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

Certificate No.: **IECEx INE 15.0033X**

Page 1 of 4

Certificate history:

Status: **Current**

Issue No: 3

Issue 2 (2018-05-30)
Issue 1 (2017-03-15)
Issue 0 (2015-07-08)

Date of Issue: 2021-10-04

Applicant: **SCAME PARRE S.p.A.**
Via Costa Erta, 15
24020 PARRE (BG)
Italy

Equipment: **Plugs OPTIMA-EX[GD] type 219.16... or 219.32... or 219.63... or 219.125... & Sockets ADVANCE-GRP[GD] type 504.16... or 504.32... or 504.63... or 504.125...**

Optional accessory:

Type of Protection: **db eb tb**

Marking: For plugs:

Ex eb IIC T6...T3 Gb
Ex tb IIIC T80°C Db
IP66

For sockets:

Ex db eb IIC T6...T3 Gb
Ex tb IIIC T80°C Db
IP66

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Approved for issue on behalf of the IECEx Certification Body:

Thierry HOUEIX

Position: Ex Certification Officer

Signature: (for printed version)

Digitally signed by Thierry HOUEIX

Date: **2021-10-13**

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:

INERIS
Institut National de l'Environnement Industriel et des Risques
BP n2 / Parc Technologique ALATA
F-60550 Verneuil-en-Halatte
France

INERIS
controlling risks for sustainable development

IECEx Certificate of Conformity

Certificate No.: **IECEx INE 15.0033X**

Date of issue: 2021-10-04

Issue No: 3

Manufacturer: **SCAME PARRE S.p.A.**
Via Costa Erta, 15
24020 PARRE (BG)
Italy

Additional 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 equipment 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 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

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

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

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 equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

FR/INE/ExTR15.0027/03

Quality Assessment Report:

IT/IMQ/QAR15.0001/06

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The plugs series OPTIMA-EX[GD] are designed as Group II Category 2 equipment and are suitable for use for fixed installation in areas with explosion hazard designated Zone 1/21 and Zone 2/22, with type of protection Ex eb IIC / Ex tb IIIC.

The plugs series OPTIMA-EX[GD] have to be used only with SCAME sockets series ADVANCE GRP[GD], Ex db eb IIC / Ex tb IIIC.

The sockets series ADVANCE-GRP[GD] are formed by Ex eb enclosure with a switch mounted on the body.

The switch type COMMAND-Ex manufactured by SCAME is certified IECEx INE 13.0032U with type of protection Ex db eb IIC Gb in a range of 32A to 80A, 2/4 poles. There are optional auxiliary contacts types ZBWE 6 or ZBWE 16 manufactured by EX-TECH SOLUTION (certified IECEx INE 13.0063U with type of protection Ex db eb IIC Gb).

The switch CZ series CZ0513 180A is certified IECEx CML 19.0055U with type of protection Ex db eb IIC Gb without optional auxiliary contacts.

The socket type 504.63... can be fitted with Ex eb earth terminal Weidmuller type WPE35 certified IECEx ULD 05.0008U.

All versions of OPTIMA-EX[GD] & ADVANCE-GRP[GD] enclosures get the degrees of protection IP66 in accordance with IEC 60529.

SPECIFIC CONDITIONS OF USE: YES as shown below:
Ambient temperature ranges:
- within the range -50°C to +60°C for Plugs OPTIMA-EX[GD] type 219.16... & Sockets ADVANCE-GRP[GD] type 504.16...
- within the range -35°C to +60°C for Plugs OPTIMA-EX[GD] type 219.63... & Sockets ADVANCE-GRP[GD] type 504.63...
- within the range -50°C to +60°C for Plugs OPTIMA-EX[GD] type 219.32... & Sockets ADVANCE-GRP[GD] type 504.32...
- within the range -35°C to +40°C for Plugs OPTIMA-EX[GD] type 219.125... & Sockets ADVANCE-GRP[GD] type 504.125...

See Installation, Operation, Maintenance Instructions for safe use.

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Certificate No.: **IECEx INE 15.0033X**

Date of issue: 2021-10-04

Issue No: 3

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 01 is related to:

- extension of ambient temperature range up to -50°C to +60°C for Plugs OPTIMA-EX[GD] type 219.16... & Sockets ADVANCE-GRP[GD] type 504.16...

Issue 02 is related to:

- the application of the standards IEC 60079-1 (Ed.7.0) & IEC 60079-7 (Ed.5.0)
- the update of manufacturer documents

Issue 03 is related to:

- the application of the standards IEC 60079-0 (Ed.7.0) & IEC 60079-7 (Ed.5.1)
- the update of manufacturer documents

Annex:

IECEx INE 15.0033X-03_Annex.pdf

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Certificate No.: IECEx INE 15.0033X

Issue No.: 03

Annex: IECEx INE 15.0033X-03_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

Rated Current: 16A or 32A or 63A or 125A according to versions

Rated Voltage: from 50V to 690V AC, from 50V to 500V DC according to versions

MARKING

Marking has to be readable and indelible; it has to include the following indications:

