



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx UL 15.0110X

Issue No: 4

Certificate history:

[Issue No. 4 \(2018-06-28\)](#)

[Issue No. 3 \(2017-04-28\)](#)

[Issue No. 2 \(2016-11-14\)](#)

[Issue No. 1 \(2016-08-11\)](#)

[Issue No. 0 \(2015-12-16\)](#)

Status: **Current**

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Date of Issue: **2018-06-28**

Applicant: **Emerson**  
9377 W. Higgins Road  
Rosemont, IL 60018  
**United States of America**

Equipment: **Redundancy Power Supply Module, Models SDN 2X10RED, SDN 2X10REDX, SDN 2X20RED, SDN 2X20REDX, SDN 2X40RED, SDN 2X40REDX**

*Optional accessory:*

Type of Protection: **Increased safety "ec", Sealed "nC"**

Marking:  
Ex ec nC IIC T4 Gc  
-40°C ≤ Ta ≤ +70°C

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

Erin LaRocco

*Position:*

Staff Engineer

*Signature:  
(for printed version)*

*Date:*

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 the [Official IECEx Website](#).

Certificate issued by:

**UL LLC**  
333 Pfingsten Road  
Northbrook IL 60062-2096  
**United States of America**





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Manufacturer: **Emerson**  
9377 W. Higgins Road  
Rosemont, IL 60018  
**United States of America**

Additional Manufacturing location(s):

**Astec Power Philippines Inc (Subsidiary of Artesyn Embedded Technologies)**

Main Road Cor. Road J Cavite Economic Zone Authority Tejeros Convention, Rosario Cavite Philippines 4106  
Philippines

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 apparatus 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:

<b>IEC 60079-0 : 2011</b> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-15 : 2010</b> Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
<b>IEC 60079-7 : 2015</b> Edition:5.0	Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical 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:

[US/UL/ExTR15.0126/04](#)

Quality Assessment Report:

[US/UL/QAR15.0004/03](#)

[US/UL/QAR15.0009/03](#)



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

Models SDN 2X10RED, SDN 2X20RED, and SDN 2X40RED are redundancy module power supplies. The devices have two inputs which allows two power supplies to be used for redundant operation. These devices may also be used to increase supply current by combing the available input power supply currents in parallel. They are intended for installation within an enclosure. Models SDN 2X10REDX, SDN 2X20REDX and SDN 2X40REDX are similar to models SDN 2X10RED, SDN 2X20RED, and SDN 2X40RED but with conformal coating applied. Model numbers may also be followed by suffix consisting of 1-3 alphanumeric characters.

Please see Annex for additional information.

### SPECIFIC CONDITIONS OF USE: YES as shown below:

- The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with IEC 60079-0.
- The equipment shall only be used in an area of not more than pollution degree 2, as defined in IEC 60664-1.



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## **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

Issue 1: Update to new protection method "ec" and new suffixes for conformally coated model and option designations.

Issue 2: Addition of models SDN 2X10RED and SDN 2X10REDX.

Issue 3: Addition of models SDN 2X40RED and SDN 2X40REDX.

Issue 4: Revision to add alternate components, minor drawing updates and update to manufacturer address.

## **Annex:**

[Annex to IECEx UL 15.0110X Issue 4.pdf](#)



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## PARAMETERS RELATING TO THE SAFETY

Input: 12-28 VDC

SDN 2X10RED, SDN 2X10REDX	SDN 2X20RED, SDN 2X20REDX	SDN 2X40RED, SDN 2X40REDX
18A x 2 or 36A x 1 at 40°C 16A x 2 or 32A x 1 at 50°C 14A x 2 or 28A x 1 at 60°C 12A x 2 or 24A x 1 at 70°C	26A x 2 or 52A x 1 at 40°C 25A x 2 or 50A x 1 at 50°C 24A x 2 or 48A x 1 at 60°C 20A x 2 or 40A x 1 at 70°C	45A x 2 or 90A x 1 at 40°C 42.5A x 2 or 85A x 1 at 50°C 40A x 2 or 80A x 1 at 60°C 35A x 2 or 70A x 1 at 70°C

Output: 12-28 VDC

SDN 2X10RED, SDN 2X10REDX	SDN 2X20RED, SDN 2X20REDX
18A redundancy, 36A maximum at 40°C 16A redundancy, 32A maximum at 50°C 14A redundancy, 28A maximum at 60°C 12A redundancy, 24A maximum at 70°C	26A redundancy, 52A maximum at 40°C 25A redundancy, 50A maximum at 50°C 24A redundancy, 48A maximum at 60°C 20A redundancy, 40A maximum at 70°C
SDN 2X20RED, SDN 2X20REDX	
45A redundancy, 90A maximum at 40°C 42.5A redundancy, 85A maximum at 50°C 40A redundancy, 80A maximum at 60°C 35A redundancy, 70A maximum at 70°C	

