## Certificate





Product Safety Functional Safety

www.tuv.com ID 0600000000

No.: 968/FSP 1964.00/20

**Product tested** 

Over- and undervoltage protection

circuitry

Certificate holder

Delta Electronics (Thailand)

Public Co., Ltd.

909 Soi 9, Moo 4, Bangpoo Ind., Estate (E.P.Z.), Pattana 1 Rd. Tambol Phraksa Amphur Muang, Samutprakarn 10280

Thailand

Type designation

Over- and undervoltage protection circuitry implemented in DRM-24V480W1SN(y).

Overvoltage protection circuitry implemented in DRM-24V480W1SP(y).

(y): any alphanumeric character or blank

Codes and standards

IEC 61508 Parts 1-7:2010

Intended application

Overvoltage protection with a limitation of the output voltage and switch off at voltages above

30 V within 20 ms.

Undervoltage protection with limit the output voltage to 18 V and if lower to put the device into

"Hiccup-mode".

Specific requirements

The instructions of the associated data sheet and the safety manual shall be considered.

The over- and undervoltage protection circuitry implemented in DRM-24V480W1SN(y) and overvoltage protection circuitry in DRM-24V480W1SP(y) fulfils the requirements up to SIL 3 (HFT=1) and can be used in applications up to SIL 3 according to IEC 61508 and IEC 61511.

Valid until 2025-01-23

The issue of this certificate is based upon an examination, whose results are documented in Report No. 968/FSP 1964.00/20 dated 2020-01-16.

This certificate is valid only for products which are identical with the product tested.

TÜV Rheinland Industrie Service GmbH

Bereich Automation
Funktionale Sicherheit

Köln, 2020-01-23

Am Grauen Stein, 51105 Köin
Certification Body Safety & Security for Automation & Grid

Dr. V. gtt

Dr.-Ing. Thorsten Gantevoort

TÜV Rheinland Industrie Service GmbH, Am Grauen Stein, 51105 Köln/ Germany Tell: +49 221 806-1790, Fax: +49 221 806-1539, E-Mail: industrie-service @de.tuv.com