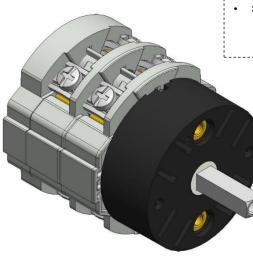
BREMAS

Bremas 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

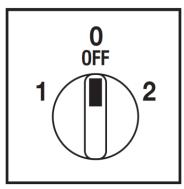
### Cod. CA0120034PL1



(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



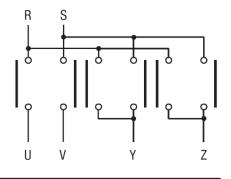
## Technical characteristics: Body

- Reversing switch single-phase motor + centrif.
- IP00 Protection degree
- Rated operational current le: 12A (AC-21A)
- Rated thermal current Ith: 16A
- Rated insulation voltage Ui: 690V
- Panel Mounting
- Fixing with 2 screw at 28mm vertical
- Switching angle: 45°
- 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.

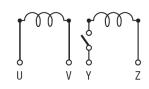
### Technical characteristics: Knob

- Transparent plate 52x52mm and black knob
- Fixing with 2 screws at 28mm vertical
- IP 40 Protection degree

### Electrical diagram and function







© 2017 Copyright Bremas Ersce. Subject to change without notice and errors excepted. Data reported in this paper are carefully checked and represent typical values of series production. The descriptions of the device and its applications, contexts of use, details of external controls, information on installation and operation are provided to the best of our knowledge. In any case, this does not mean that the features described may derive legal responsibilities that extend beyond the "Terms and Conditions" of Bremas Ersce. The customer / user is not absolved from the obligation to examine our information and recommendations and the relevant technical regulations before using the products for their own purposes.

 Bremas
 Ersce
 SpA

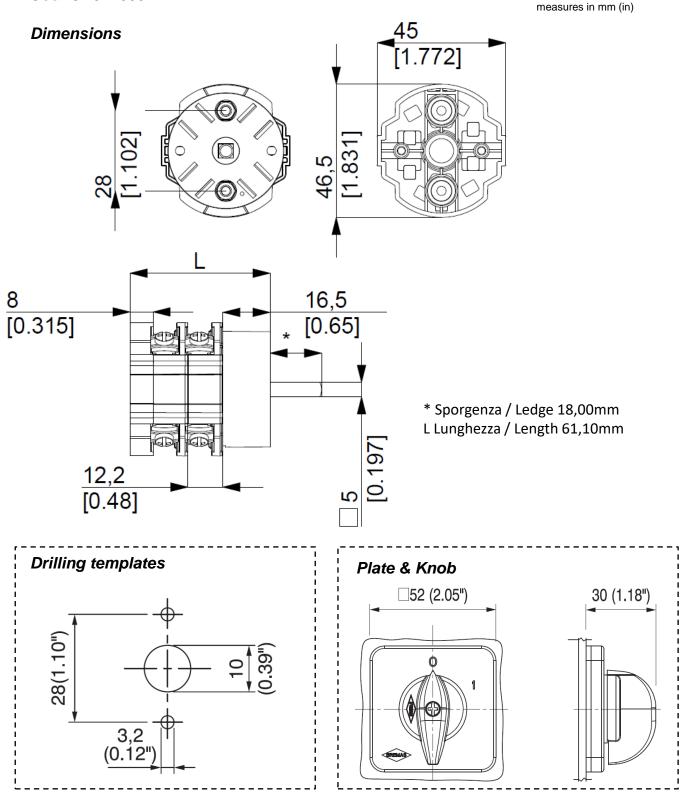
 Via castellazzo 9 - 20040
 Cambiago (MI)

 Tel +39 02 95651611
 Fax +39 02 95651639

 www.bremas.eu
 info@bremas.it

ISO 9001 Certified Quality System

# Cod. CA0120034PL1



© 2017 Copyright Bremas Ersce. Subject to change without notice and errors excepted. Data reported in this paper are carefully checked and represent typical values of series production. The descriptions of the device and its applications, contexts of use, details of external controls, information on installation and operation are provided to the best of our knowledge. In any case, this does not mean that the features described may derive legal responsibilities that extend beyond the "Terms and Conditions" of Bremas Ersce. The customer / user is not absolved from the obligation to examine our information and recommendations and the relevant technical regulations before using the products for their own purposes.



