Bremas BREMAS

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ISO 9001 Certified Quality System

Cod. CA0160008PL2

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



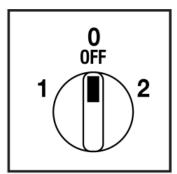
Technical characteristics: Body

- Reversing switch 3 pole
- IP00 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.

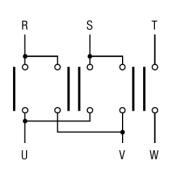
Technical characteristics: Knob

- Transparent plate 75,5x75,5mm and black knob
- Fixing with 2 screws at 28mm vertical
- IP40 protection degree

Positions



Electrical diagram



Electrical function



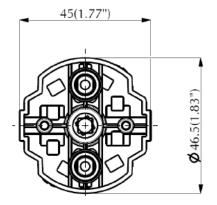
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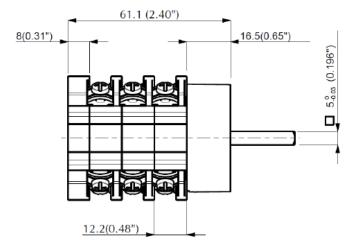


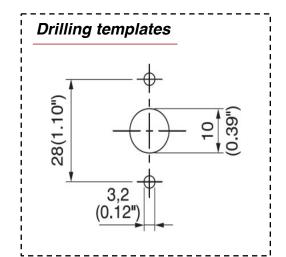
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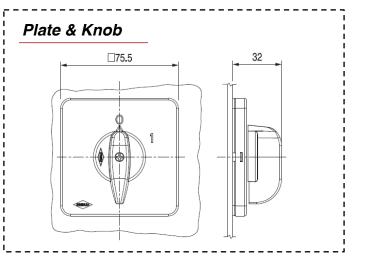
Dimensions

8(1.10")









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measures in mm (in)

