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www.bremas.eu info@bremas.it

ISO 9001 Certified Quality System

### Cod. CA2000008PL4



(Purely indicative image)



PL4

## Standard and Approvals

- Switch according to IEC/EN 60947-3
- Certified UL508
- Suitable as Manual Motor Controller





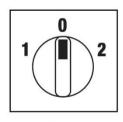
# Technical characteristics: Body

- IP00 Protection degree
- Rated operational current le: 160A
- Rated thermal current Ith: 200A
- Rated insulation voltage Ui: 690V
- · Rear Mounting
- Fixing with 4 screw at 30x90mm
- Switching angle: 60°
- Body in thermosetting material
- Assembled with metal shaft and threaded stud bolts to ensure maximum operating reliability
- Positive opening double break contacts, silver alloy made.

### Technical characteristics: Knob

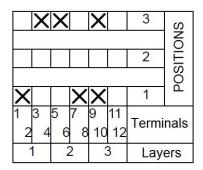
- Transparent plate 130x130mm and black knob
- · IP40 Protection degree
- Fixing with 4 screws at 30x90mm

### **Positions**

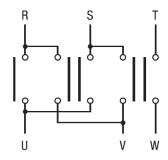


8000

# Electrical diagram



# Electrical function





Bremas Ersce SpA

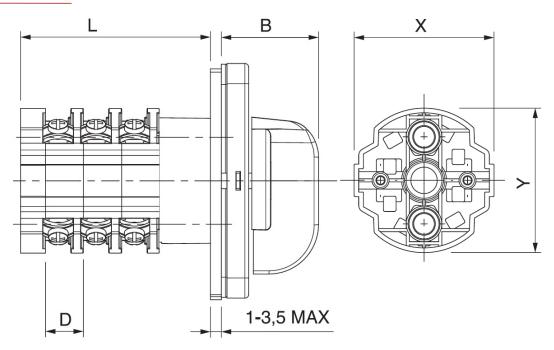
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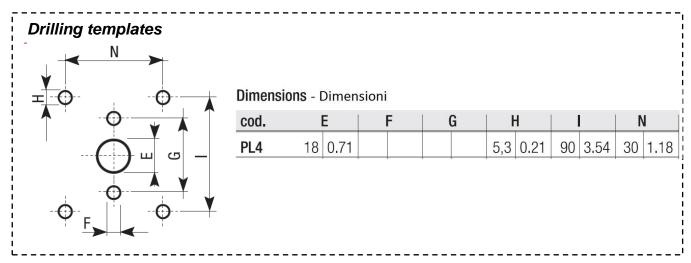
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**Dimensions** measures in mm (in)



Series Serie	X	Υ	D		N° LAYERS 3
04.000	==	ø 110	39	1	168
CA 200	-	ø (4,33")	(1,54")		(6,61")





