

 Bremas Ersce SpA

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ISO 9001 Certified Quality System

Cod. CR0160003RT4



(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

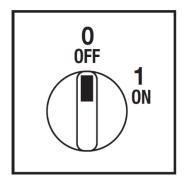


- ON-OFF switch 3 pole
- IP20 Protection degree
- Rated operational current le: 16A
- Rated thermal current Ith: 20A
- Rated insulation voltage Ui: 690V
- Rear mounting
- Fixing with 2 screw at 28mm vertical
- Switching angle: 60°
- Class V2 self-extinguishing thermoplastic housing
- Assembled with metal shaft and threaded stud bolts to ensure maximum operating reliability
- Positive opening double break contacts, silver alloy made.

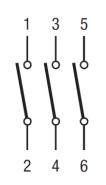
Technical characteristics: Knob

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

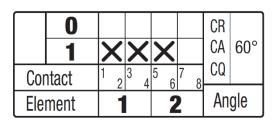
Positions



Electrical diagram



Electrical function



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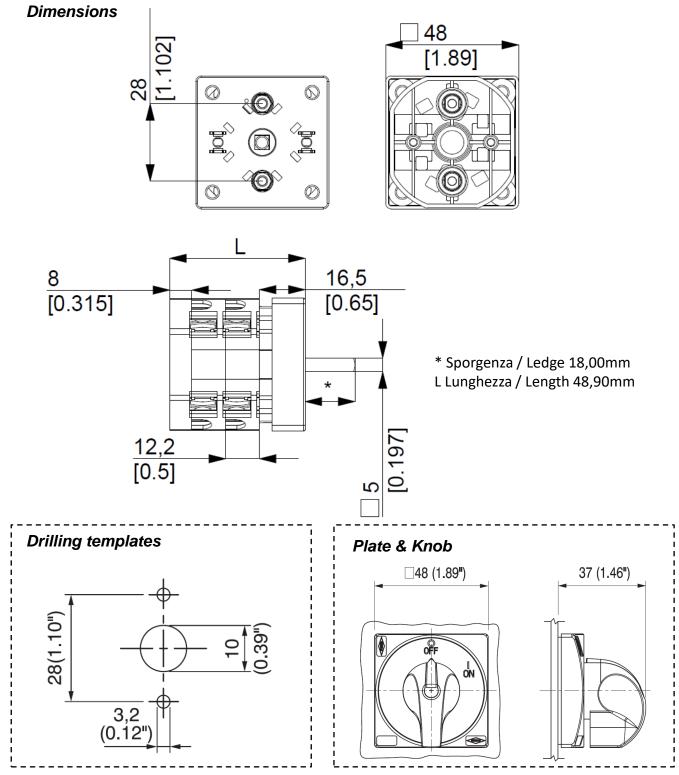
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measures in mm (in)



