

Cod. CA0259231C19VF

Standard and Approvals

- Switch according to IEC/EN 60947-3
- UL60947-4-1 and CAN/CSA C22.2 No. 60947-4-1-14
- Suitable as Manual Motor Controller
- Complies with CEI EN 61373 standard: Railway applications - Rolling stock equipment - Shock and vibration tests
- Complies with CEI UNI EN 45545 standard: Railway applications – Fire protection on railway vehicles



(purely indicative picture)

Technical characteristics: Body

- IP00 Protection degree
- Rated operational current Ie: 25A
- Rated thermal current Ith: 32A
- Rated insulation voltage Ui: 690V
- Panel mounting/Back for DIN rail
- Fixing single hole ø22mm
- Switching angle: 60°
- Class V0 self-extinguishing thermoplastic housing
- Assembled with metal shaft and threaded stud bolts to ensure maximum operating reliability
- Positive opening double break contacts, made of silver and alloy

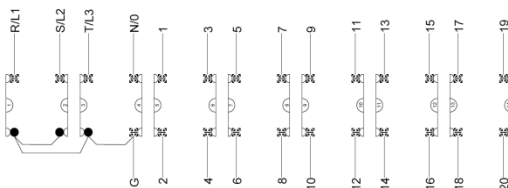
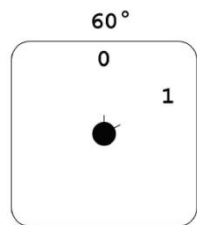
Technical characteristics: Plate and knob

- Key control
- Key removable in position **2** (H2 o'clock)
- Fixing single hole ø22mm

Positions

Electrical diagram

Electrical function



													XXXXXXXXXXXX																										POSITIONS
													XXXXXXXXXXXX																										
													XXXXXXXXXX																										1
1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	45	47	49	51	Contacts													
2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	Layers													
1	2	3	4	5	6	7	8	9	10	11	12	13																											

Posizioni:

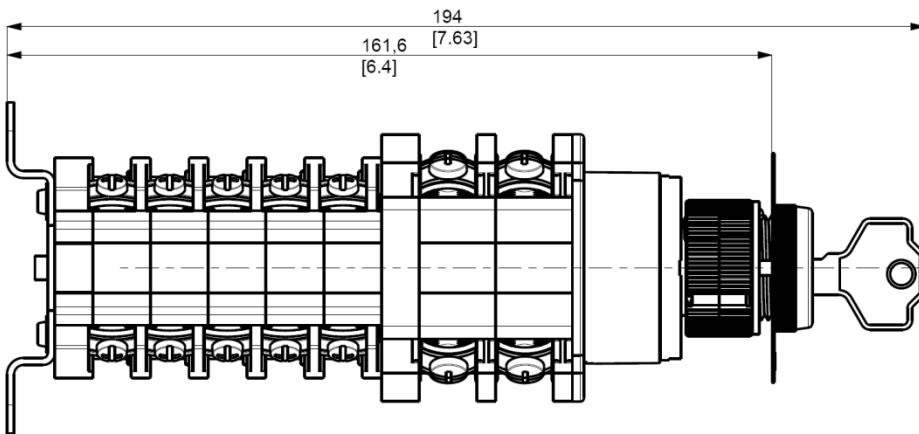
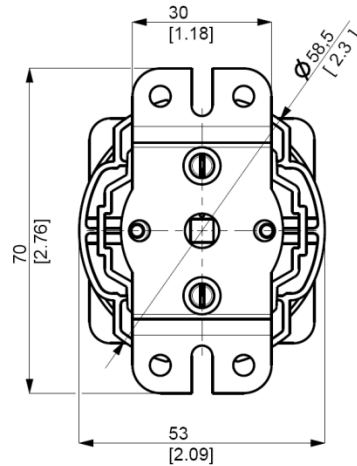
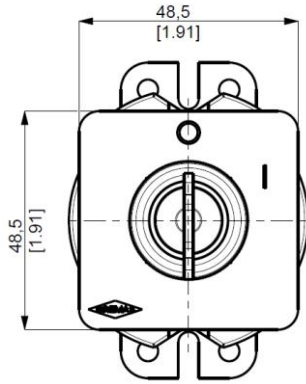


