



RCS-3 Capswitch

---Monostable magnetic actuator

---Advanced manual close and open



Longest Life of ANY Distribution Capacitor Switch with 30,000

Maintenance-Free Operations!

Catalogue

Rockwill Electric Co., Ltd.

++++General

The Rockwill's new generation RCS capacitor switch is a long mechanical life design vacuum switch that provides an operational life of over 100,000 (30,000open/close) maintenance-free operations.

Using the RCS will result in substantial savings from reduced maintenance and maximized bank uptime and will also improve Power Quality.

The RCS all comply with relevant standards.

++++Using condition

Ambient temperature: $-40^{\circ}\text{C}\sim+85^{\circ}\text{C}$, day temperature difference: 25°C ;

Altitude: $\leq 1000\text{m}$ area;

Wind speed no exceeds 35m/s ;

No normally intensity vibration

No intensity erosion gas, medium place (for example acid, alkali, smother eg.)

Pollution class: IV class;

Charge temperature $-40^{\circ}\text{C}\sim+85^{\circ}\text{C}$.

++++Offering

With optional choice by Normal type and magnetic actuator mechanism.



Magnetic actuator, RCS-3 Standard type

This advanced design monostable type magnetic actuator. With mechanical life 100,000 times.(10 times of spring type mechanism RCS)

Intelligence capacitor switch controller

Note:

More controller specifications see controller manual.



Normal type(Spring mechanism)RCS-3N

This normal type can only provide with spring device and mechanical life is design for 10,000 times. Free maintenance operations for 3000times.

Note:

Spring type mechanism RCS is cheaper cost.

With optional classes for rated current range:

For 11kV, with 600A, Max 32.5kA fault making peak capacity.

For 15kV, with 600A, Max 32.5kA fault making peak capacity..

For 27kV, with 600A, Max 32.5kA fault making peak capacity..

For 38kV, with 600A, Max 32.5kA fault making peak capacity .

With optional communication protocols & I/O port for user choice:

RS-232 and RS-485 ports supporting.

DNP3.0 communication protocol support(*).

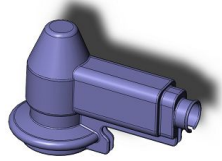
Modbus communication protocol is optional(*).

IEC 60870-5-101 communication protocol support.

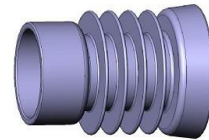
The Capacitor switch can communicate through GPRS(Or GSM) modem with English or Chinese language (*).

Note: (*) mean should customized by manufacturer if needed.

++++Accessories of RCS



Upper terminal Insulator cover 3 pcs/set



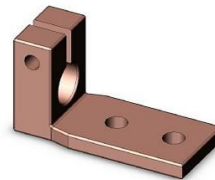
Lower expanding bushing 3 pcs/set

Note:

all above insulating components for BIL 170kV expanding using. Any question pls contact with our engineer.



Upper terminal 3 pcs/set



Lower terminal 3 pcs/set

Note: Standard made of T2 copper material, for 630A rated current using. With expanding range.

++++Main new advantages of RCS capacitor switch

High reliable manual opening device

High reliable manual closing device



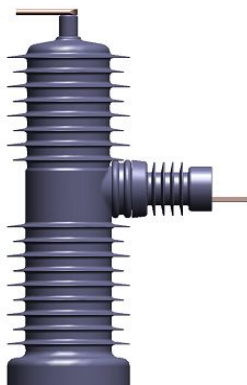
Visible ON/OFF indicator

IP64 class waterproof plug connector

Note:

ROCKWILL Supply special design manual closing device technology with own patent, It applied for normal and abnormal situation closing. Its closing speed(time) comply with IEC62271-100(GB1984-2003 standard)

This function can offset from magnetic actuator fault which when actuator can't work will cause the major accident..



Primary incomer terminal(directly connect to interrupter reduce power lost)

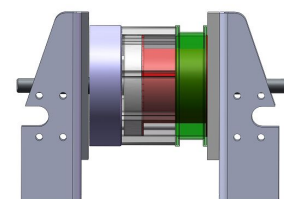
Vacuum interrupter(Adopt the APG technology with external silicone rubber mold pressure covering, increasing the whole insulation and weathering performance)

Outlet bushing (external modular design easy for quality control and maintenance)

Apply ANSOFT design the high performance magnetic actuator, high reliable and free maintenance. Through 35,000 times opening reverse excitation test, the demagnetization rate less than 1%.

Note:

ROCKWILL supply special patent modular design mono-stable type magnetic actuator with two coils controlling. Its the best design for vacuum RCS capswitch.



