

MEVOCO

MEDIUM VOLTAGE COMPONENTS

THE ONE STOP SHOP FOR MEDIUM VOLTAGE COMPONENTS



RV 53 Load Break Switch

Secured integration for safe and responsible electrical distribution

Mevoco's RV 53 Load Break Switch is an innovation that builds on the original design qualities of the RV 44, while integrating an earthing switch to create a **three position switch** (ON/OFF/EARTH).

www.mevoco.be

Flexible operations

The patented concept combines an optimized gas rotation with a high precision of the mobile contacts to ensure:

- Efficient arc interrupting
- Limited erosion of the contact points
- High dielectrical withstand voltage

Safety at work

The Load Break Switch is filled with SF₆ gas, having exceptional isolating and arc interrupting characteristics. Optimal security is ensured by means of a “sealed for life” concept. All non-ferrous components of the switch are free of halogen, resistant to UV and ozone, reinforced with fibreglass and manufactured according to the class UL 94 V0.

Easy operation

The Load Break Switch is a three-position switch preventing any incorrect operation. The “open, close or earthed” position of the switch is clearly indicated on the synoptic diagram by means of an indicator directly linked to the shaft of the switch. Depending on the model, the Load Break Switch can be manually or motor operated.

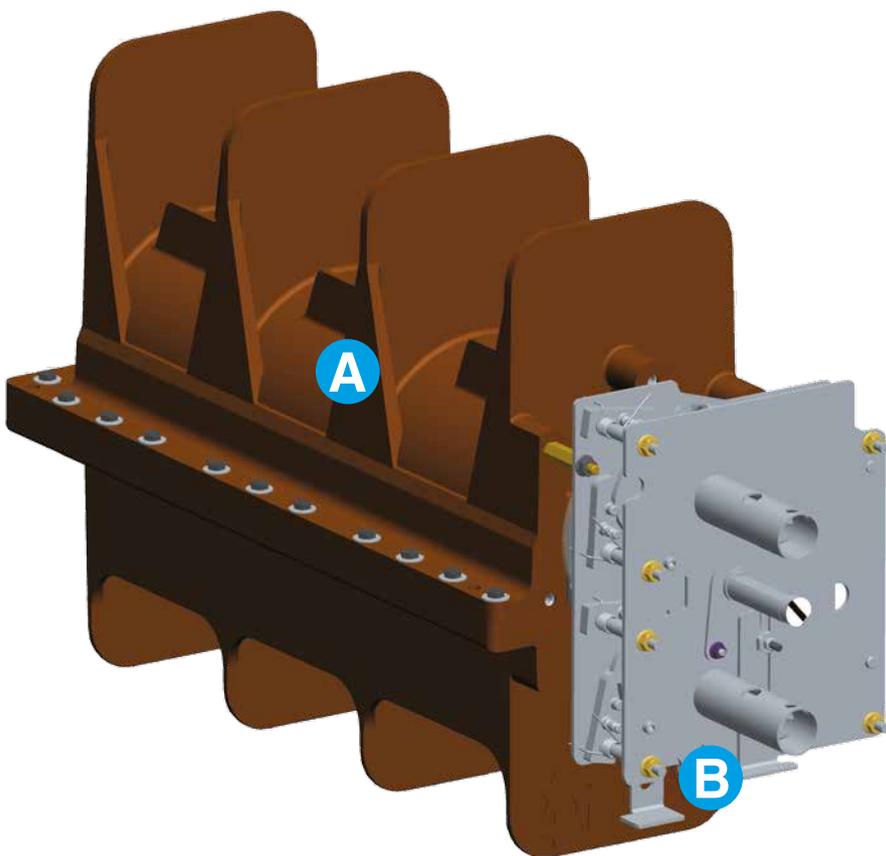
Complementary safety can be provided by extending the switch with an earthing switch or / and with a fuse combination.

Earthing switch

A single drive mechanism is used for the operation of the combination RV 53 Load Break Switch and Earthing Switch. An interlock provides high safety by preventing any incorrect operation. The operator can view the position of the earthing switch at all times through the window integrated in the front doors of the switchgear.