ISO 9001 Certified Quality System

# Cod. CA0120034PL1

Withstand to cyclic humid according to IEC 60068				2-30
Withstand to constant humid according to IEC 60068				2-78
Storage ambient temprature			°C	-30 ÷ +70
Operating ambient temperature			°C	-25 ÷ +55
Ambient conditions				
Ferminals			IP	00
Protection degree IEC 529 EN 60529				
Screw tightening torque			Nm	1
Connection terminal screw dimensions			Туре	M3,5
	With solid wires	Min-Max	mm²	2x1,5-6
		Min-Max	AWG	16-10
Connecting capability	With flexible wires	Min-Max	mm²	2x1,5-4
Connection according to IEC 9471-1 and EN 50947-1				
			Cycles/hr	120
Nechanical life		-	Cycles x 10 <sup>6</sup>	2
Panel tickness		Max	mm	4
Aechanical characteristics				
		600V	Hp (A)	5 (6,1)
		480V	Hp (A)	3 (4,8)
		240V	Hp (A)	2 (6,8)
phase - 3 pole		200V	Hp (A)	1,5 (6,9)
		240V	Hp (A)	1,5 (10)
phase - 2 pole		120V	Hp (A)	0,5 (9,8)
tated operating power				
iuse size (Class RK5, 600Vac, 200kA A.I.C.)			A	60
Short circuit rating @600Vac			Arms	5000
Seneral use current		le	UL/CSA A	12
Rated operating voltage		Ue	UL/CSA V	600/-
Fechnical data UL/CSA				
Nith fuses class gG		500V	A	16
Rated conditional short-circuit current		-	kA	4
Rated short-circuit make capacity		lcm	A	-
Rated short time withstand current		lcw	A	150
hort circuit protection				
		400V	A	72
Rated breaking capability in AC-23A (cos φ=0,45)		230V	A	72
		400V	A	3
IC-15 Control of a.c electromagnetic loads		230V	A	4
		400V	Kw (A)	-
C-4 Squirrel cage motors: starting, pluggign, inching		230V	Kw (A)	-
		400V	Kw (A)	-
		230V	Kw (A)	1,1 (6)
AC-3 Squirrel cage motors: starting, swtiching off motors during running 1 phase - 2 pole		110V	Kw (A)	0,37 (4)
		690V	Kw (A)	-
		500V	Kw (A)	-
		400V	Kw (A)	3,5 (7)
AC-3 Squirrel cage motors: starting, swtiching off motors during running 3 phase - 3 pole		230V	Kw (A)	2,2 (7)
		230V	Kw (A)	1,5 (8,5)
AC-23A Switching of motor loads or other highly inductive loads 1 phase - 2 pole		110V	Kw (A)	0,75 (8,5)
		690V	Kw (A)	-
		500V	Kw (A)	-
		400V	Kw (A)	4 (9)
AC-23A Switching of motor loads or other highly inductive loads 3 phase - 3 pole		230V	Kw (A)	3 (9)
Rated operating power				
AC-20A Connecting and disconnecting under no loads conditions				-
AC-22A Switching of mixed resistive and inductive loads, including moderate overloads		le	A	12
AC-21A Switching resistive loads, including moderate overloads		le	A	12
Rated operating current				
Power dissipation for each pole			W	0.27
Rated operation frequency		e	Hz	50/60
Rated thermal current for enclosed switch		Ithe	A	16
Rated thermal current for open switch		Ith	A	16
Rated impulse withstand voltage		Uimp	kV	6
		Ue	V	690
ated insulation voltage ated operating voltage		Ui	V	690

© 2017 Copyright Bremas Ersce. Subject to change without notice and errors excepted. Data reported in this paper are carefully checked and represent typical values of series production. The descriptions of the device and its applications, contexts of use, details of external controls, information on installation and operation are provided to the best of our knowledge. In any case, this does not mean that the features described may derive legal responsibilities that extend beyond the "Terms and Conditions" of Bremas Ersce. The customer / user is not absolved from the obligation to examine our information and recommendations and the relevant technical regulations before using the products for their own purposes.