+++++ Main technical parameter

Main technical data of the RCS

No.	Item	Unit	Data
1	Rated voltage	KV	11/15/27/38*
2	Capacitive switching current	A	200 up to 600
3	Rated frequency	HZ	50/60
4	Power frequency 1min	Dry	60/79/85*
		Wet	55/65/70*
5	Lightning impulse withstand voltage(peak value)alternate, opposite/fracture	kV	75/95/110/125/150/170*
6	Short-time symmetrical withstand current	kA	8/6.3/6.3
7	Fault making peak current	kA	32.5
8	Symmetrical fault-making current	kA	16/12.5
9	High frequency transient making peak current	kA	25
10	Rated operating circulate		O-0.3S-CO-3S-C (3S minimum)
11	Rated transient inrush frequency	Hz	6000
12	Withstand peak current	kA	32.5
13	Mechanism life	times	30,000
14	Secondary loop 1 min power frequency withstand voltage	KV	2
15	Auxiliary voltage	V	110/200 AC/DC

Note: (*) is meant special for optional. When needed should discuss with our engineer.

Exceeds Electrical Requirements of ANSI C37.66

+++Creepage Distances of RCS capacitor switch

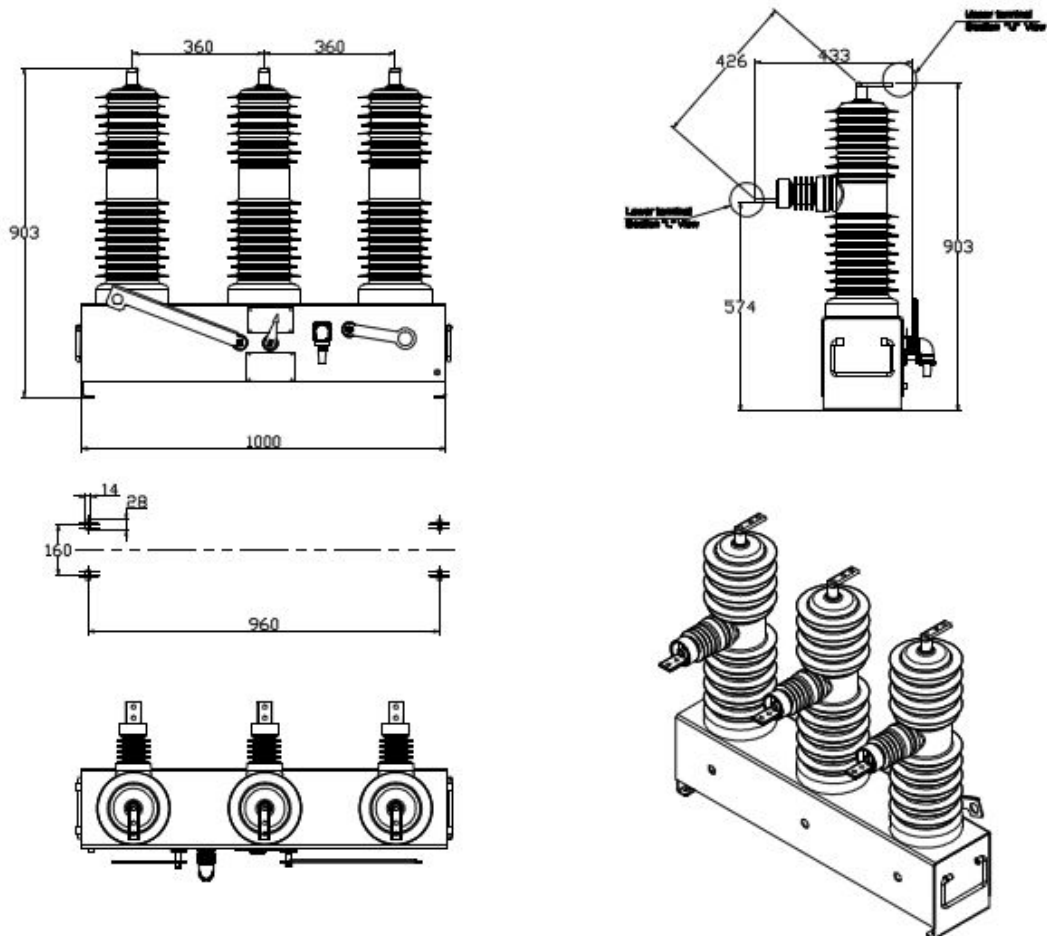
Description	15kV BIL 75kV	15kV BIL 95kV	15kV BIL 110kV	27kV BIL 125kV	27kV BIL 150kV	38kV BIL 170kV
T to T*	406mm		960mm			
T to G/E*	460mm		1020mm			