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Fechnical data IEC 947-3 EN 60947-3				
ated insulation voltage		Ui	V	690
ated operating voltage		Ue	V	690
ated impulse withstand voltage		Uimp	kV	6
ated thermal current for open switch		Ith	A	200
·				
ated thermal current for enclosed switch		Ithe	A	160
ated operation frequency			Hz	50/60
ower dissipation for each pole			W	7
ated operating current				
C-21A Switching resistive loads, including moderate overloads		le	A	160 5
C-22A Switching of mixed resistive and inductive loads, including moderate overloads		le	Α	160
C-20A Connecting and disconnecting under no loads conditions				-
ated operating power				
C-23A Switching of motor loads or other highly inductive loads 3 phase - 3 pole		230V	Kw (A)	40 (125)
		400V	Kw (A)	59 (106)
		500V	Kw (A)	75 (108)
		690V	Kw (A)	- ( /
C-23A Switching of motor loads or other highly inductive loads 1 phase - 2 pole		110V	Kw (A)	11 (125)
c-23A Switching of motor loads of other highly inductive loads 1 phase - 2 pole	230V		22 (120)	
			Kw (A)	
C-3 Squirrel cage motors: starting, swtiching off motors during running 3 phase - 3 pole		230V	Kw (A)	30 (95)
		400V	Kw (A)	45 (82)
		500V	Kw (A)	59 (85)
		690V	Kw (A)	-
C-3 Squirrel cage motors: starting, swtiching off motors during running 1 phase - 2 pole		110V	Kw (A)	9 (102)
		230V	Kw (A)	15 (82)
		400V	Kw (A)	-
C-4 Squirrel cage motors: starting, pluggign, inching		230V	Kw (A)	-
		400V	Kw (A)	-
C-15 Control of a.c electromagnetic loads		230V	Α	-
c 15 control of all electromagnetic loads		400V	A	
ated breaking capability in AC 22A (see re-0.4E)		230V		
ated breaking capability in AC-23A (cos φ=0,45)			Α .	1000
		400V	A	848
hort circuit protection		<u> </u>		2000
ated short time withstand current		lcw	A	2000
ated short-circuit make capacity		lcm	A	3000
ated conditional short-circuit current		-	kA	15
		E001/	Α	200
Vith fuses class gG		500V		
Vith fuses class gG echnical data UL/CSA		500V		
-		Ue	UL/CSA V	600/-
echnical data UL/CSA ated operating voltage				600/-
echnical data UL/CSA ated operating voltage eneral use current		Ue	UL/CSA A	600/- 240/-
echnical data UL/CSA ated operating voltage eneral use current nort circuit rating @600Vac		Ue	UL/CSA A Arms	600/- 240/-
echnical data UL/CSA ated operating voltage eneral use current nort circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.)		Ue	UL/CSA A	600/- 240/-
echnical data UL/CSA ated operating voltage eneral use current nort circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.) ated operating power		Ue Ie	UL/CSA A Arms A	600/- 240/- - -
echnical data UL/CSA ated operating voltage eneral use current nort circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.) ated operating power		Ue le	UL/CSA A Arms A	600/- 240/- - -
echnical data UL/CSA ated operating voltage eneral use current ont circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole		Ue le 120V 240V	UL/CSA A Arms A Hp (A) Hp (A)	600/- 240/- - - -
echnical data UL/CSA ated operating voltage eneral use current ort circuit rating @600Vac use size (Class RK5, 600Vac, 200KA A.I.C.) ated operating power phase - 2 pole		Ue Ie 120V 240V 200V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A)	600/- 240/
echnical data UL/CSA ated operating voltage eneral use current ont circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole		120V 240V 240V 240V	UL/CSA A Arms A Hp (A) Hp (A)	600/- 240/- - - -
echnical data UL/CSA ated operating voltage eneral use current ont circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole		Ue Ie 120V 240V 200V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A)	600/- 240/- - - - -
echnical data UL/CSA  sted operating voltage eneral use current sort circuit rating @600Vac sse size (Class RK5, 600Vac, 200kA A.I.C.)  sted operating power phase - 2 pole		120V 240V 240V 240V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A)	600/- 240/- - - - - -
echnical data UL/CSA ated operating voltage		120V 240V 240V 240V 480V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A)	600/- 240/- - - - - - -
echnical data UL/CSA ated operating voltage eneral use current hort circuit rating @600Vac use size (Class RKS, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole  phase - 3 pole		120V 240V 240V 240V 480V	UL/CSA A Arms A Hp (A)	600/- 240/- - - - - - - - -
echnical data UL/CSA ated operating voltage eneral use current ont circuit rating @600Vac use size (Class RKS, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole  phase - 3 pole		120V 240V 240V 240V 480V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup>	600/- 240/- - - - - - -
echnical data UL/CSA ated operating voltage eneral use current oort circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole phase - 3 pole  lechanical characteristics lechanical life		120V 240V 240V 240V 480V	UL/CSA A Arms A Hp (A)	600/- 240/- - - - - - - - - -
echnical data UL/CSA ated operating voltage eneral use current oort circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole phase - 3 pole  sechanical characteristics lechanical life onnection according to IEC 9471-1 and EN 50947-1	With flevible wires	120V 240V 200V 240V 480V 600V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles/hr	600/- 240/ 1 120
