

(1) TYPE EXAMINATION CERTIFICATE



(2) Equipment and Protective Systems intended for use in
Potentially Explosive Atmosphere - **Directive 2014/34/EU**

(3) Type Examination Certificate Number:

TÜV 26 ATEX 9448 U

Issue: 00

(4) Equipment: Redundancy Module
Model: DRR-80XY series

(5) Manufacturer: Delta Electronics, Inc.

(6) Address: 3, Tungyuan Road, Chungli Industrial Zone, Taoyuan City 32063 Taiwan, R.O.C.

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

(8) The Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report GC / Ex 9448.00 / 26.

(9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0: 2018

EN IEC 60079-7:2015/A1:2018

EN IEC 60079-15: 2019

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.

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



II 3 G

Ex ec nC IIC Gc

Cologne, 2026-08-18

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz



Dipl.-Ing. He Mei

This Type Examination Certificate without signature and stamp shall not be valid and may be circulated only without alteration.
Extracts or alterations are subject to approval by Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH.
Am Grauen Stein • 51105 Köln • Tel. +49 (0) 221 806-0 • Fax. + 49 (0) 221 806 114

(13)

(14)

Annex to

Type Examination Certificate

TÜV 26 ATEX 9448 U

Issue: 00

(15) Description of Equipment

Equipment and type:

Redundancy Module
Model: DRR-80XY series

Model designation:

For model DRR-80XY series, the designations from left to right are as follows:

- 1) DR: DIN Rail;
- 2) R: Redundancy Module;
- 3) 80: Max. output current;
- 4) X: Variables for customers etc.;
- 5) Y: Y is equivalent to F, with O-ring MOSFET.

General product information:

The equipment is a Redundancy Module intended for power supply redundancy management and power distribution. It is designed as an intermediate power transfer device between external DC power supplies and the load. The equipment is rated for 12 Vdc, 24 Vdc and 30 to 56 Vdc. It is provided with two independent DC inputs, each rated up to 1200 W, and one DC output rated up to 2400 W.

The Redundancy Module has a cover made of SGCC and a chassis made of AL1100. They are constructed with the type of explosion protection "ec" and "nC" for use in gas explosive atmospheres of group IIC (Zone 2) with at least pollution degree 2, and shall be installed in an enclosure meeting the requirements of IEC 60079-0 with a minimum protection rating of IP54.

Details of Change:

N/A

Technical data:

Electrical data

1. Input 1 and Input 2: 12Vdc / 40A, 480W max.; 24Vdc / 40A, 960W max.; 30-56Vdc / 40-21.5A, 1200W max.;
2. Output: 12Vdc, 24Vdc, 30-56Vdc, 80A max. and 2400W max..

Environmental data

1. Service temperature range: -40°C to +101.3°C;
2. Ambient temperature range: -40°C to +80°C;
3. Zone 2, at least Pollution Degree 2.

(16) Test report No.:

GC / Ex 9448.00 / 26

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(17) Schedule of Limitation

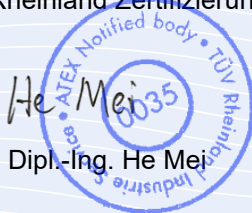
1. The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.
2. The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with IEC 60079-0.
3. Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value at the supply terminals to the equipment.
4. The equipment shall only be operated within the following rated electrical parameters:
Input 1 and Input 2:
12Vdc / 40A, 480W max.;
24Vdc / 40A, 960W max.;
30-56Vdc / 40-21.5A, 1200W max..
Output:
12Vdc, 24Vdc, 30-56Vdc, 80A max., 2400W max..

(18) Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by the standards listed at item 9.

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

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