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### **EU-TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

Certificate Number: **Sira 08ATEX3042** Issue: 3 5

4 **Type ATEX Zenith P Series Junction Boxes** Equipment:

5 Applicant: **Scame Parre Spa** 

6 Address: Via Costa Erta, 15

24020 Parre - Bergamo

- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 Sira Certification Service, notified body number 0518 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2009

EN 60079-7:2007

EN 60079-11:2007

EN 60079-31:2009

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

- 10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.
- 11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of
- 12 The marking of the equipment shall include the following:



II 2 G D

Ex e IIC TO Gb or Ex ia IIC T<sup>①</sup> Gb or

Ex e ia IIC T<sup>①</sup> Gb

Ex t IIIC T2 Db IP66 (5)\*1 Ta = -50/60°C to +60/75°C \*2

\*1 Note: Enclosure 644.0595 is only rated for IP 65.

\*2 Note: Ambient ranges are dependent upon certified component parts installed.

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permissible options.

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① T6, T5 or T4 depending on ambient range, refer to

② T80°C, T95°C or T130°C depending on ambient

range, refer to description of equipment for

description of equipment for permissible options...

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# 13 **DESCRIPTION OF EQUIPMENT**

The type ZENITH P Series of junction boxes use a component enclosure certified as Sira 08ATEX3041U, they are are fitted with rail-mounted terminals on the rear face or alternatively they are mounted on a plate fixed to the rear of the enclosure. Suitably certified cable entry devices 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 Junction box shall be calculated in accordance with EN 60079-7:2007, Annex E,E.2. The total calculated dissipated power shall not exceed the figures given in Table below:

ZENITH-P		Maximum Power Dissipation (W) for Cage Type Terminals						
SCAME	Enclosure	T6, T80°C	T6, T80°C	T5, T95°C	T5, T95°C	T4, T130°C		
Code	size mm	Ta +40°C	Ta +60°C	Ta +40°C	Ta +60°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 Powe	er Dissipation (W)		e Terminals			
SCAME	Enclosure	T6, T80°C	T6, T80°C	T5, T95°C	T5, T95°C	T4, T130°C		
Code	size mm	Ta +40°C	Ta +60°C	Ta +40°C	Ta +60°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		

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ZENITH-P		Maximum Power Dissipation (W) for Screw Type Terminals						
SCAME	Enclosure	T6, T80°C	T6, T80°C	T5, T95°C	T5, T95°C	T4, T130°C		
Code	size mm	Ta +40°C	Ta +60°C	Ta +40°C	Ta +60°C	Ta +75°C		
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		

### **Variation 1** - This variation introduced the following change:

i. The recognition of minor drawing modifications; these changes are administrative and do not affect the aspects of the product that are relevant to explosion safety

# Variation 2 - This variation introduced the following change:

i. The inclusion of the 644.0380 and 644.0390 enclosures, the description has been modified to show these products.

# **Variation 3** - This variation introduced the following changes:

- . The introduction of larger 50, 70/90 and 120/150 mm<sup>2</sup> suitably approved terminals was permitted.
- ii. The introduction of a new column in the power ratings table for T Class T5, Ta +40°C, based on previous test results was sanctioned.
- iii. The option to use a suitably certified breather/drain valve was authorised.
- iv. For clarity, the introduction of a condition of certification was added to the certificate that any unused entries must be blanked using a suitably approved blanking plugs.
- v. The introduction of a new coding for Ex e ia IIC Gb, with an associated condition of safe use with respect to enclosures containing both IS and non-IS wiring; that they should contain a separation in accordance with clause 12.2.3 of EN60079-14 and are correctly marked as required by clause 4.9.3 of EN 60079-7 in such cases.
- vi. Following appropriate re-assessment to demonstrate compliance with the requirements of the EN 60079 series of standards, the documents previously listed in section 9, EN 60079-0:2006, EN 61241-0:2006 and EN 61241-1:2004, were replaced by those currently listed, the markings in section 12 were updated accordingly.

### **Variation 4** - This variation introduced the following changes:

- i. To allow the addition of an earth terminal bar in the junction box.
- ii. To allow the introduction of a padlock on the outside of the enclosure.
- iii. To correct the note in the marking in the certificate.