Fuse combination

By using a fuse combination, the Load Break Switch can be extended with the fuse holders and a auxiliary earthing switch. Both earthing switches are mechanically linked and so they are open and close simultaneously. When a fuse blows, a tripping mechanism is activated by the striker of the fuse, causing the three phases of the Load Break Switch to open simultaneously. Other mechanical drive versions are also available



A RV 53 Load Break Switch & Earthing Switch
B Mechanical Drive



Drive mechanism

- Components manufactured from special alloyed types of steel
- Completely prepared for eventual mounting of available options in a later stage (auxiliary contacts, key interlocks, opening and closing coils, etc.)
- Indicators always show the correct position of the switches
- Manually or motor operated drive (with operating handle)
- Operating shafts are mechanically interlocked, preventing any incorrect operation
- No movable parts accessible, preventing any injuries
- Two main drives:
 - **DA53- Drive mechanism**
(Combination Load Break Switch and Earthing Switch)
 - **DP53- Drive mechanism**
(Load Break Switch and Earthing Switch / Fuse combination)

The advantages

(RV53 is a Load Break Switch with an integrated Earthing Switch)

- Maintenance friendly and fully integrated earthing switch.
- Operation of switch in one mechanical drive with one operating shaft.
- Operating shafts are mechanically interlocked, preventing any incorrect operation.
- Possible combination of other Mevoco mechanical drives and options.

Technical Specifications

Rated Voltage	kV	12	17,5	24
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Rated lightning impulse withstand voltage 1.2/50 µsec				
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- To earth and between phases	kV	75	95	125
- Over the insulated distance	kV	85	110	145

Rated short time power frequency withstand voltage 1 min.				
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- To earth and between phases	kV	28	38	50
- Over the insulated distance	kV	32	45	60

Rated frequency	Hz	50/60	50/60	50/60
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Rated current	A	630	630	630
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Rated short time withstand current 1 sec	kA	20	20	20
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Rated peak value withstand current	kA	50	50	50
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Breaking capacity of the RV 53 (IEC 62271-102)				
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- Mainly active load	A	630	630	630
- Closed loop distribution circuit current	A	630	630	630
- Cable charging current	A	18	18	18
- Making capacity	kA	63	63	50
- Earth faults	A	100	100	100
- Cable and line charging current under earth fault	A	30	30	30

Protection degree : IP65
 Mechanical endurance : 1000
 Standards : IEC 62271-100, IEC 62271-105, IEC 60694, IEC 62271-102
 Certification : KEMA, IPH

¹ as an option

Sealed for life

Mevoco's RV 53 load break switch is sealed for life, which ensures:

- Permanent safety and reliability:
- Sealed with double O rings to ensure perfect sealing
- Helium leak tested



For more information on RV 53 or our other products, contact our sales team
 ⚡ sales@mevoco.be



DA53-DRIVE MECHANISM

	¹	²	³	⁴
Drive mechanism	DA53-MEC	DA53-M-MEC	DA56-MEC	DA56-M-MEC
Load Break Switch function	•	•	•	•
Earthing Switch function	•	•	•	•
Manually operated	•	• ¹	•	• ¹
Motor operated	-	•	-	•

DP53-DRIVE MECHANISM

	⁵	⁶	⁷	⁸
Drive mechanism	DP53-MEC	DP53-M-MEC	DP56-MEC	DP56-M-MEC
Load Break Switch function	•	•	•	•
Earthing Switch function	•	•	•	•
Manually operated	•	• ¹	•	• ¹
Motor operated	-	•	-	•

¹ in case of motor malfunction

² as an option

MEVOCO

MEDIUM VOLTAGE COMPONENTS

Mevoco spearheads a drive for the development of medium voltage components that excel in quality and safety. Mevoco's range of products includes load break switches, circuit breakers, voltage detectors, a relay, and an arc-killer. Among its innovations, Mevoco created the Arc-killer SV-25, a patented mechanism that dramatically improves safety in medium voltage cubicles. It maximizes not only operator safety, but it reduces material damage as well. The story lies at the heart of a vision for safer medium voltage components. Mevoco is located in Belgium, at the heart of an international transportation network. It ships products worldwide.



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Our products



RV 44
Load break switch



RV 50
Load break switch



RV 53
Load break switch



RV 54
Load break switch
(submersible)



HR-2
(Non-)integrated
voltage detector



HR-3
Integrated
voltage-detector



VA(S)-2(RP)
Vacuum circuit
breaker



RP600
Digital Protection Relay



SV-25
Arc-killer



SV-50
Arc-killer