Cycles/hr	120
Connection according to IEC 9471-1 and EN 50947-1			-,	120
Connecting capability	With flexible wires	Min-Max	mm²	2x1,5-4
		Min-Max	AWG	16-10
	With solid wires	Min-Max	mm <sup>2</sup>	2x1,5-6
	with solu wiles	IVIII1-IVIdX	Туре	M3,5
Connection terminal screw dimensions				1
			Mm	
Screw tightening torque			Nm	1
Screw tightening torque Protection degree IEC 529 EN 60529				
Screw tightening torque Protection degree IEC 529 EN 60529 Terminals			Nm IP	20
Connection terminal screw dimensions Screw tightening torque Protection degree IEC 529 EN 60529 Terminals Ambient conditions Output: Description of the second seco			IP	20
Screw tightening torque Protection degree IEC 529 EN 60529 Terminals Ambient conditions Operating ambient temperature			IP °C	20 -25 ÷ +55
Screw tightening torque Protection degree IEC 529 EN 60529 Terminals Ambient conditions Operating ambient temperature Storage ambient temprature			IP	20 -25 ÷ +55 -30 ÷ +70
Screw tightening torque Protection degree IEC 529 EN 60529 Terminals Ambient conditions Operating ambient temperature			IP °C	20 -25 ÷ +55

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