Key removable in this position

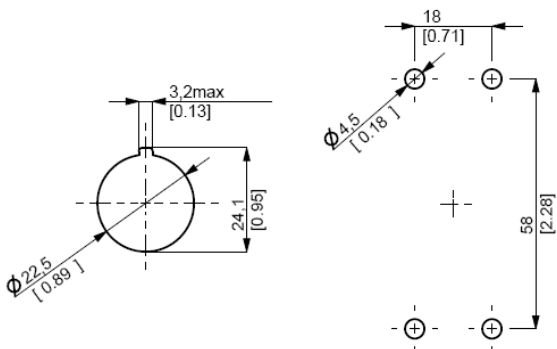
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measures in mm (in)

Dimensions



Drilling templates



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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		32
Rated thermal current for enclosed switch	Ithe	A		32
Rated operation frequency		Hz		50/60
Power dissipation for each pole		W		1
Rated operating current				
AC-21A Switching resistive loads, including moderate overloads	Ie	A		25
AC-22A Switching of mixed resistive and inductive loads, including moderate overloads	Ie	A		20
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)		7,5 (24)
	400V	Kw (A)		11 (20)
	500V	Kw (A)		11 (15)
	690V	Kw (A)		11 (11)
	110V	Kw (A)		2,2 (25)
AC-23A Switching of motor loads or other highly inductive loads 1 phase - 2 pole	230V	Kw (A)		3,7 (20)
	230V	Kw (A)		5,5 (17)
AC-3 Squirrel cage motors: starting, switching off motors during running 3 phase - 3 pole	400V	Kw (A)		9,5 (16)
	500V	Kw (A)		9,5 (12,5)
	690V	Kw (A)		8,5 (10)
	110V	Kw (A)		1,5 (17)
AC-3 Squirrel cage motors: starting, switching off motors during running 1 phase - 2 pole	230V	Kw (A)		3 (17)
	400V	Kw (A)		-
	230V	Kw (A)		2,2 (17)
AC-4 Squirrel cage motors: starting, pluggign, inching	400V	Kw (A)		3 (5,5)
	230V	Kw (A)		2,2 (17)
AC-15 Control of a.c electromagnetic loads	230V	A		8
	400V	A		6
Rated breaking capability in AC-23A (cos φ=0,45)	230V	A		192
	400V	A		160
Short circuit protection				
Rated short time withstand current	Icw	A		400
Rated short-circuit make capacity	Icm	A		2000
Rated conditional short-circuit current	-	kA		10
With fuses class gG	500V	A		35
Technical data UL/CSA				
Rated operating voltage	Ue	UL/CSA V		600/600
General use current	Ie	UL/CSA A		25/25
Short circuit rating @600Vac		Arms		5000
Fuse size (Class RK5, 600Vac, 200kA A.I.C.)		A		60
Rated operating power				
1 phase - 2 pole	120V	Hp (A)		2 (24)/-
	240V	Hp (A)		3 (17)/6
3 phase - 3 pole	200V	Hp (A)		5 (17,5)/-
	240V	Hp (A)		7,5 (22)/-
	480V	Hp (A)		10 (14)/-
	600V	Hp (A)		10 (11)/15
Mechanical characteristics				
Panel tickness	Max	mm		4
Mechanical life		Cycles x 10 ⁶		1,5
		Cycles/hr		120
Connection according to IEC 9471-1 and EN 50947-1				
Connecting capability (layer 1 and 2)	With flexible wires	Min-Max	mm ²	2x2,5-10
		Min-Max	AWG	14-8
Connecting capability (layer from 3 to 7)	With solid wires	Min-Max	mm ²	2x2,5-16
		Min-Max	AWG	2x1,5-4
	With flexible wires	Min-Max	mm ²	16-12
		Min-Max	mm ²	2x1,5-6
Connection terminal screw dimensions (layer 1 and 2)		Type		M4
Screw tightening torque (layer 1 and 2)		Nm		1,7
Connection terminal screw dimensions (layer from 3 to 7)		Type		M3,5
Screw tightening torque (layer from 3 to 7)		Nm		1
Protection degree IEC 529 EN 60529				
Terminals		IP		00
Ambient conditions				
Operating ambient temperature		°C		-40 ÷ +85
Storage ambient temprature		°C		-40 ÷ +85
Withstand to constant humid according to IEC 60068				2-78
Withstand to cyclic humid according to IEC 60068				2-30