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#### 14 **DESCRIPTIVE DOCUMENTS**

## 14.1 Drawings

Refer to Certificate Annexe.

# 14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	5 March 2008	R51A15460A	The release of the prime certificate.
1	29 August 2008	R51A18692A	The introduction of Variation 1.
2	12 November 2008	R51A18758A	<ul> <li>This Issue covers the following changes:</li> <li>The introduction of Variation 2.</li> <li>The applicable surface temperatures for dust were added to the tables in the description.</li> <li>Condition of certification clause 17.4 was modified to clarify the restrictions applying to the minimum operating temperatures of the terminals.</li> </ul>
3	1 June 2012	R23529A/00	The introduction of Variation 3.
4	30 November 2012	R23529A/01	Report R23529A/01 replaced R23529A/00.
5	08 August 2016	R70070294A	<ul> <li>This Issue covers the following changes:</li> <li>EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. (In accordance with Article 41 of Directive 2014/34/EU, EC Type-Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</li> <li>The introduction of Variation 4.</li> </ul>

15 **SPECIFIC CONDITIONS OF USE** (denoted by X after the certificate number)

None

## 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

## 17 **CONDITIONS OF MANUFACTURE**

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.
- 17.3 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

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terminal block and the enclosure for a period of 60 s as required by clause 6.1 of EN 60079-7. Alternatively, a test shall be carried out at 1.2 times the test voltage, but maintained for at least 100 ms.

- 17.4 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 EN 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 (Cert No. KEMA 98TEX1683U) terminals must 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.

- 17.5 When cable entry devices are fitted they shall be approved by a notified body and suitable for the application.
- 17.6 The maximum dissipated power in watts, for each junction box, shall be calculated in accordance with EN 60079-7:2007, Annex E, E.2 and shall not exceed the value given in the Table detailed in Section 13.
- 17.7 Any unused entries must be blanked using suitably approved blanking plugs.
- 17.8 When the Junction Box contains both Intrinsic safety and non-Intrinsic Safety wiring, a separation method in accordance with clause 12.2.3 of EN60079-14 must be observed and suitable warning label must be fixed to the cover in accordance with EN 60079-7 Clause 4.9.3.
- 17.9 The breather/drains detailed in the associated assessment report and in the manufacturer's 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.

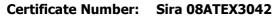
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# **Certificate Annexe**

**Equipment:** 





**Applicant:** Scame Parre Spa

**Issue 0** - The drawings associated with this Issue were replaced by those listed in Issue 1.

Drawing no:	Sheets	Rev.	Date	Description
STP 0001	1 to 11	00	04 Mar 08	Scame Zenith P Range Technical Document
IQA9002	1 to 9	00	31 Jan 08	Enclosure Installation, Maintenance, Operating Instructions
IQA9003	1 to 7	00	31 Jan 08	Terminal Box Installation, Maintenance, Operating Instructions

#### Issue 1

Drawing No	Sheets	Rev.	Date	Description
STP 0001	1 to 11	00	04 Mar 08	Scame Zenith P Range Technical Document
IQA9003	1 to 5	01	18 Jul 08	Terminal Box Installation, Maintenance, Operating
				Instructions

## Issue 2

Drawing No	Sheets	Rev.	Date	Description
STP 0001	1 to 11	01	04 Nov 08	Scame Zenith P Range Technical Document
IQA9003	1 to 4	02	04 Nov 08	Terminal Box Installation, Maintenance, Operating
				Instructions

### **Issue 3**

Drawing No.	Sheets	Rev.	Date (Sira stamp)	Title
STP 0002	1 to 21	0	01 Jun 12	Zenith-P Technical Document Junction Box
IQA9003	1 to 11	3	01 Jun 12	Terminal Box - installation, maintenance, operating
				instructions

**Issue 4** - (No new drawings were introduced.)

## **Issue 5**

				/
Drawing	Sheets	Rev.	Date(Sira stamp)	Title
STP0002	1 to 24	1	13 Jul 16	Zenith-P Technical Document Junction Box
IQA9003	1 to 11	4	04 Jul 16	Terminal Box – installation, maintenance, operating
				instructions.

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