echnical data UL/CSA ated operating voltage eneral use current oort circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole phase - 3 pole  sechanical characteristics lechanical life onnection according to IEC 9471-1 and EN 50947-1	With flexible wires	120V 240V 200V 240V 480V 600V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles/hr	600/- 240/ 5 5
echnical data UL/CSA sted operating voltage eneral use current oort circuit rating @600Vac sse size (Class RØ, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole phase - 3 pole  sechanical characteristics echanical life onnection according to IEC 9471-1 and EN 50947-1		120V 240V 200V 240V 480V 600V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles/hr AWG	600/- 240/
echnical data UL/CSA ated operating voltage eneral use current oort circuit rating @600Vac use size (Class RKS, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole phase - 3 pole  lechanical characteristics techanical life onnection according to IEC 9471-1 and EN 50947-1 onnecting capability	With flexible wires With solid wires	120V 240V 200V 240V 480V 600V	UL/CSA A Arms 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> AWG mm <sup>2</sup>	600/- 240/ 120  50-70 ¹ 1/0-2/0 16-35
echnical data UL/CSA ated operating voltage eneral use current cort circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole phase - 3 pole    Clechanical characteristics   Clechanical life   Connection according to IEC 9471-1 and EN 50947-1   Connection care dimensions		120V 240V 200V 240V 480V 600V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles/hr  AWG mm² Type	600/- 240/ 120  50-70 ¹ 1/0-2/0 16-35 M10
echnical data UL/CSA ated operating voltage eneral use current over circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole phase - 3 pole  lechanical characteristics lechanical life ownection according to IEC 9471-1 and EN 50947-1 ownecting capability  ownection terminal screw dimensions crew tightening torque		120V 240V 200V 240V 480V 600V	UL/CSA A Arms 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> AWG mm <sup>2</sup>	600/- 240/ 120  50-70 <sup>1</sup> 1/0-2/0 16-35
echnical data UL/CSA ated operating voltage eneral use current over circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole phase - 3 pole  lechanical characteristics lechanical life ownection according to IEC 9471-1 and EN 50947-1 ownecting capability  ownection terminal screw dimensions crew tightening torque		120V 240V 200V 240V 480V 600V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles/hr  AWG mm² Type	600/- 240/ 120  50-70 ¹ 1/0-2/0 16-35 M10
echnical data UL/CSA ated operating voltage eneral use current over circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole  phase - 3 pole  lechanical characteristics echanical life ownection according to IEC 9471-1 and EN 50947-1 ownecting capability  ownection terminal screw dimensions crew tightening torque rotection degree IEC 529 EN 60529		120V 240V 200V 240V 480V 600V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles/hr  AWG mm² Type	600/- 240/ 120  50-70 ¹ 1/0-2/0 16-35 M10
echnical data UL/CSA ated operating voltage eneral use current ont circuit rating @600Vac use size (Class RK, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole  phase - 3 pole    Clean   Class   Cla		120V 240V 200V 240V 480V 600V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles/hr  mm² AWG mm² Type Nm	600/- 240/
echnical data UL/CSA ated operating voltage eneral use current hort circuit rating @600Vac use size (Class RK, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole  phase - 3 pole  Ilechanical characteristics techanical life  connection according to IEC 9471-1 and EN 50947-1 connecting capability  connection terminal screw dimensions crew tightening torque rotection degree IEC 529 EN 60529 erminals mbient conditions		120V 240V 200V 240V 480V 600V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles/hr  mm² AWG mm² Type Nm	600/- 240/
echnical data UL/CSA ated operating voltage eneral use current cort circuit rating @600Vac use size (Class RK5, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole phase - 3 pole    Class RK5, 600Vac, 200kA A.I.C.)    Class RK5, 600Vac, 200kA A.I.C.)   Cl		120V 240V 200V 240V 480V 600V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles/hr  mm² AWG mm² Type Nm	600/- 240/
echnical data UL/CSA ated operating voltage eneral use current oort circuit rating @600Vac use size (Class RK, 600Vac, 200kA A.I.C.) ated operating power phase - 2 pole phase - 3 pole  lechanical characteristics lechanical life onnection according to IEC 9471-1 and EN 50947-1 onnecting capability onnection terminal screw dimensions crew tightening torque rotection degree IEC 529 EN 60529 erminals mbient conditions		120V 240V 200V 240V 480V 600V	UL/CSA A Arms A Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 <sup>6</sup> Cycles/hr  mm² AWG mm² Type Nm	600/- 240/

#### Note:

<sup>&</sup>lt;sup>1</sup> = M10 bolt clamps

<sup>&</sup>lt;sup>5</sup> = a 500V