

#### THE ONE STOP SHOP FOR MEDIUM VOLTAGE COMPONENTS



# VA(S)-2(RP) Circuit Breakers

Reliable protection of your distribution network

Mevoco's new generation VA(S)-2(RP) vacuum circuit breaker proves that Mevoco is once again a safe and reliable partner for medium voltage components

#### VA-2(S) Concept

The Mevoco vacuum circuit breaker, like all the other components of the product range, is based on the DF-2 modular switchgear concept, synonymous with high reliability and safety. The VA(S)-2 concept offers the security and reliability with a large spectrum of possibilities in the range of 12 to 24 kV. The Mevoco vacuum circuit breaker is available in two main versions:

- VA(S)-2 with lateral arrangement;
- VA(S)-2RP with lateral arrangement, integrated digital protection relay and side mounted CT's.

#### **Key Features**

- · Complete switching device for distribution switchgear
- Made for integration in SGC switchgears
- Available in a wide spectrum of possibilities
- Vacuum interrupters of the latest generation
- Great withstand to extreme temperatures
- Mechanical spring drive with exceptional longevity
- Maintenance-free

#### Characteristics of the VA(S)-2

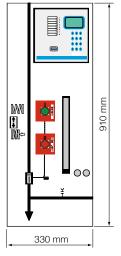
- Epoxy casted housing with protected ventilation openings, developed to be used in the more severe climatic conditions (IEC 60932 method A – Level 2)
- State of the art vacuum interrupters
- Spring drive mechanism
- Developed and manufactured in line with the ISO9001 standards
- IEC Type tested at KEMA, according the latest IEC 62271-100

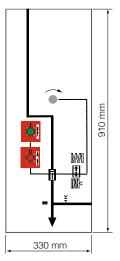
#### Characteristics of the VA(S)-2RP

- Replace a MV circuit breaker with a direct relay protection
- Multifunctional digital protection with a large spectrum of functionalities
- Without auxiliary source. Energy is provided by the CT's that can be mounted on the left or on the right side of the circuit breaker.
- Opening release mechanically winded up at the end of the opening cycle of the circuit breaker
- Side mounted CT L/R with multiple ratio
   50/1,150/1,200/1,400/1,600/1 (only in combination with RP)

#### Options

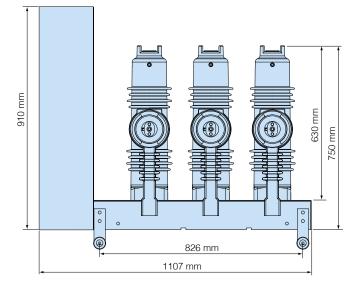
- Motor operation 24-48-110 VDC/110-220 VAC
- · Aux contacts (optionally spring charged)
- Operation counter
- Key interlock
- Closing coil
- Tripping coil (x2)

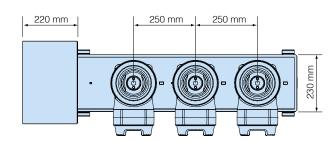




VA-2RP

VAS-2 (export)