OK Contact Rating: 60 VDC, 1A

## MARKING





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**SDN 2X10REDX**  
OK Contact Rating:  
60V ~ / 1A  
Ambient temperature range: -40°C ≤ Ta ≤ 70°C

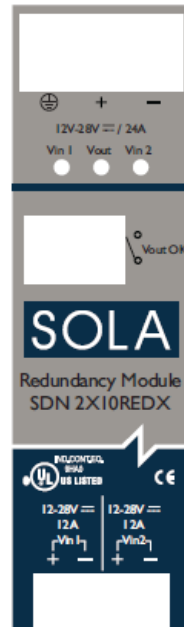
**Risk of electric shock.**  
Do not open. Read installation manual.  
Risque de choc électrique.  
Ne pas ouvrir. Lire le manuel d'installation.  
Опасность поражения электрическим током.  
Не открывать. Читайте инструкцию по установке.

**SOLA**  
9377 W Higgins Rd Rosemont, IL 60018 USA  
SolaHD Technical Support: 1.800.377.4384 www.solahd.com

**EMERSON**

**UL** Class I, Zone 2, AEx nA nC IIC T4 Gc  
Class I, Zone 2, Ex nA nC IIC T4 U  
I13 G Ex ec nC IIC T4 Gc  
DEMKO 15ATEX1569X  
Ex ec nC IIC T4 Gc  
IECEx UL 15.0110X  
№ TC RU C-US.AA87.B.00539  
2Ex nA nC IIC T4 Gc X

**CE** **Ex** **EAC**



**SDN 2X20RED**  
OK Contact Rating:  
60V ~ / 1A  
Ambient temperature range: -40°C ≤ Ta ≤ 70°C

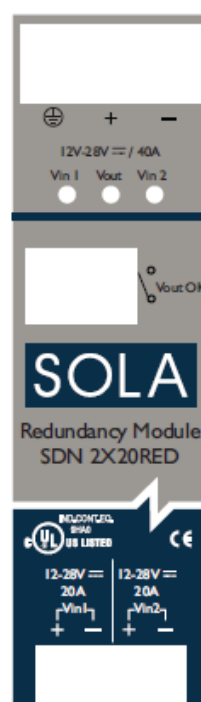
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**CE** **Ex** **EAC**





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OK Contact Rating:  
60V --- / 1A  
Ambient temperature range: -40°C ≤ Ta ≤ 70°C

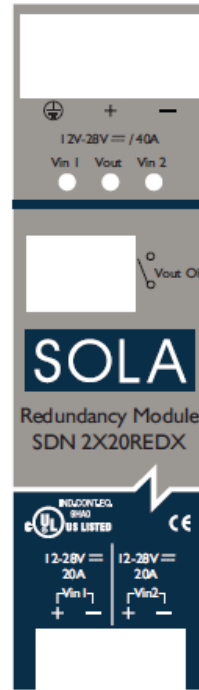
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Class I, Zone 2, Ex nA nC IIC T4 U  
**CE Ex** II3 G Ex ec nC IIC T4 Gc  
DEMKO 15ATEX1569X  
**IECEx** Ex ec nC IIC T4 Gc  
IECEx UL 15.0110X  
**Ex EAC** № TC RU C-US.AA87.B.00539  
2Ex nA nC IIC T4 Gc X

**DNV-GL** **25**



**SDN 2X40RED**  
OK Contact Rating:  
90V --- / 1A  
Ambient temperature range: -40°C ≤ Ta ≤ 60°C

**Risk of electric shock.**  
Do not open. Read installation manual.  
**Risque de choc électrique.**  
Ne pas ouvrir. Lire le manuel d'installation.  
**Опасность поражения электрическим током.**  
Не открывать. Читайте инструкцию по установке

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9377 W Higgins Rd Rosemont, IL 60018 USA  
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**EMERSON**

**UL** Class I, Zone 2, AEx nA nC IIC T4 Gc  
Class I, Zone 2, Ex nA nC IIC T4 U  
**CE Ex** II3 G Ex ec nC IIC T4 Gc  
DEMKO 15ATEX1569X  
**IECEx** Ex ec nC IIC T4 Gc  
IECEx UL 15.0110X  
**Ex EAC** № TC RU C-US.AA87.B.00664  
2Ex nA nC IIC T4 Gc X

**DNV-GL** **25**





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**SDN 2X40REDX**  
OK Contact Rating:  
60V ~~/1A  
Ambient temperature range: -40°C ≤ Ta ≤ 60°C

**Risk of electric shock.**  
Do not open. Read installation manual.  
**Risque de choc électrique.**  
Ne pas ouvrir. Lire le manuel d'installation.  
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**CEEx** II 3 G Ex ec nC IIC T4 Gc  
DEMKO 15ATEX1500X  
**IECEx** Ex ec nC IIC T4 Gc  
IECEx UL 15.0110X  
**Ex EAC** № TC RU C-US-AA87.B.00604  
2Ex nA nC IIC T4 Gc X  
**EMERSON**