Note:

T to T* -----Terminal to terminal creepage

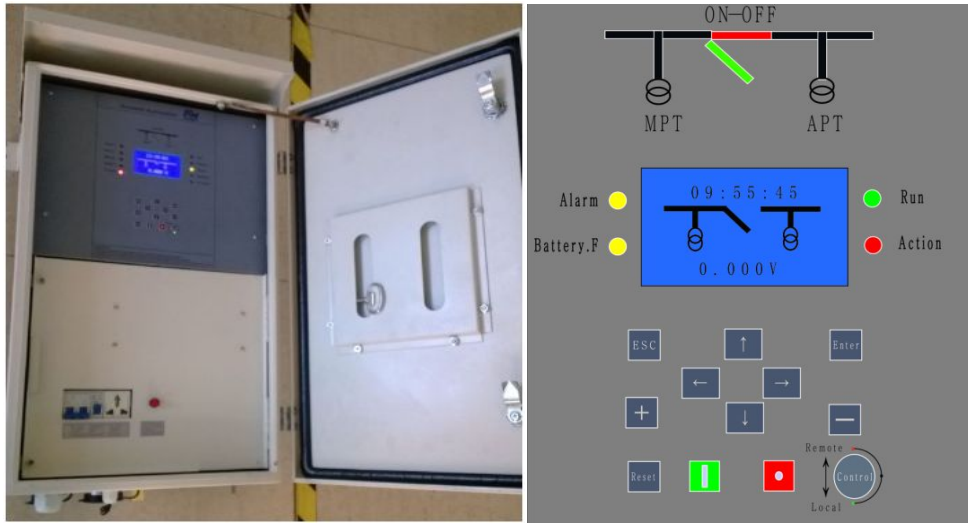
T to G/E* -----Terminal to ground/earth creepage

+++Outline & Sizes for RCS



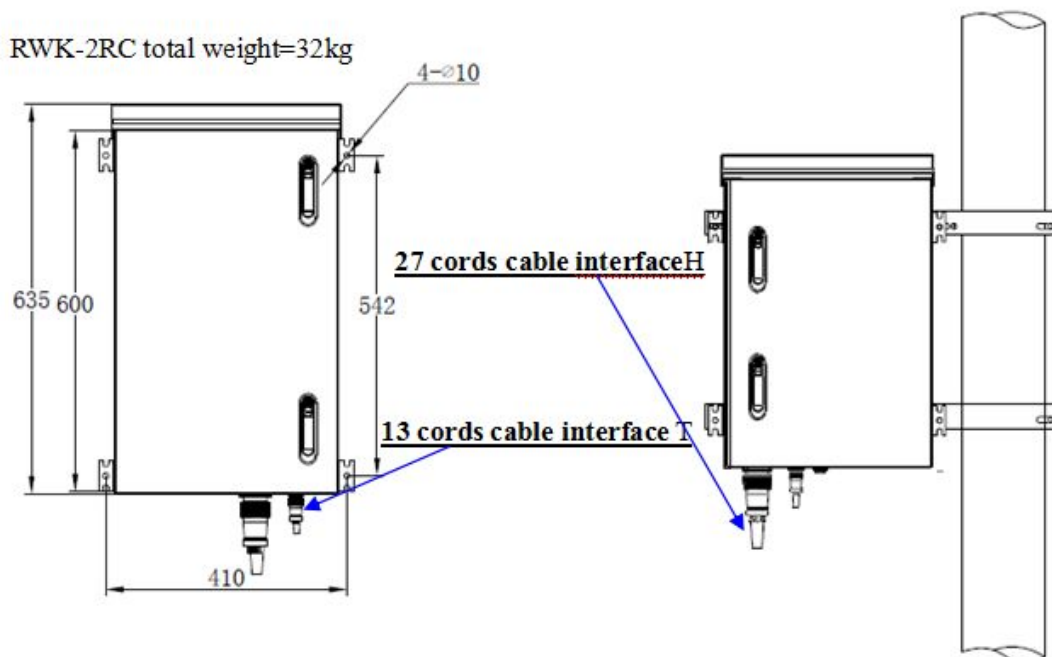
Installation way for 27kV RCS capacitor switches reference.

++++Capacitor switch controller features



RWK-NCB Capacitor Switch controller Cooperate with Reactive power compensation device or manual operation, to implement the switch of the Capacitor. The controller can record, self-inspection event, device start event, device action event.

++++Outline & Sizes for RCS capacitor switch controller



++++Before order pls clear of your requirement.

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