

**Cod. CA0160008S31**

### Standard and Approvals

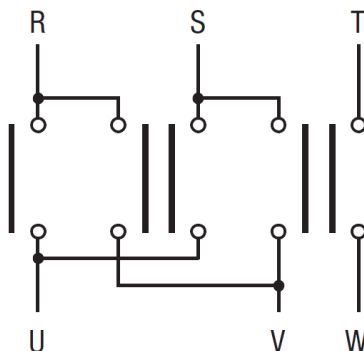
- Switch according to IEC/EN 60947-3
- Certified UL60947-4-1A and CAN/CSA C22.2 No. 60947-4-1-07
- Suitable as Manual Motor Controller



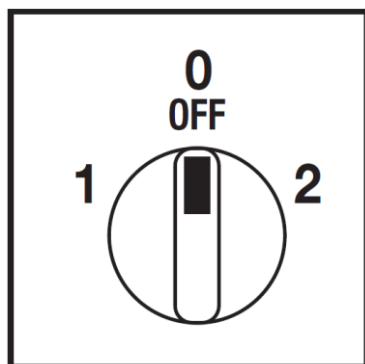
### Technical characteristics: Body

- Side-operated ABS box
- IP65 Protection degree
- Rated operational current  $I_e$ : 16A (AC-21A)
- Rated thermal current  $I_{th}$ : 20A
- Rated insulation voltage  $U_i$ : 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.

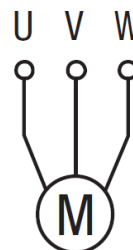
### Electrical diagram and function



### Positions



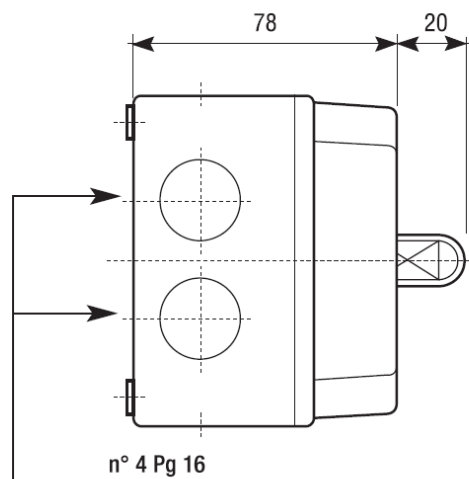
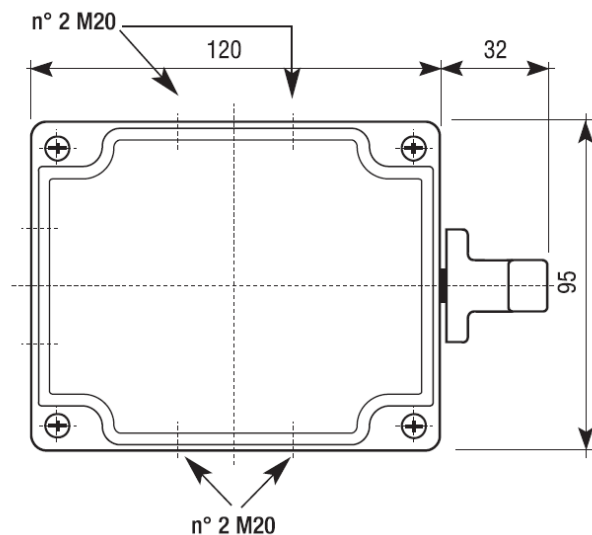
	<b>2</b>		<b>X</b>	<b>X</b>		<b>X</b>							CR	
	<b>0</b>												CA	60°
	<b>1</b>	<b>X</b>				<b>X</b>	<b>X</b>						CQ	
Contact		1	2	3	4	5	6	7	8	9	10	11	12	
Element		<b>1</b>				<b>2</b>				<b>3</b>				Angle



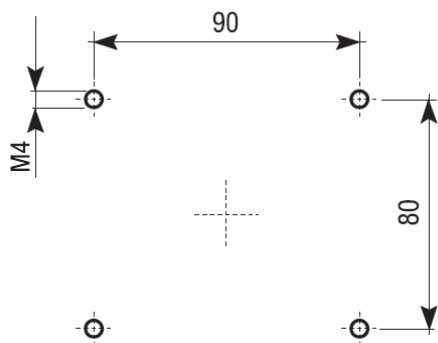
**Cod. CA0160008PL2**

measures in mm (in)

***Dimensions***



***Drilling templates***



### Cod. CA0160008PL2

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	A	20	
Rated operation frequency		Hz	50/60	
Power dissipation for each pole		W	0,5	
Rated operating current				
AC-21A Switching resistive loads, including moderate overloads	Ie	A	16	
AC-22A Switching of mixed resistive and inductive loads, including moderate overloads	Ie	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, switching 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, switching 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	Icw	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	Ie	UL/CSA A	16	
Short circuit rating @600Vac		Arms	5000	
Fuse size (Class RK5, 600Vac, 200kA A.I.C.)		A	25 (30)	
Rated operating power				
1 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	Hp (A)	7,5 (9)	
Mechanical characteristics				
Panel thickness	Max	mm	4	
Mechanical life		Cycles x 10 <sup>6</sup>	2	
		Cycles/hr	120	
Connection according to IEC 9471-1 and EN 50947-1				
Connecting capability	With flexible wires	Min-Max	mm <sup>2</sup>	2x1,5-4
		Min-Max	AWG	16-10
	With solid wires	Min-Max	mm <sup>2</sup>	2x1,5-6
Connection terminal screw dimensions		Type	M3,5	
Screw tightening torque		Nm	1	
Protection degree IEC 529 EN 60529				
Terminals		IP	00	
Ambient conditions				
Operating ambient temperature		°C	-25 ÷ +55	
Storage ambient temprature		°C	-30 ÷ +70	
Withstand to constant humid according to IEC 60068			2-78	
Withstand to cyclic humid according to IEC 60068			2-30	