

Frank Lohrengel

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

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

Certificate No.: **IECEx ULD 21.0023X** Page 1 of 3 Certificate history:

Status: Current Issue No: 0

Date of Issue: 2021-10-06

PHOENIX CONTACT GmbH & Co. KG Applicant:

Flachsmarktstraße 8 32825 Blomberg Germany

Equipment: Switch Mode Power Supply Modules, QUINT4-SYS-PS/1AC/24DC/2.5/SC/...

Optional accessory:

Type of Protection: Increased Safety "ec", Sealed device "nC"

Ex ec nC IIC T4 Gc Marking:

-25 °C to +70 °C

Approved for issue on behalf of the IECEx Certification Body:

Position: Staff Engineer

Signature:

(for printed version)

2021-10-06 Date:

1. This certificate and schedule may only be reproduced in full.

This certificate is not transferable and remains the property of the issuing body.
The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

UL International DEMKO A/S Borupvang 5A DK-2750 Ballerup **Denmark**





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Date of issue: 2021-10-06 Issue No: 0

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 60079-15:2017 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:5.0

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:

DK/ULD/ExTR21.0022/00

Quality Assessment Report:

NL/DEK/QAR11.0009/07



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

These devices are open type switch mode power supplies, intended to be used in combination with Equipment for Measurement, Control and Laboratory Use. These devices are suitable for DIN-Rail mounting (building in), prepared for field wiring, TN, TT and IT (star networks) power systems

Please see Annex for additional information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The equipment is intended for installation in an area providing at least pollution degree 2 as defined by IEC 60664-1.
- The device shall be installed in an enclosure (control or distributor box) that fulfills a type of protection of IEC 60079-0 and at least IP54 (IEC 60529) degree of protection.
- The installation altitude for Ex area shall be maximum 2000m above sea level.
- The device must be installed in accordance with the instructions in the manual document no. 831933326-00 regarding the rating and distances between devices.

Annex:

Annex to IECEx ULD 21.0023X Issue 0.pdf



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TYPE DESIGNATION

QUINT4-SYS-PS/1AC/24DC/2.5/SC/...

Where "/..." may be one or more alphanumeric character or blank representing non safety relevant differences.

PARAMETERS RELATING TO THE SAFETY

Input:

Cat. No.	Input		
	Volt	Amp	Hz
QUINT4-SYS- PS/1AC/24DC/2.5/SC/	100 - 240 Vac (-15% +10%)	0.85 – 0.37	50 - 60 (+/-10%)
	110 - 250 Vdc (-20% +40%)	0.75 – 0.33	DC

Output:

Cat. No.	Volt	Amp	Watt	Note
QUINT4-SYS- PS/1AC/24DC/2.5/SC/	24 VDC (24-28 VDC) (*)	2.5 (***)	60	continuous
		3.125	75	Stat. Boost mode (≤40°C)
		4	96	Dyn. Boost mode (**)

(*) Nominal: 24VDC, adjustable range: 24VDC - 28VDC.

(**) Dynamic Boost Mode:

- max Tambient <=60°C
- max Ton <= 5sec
- min Toff >= 5sec
- max lout_eb=4A @ Uout=24V, max lout_eb=3.42A @ Uout=28V (eb=extra boost)

(***) >60°C Derating 2.5%/K

Signals:

Cat. No.	Name
	DC OK LED
QUINT4-SYS-PS/1AC/24DC/2.5/SC/	Active signal output (floating switch contact), 1.0 A, 24 V dc, Resistive and 0.5A@30VAC up to 2000m,



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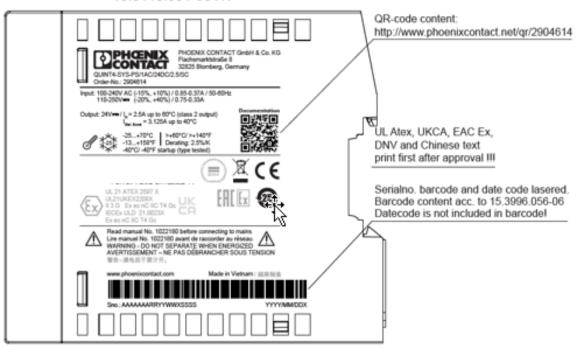
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MARKING

Marking has to be readable and indelible; it has to include the following indications:

15.5140.501-05VN





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ROUTINE EXAMINATIONS AND TESTS

Each piece of equipment defined above has to have successfully passed; before delivery:

• Between the power supply terminals and Relay terminals all suitable for 230 V ac/ 250 V dc working voltage and the terminals suitable for less than 90 V ac, with a test voltage derived from the applicable industrial standard or with 1500 V ac +5% or 2100 V dc +5% for 1 minute or with 1.2 times of the test voltage for ≥ 100 millisecond.

Because the creepage and clearance dimensions are rigidly controlled by tooling in the manufacturing process, the routine tests will be performed on a statistical basis in accordance with ISO 2859-1 with an acceptance quality limit (AQL) of 0.04..

LIST OF CERTIFIED COMPONENTS

The following additional previous editions of Standards noted under the "Standards" section of this Certificate were applied to integral Components as itemized below. There are no significant safety related changes between these previous editions and the editions noted under the "Standards" section.

Product	Certificate Number	Standards		
1-T90 DC12 manufactured by	SI/SIQ/ExTR19.0001/01	IEC 60079-0:2017, 7th Ed.		
Omron.		IEC 60079-7:2015 5.1th Ed, EC 60079- 11:2011, 5th Ed. EC 60079-15:2017, 5th Ed.		
Signal Relay (RE500), Type HFD23/012-1ZS(866), manufactured by Hongfa.	SI/SIQ/ExTR19.0001/01	IEC 60079-0:2017, 7th Ed. IEC 60079-7:2015 5.1th Ed, EC 60079- 11:2011, 5th Ed. EC 60079-15:2017, 5th Ed.		