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

Certificate No.:	**IECEx SIQ 20.0002X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 1	Issue 0 (2020-03-06)
Date of Issue:	2021-07-28		
Applicant:	**PHOENIX CONTACT GmbH & Co. KG** Flachsmarktstrasse 8 D-32825 Blomberg **Germany**		
Equipment:	**Power Supply, types: QUINT4-PS/24DC/24DC/20/PT, QUINT4-PS/24DC/24DC/20/PT/+, QUINT4-PS/24DC/24DC/20/SC and QUINT4-PS/24DC/24DC/20/SC/+**		
Optional accessory:			
Type of Protection:	**Increased safety "ec", Intrinsic safety "ic", Type of protction "nC"**		
Marking:	Ex ec ic nC IIC T4 Gc		

Approved for issue on behalf of the IECEx Certification Body: **Bojan Pečavar**

Position: **Certification Manager**

Signature: (for printed version)

Date: 2021-07-28

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:

Slovenian Institute of Quality and Metrology (SIQ)
Masera-Spasiceva ulica 10
SI-1000 Ljubljana
Slovenia

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Certificate No.: **IECEx SIQ 20.0002X**

Date of issue: 2021-07-28

Issue No: 1

Manufacturer: **PHOENIX CONTACT GmbH & Co. KG**
Flachsmarktstr. 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 Edition:7.0 — Explosive atmospheres - Part 0: Equipment - General requirements

IEC 60079-11:2011 Edition:6.0 — Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

IEC 60079-15:2017 Edition:5.0 — Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

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

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 Reports:

SI/SIQ/ExTR20.0003/00 SI/SIQ/ExTR20.0003/01

Quality Assessment Report:

NL/DEK/QAR11.0009/07

IECEx Certificate of Conformity

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Power supply, types QUINT4-PS/24DC/24DC/20/PT, QUINT4-PS/24DC/24DC/20/PT/+, QUINT4-PS/24DC/24DC/20/SC and QUINT4-PS/24DC/24DC/20/SC/+, manufactured by Phoenix Contact GmbH & Co. KG is a DC/DC converter installed in metal enclosure with degree of ingress protection IP20. Power supply is designed in type of protection "ec", except the circuit with buttons for adjustment of the output voltage is in type of protection "ic", and the incorporated relay is in type of protection "nC". Power supply has external terminals for connections and shall be installed in appropriate enclosure with degree of ingress protection of at least IP54 according to IEC 60079-0 and IEC 60079-7.

Type key:

QUINT4-PS/24DC/24DC/20/PT
QUINT4-PS/24DC/24DC/20/PT/+
QUINT4-PS/24DC/24DC/20/SC
QUINT4-PS/24DC/24DC/20/SC/+

Additional suffix may be combined with any alphanumeric characters or blank. This is used for customer configurations and it is not considered as explosion protection relevant.

Electrical ratings:

INPUT:

Rated input voltage: 24 V d.c.

OUTPUT:

- QUINT4-PS/24DC/24DC/20/PT and QUINT4-PS/24DC/24DC/20/SC:

24 V – 29.5 V d.c., 20 A – 16.3 A (480 W) up to +70°C with derating of 2.5%/°C above +60°C
24 V – 29.5 V d.c., 25 A – 20.3 A (600 W, boost) up to +40°C

- QUINT4-PS/24DC/24DC/20/PT/+ and QUINT4-PS/24DC/24DC/20/SC/+:

24 V – 28 V d.c., 20 A – 17.1 A (480 W) up to +70°C with derating of 2.5%/°C above +60°C
24 V – 28 V d.c., 25 A – 21.4 A (600 W, boost) up to +40°C

SIGNAL:

Relay's contact (3.1, 3.2): U_{max} = 30 V a.c., I_{max} = 500 mA a.c. or U_{max} = 24 V d.c., I_{max} = 1 A d.c.
Remote (3.3), SGnd (3.4): No voltage input
Out 1 (3.5), Out 2 (3.6): 24 V d.c.

Ambient temperature range:

QUINT4-PS/24DC/24DC/20/PT and QUINT4-PS/24DC/24DC/20/SC:

- from -25°C to +70°C for P_{OUT} = 480 W with derating of 2.5%/°C above +60°C
- from -25°C to +40°C for P_{OUT} = 600 W

QUINT4-PS/24DC/24DC/20/PT/+ and QUINT4-PS/24DC/24DC/20/SC/+:

- from -40°C to +70°C for P_{OUT} = 480 W with derating of 2.5%/°C above +60°C
- from -40°C to +40°C for P_{OUT} = 600 W

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Power supply shall be installed in appropriate IP54 enclosure according to IEC 60079-0 and IEC 60079-7. This is assured with enclosure in type of protection Ex ec or Ex eb.
- Power supply shall be installed in area providing at least pollution degree 2 as defined in IEC 60664-1.
- Power supply shall be installed in clean dry conditions.
- Ambient temperature range listed above shall be considered.
- Enclosure (IP20) of the power supply shall be earthed by installation on earthed DIN Rail.
- The distances to other components or enclosure's wall shall be at least 15 mm (left, right) and 50 mm (top, bottom).

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Modifications for vibration improvement were performed.