



# 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 15.0022X

Issue No: 5

Certificate history:

Status: **Current**

[Issue No. 5 \(2018-06-27\)](#)

[Issue No. 4 \(2017-10-20\)](#)

Date of Issue: **2018-06-27**

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[Issue No. 3 \(2016-12-19\)](#)

[Issue No. 2 \(2016-08-11\)](#)

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

[Issue No. 1 \(2016-03-04\)](#)

[Issue No. 0 \(2015-04-29\)](#)

Equipment: **Power Supply, Models SDN 10-24-100C, SDN 10-24-100CX, SDN 15-12-100C, SDN 15-12-100CX, SDN 16-12-100C, and SDN 16-12-100CX**

*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:*

Andrew Moffat

*Position:*

Project 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><br>Edition:6.0 | Explosive atmospheres - Part 0: General requirements                            |
| <b>IEC 60079-15 : 2010</b><br>Edition:4  | Explosive atmospheres - Part 15: Equipment protection by type of protection "n" |
| <b>IEC 60079-7 : 2015</b><br>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/ExTR15.0021/05](#)

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:*

Devices are power supplies for information technology equipment including electrical business equipment. They are intended for installation within an enclosure. Models designated with suffix X are the same as their base model, 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 IP54 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: Model reference removed from 60079-0 test report. 60079-15 test report did not reference the model and was not affected by this revision.

Issue 2: Update to new protection method "ec", ambient temperature was updated and new suffixes for conformally coated model and option designations.

Issue 3: Addition of new input rating and revision of components.

Issue 4: Addition of models SDN 15-12-100C, SDN 15-12-100CX, SDN 16-12-100C, and SDN 16-12-100CX. Revision of output rating of existing models SDN 10-24-100C, SDN 10-24-100CX.

Issue 5: Revision to add alternate components, minor drawing updates and update to manufacturer address.

## **Annex:**

[Annex to IECEx UL 15.0022X Issue 5.pdf](#)



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## PARAMETERS RELATING TO THE SAFETY

Models SDN 10-24-100C, SDN 10-24-100CX:

Input: 100-240 V ac, 3.5 A, 50/60 Hz  
100-340 V dc, 2.8 A  
Output: 24 V dc, 10.0 A, 240W at 60 °C  
24 V dc, 7.5 A, 180W at 70 °C  
Relay output: 50 V dc, 0.2 A (Resistive Load)

Models SDN 15-12-100C, SDN 15-12-100CX:

Input: 100-240 V ac, 2.5 A, 50/60 Hz  
100-340 V dc, 2.3 A  
Output: 12 V dc, 15.0 A, 180W at 60 °C  
12 V dc, 11.25 A, 135W at 70 °C  
Relay output: 50 V dc, 0.2 A (Resistive Load)

Models SDN 16-12-100C, SDN 16-12-100CX:

Input: 100-240 V ac, 2.5 A, 50/60 Hz  
100-340 V dc, 2.3 A  
Output: 12 V dc, 16.0 A, 192W at 60 °C  
12 V dc, 12 A, 144W at 70 °C  
Relay output: 50 V dc, 0.2 A (Resistive Load)

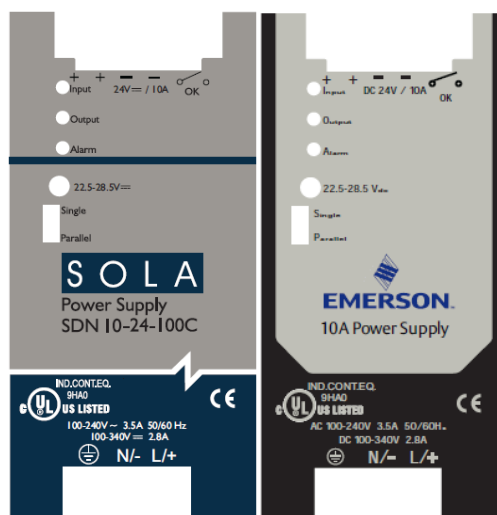
## MARKING

**SDN 10-24-100C**  
OK Contact Rating:  
50V ~ / 0.2A  
Ambient temperature range: -40°C ≤ T<sub>a</sub> ≤ 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

**UL** E137832 E234790  
**CE** **Ex** **IECEx** **Ex** **FM**  
Class I, Zone 2, AEx nA nC IIC T4 Gc  
Class I, Zone 2, Ex nA nC IIC T4 U  
II 3 G Ex ec nC IIC T4 Gc  
DEMKO 12ATEX1154772X  
Ex ec nC IIC T4 Gc  
IECEx UL 15.0022X  
№ TC RU C-US.AA87.B.00778  
2Ex nA nC IIC T4 Gc X  
MSIP-REM-N4C-SDN10

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

**EMERSON**





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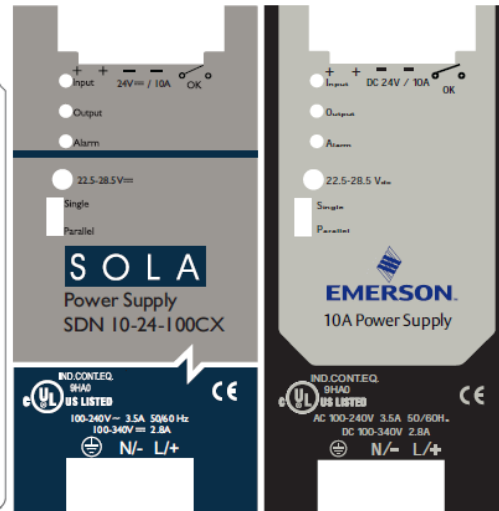
**SDN 10-24-100CX**  
OK Contact Rating:  
50V ~ / 0.2A  
Ambient temperature range: -40°C ≤ Ta ≤ 60°C

