CERTIFICATE

Issued to:
Applicant:
Phoenix Contact GmbH & Co. KG
Flachsmarktstrasse 8
32825 Blomberg, Germany

Licensee:
Phoenix Contact GmbH & Co. KG
Flachsmarktstrasse 8
32825 Blomberg, Germany

Product	:	surge protective devices
Trade name(s)	:	Phoenix Contact
Type(s)/model(s)	:	VAL-MS DC-PV

The product and any acceptable variation thereof as specified in the Annex to this certificate and the documents referred to therein.

DEKRA hereby declares that the above-mentioned product has been certified based on:
- a type test according to EN 61643-31:2019
- an inspection of the factory location according to CENELEC Operational Document CIG 021
- a DEKRA certification agreement with the number 900469

DEKRA hereby grants the right to use the KEMA-KEUR certification mark.

The KEMA-KEUR certification mark may be applied to the product as specified in this certificate for the duration and under the conditions of the KEMA-KEUR certification agreement.

This certificate is issued on 30 April 2025 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 71-123544 REV.3

DEKRA Certification B.V.

B.T.M. Holtus
Managing Director

H.R.M. Barends
Certification Manager

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DUTCH ACCREDITATION
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PRODUCTS
RvA C 001

KEMA KEUR

SPECIFICATION OF THE CERTIFIED PRODUCT

Product data

Product	:	surge protective devices
Trade name(s)	:	Phoenix Contact
Type(s)/model(s)	:	VAL-MS-150DC-PV/2+0-UT, VAL-MS-T1/T2 1000DC-PV-ST, VAL-MS-T1/T2 1000DC-PV/2+V, VAL-MS-T1/T2 1000DC-PV/2+V-FM, VAL-MS-T1/T2 1000DCPV-UD-ST, VAL-MS-T1/T2 600DC-PV-ST, VAL-MS-T1/T2 600DC-PV/2+V, VAL-MS-T1/T2 600DC-PV/2+V-FM, VAL-MS 1000DC-PV-ST, VAL-MS 1000DC-PV/2+V, VAL-MS 1000DC-PV/2+V-FM, VAL-MS 1500DC-PV-ST, VAL-MS 1500DC-PV/2+V, VAL-MS 1500DC-PV/2+V-FM, VAL-MS 150DC-PV-ST, VAL-MS 600DC-PV-ST, VAL-MS 600DC-PV/2+V and VAL-MS 600DC-PV/2+V-FM
Modes of protection	:	+/-, +/PE, -/PE, only in Y configuration
Rated load current (IL)	:	80 A

Product data – type VAL-MS 1000DC-PV/2+V

Socket with plugs	:	three pole with plugs VAL-MS 1000DC-PV-ST
Type of SPD	:	2
Maximum continuous operating voltage (Ucpv)	:	1170 Vdc
Nominal discharge current (In)	:	15 kA
Maximum discharge current (Imax)	:	40 kA
Voltage protection level (Up)	:	3,7 kV
Total discharge current (Itotal)	:	40 kA
Short-circuit current rating (Iscpv)	:	2000 A

Product data – type VAL-MS 1000DC-PV/2+V-FM

Socket with plugs	:	three pole with remote contact and plugs VAL-MS 1000DC-PV-ST
Type of SPD	:	2
Maximum continuous operating voltage (Ucpv)	:	1170 Vdc
Nominal discharge current (In)	:	15 kA
Maximum discharge current (Imax)	:	40 kA
Voltage protection level (Up)	:	3,7 kV
Total discharge current (Itotal)	:	40 kA
Short-circuit current rating (Iscpv)	:	2000 A

Product data – type VAL-MS 1000DC-PV-ST

Plug	:	one pole for VAL-MS 1000DC-PV/2+V(-FM) and VAL-MS 1000DC-PV/3+V(-FM)

Product data – type VAL-MS 1500DC-PV/2+V

Socket with plugs	:	three pole with plugs VAL-MS 1500DC-PV-ST
Type of SPD	:	2
Maximum continuous operating voltage (Ucpv)	:	1500 Vdc
Nominal discharge current (In)	:	15 kA
Maximum discharge current (Imax)	:	30 kA
Voltage protection level (Up)	:	5,0 kV

Short-circuit current rating (Iscpv)	:	2000 A

Product data – type VAL-MS 1500DC-PV/2+V-FM

Socket with plugs	:	three pole with remote contact and plugs VAL-MS 1500DC-PV-ST
Type of SPD	:	2
Maximum continuous operating voltage (Ucpv)	:	1500 Vdc
Nominal discharge current (In)	:	15 kA
Maximum discharge current (Imax)	:	30 kA
Voltage protection level (Up)	:	5,0 kV
Short-circuit current rating (Iscpv)	:	2000 A

Product data – type VAL-MS 1500DC-PV-ST

Plug	:	one pole for VAL-MS 1500DC-PV/2+V(-FM)

