



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx DEK 17.0060U** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2020-01-22

Applicant: **PHOENIX CONTACT GmbH & Co. KG**
Flachmarktstraße 8
32825 Blomberg
Germany

Ex Component: Terminal Blocks VDFK 4, VDFK 4-DP, VDFK 4/K and VDFK 4/K-DP

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Increased Safety**

Marking: Ex eb IIC Gb

Approved for issue on behalf of the IECEx
Certification Body:

L.G. van Schie

Position:

Certification Manager

Signature:
(for printed version)

Date:

2020-01-22

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

DEKRA Certification B.V.
Meander 1051
6825 MJ Arnhem
Netherlands





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Manufacturer: **PHOENIX CONTACT GmbH & Co. KG**
Flachsmarktstraße 8
32825 Blomberg
Germany

Additional
manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[NL/DEK/ExTR17.0071/00](#)

Quality Assessment Report:

[NL/DEK/QAR11.0009/06](#)



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Ex Component(s) covered by this certificate is described below:

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.

See Annex 1 for electrical data and nomenclature.

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 IEC 60079-0 clause 1, with a degree of protection at least as required for Ex e.
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 IEC 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 IEC 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.

Annex:

[219988000_Annex1.pdf](#)