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ISO 9001 Certified Quality System

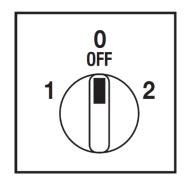
### Cod. CR0160008RT4



(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

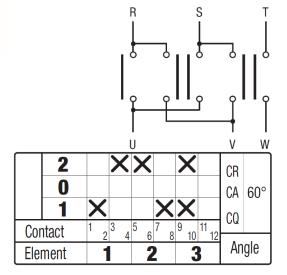


- Reversing swtch 3 pole
- IP20 Protection degree
- Rated operational current le: 16A
- Rated thermal current Ith: 20A
- Rated insulation voltage Ui: 690V
- Rear mounting
- Fixing with 2 screw at 28mm vertical
- Switching angle: 60°
- Class V2 self-extinguishing thermoplastic housing
- Assembled with 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



U V W

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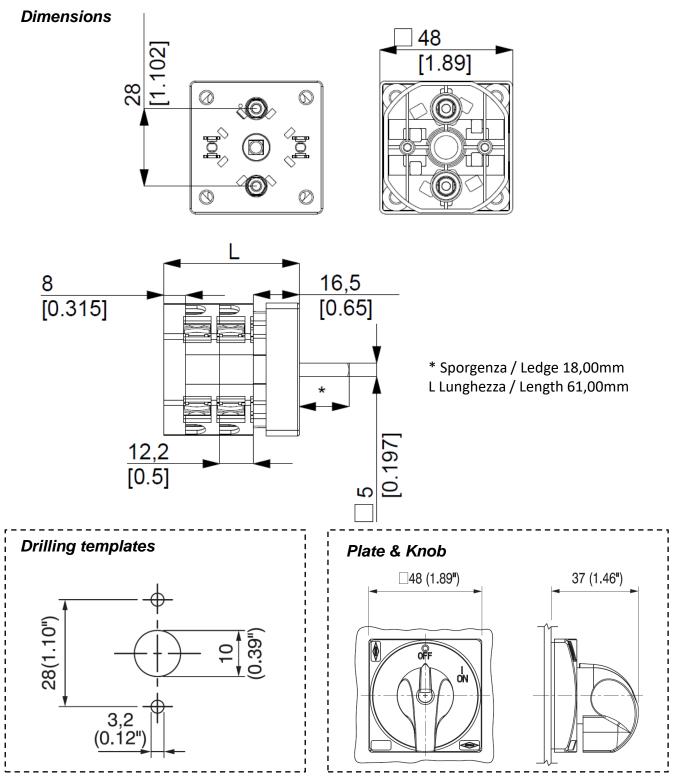
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measures in mm (in)