Product data – type VAL-MS 150DC-PV-ST

Plug	:	one pole for VAL-MS-150DC-PV/2+0-UT

Product data – type VAL-MS 600DC-PV/2+V

Socket with plugs	:	three pole with plugs VAL-MS 600DC-PV-ST
Type of SPD	:	2
Maximum continuous operating voltage (Ucpv)	:	800 Vdc
Nominal discharge current (In)	:	15 kA
Maximum discharge current (Imax)	:	40 kA
Voltage protection level (Up)	:	2,7 kV
Total discharge current (Itotal)	:	40 kA
Short-circuit current rating (Iscpv)	:	2000 A

Product data – type VAL-MS 600DC-PV/2+V-FM

Socket with plugs	:	three pole with remote contact and plugs VAL-MS 600DC-PV-ST
Type of SPD	:	2
Maximum continuous operating voltage (Ucpv)	:	800 Vdc
Nominal discharge current (In)	:	15 kA
Maximum discharge current (Imax)	:	40 kA
Voltage protection level (Up)	:	2,7 kV
Total discharge current (Itotal)	:	40 kA
Short-circuit current rating (Iscpv)	:	2000 A

Product data – type VAL-MS 600DC-PV-ST

Plug	:	one pole for VAL-MS 600DC-PV/2+V(-FM)

Product data – type VAL-MS-150DC-PV/2+0-UT

Socket with plugs	:	two pole with plugs VAL-MS 150DC-PV-ST
Type of SPD	:	2
Maximum continuous operating voltage (Ucpv)	:	360 V (DC+ - DC-) 180 V ((DC+ /DC-)-PE)

Nominal discharge current (In)	:	20 kA
Maximum discharge current (Imax)	:	40 kA
Voltage protection level (Up)	:	≤ 1,8 kV (DC+ - DC-) ≤ 0,9 kV ((DC+ /DC-)-PE)
Total discharge current (Itotal)	:	40 kA
Short-circuit current rating (Iscpv)	:	1800 A

Product data – type VAL-MS-T1/T2 1000DC-PV/2+V

Socket with plugs	:	three pole with plugs VAL-MS-T1/T2 1000DC-PV-ST
Type of SPD	:	1 and 2
Maximum continuous operating voltage (Ucpv)	:	1170 Vdc
Nominal discharge current (In)	:	15 kA
Maximum discharge current (Imax)	:	40 kA
Impulse discharge current for class I tests (Iimp)	:	5 kA
Voltage protection level (Up)	:	3,5 kV
Total discharge current (Itotal)	:	5 kA for class I test 40 kA for class II test
Short-circuit current rating (Iscpv)	:	2000 A

Product data – type VAL-MS-T1/T2 1000DC-PV/2+V-FM

Socket with plugs	:	three pole with remote contact and plugs VAL-MS-T1/T2 1000DC-PV-ST
Type of SPD	:	1 and 2
Maximum continuous operating voltage (Ucpv)	:	1170 Vdc
Nominal discharge current (In)	:	15 kA
Maximum discharge current (Imax)	:	40 kA
Impulse discharge current for class I tests (Iimp)	:	5 kA
Voltage protection level (Up)	:	3,5 kV
Total discharge current (Itotal)	:	5 kA for class I test 40 kA for class II test
Short-circuit current rating (Iscpv)	:	2000 A

Product data – type VAL-MS-T1/T2 1000DC-PV-ST

Plug	:	one pole for VAL-MS-T1/T2 1000DC-PV/2+V(-FM)

Product data – type VAL-MS-T1/T2 1000DCPV-UD-ST

Plug	:	one pole, equal to VAL-MS-T1/T2 1000DC-PV-ST with markings turned 180 degr

Product data – type VAL-MS-T1/T2 600DC-PV/2+V

Socket with plugs	:	three pole with plugs VAL-MS-T1/T2 600DC-PV-ST
Type of SPD	:	1 and 2
Maximum continuous operating voltage (Ucpv)	:	720 Vdc
Nominal discharge current (In)	:	15 kA
Maximum discharge current (Imax)	:	40 kA
Impulse discharge current for class I tests (Iimp)	:	5 kA
Voltage protection level (Up)	:	2,6 kV

Total discharge current (Itotal)	:	7 kA for class I test 40 kA for class II test
Short-circuit current rating (Iscpv)	:	2000 A

Product data – type VAL-MS-T1/T2 600DC-PV/2+V-FM

Socket with plugs	:	three pole with remote contact and plugs VAL-MS-T1/T2 600DC-PV-ST
Type of SPD	:	1 and 2
Maximum continuous operating voltage (Ucpv)	:	720 Vdc
Nominal discharge current (In)	:	15 kA
Maximum discharge current (Imax)	:	40 kA
Impulse discharge current for class I tests (Iimp)	:	5 kA
Voltage protection level (Up)	:	2,6 kV
Total discharge current (Itotal)	:	7 kA for class I test 40 kA for class II test
Short-circuit current rating (Iscpv)	:	2000 A

Product data – type VAL-MS-T1/T2 600DC-PV-ST

Plug	:	one pole for VAL-MS-T1/T2 600DC-PV/2+V(-FM)

TESTS

Test requirements
EN 61643-31:2019

Test result
The test results are documented in DEKRA test file 229724800.

Additional information
This certificate replaces certificate No. 71-123544 REV.2 which we hereby declare invalid.

Conclusion
The examination has confirmed that all requirements were met.

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