



# 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 SIR 11.0058** issue No.:2

Status: **Current**

Date of Issue: **2016-08-08**

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Certificate history:

Issue No. 2 (2016-8-8)

Issue No. 1 (2012-12-20)

Issue No. 0 (2012-6-14)

Applicant: **SCAME Parre s.p.a.**  
Via Costa Erta, 15  
24020 Parre Bergamo  
Italy

Equipment: **ZENITH-P Series of junction boxes**  
Optional accessory:

Type of Protection: **Increased Safety, Intrinsically Safe and Dust Protection by Enclosure.**

Marking: Ex e IIC T $\nabla$  Gb or  
Ex ia IIC T $\nabla$  Gb or  
Ex e ia IIC T $\nabla$  Gb  
Ex t IIIC T $\clubsuit$  Db IP66 (5) <sup>\*1</sup>  
Ta = -50/60°C to +60/75°C <sup>\*2</sup>  
<sup>\*1</sup> Note: Enclosure 644.0595 is only rated for IP65  
<sup>\*2</sup> Note: Ambient ranges are dependent upon certified component parts installed.  
 $\nabla$  T6, T5 or T4 depending on ambient range, refer to description of equipment for permissible options.  
 $\clubsuit$  T80°C, T95°C or T130°C depending on ambient range, refer to description of equipment for permissible options.

Approved for issue on behalf of the IECEx  
Certification Body:

N Jones

Position:

11 *R.A. Clark*  
Certification Manager

Signature:  
(for printed version)

*[Signature]*

Date:

2016-08-08

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:

**SIRA Certification Service**  
CSA Group  
Unit 6, Hawarden Industrial Park  
Hawarden, Deeside, CH5 3US  
United Kingdom

**sira**  
CERTIFICATION





# IECEX Certificate of Conformity

Certificate No.: IECEX SIR 11.0058

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Manufacturer: **SCAME Parre s.p.a.**  
Via Costa Erta, 15  
24020 Parre Bergamo  
**Italy**

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 60079-11 : 2006** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition: 5
- IEC 60079-31 : 2008** Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'  
Edition: 1
- IEC 60079-7 : 2006-07** Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
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:

GB/SIR/ExTR12.0116/01

GB/SIR/ExTR16.0186/00

##### Quality Assessment Report:

IT/IMQ/QAR15.0001/00

FR/INE/QAR10.0005/01



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The type ZENITH-P Series of junction boxes use a component enclosure certified as IECEX SIR 11.0057U, they are fitted with rail mounted terminals on the rear face or alternatively are mounted on a plate fixed to the rear of the enclosure. Suitably certified cable entries may be fitted to the sides or the rear of the enclosure as described in the manufacturer's instructions.

The total dissipated power for the control stations shall be calculated in accordance with IEC 60079-7:2007, Annex E.E.2. The total calculated dissipated power shall not exceed the figures given in table listed at the Annexe.

Refer to the Annexe for ZENITH-P Series of junction boxes sizes and Power Dissipation Ratings and Conditions of Manufacture.

**CONDITIONS OF CERTIFICATION: NO**

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## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

- Issue 1** - this Issue introduced the following change:  
1 Report GB/SIR/ExTR12.0116/01 replaced GB/SIR/ExTR12.0116/00
- Issue 2** - this Issue introduced the following changes:  
1 To allow the addition of an earth terminal bar in the junction box.  
2 To allow the introduction of a padlock on the outside of the enclosure.

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Annexe to: IECEx SIR 11.0058 Issue 2

Applicant: SCAME Parre s.p.a.

Apparatus: ZENITH-P Series of junction boxes



### ZENITH-P Series of junction boxes sizes and Power Dissipation Ratings

ZENITH-P		Maximum Power Dissipation (W) for Cage Type Terminals				
SCAME Code	Enclosure size mm	T6, T80°C Ta +40°C	T6, T80°C Ta +60°C	T5, T95°C Ta +40°C	T5, T95°C Ta +60°C	T4, T130°C Ta +75°C
644.0100	75x80x55	2.50	1.30	2.55	2.50	2.55
644.0200	75x80x75	2.60	1.30	2.90	2.60	2.90
644.0110	75x110x55	3.20	1.35	3.60	2.85	3.60
644.0210	75x110x75	3.40	1.35	4.00	3.00	4.00
644.0120	75x160x55	4.50	1.40	5.80	3.55	5.80
644.0220	75x160x75	4.70	1.45	6.00	3.60	6.00
644.0130	75x190x55	5.40	1.50	7.00	4.00	7.00
644.0230	75x190x75	5.50	1.55	7.20	4.05	7.20
644.0140	75x230x55	6.50	1.55	8.90	4.60	8.90
644.0240	75x230x75	6.60	1.60	9.20	4.70	9.20
644.0345	120x122x90	3.85	1.46	6.03	3.42	6.03
644.0350	120x220x90	3.75	2.30	8.25	3.80	8.25
644.0360	160x160x90	3.00	2.50	6.00	3.20	6.00
644.0370	160x260x90	6.30	2.80	13.5	5.10	13.5
644.0380	160x360x90	7.2	2.75	n/a	n/a	n/a
644.0390	160x560x90	11.7	3.80	n/a	n/a	n/a
644.0465	255x250x120	7.44	1.87	15.27	5.88	15.27
644.0485	400x250x120	9.57	2.12	n/a	n/a	n/a
644.0595	400x405x165	9.57	2.12	n/a	n/a	n/a