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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	lth	A	20
Rated thermal current for enclosed switch	Ithe	A	20
Rated operation frequency		Hz	50/60
Power dissipation for each pole		w	0,5
Rated operating current		w	0,5
AC-21A Switching resistive loads, including moderate overloads	le	A	16
AC-22A Switching of mixed resistive and inductive loads, including moderate overloads	le	A	16
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)	4 (14)
	400V	Kw (A)	7,5 (14)
	500V	Kw (A)	-
	690V	Kw (A)	-
AC-23A Switching of motor loads or other highly inductive loads 1 phase - 2 pole	110V	Kw (A)	1,1 (12)
	230V	Kw (A)	2,2 (14)
AC-3 Squirrel cage motors: starting, swtiching off motors during running 3 phase - 3 pole	230V	Kw (A)	3,7 (12)
	400V	Kw (A)	5,5 (10)
	500V	Kw (A)	-
	690V	Kw (A)	-
AC-3 Squirrel cage motors: starting, swtiching off motors during running 1 phase - 2 pole	110V	Kw (A)	0,75 (9)
	230V	Kw (A)	1,5 (8)
	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	А	6
	400V	А	4
Rated breaking capability in AC-23A (cos φ=0,45)	230V	А	112
	400V	А	112
Short circuit protection			
Rated short time withstand current	lcw	А	240
Rated short-circuit make capacity	Icm	А	-
Rated conditional short-circuit current	-	kA	4
With fuses class gG	500V	A	20
Technical data UL/CSA			
Rated operating voltage	Ue	UL/CSA V	coo /
		02/03/11	600/-
General use current	le	UL/CSA A	16
General use current Short circuit rating @600Vac	le		
Short circuit rating @600Vac	le	UL/CSA A	16 5000
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.)	le	UL/CSA A Arms	16
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power	ie 120V	UL/CSA A Arms A	16 5000
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.)		UL/CSA A Arms A Hp (A)	16 5000 25 (30)
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power	120V	UL/CSA A Arms A	16 5000 25 (30) 1 (16)
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power 1 phase - 2 pole		UL/CSA A Arms A Hp (A) Hp (A)	16 5000 25 (30) 1 (16) 2 (12)
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power 1 phase - 2 pole	200V 200V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A)	16 5000 25 (30) 1 (16) 2 (12) 2 (7,8)
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power 1 phase - 2 pole	120V 240V 200V 240V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A)	16 5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6)
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power 1 phase - 2 pole	120V 240V 200V 240V 480V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A)	16 5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11)
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power 1 phase - 2 pole 3 phase - 3 pole	120V 240V 200V 240V 480V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A)	16 5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11)
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power 1 phase - 2 pole 3 phase - 3 pole Mechanical characteristics	120V 240V 200V 240V 480V 600V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A)	16 5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9)
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power 1 phase - 2 pole 3 phase - 3 pole Mechanical characteristics Panel thickness	120V 240V 200V 240V 480V 600V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) mm	16 5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power 1 phase - 2 pole 3 phase - 3 pole Mechanical characteristics Panel thickness	120V 240V 200V 240V 480V 600V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup>	16 5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 4 2
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power 1 phase - 2 pole 3 phase - 3 pole 3 phase - 3 pole Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1	120V 240V 200V 240V 480V 600V Max	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup>	16 5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 4 2
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power 1 phase - 2 pole 3 phase - 3 pole Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1	120V 240V 240V 480V 600V Max	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles/hr mm <sup>2</sup>	16 5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 2 120 2x1,5-4
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power  1 phase - 2 pole 3 phase - 3 pole Mechanical characteristics Panel thickness Mechanical life Connecting capability With flexible wires	120V           240V           200V           240V           480V           600V           Max           Min-Max	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Mp (A) Cycles x 10 <sup>6</sup> Cycles/hr Mm <sup>2</sup> AWG	16           5000           25 (30)           1 (16)           2 (12)           2 (7.8)           3 (9.6)           7,5 (31)           7,5 (9)           4           2           120           2x1,5-4           16-10
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kAA.I.C.) Rated operating power  1 phase - 2 pole  3 phase - 3 pole  Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires	120V 240V 240V 480V 600V Max	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles/hr Cycles/hr	16           5000           25 (30)           1 (16)           2 (12)           2 (7.8)           3 (9.6)           7,5 (31)           7,5 (9)           4           2           120           2x1,5-4           16-10           2x1,5-6
