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 14.0004X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 1	Issue 0 (2014-11-05)
Date of Issue:	2023-03-15		
Applicant:	**TDK-Lambda UK Ltd** Kingsley Avenue, Ilfracombe Devon, EX34 8ES **United Kingdom**		
Equipment:	**Power supply, type DRF120-24-1/HL-xyz**		
Optional accessory:			
Type of Protection:	**Increased safety, type of protection "n"**		
Marking:	**Ex ec nC IIC T4 Gc**		

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

Position: **Certification Manager**

Signature: (for printed version)

Date: (for printed version)

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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Manufacturer: **TDK-Lambda UK Ltd**
Kingsley Avenue, Ilfracombe
Devon, EX34 8ES
United Kingdom

Manufacturing locations: **TDK-Lambda Malaysia Sdn. Bhd.**
Lot 2&3
Kawasan Perindustrian Bandar Baru
Jaya Gading
26070 Kuantan, Pahang Darul Makmur
Malaysia

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 Reports:

SI/SIQ/ExTR14.0004/00 SI/SIQ/ExTR14.0004/01

Quality Assessment Report:

SI/SIQ/QAR14.0001/05

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

Power supply type DRF120-24-1/HL-xyz(1) is an AC/DC converter installed in metal enclosure with degree of ingress protection IP20. Product is designed in type of protection Ex ec nC. Power supply has external terminals for connections and shall be installed in appropriate enclosure with degree of ingress protection at least IP54 according to IEC 60079-0 and IEC 60079-7.

(1) Suffix -xyz can be alphanumeric characters or blank and is non explosion protection related information.

Allowed ambient temperature is from -25°C to +70°C(2).
(2) For ambient temperature from +60°C to +70°C linear derating from 100% load at +60°C to 75% load at +70°C shall be considered.

Electrical ratings:
Input: 100 V – 240 V a.c., 50 Hz / 60 Hz, 1.5 A
Output: 24 V – 28 V d.c., 5 A – 4.3 A, 120 W

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Power supply shall be installed in a suitable housing so that a degree of protection of at least IP54 according to IEC 60079-0 and IEC 60079-7 is achieved. This is assured with enclosure in type of protection Ex ec or Ex eb.
- The installation in the enclosure must be carried out in such a way that the following allowed ambient temperature range for the power supply is not exceeded during operation:
  from -25°C to +70°C with derating of 2.5%/°C above +60°C.
- The metal parts of the power supply shall be earthed.
- Adjustment of the potentiometer is allowed only when explosive atmosphere is not present.
- The distances to other components or enclosure's wall shall be at least 5 mm (left, right), 40 mm (top) and 20 mm (bottom). If the adjacent device is a heat source, the distance to it shall be at least 15 mm.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- New editions of standards were considered.
- Type of explosion protection was changed from "nA nC" to "ec nC" according to new editions of the standards.
- Some electronic components were changed or modified.