**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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**EMERSON**

**UL** E137632 E234790  
**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**  
**DEMCO 12ATEX1154772X**  
**IECEx** **Ex ec nC IIC T4 Gc**  
**IECEx UL 15.0022X**  
**Ex** **TC RU C-US.AA87.B.00778**  
**2Ex nA nC IIC T4 Gc X**  
**MSIP-REM-N4C-SDN10**



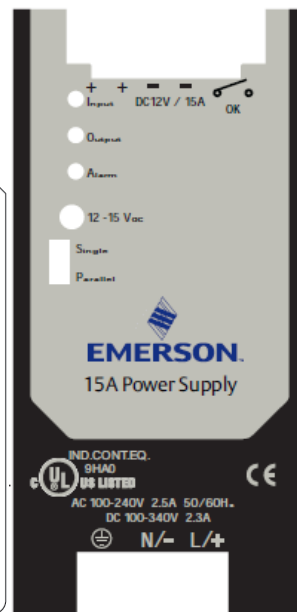
**SDN 15-12-100C-EPM**  
OK Contact Rating:  
50V ~ / 0.2A  
Ambient temperature range: -40°C ≤ Ta ≤ 60°C

**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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**UL** E137632 E234790  
**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**  
**DEMCO 12ATEX1154772X**  
**IECEx** **Ex ec nC IIC T4 Gc**  
**IECEx UL 15.0022X**  
**Ex** **TC RU C-US.AA87.B.00778**  
**2Ex nA nC IIC T4 Gc X**





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**SDN 15-12-100CX-EPM**  
OK Contact Rating:  
50V --- / 0.2A  
Ambient temperature range: -40°C ≤ Ta ≤ 60°C

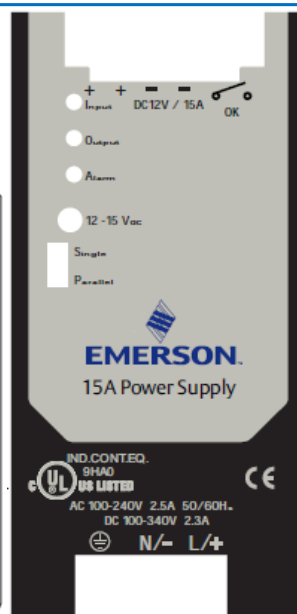
**Risk of electric shock.**  
Do not open. Read installation manual.  
**Risque de choc électrique.**  
Ne pas ouvrir. Lire le manuel d'installation.  
**Опасность поражения электрическим током.**  
Не открывать. Читайте инструкцию по установке

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**EMERSON**

**UL** E137632 E234790  
**CE** **Ex** **IECEx**  
Class I, Zone 2, AEx nA nC IIC T4 Gc  
Class I, Zone 2, Ex nA nC IIC T4 U  
II3 G Ex ec nC IIC T4 Gc  
DEMKO 12ATEX1154772X  
Ex ec nC IIC T4 Gc  
IECEx UL 15.0022X  
№ TC RU C-US.AA87.B.00778  
2Ex nA nC IIC T4 Gc X

**EX** **IECEx**  
**25**



**SDN 16-12-100C**  
OK Contact Rating:  
50V --- / 0.2A  
Ambient temperature range: -40°C ≤ Ta ≤ 60°C

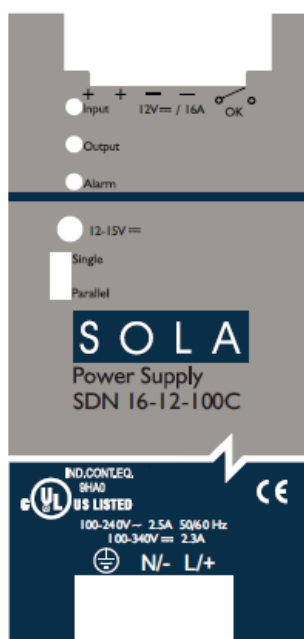
**Risk of electric shock.**  
Do not open. Read installation manual.  
**Risque de choc électrique.**  
Ne pas ouvrir. Lire le manuel d'installation.  
**Опасность поражения электрическим током.**  
Не открывать. Читайте инструкцию по установке

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**UL** E137632 E234790  
**CE** **Ex** **IECEx**  
Class I, Zone 2, AEx nA nC IIC T4 Gc  
Class I, Zone 2, Ex nA nC IIC T4 U  
II3 G Ex ec nC IIC T4 Gc  
DEMKO 12ATEX1154772X  
Ex ec nC IIC T4 Gc  
IECEx UL 15.0022X  
№ TC RU C-US.AA87.B.00778  
2Ex nA nC IIC T4 Gc X

**EX** **IECEx**  
**25**





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**SDN 16-12-100CX**  
OK Contact Rating:  
50V ~ / 0.2A  
Ambient temperature range: -40°C ≤ Ta ≤ 60°C

**UL** E 137632 E 224790 Class I, Zone 2, AEx nA nC IIC T4 Gc  
Class I, Zone 2, Ex nA nC IIC T4 U

**CEEx** II 3 G Ex ec nC IIC T4 Gc  
DEMKO 12ATEX1154772X

**IECEx** Ex ec nC IIC T4 Gc  
IECEx UL 15.0022X

**Ex EAC** № TC RU C-US.AA87.B.00778  
2Ex nA nC IIC T4 Gc X

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

**EMERSON**

**SOLA**  
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**Warnings:**  
⚠ 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.  
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