



# 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 15.0056X** issue No.:0 Certificate history:

Status: **Current**

Date of Issue: **2015-12-01** Page 1 of 3

Applicant: **Tempa Pano**  
Makine İhtisas Organize Sanayi Bölgesi,  
2.Cad.,No:1 Demirciler Köyü  
Dilovası KOCAELİ 41455  
Turkey

Electrical Apparatus: **TEX & TES\*\*\*\*\* Range of Junction Boxes**  
Optional accessory:

Type of Protection: **Increased Safety, Intrinsic Safety and Dust Protection by Enclosure**

Marking: Ex eb IIC T5 Gb (Tamb -40°C to +55°C) or Ex ia IIC T5 Ga (Tamb -40°C to +55°C)  
Ex tb IIIC T72°C Db (Tamb -40°C to +55°C) Ex ia IIC T6 Ga (Tamb -40°C to +40°C)  
or  
Ex eb IIC T6 Gb (Tamb -40°C to +40°C)  
Ex tb IIIC T57°C Db (Tamb -40°C to +40°C)

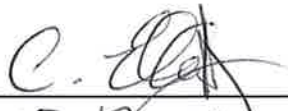
Note: -20°C to be marked when fitted with terminals with a -20°C limiting temperature.

Approved for issue on behalf of the IECEx Certification Body: C Ellaby

Position: Deputy Certification Manager

Signature:  
(for printed version)

Date:

  
2015-12-01

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 15.0056X

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Issue No.: 0

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Manufacturer: **Tempa Pano**  
Makine İhtisas Organize Sanayi Bölgesi,  
2.Cad.,No:1 Demirciler Köyü  
Dilovası KOCAELİ 41455  
Turkey

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:

|                                            |                                                                                      |
|--------------------------------------------|--------------------------------------------------------------------------------------|
| <b>IEC 60079-0 : 2011</b><br>Edition: 6.0  | Explosive atmospheres - Part 0: General requirements                                 |
| <b>IEC 60079-11 : 2011</b><br>Edition: 6.0 | Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"        |
| <b>IEC 60079-31 : 2013</b><br>Edition: 2   | Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t" |
| <b>IEC 60079-7 : 2015</b><br>Edition: 5.0  | Explosive atmospheres – Part 7: Equipment protection by increased safety "e"         |

*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/ExTR15.0308/00

Quality Assessment Report:  
GB/SIR/QAR15.0005/00



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## Schedule

### EQUIPMENT:

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

The TES\*\*\*\*\* range of enclosure boxes are manufactured in mild or stainless steel and comprise of an enclosure with a separate lipped lid. The lid has a closed cell, flat EPDM gasket seal that presses on to a lipped edge on the base of the enclosure, with access points for fixing lugs to secure the enclosure to the mounting surface.

The TEX\*\*\*\*\* range of enclosure boxes are manufactured in mild or stainless steel and comprise of an enclosure with a hinged lid. The lid has a closed cell poured polyurethane gasket seal that presses on to a raised edge on the base of the enclosure to aid sealing. Four fixing lugs are provided to secure the enclosure to the mounting surface.

Refer to ANNEXE for additional description and Conditions of Manufacture.

### CONDITIONS OF CERTIFICATION: YES as shown below:

1. Schedule of Limitations may apply to the terminals fitted in these junction boxes, the user/installer shall therefore comply with any conditions that have been identified by Tempa Pano.

**Annexe to:** IECEx SIR 15.0056X Issue 0

**Applicant:** Tempa Pano

**Apparatus:** TEX & TES\*\*\*\*\* Range of Junction Boxes



#### Enclosure sizes

| Type      | Width (mm) | Height (mm) | Depth (mm) |
|-----------|------------|-------------|------------|
| TES121208 | 120        | 120         | 80         |
| TES151509 | 150        | 150         | 90         |
| TES191910 | 190        | 190         | 100        |
| TEX152213 | 150        | 220         | 130        |
| TEX262616 | 260        | 260         | 160        |
| TEX262620 | 260        | 260         | 200        |
| TEX303016 | 300        | 300         | 160        |
| TEX303020 | 300        | 300         | 200        |
| TEX263816 | 260        | 380         | 160        |
| TEX263820 | 260        | 380         | 200        |
| TEX384516 | 380        | 450         | 160        |
| TEX384520 | 380        | 450         | 200        |
| TEX484816 | 480        | 480         | 160        |
| TEX484820 | 480        | 480         | 200        |
| TEX355016 | 350        | 500         | 160        |
| TEX355020 | 350        | 500         | 200        |
| TEX456216 | 450        | 620         | 160        |
| TEX456220 | 450        | 620         | 200        |
| TEX745520 | 740        | 550         | 200        |
| TEX507620 | 500        | 760         | 200        |
| TEX648620 | 640        | 860         | 200        |
| TEX619120 | 610        | 910         | 200        |
| TEX749820 | 740        | 980         | 200        |

The enclosures are fitted with combinations of suitably certified terminals (listed in certification drawing No. TESTEXTERMINALS-001 SHT 1 of 1) to mounting rails fixed to the rear panel. If Weidmüller WDU 1.5, WDU 2.5 or SAK 2.5 type of terminals are fitted, they are limited to a maximum current of 15A. The maximum power that may be dissipated inside the enclosures is calculated according to the maximum dissipated power method described in IEC 60079-7: 2015 Annex E, E.2. The junction boxes are fitted with a gland plate on the enclosure base.