# Explanation of the codification Ex: VA(S)-2/12-25/12L and VA(S)-2RP/12-25/12L

VA(S)-2: Circuit breaker type

RP Protection relay

12 Voltage in kV

25 Rated short time current 1 sec

8 Abbreviation of the nominal current

L Lateral arrangement

### **1** Technical Specifications

Rated power frequency withstand voltage 1 min kV 28 - 38 - 50 - 69 28 - 38 - 50 28 - 38 - 50 - 69	
Rated voltage       kV       12 - 17.5 - 24       12 - 17.5 - 25       12 - 17.5 - 25       12 - 17.5 - 25       12 - 17.5 - 25       12 - 17.5 - 25       12 - 17.5 - 25       12 - 17.5 - 25       12 - 17.5 - 25       12 - 17.5 - 25       12 - 17.5 - 25       12 - 17.5 - 25       12 - 17.5 - 25       12 - 25       12 - 25       12 - 25       12 - 25       12 - 25       12 - 25       12 - 25       12 - 25       12 - 25 - 25       12 - 25 - 25       12 - 25 - 25       12 - 25 - 25	38 - 50 95 - 125 0 - 20 - 25 - 50 - 63
Rated lightning impulse withstand voltage 1.2/50 $\mu$ s kV 75 - 95 - 125 75 - 20 - 25 12.5 - 20 - 25 1	95 - 125 ) - 20 - 25 - 50 - 63
Rated frequency       Hz       50/60       50/60       50/60       50/60         Rated current       A       400       630       800       1250         Rated short time current       kA       12.5 - 20 - 25       12.5 - 20 -	- 20 - 25 - 50 - 63
Rated current       A       400       630       800       1250         Rated short time current       kA $12.5 - 20 - 25$ $12.5 - 20 - 25$ $12.5 - 20 - 25$ $12.5 - 20 - 25$ $12.5 - 20 - 25$ $12.5 - 20 - 25$ $12.5 - 20 - 25$ $12.5 - 20 - 25$ $12.5 - 20 - 25$ $12.5 - 20 - 25$ $12.5 - 20 - 25$ $31.5 - 50 - 63$	- 20 - 25 - 50 - 63
Rated short time current       kA $12.5 - 20 - 25$ $12$	- 20 - 25 - 50 - 63
Rated duration of the short circuit       s       3       3       3       3         Rated peak withstand current       kA $31.5 - 50 - 63$ $31.5 - 50 - 63$ $31.5 - 50 - 63$ $31.5 - 50 - 63$ $31.5 - 50 - 63$ $31.5 - 50 - 63$ $31.5 - 50 - 63$ $31.5 - 50 - 63$ $31.5 - 50 - 63$ $31.5 - 50 - 63$ $36$ $36$ $36$ $36$ $36$ $36$ $36$ $36$ $36$ $36$ $36$ $36$ $36$ $36$ $31.5 - 50 - 63$ $31.5 - 50 -$	- 50 - 63
Rated peak withstand current	
Short circuit breaking current at ≤ Un	
DC Component       %       36       36       36       36         Short circuit making current       kÂ       31.5 - 50 - 63 <td>- 20 - 25</td>	- 20 - 25
Short circuit making current       kÂ $31.5 - 50 - 63$	
Rated operating sequence       0 - 0.3s - C0 - 15s - C0       0 - 0.3s - C0 -	
Rated single capacitor bank breaking current at Un en fn = 50[Hz]       A       400       400       400       400         Over voltage factor       < 2.5	- 50 - 63
Over voltage factor         < 2.5	3s-CO-15s-CO
Rated breaking cable charging current         A         25         25         25           Over voltage factor         %         < 4	
Over voltage factor % <4 <4 <4 <4	
7	
Rated off load transformer breaking current A 12.5 12.5 12.5	
Over voltage factor <4 <4 <4 <4	
Rated total closing time ms 50 50 50 50	
Rated total opening time ms 42 42 42 42 42	
Rated total breaking time ms 60 60 60 60	
Mechanical life time in number of CO operations 30,000 30,000 30,000 30,000	0
Life time of the vacuum interrupter years 30 30 30 30	
Electrical life time of the vacuum interrupter 10,000 10,000 10,000 10,000	
Weight kg 118 121 121 124	0



Fore more information on VA(S)-2(RP) or our other products, contact our sales team sales@mevoco.be

## Part of available range

Туре	Rated Voltage (kV)	Rated Current (A)	Breaking capacity (kA)
VA(S)-2 12-25/8L	12	800	25
VA(S)-2 12-25/12L	12	1250	25
VA/C\ 2.17 E.2E/0	17 E	800	25
VA(S)-2 17.5-25/8L	17.5		
VA(S)-2 17.5-25/12L	17.5	1250	25
VA(S)-2 24-20/8L	24	800	20
VA(S)-2 24-20/12L	24	1250	20
VA(S)-2RP 12-25/8L	12	800	25
VA(S)-2RP 12-25/12L	12	1250	25
VA(S)-2RP 17.5-25/8L	17.5	800	25
VA(S)-2RP 17.5-25/12L	17.5	1250	25



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 (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