

# MEVOCO

MEDIUM VOLTAGE COMPONENTS

THE ONE STOP SHOP FOR MEDIUM-VOLTAGE COMPONENTS



## RV 44 Load Break Switch

Secured integration for safe and responsible electrical distribution

The development of the **RV 44 Load Break Switch** became the foundation of the revolutionary modular switchgear - the DF-2 family. An **epoxy casted housing**, a **patented interrupting concept**, **extreme reliability and safety provisions** characterize the RV 44 Load Break Switch.

[www.mevoco.be](http://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 SF<sub>6</sub> gas, having exceptional isolating and arc interrupting characteristics. Optimal security is ensured by the means of a "sealed for life" concept. All non-ferrous components of the switch are free of halogen, resistant to the UV and ozone, reinforced with fibreglass and manufactured according to the class UL 94 V0.

## Easy operation

The Load Break Switch is a two-position switch preventing any incorrect operation. The "open" or "close" 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 hand, coil or motor operated.

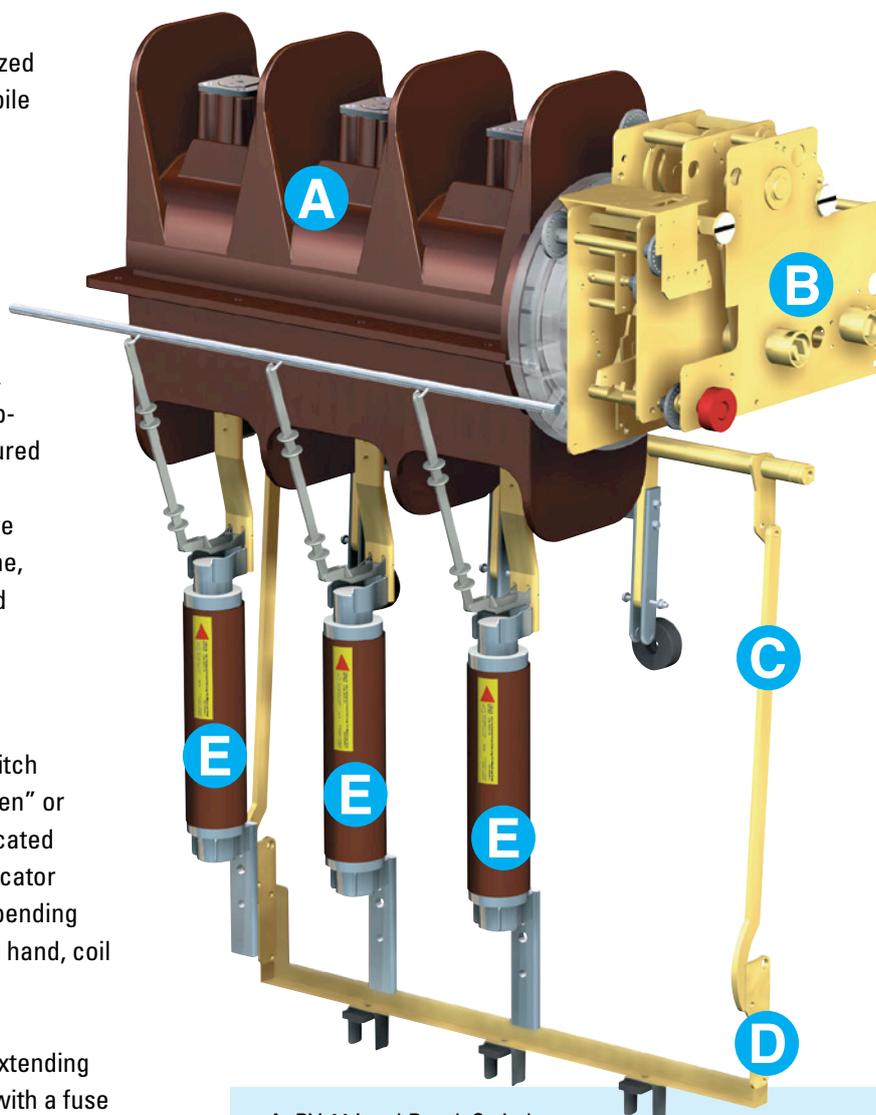
Complementary safety can be provided by extending the switch with an earthing switch or / and with a fuse combination.