ZENITH-P		Maximum Power Dissipation (W) for Screw Type Terminals				
SCAME Code	Enclosure size mm	T6, T80°C Ta +40°C	T6, T80°C Ta +60°C	T5, T95°C Ta +40°C	T5, T95°C Ta +60°C	T4, T130°C Ta +75°C
644.0100	75x80x55	4.50	1.50	4.90	2.90	4.90
644.0200	75x80x75	4.60	1.50	5.20	3.10	5.20
644.0110	75x110x55	5.00	1.60	6.00	3.50	6.00
644.0210	75x110x75	5.10	1.65	6.40	3.80	6.40
644.0120	75x160x55	6.00	1.75	8.20	4.80	8.20
644.0220	75x160x75	6.10	1.80	8.40	4.90	8.40
644.0130	75x190x55	6.60	2.00	9.40	5.60	9.40
644.0230	75x190x75	6.70	2.05	9.85	5.70	9.85
644.0140	75x230x55	7.50	2.20	11.3	6.70	11.3
644.0240	75x230x75	7.60	2.25	11.6	6.80	11.6
644.0345	120x122x90	5.92	1.85	8.42	3.86	8.42
644.0350	120x220x90	7.00	2.0	16.0	4.50	16.0
644.0360	160x160x90	6.40	1.7	14.5	4.00	14.5
644.0370	160x260x90	8.50	2.5	19.7	5.60	19.7
644.0380	160x360x90	7.4	2.75	n/a	n/a	n/a
644.0390	160x560x90	11.2	4.20	n/a	n/a	n/a
644.0465	255x250x120	9.70	2.80	17.76	6.41	17.76
644.0485	400x250x120	11.94	3.36	n/a	n/a	n/a
644.0595	400x405x165	11.94	3.36	n/a	n/a	n/a

Date: 08 August 2016

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### Sira Certification Service

Unit 6, Hawarden Industrial Park,  
Hawarden, CH5 3US, United Kingdom

Form 9530 Issue 1

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**Annexe to:** IECEx SIR 11.0058 Issue 2  
**Applicant:** SCAME Parre s.p.a.  
**Apparatus:** ZENITH-P Series of junction boxes

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### Conditions of Manufacture

- i. If the junction boxes are fitted with wiring, each Zenith-P Enclosures shall be subject to a routine dielectric strength test of 1000 V + 2U rms or 1500 V rms, whichever is the greater applied between the terminal block and the enclosure for a period of 60 s as required by clause 6.1 of IEC 60079-7. Alternatively, a test shall be carried out at 1.2 times the test voltage, but maintained for at least 100 ms.
- ii. The terminals detailed in the associated assessment report and in the manufacturers controlled documents have been suitably certified by a notified body may be fitted in the junction boxes. The following requirements shall be complied with:
  - All terminals shall comply with IEC 60079-7: 2007.
  - The terminals shall be fitted in accordance with the manufacturer's instructions and any special conditions for safe use that are specified in their certificate.
  - When installed, the terminals shall have the minimum clearance to earth that is shown in specified controlled certification documents.
  - When terminals are installed within a T6 enclosure they shall be rated for a minimum of +80°C.
  - When terminals are installed within a T5 enclosure they shall be rated for minimum of +111°C.
  - When terminals are installed within a T4 enclosure only ceramic terminals shall be used.
  - Weidmüller WDU 1.5 or WDU 2.5 terminals shall be limited to a maximum current of 15 A.
  - These terminal boxes may be marked with a minimum ambient temperature of either -50°C or -60°C, therefore, the terminals that are fitted shall be capable of operating at the temperature of the intended application of the box.

The user/installer of the Zenith-P Series of Junction Boxes shall be provided with a copy of the certificate that appertains to the particular terminals that are fitted in that box.
- iii. When cable entry devices are fitted they shall be approved by a notified body and suitable for the application.
- iv. The maximum dissipated power in watts, for each Junction Box, shall be calculated in accordance with IEC/EN 60079-7:2007, Annex E, E.2 and shall not exceed the value given in the Table above.
- v. Any unused entries must be blanked using suitably approved blanking plugs.
- vi. When the Junction Box contains both Intrinsic safety and non Intrinsic Safety wiring, , a separation method in accordance with clause 12.2.3 of IEC/EN60079-14 must be observed and suitable warning label must be fixed to the cover in accordance with IEC/EN 60079-7 Clause 4.9.3.
- vii. The breather/drains detailed in the associated assessment report and in the manufacturers controlled certification documents and have been suitably certified by a notified body may be fitted in the junction box. The following requirements must be complied with:
  - When fitted with breather/drain, ingress protection of the enclosure must not be compromised. Select breather/drain to suit.
  - The breather/drain shall be fitted in accordance with the manufacturer's instructions and any special conditions for safe use that are specified in their certificate.
  - The junction boxes must be marked with a minimum/maximum ambient temperature dependant on the minimum/maximum service temperatures detailed on the breather/drain certificate if the breather/drain values are the limiting factor.

The user/installer of the Zenith-P Series of Junction Boxes shall be provided with a copy of the certificate that appertains to the particular breather/drain that is fitted in that box.

### Sira Certification Service

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**Annexe to:** IECEx SIR 11.0058 Issue 2  
**Applicant:** SCAME Parre s.p.a.  
**Apparatus:** ZENITH-P Series of junction boxes



### Manufacturer's Documents

Drawing No	Sheets	Rev.	Date (Sira stamp)	Title
STP 0002	1 to 21	0	01 Jun 2012	Zenith-P Technical Document Junction Box
IQA9003	1 to 11	3	01 Jun 2012	Terminal Box - installation, maintenance, operating instructions

### Issue 2

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
STP0002	1 to 24	1	13 Jul 2016	Zenith-P Technical Document Junction Box
IQA9003	1 to 11	4	04 Jul 2016	Terminal Box - installation, maintenance, operating instructions.

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**Date:** 08 August 2016

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**Form 9530 Issue 1**

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