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echnical data IEC 947-3 EN 60947-3 ated insulation voltage ated operating voltage			
		<u>)</u> (600
aien oberariuk zourake	Ui	v	690
where difference data and a state of the second	Ue	V kV	690
ated impulse withstand voltage	Uimp		6
ated thermal current for open switch	lth	A	20
ated thermal current for enclosed switch	Ithe	A	20
ated operation frequency		Hz	50/60
ower dissipation for each pole		W	0,5
ated operating current			
C-21A Switching resistive loads, including moderate overloads	le	A	16
C-22A Switching of mixed resistive and inductive loads, including moderate overloads	le	A	16
C-20A Connecting and disconnecting under no loads conditions			-
ated 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)	-
C-15 Control of a.c electromagnetic loads	230V	А	6
	400V	А	4
ated breaking capability in AC-23A (cos φ=0,45)	230V	A	112
	400V	А	112
hort circuit protection			
ated short time withstand current	Icw	А	240
ated short-circuit make capacity	Icm	А	-
ated conditional short-circuit current	-	kA	4
/ith fuses class gG	500V	А	20
echnical data UL/CSA			
ated operating voltage	Ue	UL/CSA V	600/ -
eneral use current	le	UL/CSA A	16
hort circuit rating @600Vac		Arms	5000
use size (Class RK5, 600Vac, 200kA A.I.C.)		A	25 (30)
ated operating power			
phase - 2 pole	120V	Hp (A)	1 (16)
	240V	Hp (A)	2 (12)
3 phase - 3 pole	200V	Hp (A)	2 (7,8)
	240V	Hp (A)	3 (9,6)
	480V	Hp (A)	7,5 (11)
			, - \/
	600V		7,5 (9)
lechanical characteristics		Hp (A)	7,5 (9)
Techanical characteristics	600V	Нр (А)	7,5 (9)
anel thickness		Hp (A) mm	4
	600V	Hp (A) mm Cycles x 10 ⁶	4
anel thickness techanical life	600V	Hp (A) mm	4
anel thickness techanical life onnection according to IEC 9471-1 and EN 50947-1	600V Max	Hp (A) mm Cycles x 10 ⁶ Cycles/hr	4 2 120
anel thickness techanical life	600V Max Min-Max	Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm ²	4 2 120 2x1,5-4
anel thickness techanical life onnection according to IEC 9471-1 and EN 50947-1 Onnecting capability With flexible wires	600V Max Min-Max Min-Max	Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm ² AWG	4 2 120 2x1,5-4 16-10
anel thickness techanical life onnection according to IEC 9471-1 and EN 50947-1 Onnecting capability With flexible wires With solid wires	600V Max Min-Max	Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm ² AWG mm ²	4 2 120 2x1,5-4 16-10 2x1,5-6
anel thickness techanical life onnection according to IEC 9471-1 and EN 50947-1 Onnecting capability With flexible wires With solid wires Onnection terminal screw dimensions	600V Max Min-Max Min-Max	Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm ² AWG mm ² Type	4 2 120 2x1,5-4 16-10 2x1,5-6 M3,5
anel thickness techanical life onnection according to IEC 9471-1 and EN 50947-1 Onnecting capability With flexible wires With solid wires onnection terminal screw dimensions crew tightening torque	600V Max Min-Max Min-Max	Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm ² AWG mm ²	4 2 120 2x1,5-4 16-10 2x1,5-6
anel thickness techanical life onnection according to IEC 9471-1 and EN 50947-1 Onnecting capability Onnecting capability Onnection terminal screw dimensions crew tightening torque rotection degree IEC 529 EN 60529	600V Max Min-Max Min-Max	Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm ² AWG mm ² Type Nm	4 2 120 2x1,5-4 16-10 2x1,5-6 M3,5 1
anel thickness techanical life onnection according to IEC 9471-1 and EN 50947-1 Onnecting capability With flexible wires Onnection terminal screw dimensions crew tightening torque rotection degree IEC 529 EN 60529 erminals	600V Max Min-Max Min-Max	Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm ² AWG mm ² Type	4 2 120 2x1,5-4 16-10 2x1,5-6 M3,5
anel thickness techanical life onnection according to IEC 9471-1 and EN 50947-1 onnecting capability With flexible wires With solid wires onnection terminal screw dimensions crew tightening torque rotection degree IEC 529 EN 60529 erminals mbient conditions	600V Max Min-Max Min-Max	Hp (A) mm Cycles x 10 ⁶ Cycles/hr Cycles/hr mm ² AWG mm ² Type Nm IP	4 2 120 2x1,5-4 16-10 2x1,5-6 M3,5 1 1 00
anel thickness techanical life onnection according to IEC 9471-1 and EN 50947-1 onnecting capability onnecting capability with flexible wires with solid wires onnection terminal screw dimensions crew tightening torque crew tig	600V Max Min-Max Min-Max	Hp (A) mm Cycles x 10 ⁶ Cycles/hr Cycles/hr Mm ² AWG mm ² Type Nm IP	4 2 120 2x1,5-4 16-10 2x1,5-6 M3,5 1 00 -25 ÷ +55
anel thickness techanical life onnection according to IEC 9471-1 and EN 50947-1 onnection carpability With flexible wires With solid wires onnection terminal screw dimensions crew tightening torque crew	600V Max Min-Max Min-Max	Hp (A) mm Cycles x 10 ⁶ Cycles/hr Cycles/hr mm ² AWG mm ² Type Nm IP	4 2 120 2x1,5-4 16-10 2x1,5-6 M3,5 1 00 -25 ÷ +55 -30 ÷ +70
anel thickness techanical life onnection according to IEC 9471-1 and EN 50947-1 onnecting capability onnecting capability with flexible wires with solid wires onnection terminal screw dimensions crew tightening torque crew tig	600V Max Min-Max Min-Max	Hp (A) mm Cycles x 10 ⁶ Cycles/hr Cycles/hr Mm ² AWG mm ² Type Nm IP	4 2 120 2x1,5-4 16-10 2x1,5-6 M3,5 1 00 -25 ÷ +55

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