



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 IBE 17.0007U Issue No: 0 Certificate history:
Issue No. 0 (2017-04-24)

Status: **Current** Page 1 of 4

Date of Issue: **2017-04-24**

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

Equipment: **Integrated Emergency Unit type 3 * 180 *****
Optional accessory:

Type of Protection: **Increased safety "e"**

Marking: Ex ec IIC Gc

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

Prof. Dr. Tammo Redeker

Position:

Head of Certification Body

*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:

IBExU Institut für Sicherheitstechnik GmbH
Certification Body
Fuchsmühlenweg 7
09599 Freiberg
Germany





IECEX Certificate of Conformity

Certificate No: IECEx IBE 17.0007U Issue No: 0
Date of Issue: 2017-04-24 Page 2 of 4
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 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0
IEC 60079-7 : 2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

*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/IBE/ExTR16.0058/00](#)

Quality Assessment Report:

[DE/TUN/QAR14.0009/01](#)



IECEx Certificate of Conformity

Certificate No: IECEx IBE 17.0007U

Issue No: 0

Date of Issue: 2017-04-24

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Integrated Emergency Unit type 3 * 180 *** is used for the supply of one or more LED modules in series connection. The rated output current may be adjusted by a DALI interface or is set by the manufacturer.

The Integrated Emergency Unit includes additional circuitry to charge and discharge an attached battery pack (5*1.2 V NiCd or NiMH) for use in self-contained emergency luminaires.

Technical data:

rated voltage input:	220...240 V AC (50...60 Hz) or 110...127 V AC (50...60 Hz)
rated voltage output:	maximum 250 V
nominal current output:	50...350 mA or 250...700 mA
nominal power output:	maximum 80 W, mains voltage 220...240 V maximum 52 W, mains voltage 110...127 V
maximum charging voltage:	7.8 V
range of charge current:	40...400 mA
minimum discharge voltage:	5 V
range of discharge current:	0.5...3.5 A
open circuit voltage signal LED:	maximum 6.6 V
nominal output current signal LED:	15 mA
short circuit current signal LED:	maximum 18 mA

Further details are mentioned in the Annex to this certificate.

SPECIFIC CONDITIONS OF USE: NO



IECEx Certificate of Conformity

Certificate No: IECEx IBE 17.0007U

Issue No: 0

Date of Issue: 2017-04-24

Page 4 of 4

EQUIPMENT (continued):

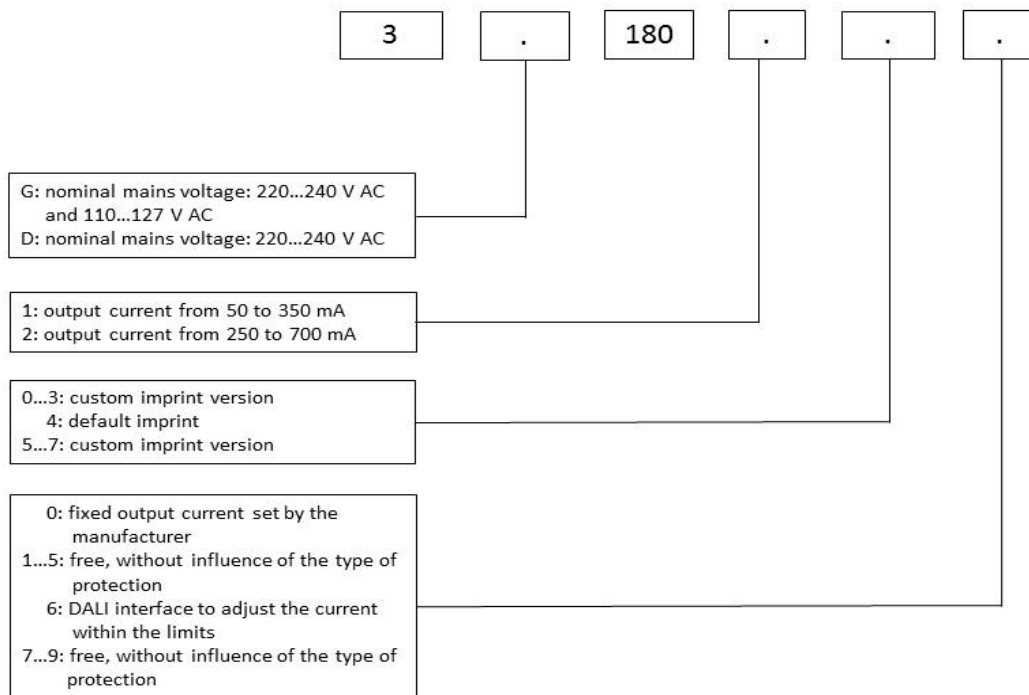
Schedule of Limitation:

- The Integrated Emergency Unit has to be installed in a suitable and separately certified enclosure which complies with the requirements of IEC 60079-7 or IEC 60079-15 and fulfils degree of protection at least IP54.
- The service temperature range at t_c -point may not exceed $-40\text{ }^\circ\text{C}$ up to maximum $+75\text{ }^\circ\text{C}$, depending on the type. For details see Annex.
- Creepages and clearances have to be considered depending on the rated voltage when assembled in an enclosure.

Annex:

[Annex2IBE17.0007U.pdf](#)

Type code designation:



Additional information for the service temperature:

The service temperature range at t_c -point may not exceed either the values given in the following Table:

type	service temperature at t_c point
3 D 180 14 *	-40 °C up to +75 °C
3 D 180 24 *	-40 °C up to +60 °C
3 G 180 14 *	-40 °C up to +70 °C
3 G 180 24 *	-40 °C up to +60 °C

or

During mains operation the case temperature of electrolytic capacitors shall not exceed 90°C. All other components shall be at or below 105°C.

During emergency operation the case temperature of power semiconductors shall not exceed 115°C. All other components shall be at or below 105°C.

The minimum permitted service temperature is -40 °C.