## Earthing switch

A single drive mechanism is used for the operation of the combination RV 44 Load Break Switch and EM98 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 an auxiliary earthing switch. Both earthing switches are mechanically linked, so they open and close simultaneously. When a fuse blows, a switch-off mechanism through a hitting bolt opens the three phases of the Load Break Switch simultaneously. Other mechanical drive versions are also available.



- A RV 44 Load Break Switch
- B Mechanical drive
- C EM98 Earthing Switch
- D Auxiliary Earthing Switch
- E Fuse holders

## 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
- Hand or motor operating drive (with operating handle)
- Operating shafts are mechanically interlocked, preventing any incorrect operation
- No movable parts accessible, preventing any injuries
- Two main drives:
  - **DA98 - Drive mechanism**  
(Combination Load Break Switch and Earthing Switch)
  - **DP99 - Drive mechanism**  
(Load Break Switch / Fuse combination)

## ⚡ The advantages

(Combination RV 44 Load Break Switch and EM98 Earthing Switch)

- Maintenance friendly and easily accessible earthing switch.
- Operation of both switches in one single mechanical drive with two separate operating shafts.
- Operating shafts are mechanically interlocked, preventing any incorrect operation.
- Possible combination of other Mevoco mechanical drives and options.

## ⚡ Technical Specificities

|               |    |    |      |    |
|---------------|----|----|------|----|
| Rated Voltage | kV | 12 | 17,5 | 24 |
|---------------|----|----|------|----|

|   |    |    |     |     |
|---|----|----|-----|-----|
| Rated lightning impulse withstand voltage 1.2/50 µsec |    |    |     |     |
| - 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. |    |    |    |    |
| - 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   |
| Rated current                            | A  | 800/1250 <sup>1</sup> | 800/1250 <sup>1</sup> | 630/800 |
| Rated short time withstand current 1 sec | kA | 25                    | 25                    | 20      |
| Rated peak value withstand current       | kA | 63                    | 63                    | 50      |

|   |    |          |          |     |
|---|----|----------|----------|-----|
| Breaking capacity of the RV 44 (IEC 62271-102)      |    |          |          |     |
| - Mainly active load                                | A  | 800/1250 | 800/1250 | 630 |
| - Closed loop distribution circuit current          | A  | 800/1250 | 800/1250 | 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

<sup>1</sup> as an option

## ⚡ Sealed for life

Mevoco's RV 44 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 44 or our other products, contact our sales team  
 ⚡ [sales@mevoco.be](mailto:sales@mevoco.be)



### DA-DRIVE MECHANISM

|                            | <sup>1</sup> DA-MEC | <sup>2</sup> DA-M-MEC | <sup>3</sup> DA-K-MEC | <sup>4</sup> DA-K-M-MEC | <sup>5</sup> DA-EDN-D-MEC |
|----------------------------|---------------------|-----------------------|-----------------------|-------------------------|---------------------------|
| Drive mechanism            | •                   | •                     | •                     | •                       | •                         |
| Load Break Switch function | •                   | •                     | •                     | •                       | •                         |
| Earthing Switch function   | •                   | •                     | -                     | -                       | •                         |
| Hand operated              | •                   | • <sup>1</sup>        | •                     | • <sup>1</sup>          | •                         |
| Motor operated             | -                   | •                     | -                     | •                       | • <sup>2</sup>            |

### DP-DRIVE MECHANISM

|                            | <sup>6</sup> DP-MEC | <sup>7</sup> DP-M-MEC | <sup>8</sup> DP-A-MEC | <sup>9</sup> DP-A-M-MEC |
|----------------------------|---------------------|-----------------------|-----------------------|-------------------------|
| Drive mechanism            | •                   | •                     | •                     | •                       |
| Load Break Switch function | •                   | •                     | •                     | •                       |
| Earthing Switch function   | •                   | •                     | •                     | •                       |
| Hand operated              | •                   | • <sup>1</sup>        | •                     | • <sup>1</sup>          |
| Motor operated             | -                   | •                     | -                     | •                       |

<sup>1</sup> in the case of non function of the motor  
<sup>2</sup> 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.



## Mevoco nv

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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 / HR-3**  
(Non-)integrated  
voltage detector



**VA-2**  
Vacuum circuit breaker



**SV-25**  
Arc-killer



**RP600**  
Digital Protection Relay