1. For plug series OPTIMA-EX[GD]:
   - SCAME PARRE S.p.A.
   - 24020 PARRE (BG) - ITALY
   - 219.16... or 219.32... or 219.63... or 219.125...(1)
   - IECEx INE 15.0033X
   - (Serial number)
   - Ex eb IIC T(2) Gb
   - Ex tb IIIC T80°C Db IP66
   - Tamb. (3)
   - Tcable: (4)
   - *Rated Current and Rated Voltage (as defined in the manufacturer's documents)*

(1) The type is completed by numbers in accordance with the manufacturing variations

(2) Temperature Class for Gas according to the tables below

(3) Ambient temperature range according to the tables below when different from –20°C to +40°C

(4) Tcable: 80°C for type 219.16... when maximum ambient temperature is +60°C;
Tcable: 85°C for type 219.32... when maximum ambient temperature is +60°C;
Tcable: 90°C for type 219.63... when maximum ambient temperature is +60°C;
Tcable: 85°C for type 219.125... when maximum ambient temperature is +40°C;

Plug OPTIMA-EX[GD] type 219.16... & Socket ADVANCE-GRP[GD] TYPE 504.16...		
Ambient temperature range	Temperature Class for Gas	Optional auxiliary contacts EX-TECH ZBWE
-40°C to +60°C	T5	yes
-40°C to +50°C	T6	yes
-50°C to +60°C	T5	yes
-50°C to +50°C	T6	yes

Plug OPTIMA-EX[GD] type 219.32... & Socket ADVANCE-GRP[GD] TYPE 504.32...		
Ambient temperature range	Temperature Class for Gas	Optional auxiliary contacts EX-TECH ZBWE
-50°C to +60°C	T4	no
-50°C to +50°C	T4	no
-50°C to +40°C	T5	yes
-40°C to +60°C	T4	no
-40°C to +50°C	T4	no
-40°C to +40°C	T5	yes

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Plug OPTIMA-EX[GD] type 219.63... & Socket ADVANCE-GRP[GD] TYPE 504.63...		
Ambient temperature range	Temperature Class for Gas	Optional auxiliary contacts EX-TECH ZBWE
-35°C to +60°C	T3	no
-35°C to +50°C	T3	no
-35°C to +40°C	T4	yes

Plug OPTIMA-EX[GD] type 219.125... & Socket ADVANCE-GRP[GD] TYPE 504.125...	
Ambient temperature range	Temperature Class for Gas
-35°C to +40°C	T4

2. For socket series ADVANCE-GRP[GD]:
   - SCAME PARRE S.p.A.
   - 24020 PARRE (BG) - ITALY
   - 504.16... or 504.32... or 504.63... or 504.125... (1)
   - IECEx INE 15.0033X
   - (Serial number)
   - Ex db eb IIC T(2) Gb
   - Ex tb IIIC T80°C Db IP66
   - Tamb. (3)
   - Tcable: (4)
   - *Rated Current and Rated Voltage (as defined in the manufacturer's documents)*
   - **WARNING:** DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

(1) The type is completed by numbers in accordance with the manufacturing variations

(2) Temperature Class for Gas according to the tables above

(3) Ambient temperature range according to the tables above when different from –20°C to +40°C

(4) Tcable: 80°C for type 504.16... when maximum ambient temperature is +60°C;
Tcable: 85°C for type 504.32... when maximum ambient temperature is +60°C;
Tcable: 90°C for type 504.63... when maximum ambient temperature is +60°C;
Tcable: 85°C for type 504.125... when maximum ambient temperature is +40°C

ROUTINE EXAMINATIONS AND TESTS

Each piece of equipment defined above must have successfully passed; before delivery, in accordance with clause 7.1 of the IEC 60079-7 standard, a dielectric strength test on each of the different circuits of the connection units, performed according to the relevant standards, the supply voltage shall be applied for one minute.

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Certificate No.: IECEx INE 15.0033X

Issue No.: 03

Annex: IECEx INE 15.0033X-03_Annex.pdf

LIST OF Ex COMPONENTS USED IN THIS PRODUCT

Type of component	Name of Manufacturer	Marking / Operating temperature	Certificate number	IEC 60079-0	IEC 60079-1	IEC 60079-7	IEC 60079-31
Safety switch type COMMAND-Ex	SCAME	Ex db eb IIC Gb -50°C to +75°C or 100°C	IECEx INE 13.0032U	2017	2014	2017	2013
Optional auxiliary contacts type ZBWE	EX-TECH SOLUTION	Ex db eb IIC Gb -50°C to +75°C	IECEx INE 13.0063U	2012 (1)	2014	2015 (2)	2013
Switch of CZ series CZ0513 type D180	CZ Electric	Ex db eb IIC Gb -40°C to +55°C (95°C)	IECEx CML 19.0055U	2017	2014	2017	
Earth terminal series WPE (63A)	WEIDMULLER	Ex eb IIC Gb -60°C to +110°C	IECEx ULD 14.0005U	2017		2017	

(1) No Major technical changes between the standard IEC 60079-0: 2011 and the standard IEC 60079-0: 2017.

(2) No Major technical changes between the standard IEC 60079-7: 2015 and the standard IEC 60079-7:2017.

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