

CERTIFICATE

(1) EU-Type Examination

- (2) **Component intended for use on/in equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **KEMA 04ATEX2210 U** Issue Number: **3**

(4) Product: **Terminal Blocks Type VDFK 4, VDFK 4-DP, VDFK 4/K and VDFK 4/K-DP**

(5) Manufacturer: **PHOENIX CONTACT GmbH & Co. KG**

(6) Address: **Flachmarktstraße 8, 32825 Blomberg, Germany**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report number NL/DEK/ExTR17.0071/00.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0 : 2018

EN 60079-7 : 2015 + A1 : 2018

(10) The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:



II 2 GD Ex eb IIC Gb

Date of certification: 13 January 2020

DEKRA Certification B.V.

L.G. van Schie
Certification Manager

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(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 04ATEX2210 U**

Issue No. 3

(15) **Description**

Terminal Blocks Type VDFK 4, VDFK 4-DP, VDFK 4/K and VDFK 4/K-DP are intended for the connection of external circuits of electrical equipment fulfilling the degree of protection which is required by the applied type of protection for the end application.

Operating temperature range -60 °C to +100 °C.

Electrical data

For electrical data and nomenclature see Annex 1.

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

No. NL/DEK/ExTR17.0071/00.

(17) **Schedule of Limitations**

1. The Terminal Blocks shall be mounted in a certified enclosure that meets the requirements of an type of protection as specified in EN 60079-0 clause 1, with a degree of protection at least as required for Ex e. For combustible dust these enclosures must satisfy the requirements according to EN 60079-0 and EN 60079-31.
2. When assembling with other certified series and sizes and using the associated accessories, the required creepage distances and clearances have to be observed.
3. The creepage and clearance distances on the encapsulated face of the Terminal Blocks must satisfy the requirements according to table 1 of EN 60079-18.
4. If the encapsulated Terminal Blocks are built-in in a connection box, the requirements according to clause 14.2 and 14.4 of EN 60079-0 need to be attended.
5. The installation instruction of the manufacturer shall be followed e.g. for the use of cover, jumpers, end brackets. The data regarding current and associated temperature rise shall be used as guideline for the given conductor cross sections. The cross section has an influence on the temperature rise which shall be assessed in the end application.
6. If the Terminal Blocks are used in electrical apparatus of temperature classes T1 up to T5, the highest temperature of the insulating material shall not exceed the maximum value of the operating temperature range.
7. If the Terminal Blocks are used in electrical apparatus of temperature classes T6 the permissible ambient temperature range is $-60\text{ °C} < T_{amb} < +40\text{ °C}$.
8. To avoid mechanical stress to the soldered joints, the soldered connections have to be mechanically supported by e.g. encapsulation.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. NL/DEK/ExTR17.0071/00.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 04ATEX2210 U**

Issue No. **3**

(20) **Certificate history**

Issue 1 - 207591500	Initial certificate.
Issue 2 - 215823400	Assessment to recent edition of standards.
Issue 3 - 219988000	Assessment to recent edition of standards, operating temperature range changed, small mechanical change.