

Premas Ersce SpA
Via castellazzo 9 - 20040 Cambiago (MI)
Tel +39 02 95651611 Fax +39 02 95651639
www.bremas.eu info@bremas.it

ISO 9001 Certified Quality System

Cod. CA0160003S31

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

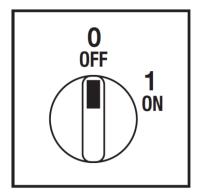




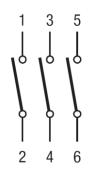
Technical characteristics: Body

- Side-operated ABS box
- IP65 Protection degree
- Rated operational current le: 16A (AC-21A)
- Rated thermal current Ith: 20A
- Rated insulation voltage Ui: 690V
- Knockout holes: 2xM20 and 2xPg16 / M20
- 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.

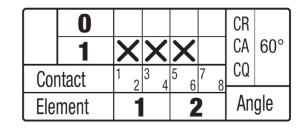
Positions



Electrical diagram



Electrical function





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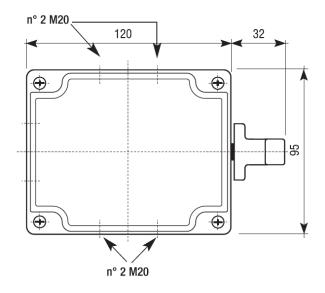
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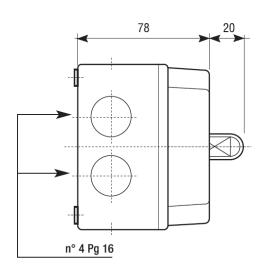
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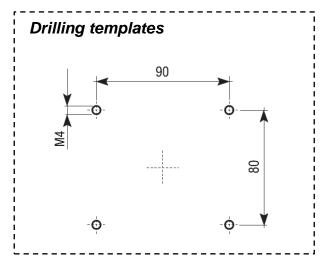
Cod. CA0160003PL2

Dimensions

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	20
Rated thermal current for enclosed switch	Ithe	Α Α	20
Rated operation frequency	Teric	Hz	50/60
Power dissipation for each pole		W	0,5
Rated operating current			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	2201		. (1.1)
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 .	Α .	240
Rated short-circuit make capacity	Icm -	A	
Rated conditional short-circuit current	500V	kA A	20
With fuses class gG	5000	А	20
Technical data UL/CSA		(00.1.)	5001
Rated operating voltage	Ue	UL/CSA V	600/-
General use current	le	UL/CSA A	16
Short circuit rating @600Vac		Arms	5000
Fuse size (Class RKS, 600Vac, 200kA A.I.C.)		A	25 (30)
Rated operating power			
1 phase - 2 pole	120V	Hp (A)	1 (16)
- 5000 500		Lim (A)	2 (12)
	240V	Hp (A)	2 (12)
	200V	Hp (A)	2 (7,8)
	200V 240V	Hp (A) Hp (A)	2 (7,8) 3 (9,6)
	200V 240V 480V	Нр (A) Нр (A) Нр (A)	2 (7,8) 3 (9,6) 7,5 (11)
3 phase - 3 pole	200V 240V	Hp (A) Hp (A)	2 (7,8) 3 (9,6)
3 phase - 3 pole Mechanical characteristics	200V 240V 480V 600V	Hp (A) Hp (A) Hp (A) Hp (A)	2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9)
3 phase - 3 pole Mechanical characteristics Panel thickness	200V 240V 480V	Hp (A) Hp (A) Hp (A) Hp (A)	2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9)
3 phase - 3 pole Mechanical characteristics Panel thickness Mechanical life	200V 240V 480V 600V	Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) Cycles x 10 ⁶	2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4
Mechanical characteristics Panel thickness Mechanical life	200V 240V 480V 600V	Hp (A) Hp (A) Hp (A) Hp (A)	2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9)
Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1	200V 240V 480V 600V Max	Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) mm Cycles x 10 ⁶ Cycles/hr	2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 2 120
Mechanical characteristics Panel thickness Mechanical life	200V 240V 480V 600V Max	Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) mm Cycles x 10 ⁶ Cycles/hr	2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 2 120
Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires	200V 240V 480V 600V Max Min-Max	Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm ² AWG	2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 2 120 2x1,5-4 16-10
Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires With solid wires	200V 240V 480V 600V Max	Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) mm Cycles x 10° Cycles/hr mm² AWG mm²	2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 2 120 2x1,5-4 16-10 2x1,5-6
Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With solid wires Connection terminal screw dimensions	200V 240V 480V 600V Max Min-Max	Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm² AWG mm² Type	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
Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires With solid wires Connection terminal screw dimensions Screw tightening torque	200V 240V 480V 600V Max Min-Max	Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) mm Cycles x 10° Cycles/hr mm² AWG mm²	2 (7,8) 3 (9,6) 7,5 (11) 7,5 (9) 4 2 120 2x1,5-4 16-10 2x1,5-6
Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires With solid wires Connection terminal screw dimensions Screw tightening torque Protection degree IEC 529 EN 60529	200V 240V 480V 600V Max Min-Max	Hp (A) Hp (A) Hp (A) Hp (A) Mm Cycles x 10 ⁶ Cycles/hr mm² AWG mm² Type Nm	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
Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires With solid wires Connection terminal screw dimensions Screw tightening torque Protection degree IEC 529 EN 60529 Terminals	200V 240V 480V 600V Max Min-Max	Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm² AWG mm² Type	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
Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires With solid wires Connection terminal screw dimensions Screw tightening torque Protection degree IEC \$29 EN 60529 Terminals Ambient conditions	200V 240V 480V 600V Max Min-Max	Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm² AWG mm² Type Nm	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
Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires With solid wires Connection terminal screw dimensions Screw tightening torque Protection degree IEC 529 EN 60529 Terminals Ambient conditions Operating ambient temperature	200V 240V 480V 600V Max Min-Max	Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm ² AWG mm ² Type Nm	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
Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires With solid wires Connection terminal screw dimensions Connection degree IEC 529 EN 60529 Protection degree IEC 529 EN 60529 Ambient conditions Operating ambient temperature Storage ambient temperature	200V 240V 480V 600V Max Min-Max	Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm² AWG mm² Type Nm	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 00 -25 ÷ +55 -30 ÷ +70
Mechanical characteristics Panel thickness Mechanical life Connection according to IEC 9471-1 and EN 50947-1 Connecting capability With flexible wires With solid wires Connection terminal screw dimensions Screw tightening torque Protection degree IEC 529 EN 60529 Terminals Ambient conditions Operating ambient temperature	200V 240V 480V 600V Max Min-Max	Hp (A) Hp (A) Hp (A) Hp (A) Hp (A) mm Cycles x 10 ⁶ Cycles/hr mm ² AWG mm ² Type Nm	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