The following power ratings apply:

#### Maximum power dissipation (W)

| Type      | T6, maximum Ta = 40°C | T5, maximum Ta = 55°C |
|-----------|-----------------------|-----------------------|
| TES121208 | 3.0                   | 3.0                   |
| TES151509 | 6.0                   | 6.0                   |
| TES191910 | 8.0                   | 8.0                   |
| TEX152213 | 11.0                  | 11.0                  |
| TEX262616 | 30.0                  | 30.0                  |
| TEX262620 | 33.0                  | 33.0                  |
| TEX303016 | 39.0                  | 39.0                  |
| TEX303020 | 39.1                  | 39.1                  |
| TEX263816 | 39.2                  | 39.2                  |
| TEX263820 | 39.3                  | 39.3                  |

#### Sira Certification Service

Unit 6, Hawarden Industrial Park,  
Hawarden, CH3 3US, United Kingdom

Tel: +44 (0) 1244 670 900  
Fax: +44 (0) 1244 539 301  
Email: [ukinfo@csagroup.org](mailto:ukinfo@csagroup.org)  
Web: [www.csagroupuk.org](http://www.csagroupuk.org)

**Date:** 01 December 2015

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**Form 9530 Issue 1**

**Annexe to:** IECEx SIR 15.0056X Issue 0

**Applicant:** Tempa Pano

**Apparatus:** TEX & TES\*\*\*\*\* Range of Junction Boxes



| Type      | T6, maximum Ta = 40°C | T5, maximum Ta = 55°C |
|-----------|-----------------------|-----------------------|
| TEX384516 | 40.0                  | 40.0                  |
| TEX384520 | 40.1                  | 40.1                  |
| TEX484816 | 40.7                  | 40.7                  |
| TEX484820 | 40.8                  | 40.8                  |
| TEX355016 | 40.2                  | 40.2                  |
| TEX355020 | 40.3                  | 40.3                  |
| TEX456216 | 41.6                  | 41.6                  |
| TEX456220 | 42.1                  | 42.1                  |
| TEX745520 | 65.0                  | 65.0                  |
| TEX507620 | 64.2                  | 64.2                  |
| TEX648620 | 72.0                  | 72.0                  |
| TEX619120 | 73.0                  | 73.0                  |
| TEX749820 | 89.0                  | 89.0                  |

### Conditions of manufacture

The Manufacturer shall comply with the following:

- The enclosures may also be manufactured to sizes not specified in the documentation, provided that any given dimension is not larger than the respective dimension of the largest enclosure or smaller than the respective dimension of the smallest enclosure. The marked power rating shall be the power rating of the next smallest size of enclosure.
- The manufacturer shall only fit the suitably certified screw type terminals listed in drawing number TESTEXTERMINALS-001 SHT 1 of 1. The terminals fitted shall additionally conform with the following requirements:
  - When terminals are installed within a T6 enclosure they shall be rated for a minimum of +77°C and when terminals are installed within a T5 enclosure they shall be rated for minimum of +92°C.
  - Weidmuller WDU 1.5, WDU 2.5 or SAK 2.5 terminals must be limited to a maximum current of 15 A.
  - Tempa Pano shall review the Special Conditions for Safe Use/Schedule of Limitations that apply to the terminals fitted in their products, if anything needs to be considered during the installation of the junction boxes, then they shall provide their user/installer with a copy of the certificate that applies to the terminals and specifically identify those condition(s) that need to be addressed.
- Terminals shall be installed in accordance with the conditions specified on their certificate and the manufacturer's instructions.
- An electric strength test shall be carried out on each unit manufactured only if the terminals are fitted with wiring. The test shall be carried out in accordance with IEC 60079-7 Clause 7.
- The maximum number of terminals permitted shall be calculated in accordance with IEC 60079-7 Annex E, E.3.
- The marking shall be updated to limit the minimum ambient temperature to -20°C when the internally fitted suitably certified terminal is limited to -20°C operating temperature.
- The Junction Box is equipped with terminals for circuits in the type of protection Increased Safety 'e' or Intrinsic Safety i or a combination of both. The intrinsically safe terminals shall be marked for Ex ia IIC e.g in light blue.

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