



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

Certificate No.: IECEx TUN 14.0023U Issue No: 0 Certificate history:
Issue No. 0 (2014-09-15)

Status: **Current** Page 1 of 3

Date of Issue: **2014-09-15**

Applicant: **Hadler GmbH**
Fritzlarer Straße 19
34587 Felsberg-Neuenbrunslar
Germany

Electrical Apparatus: **Electronic ballasts types 3 P 218/236/258 08 0 / 08 1**
Optional accessory:

Type of Protection: **Equipment protection by type of protection "n"**

Marking: Ex nA IIC Gc

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

Andreas Meyer

Position:

Head of the IECEx CB

*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](http://www.iecex.com).

Certificate issued by:

TÜV NORD CERT GmbH
Hanover Office
Am TÜV 1
30519 Hannover
Germany





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Manufacturer: **Hadler GmbH**
Fritzlarer Straße 19
34587 Felsberg-Neuenbrunslar
Germany

Additional Manufacturing
location(s):

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 electrical 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:

IEC 60079-0 : 2007-10 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:5
IEC 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:4

*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:

[DE/TUN/ExTR14.0021/00](#)

Quality Assessment Report:

[DE/TUN/QAR14.0009/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The electronic ballasts types 3 P 218/236/258 08 0 / 08 1 are used for the operation of one or two T8 fluorescent lamps in explosion protected luminaries.

For technical data and Schedule of Limitations refer to the attached document.

CONDITIONS OF CERTIFICATION: NO

Annex:

[_Attachment to CoC IECEx TUN 14.0021U.pdf](#)

The electronic ballasts types 3 P 218/236/258 08 0 / 08 1 are used for the operation of one or two T8 fluorescent lamps in explosion protected luminaries.

Technical data

Type	Number of lamps	Power of lamp [W]	Mains current [A]	Power factor
3 P 218 08 0 / 08 1	1	18	0.093	0.83
	2		0.155	0.94
3 P 236 08 0 / 08 1	1	36	0.149	0.96
	2		0.289	0.99
3 P 258 08 0 / 08 1	1	58	0.236	0.98
	2		0.434	0.99

Permissible ambient temperature range 18 W: -25 °C ... +75 °C
 36 W: -25 °C ... +70 °C
 58 W: -25 °C ... +65 °C

Permissible housing temperature at tc point 18 W: 80 °C
 36 W: 75 °C
 58 W: 70 °C

Nominal voltage 220 V up to 240 V

Nominal frequency 0/50-60 Hz

Voltage area 198 up to 264 V a. c.
 176 up to 264 V d. c.

Breaking capacity

of the built-in line side fuse 1500 A a. c. at $\cos \varphi \geq 0,76$ and
 1500 A d. c. at $L/R \geq 2$ ms

Cross section area 0.5 mm² up to 1.5 mm² single or multistrand conductor

Dismantled length of the wire 8.5 mm up to 9.5 mm

Schedule of Limitations:

1. The electronic ballasts types 3 P 218/236/258 08 0 / 08 1 may be installed into housings of explosion protected luminaries with a min. type of protection of the housing of IP 54 according to IEC 60529.
2. The dismantled length of the wires (permissible cross section area 0.5 mm² up to 1.5 mm²) has to be between 8.5 mm and 9.5 mm. At use of multistrand wires, conductor sleeves have to be used.
3. The max. temperature rise at the components is 47 K.
4. The adherence of the requirements relevant for the electronic ballasts types 3 P 218/236/258 08 0 / 08 1 of the IEC 61347-1 and IEC 61347-2-3 has to be verified by separate tests (see IEC 60079-15:2010, section 11.2.4.5).