IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx FIDI 23.0007U**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2023-09-28

Applicant: **MP Gamma S.r.l.**
Via Cisa Ligure, 43/A
Brescello (RE) 42041
Italy

Ex Component: Empty enclosures type: CPN ... Ix U or SDN ... Ix U

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Increased safety 'eb'; Protection by enclosure 'tb'**

Marking: **Ex eb IIC Gb**

Ex tb IIIC Db

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

Position: **Certification Signatory**

Signature: (for printed version)

Date: (for printed version) 2023-09-28

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 www.iecex.com or use of this QR Code.

Certificate issued by:

Fiditas Ltd
Slavka Tomerlina 44
HR-10361 Zagreb-Sesvete
Croatia

Fiditas explosion safety solutions

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Certificate No.: **IECEx FIDI 23.0007U**

Date of issue: 2023-09-28

Issue No: 0

Manufacturer: **MP Gamma S.r.l.**
Via Cisa Ligure, 43/A
Brescello (RE) 42041
Italy

Manufacturing locations:

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 component 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 60079-0:2017 Edition:7.0 — Explosive atmospheres - Part 0: Equipment - General requirements

IEC 60079-31:2013 Edition:2 — Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

IEC 60079-7:2017 Edition:5.1 — Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the component listed has successfully met the examination and test requirements as recorded in:

Test Report:

HR/FIDI/ExTR23.0001/00

Quality Assessment Report:

HR/FIDI/QAR23.0001/00

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Ex Component(s) covered by this certificate is described below:

Empty Enclosures model CPN Ix U, SDN Ix U with or without flanges. Enclosures made on stainless steel materials AIS304 or AIS316L. Depending on dimensions, walls and covers thickness may be 1.2 mm, 1.5 mm, 2.0 mm, or 3.0 mm differentiating box enclosure and cover. The enclosures incorporate holes for cable entries and also holes on the cover for installation of different accessories.

Dimension (mm)	Up to 800×1200×400 for CPN enclosures Up to 400×400×150 for SDN enclosures
Service temperature:	-50°C to +100°C
Ingress protection:	IP 66

For each type of enclosure, CPN series or SDN series, temperature measurement performed and temperature coefficient (Rth) of an enclosure determined which define relationship between temperature of air inside box and dissipated power. Depends of externa dimension of an enclosure Rth can be calculated with formula:

$Rth = A \times (\text{enclosure surface in } mm^2 \text{ except bottom surface})^B$

Leged: **Rth** – Thermal resistance [K/W].

A and **B** - coefficients determined by measurement for each series of enclosure.

Enclosure type	Coeff A	Coeff. B
SDN	17149	-0.777
CPN	27186	-0.987

SCHEDULE OF LIMITATIONS:

- Enclosures are Ex component, not intended to be used alone and requires additional consideration by the conformity assessment procedure when incorporated into Ex equipment.
- Enclosures are suitable for the service temperature -50°C to +100°C.