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power  1 phase - 2 pole 3 phase - 3 pole Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires Connection terminal screw dimensions	120V           240V           200V           240V           480V           600V           Max           Min-Max	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Mp (A) Cycles x 10 <sup>6</sup> Cycles/hr Cycles/hr AWG mm <sup>2</sup> AWG	16 5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 2 120 2 2x1,5-4 16-10 2x1,5-6 M3,5
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power 1 phase - 2 pole 3 phase - 3 pole Wechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires Connection terminal screw dimensions Screw tightening torque	120V           240V           200V           240V           480V           600V           Max           Min-Max	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles/hr Cycles/hr	16           5000           25 (30)           1 (16)           2 (12)           2 (7.8)           3 (9.6)           7,5 (31)           7,5 (9)           4           2           120           2x1,5-4           16-10           2x1,5-6
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power 1 phase - 2 pole 3 phase - 3 pole 9 Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability Uith flexible wires Connection carpability Uith flexible wires Connection terminal screw dimensions Screw tightening torque Protection degree IEC 529 EN 60529	120V           240V           200V           240V           480V           600V           Max           Min-Max	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles x 10 <sup>6</sup> Cycles y hr AWG mm <sup>2</sup> AWG mm <sup>2</sup> Nm	16 5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 2 120 2x1,5-4 16-10 2x1,5-6 M3,5 1
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power  1 phase - 2 pole  3 phase - 3 pole  Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires Connection carcending to remain a screw dimensions Screw tightening torque Protection degree IEC 529 EN 60529 Terminals	120V           240V           200V           240V           480V           600V           Max           Min-Max	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Mp (A) Cycles x 10 <sup>6</sup> Cycles/hr Cycles/hr AWG mm <sup>2</sup> AWG	16 5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 2 120 2 2x1,5-4 16-10 2x1,5-6 M3,5
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power  1 phase - 2 pole  3 phase - 3 pole  Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires Connection grapability With flexible wires Connection degree IEC 529 EN 60529 Terminals Ambient conditions	120V           240V           200V           240V           480V           600V           Max           Min-Max	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Mp (A) Cycles x 10 <sup>6</sup> Cycles/hr Cycles/hr Mm <sup>2</sup> AWG mm <sup>2</sup> Type Nm	16           5000           25 (30)           1 (16)           2 (12)           2 (7,8)           3 (9,6)           7,5 (31)           7,5 (9)           4           2           120           2x1,5-4           16-10           2x1,5-6           M3,5           1           20
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power  1 phase - 2 pole  3 phase - 3 pole  Mechanical characteristics Panel thickness Mechanical life  Connecting capability  Connecting capability  Connecting capability  Connecting to FUE 9471-1 and EN 50947-1  Connecting to FUE 9471	120V           240V           200V           240V           480V           600V           Max           Min-Max	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Mp (A) Cycles x 10 <sup>6</sup> Cycles/hr Cycles/hr Mm <sup>2</sup> AWG mm <sup>2</sup> Type Nm IP	16 5000 25 (30) 1 (16) 2 (12) 2 (7.8) 3 (9.6) 7,5 (11) 7,5 (9) 4 2 2 2 2 2 4 120 2 2 2 2 4 16 10 2 2 2 4 16 3 3 5 1 2 2 2 2 2 5 5 5 1 2 2 2 2 2 2 2 2 2 2 2 2 2
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power  1 phase - 2 pole  3 phase - 3 pole  Mechanical characteristics Panel thickness Mechanical life  Connection according to IEC 9471-1 and EN 50947-1  Connecting capability  Connecting capability  With flexible wires  Connection terminal screw dimensions Screw tightening torque Protection degree IEC 529 EN 60529 Terminals  Ambient conditions  Operating ambient temperature Storage ambient temperature	120V           240V           200V           240V           480V           600V           Max           Min-Max	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Mp (A) Cycles x 10 <sup>6</sup> Cycles/hr Cycles/hr Mm <sup>2</sup> AWG mm <sup>2</sup> Type Nm	16 5000 25 (30) 1 (16) 2 (12) 2 (7.8) 3 (9.6) 7,5 (11) 7,5 (9) 4 2 2 2 4 2 2 4 120 2 2 2 4 120 2 2 2 4 120 2 2 2 4 120 2 2 2 2 2 2 2 2 2 2 2 2 2
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power  1 phase - 2 pole  3 phase - 3 pole  Mechanical characteristics Panel thickness Mechanical life  Connection according to IEC 9471-1 and EN 50947-1  Connecting capability  Connecting capability  Connecting torque Protection degree IEC 529 EN 60529  Terminals  Ambient conditions  Operating ambient temperature	120V           240V           200V           240V           480V           600V           Max           Min-Max	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Mp (A) Cycles x 10 <sup>6</sup> Cycles/hr Cycles/hr Mm <sup>2</sup> AWG mm <sup>2</sup> Type Nm IP	16 5000 25 (30) 1 (16) 2 (12) 2 (7.8) 3 (9.6) 7,5 (11) 7,5 (9) 4 2 2 2 2 2 4 120 2 2 2 2 4 16 10 2 2 2 4 16 3 3 5 1 2 2 2 2 2 5 5 5 1 2 2 2 2 2 2 2 2 2 2 2 2 2

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