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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		lth	A	20
Rated thermal current for enclosed switch		Ithe	A	20
Rated operation frequency		itile	Hz	50/60
Power dissipation for each pole			W	0,5
Rated operating current			**	0,5
		la		16
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	A	6	
	400V	A	4	
Rated breaking capability in AC-23A (cos φ =0,45)		230V	A	112
		400V	A	112
Short circuit protection				
Rated short time withstand current		lcw	A	240
Rated short-circuit make capacity		Icm	A	-
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	600/-
General use current		le	UL/CSA A	16
General use current Short circuit rating @600Vac		le	UL/CSA A Arms	16 5000
		le		
Short circuit rating @600Vac		le	Arms	5000
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.)		le	Arms	5000
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power			Arms A	5000 25 (30)
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA A.I.C.) Rated operating power		120V	Arms A Hp (A)	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			Arms A Hp (A) Hp (A)	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 240V 200V	Arms A Hp (A) Hp (A) Hp (A)	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	Arms A Hp (A) Hp (A) Hp (A) Hp (A)	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	Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A)	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	Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A)	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	Аrms А Нр (А) Нр (А) Нр (А) Нр (А) Нр (А) Нр (А)	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	Аrms А Нр (А) Нр (А) Нр (А) Нр (А) Нр (А) Нр (А)	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	Аrms А Нр (А) Нр (А) Нр (А) Нр (А) Нр (А) Нр (А) Сусles x 10 ⁶	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 Mechanical life	With flexible wires	120V 240V 200V 240V 480V 600V	Аrms А Нр (А) Нр (А) Нр (А) Нр (А) Нр (А) Нр (А) Сусles x 10 ⁶	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 9 Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1	With flexible wires	120V 240V 240V 240V 480V 600V Max	Аrms А Нр (А) Нр (А) Нр (А) Нр (А) Нр (А) Нр (А) Нр (А) Сусles x 10 ⁶ Суcles/hr	5000 25 (30) 1 (16) 2 (12) 2 (12) 2 (12) 3 (9,6) 7,5 (11) 7,5 (9) 4 2 2 120
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	With flexible wires	120V 240V 240V 240V 480V 600V Max Min-Max	Аrms А Нр (А) Нр (А) Нр (А) Нр (А) Нр (А) Нр (А) Сусles x 10 ⁶ Суcles/hr	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 9 Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1		120V 240V 240V 240V 480V 600V Max Min-Max	Аrms А Нр (А) Нр (А) Нр (А) Нр (А) Нр (А) Мр (А) Сусles x 10 ⁶ Суcles x 10 ⁶ Суcles x 10 ⁶	5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 4 2 120 2 x1,5-4 16-10
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 Connection capability Connection terminal screw dimensions		120V 240V 240V 240V 480V 600V Max Min-Max	Аrms А Нр (A) Нр (A) Нр (A) Нр (A) Нр (A) Нр (A) Сусles x 10 ⁶ Суcles x 10 ⁶ Суcles x 10 ⁶ Суcles x 10 ⁶	5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 4 2 120 2 x1,5-4 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		120V 240V 240V 240V 480V 600V Max Min-Max	Аrms А Нр (A) Нр (A) Нр (A) Нр (A) Нр (A) Нр (A) Сусles x 10 ⁶ Сусles/hr Сусles/hr Мт ² АWG mm ² Туре	5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 4 2 120 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 Connection terminal screw dimensions Screw tightening torque		120V 240V 240V 240V 480V 600V Max Min-Max	Аrms А Нр (A) Нр (A) Нр (A) Нр (A) Нр (A) Нр (A) Сусles x 10 ⁶ Сусles/hr Сусles/hr Мт ² АWG mm ² Туре	5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 4 2 120 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 Connecting capability Connecting to rew dimensions Screw tightening torque Protection degree IEC 529 EN 60529		120V 240V 240V 240V 480V 600V Max Min-Max	Аrms А Нр (A) Нр (A) Нр (A) Нр (A) Нр (A) Нр (A) Нр (A) Сусles x 10 ⁶ Суcles x 10 ⁶ Суcles/hr Суcles/hr mm ² АWG mm ² Туре Nm	5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 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 Connecting capability Connection terminal screw dimensions Screw tightening torque Protection degree IEC 529 EN 60529 Terminals		120V 240V 240V 240V 480V 600V Max Min-Max	Аrms А Нр (A) Нр (A) Нр (A) Нр (A) Нр (A) Нр (A) Нр (A) Сусles x 10 ⁶ Суcles x 10 ⁶ Суcles/hr Суcles/hr mm ² АWG mm ² Туре Nm	5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 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 Connection gcapability Connection cerew dimensions Screw tightening torque Protection degree IEC 529 EN 60529 Terminals Ambient conditions		120V 240V 240V 240V 480V 600V Max Min-Max	Аrms А Нр (A) Нр (A) Нр (A) Нр (A) Нр (A) Мр (A) Сусles x 10 ⁶ Сусles x 10 ⁶ Сусles x 10 ⁶ Сусles/hr Мт ² АWG мm ² Туре Nm	5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 4 2 2 120 2 2 x1,5-4 16-10 2x1,5-6 M3,5 1 1 20 20 20
Short circuit rating @600Vac Fuse size (Class RK5, 600Vac, 200kA.A.I.C.) Rated operating power 1 phase - 2 pole 3 phase - 2 pole Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability Connecting capability Connection degree IEC 529 EN 60529 Terminals Free IEC 529 EN 60529 Terminals Ambient conditions Operating ambient temperature		120V 240V 240V 240V 480V 600V Max Min-Max	Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Mp (A) Mp (A) Mp (A) Mp (A) Mp (A) Mp (A) Mm Cycles x 10 ⁶ Cycles/hr AWG mm² AWG IP IP °C	5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 4 2 120 2 x1,5-4 16-10 2x1,5-4 16-10 2x1,5-5 M3,5 1 2 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 Connection according to IEC 9471-1 and EN 50947-1 Connection gcapability Connection terminal screw dimensions Crew tightening torque Protection degree IEC 529 EN 60529 Terminals Ambient conditions Operating ambient temperature Storage ambient temperature		120V 240V 240V 240V 480V 600V Max Min-Max	Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Mp (A) Mp (A) Mp (A) Mp (A) Mp (A) Mp (A) Mm Cycles x 10 ⁶ Cycles/hr AWG mm² AWG IP IP °C	5000 25 (30) 1 (16) 2 (12) 2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 2 4 2 120 2 2 x1,5-4 16-10 2 x1,5-6 M3,5 1 2 2 0 2 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2

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