

# ELECTRICAL CONTACT (ELECTROMECHANICAL) SNAP CONTACT (MAGNET ASSISTANCE)

*Electromechanical limit value switches in pointer-type measuring instruments are auxiliary current switches which—depending on the direction of movement—open or close electrical circuits at the set limit values by means of a contact arm which is moved by the actual value pointer.*

### Snap-Action Contacts Essentially Comprise:

- An adjustable orange set pointer
- A supporting arm which is connected to the orange set pointer & carries the contact pin and magnet
- A contact arm moved by the actual pointer carrying the second contact point

### Mode of Operation

The snap-action contact is a mechanical contact for switching capabilities up to 30W 50VA maximum.

The contact making will be delayed and or advanced in relation to the movement of the actual value pointer.

To close the circuit, the contact pin of the movable contact arm is attracted in a jump by the permanent magnet fastened to the supporting arm shortly before the set valve has been reached. Due to the retention force of the magnet, snap-action contacts are more resistant against shock and vibration. Switching safety is increased by the contact pressure.

When the circuit is opened the magnet keeps the contact arm in its place until the restoring force of the measuring pointer exceeds the magnetic force and the contact opens in a jump. This changes pointer reading 3-6% full scale.

### Standard Contacts

V	DC	AC	INDUCTIVE LOAD
220	100mA	120mA	65mA
110	200mA	240mA	130mA
48	300mA	450mA	200mA
24	400mA	600mA	250mA

FOR VOLTAGES BELOW 40V THE CURRENT MUST NOT EXCEED 1A

To guarantee maximum switching safety and to avoid switching interruptions and to increase the switching power, we recommend using a relay.

The service life of the contact devices is considerably increased, because the contacts open and close under no voltage in 99% of the cases.

### To Set Switch:

1. Depress the knob in the nose piece of the switch and turn it to the left or right. This will engage a pin.
2. Now move the pin connected to the orange set pointer. This carries the set pointer to the desired temperature settings.
3. The set pointer on the left side is for the low setting. The switch on the right side is for the high setting.
4. The high and low setting might need to be slightly moved if switch activates too early. Just move set pointer.
5. If one side of the contact is not used, rotate the set pointer out of the range thermometer.

### TERMINAL CONFIGURATION

Snap Action Double Contact	2	1 <sup>st</sup> Contact
	3	2 <sup>nd</sup> Contact
	4	Common

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