

## Technical data

### Compliance with standards

IEC 947.5.1 - VDE 0660 - NFC63140  
CEI EN60947.5.1 - UTE - BSI - NEMA  
CENELEC EN 50007

### A p p r o v a l s

UL (U.S.A) - CSA (Canada) - RINA  
Lloyd's Register of Shipping - Bureau Veritas

### Climatic protections

The standard versions are suitable for use in the following climates:

Temperate climate	cat. 23/50 (DIN 50014)
Wet climate	cat. 23/83 (DIN 50015)
Hot wet climate	cat. 40/92 (DIN 50015)
Variable wet climate	FW24 (DIN 50016)

### Temperature ranges

Operation	-25 °C to + 70 °C
Storage	-40 °C to + 70 °C

### Protection degree of the operators

IP66 according to CENELEC EN 60529 when they are mounted into enclosures with the same or a higher degree of protection.  
Suitable for using into enclosures type NEMA  
1-3-3R-3S-4-4X-12-13 according to UL 508.

### Protection degree of the terminals

IP2x according to CENELEC EN 60529.

### Shock resistance (acc. to MIL 202 B method 202 A)

1/2 sinusoid 11 ms:  
No damage or disassembling at 100 g for all devices, except for the illuminated operators with transformer 38 g.

### Vibration resistance (according to IEC 68-2-6)

16 g with frequency range from 40 to 500 Hz and maximum shifting 0.75 mm (peak-to-peak).

### Rated insulation voltage

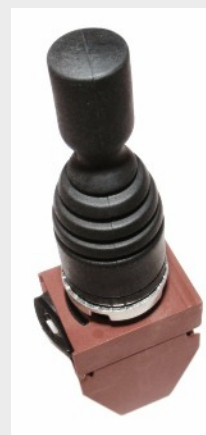
690V according to EN 60947.1

### Impulse withstand voltage

4 kV according to EN 60947.1

### Insulation class

Groep C according VDE 0110



### Electrical shocks protection (acc. IEC 536)

Metal operators	Class I
Plastic operators	Class II (double insulation)

### Short-circuit protection

With fuses 16A gG according to IEC 269.1 and 269.3.

### Performances of the contacts

- Slow acting
- Self-cleaning sliding
- NC forced breaking
- Double movable bridge
- Four switching points
- Double break

### Electrical resistance of the contact

25 m according to IEC255, cat. 3

### Identification of the terminals

According CENELEC EN 50013

### Electrical performances

Rated thermal current I<sub>th</sub> = 10 A

#### Performances according IEC 947.5.1

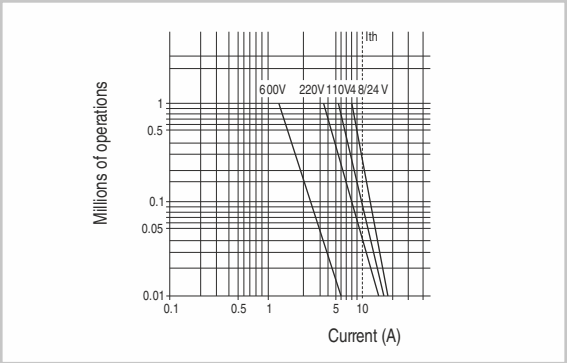
Categorie AC 15										
Vo lta g e	Ue (V)	24	48	60	110	220	380	500	600	
Current	Ie (A)	10	10	10	6	3	2	1.5	1.2	
Categorie DC 13										
Voltage	Ue (V)	24	48	60	110	220	300			
Currente	Ie (A)	2.5	1.4	1	0.55	0.27	0.2			

#### Performances according to CSA and UL

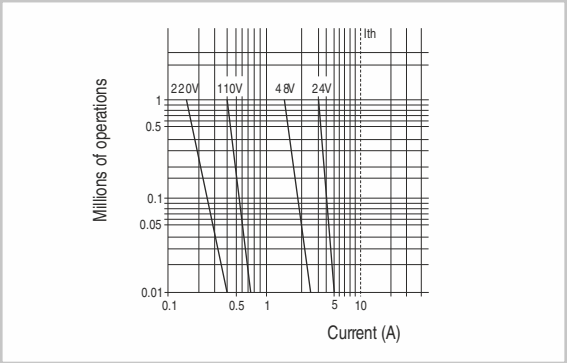
AC HeavyDuty(A600)DC	
StandardDuty(Q300)	

## Electrical endurance

Alternative current 50/60 Hz cat. AC 15



Direct current cat. DC 13

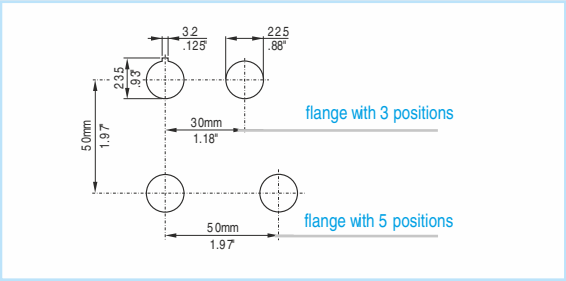


## Mechanical endurance

Joysticks	0.5 Mil./op.

## Mounting

Fitted for panels 1 to 6 mm. thick with holes drilled according to CENELEC EN 50007 standards.



## Rear panel modularity

The P9series is composed with 10mm or a multiple of 10mm modular units ,fitted side by side on a proper mounting flange .  
The standard operators are supplied with a three position flange with a capacity of 3units of 10mm or 1 of 10mm and 1 of 20mm or 1 of 30mm .  
When the three position flange is not enough to satisfy the applications needs ,the five position flange is required to add two more units of 10mm mounted side by side .  
Using the five position flange take in to account the bigger with (50mm instead of 30mm ).