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

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)
Ex tb IIIC T72°C Db (Tamb -40°C to +55°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)

or

Ex ia IIC T5 Ga (Tamb -40°C to +55°C)
Ex ia IIC T6 Ga (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.

Certificate issued by:

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

sira CERTIFICATION

CSA Group

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Certificate No.: IECEx SIR 15.0056X

Date of Issue: **2015-12-01** Issue No.: **0**

Manufacturer: **Tempa Pano**
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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:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2013 Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2015 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.

Annex: IECEx SIR 15 0056X Annexe Issue 0.pdf

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

Applicant: **Tempa Pano**

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

CSA Group

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, CH5 3US, United Kingdom

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

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:

1. 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.
2. 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.
3. Terminals shall be installed in accordance with the conditions specified on their certificate and the manufacturer's instructions.
4. 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.
5. The maximum number of terminals permitted shall be calculated in accordance with IEC 60079-7 Annex E, E.3.
6. 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.
7. 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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Email: ukinfo@csagroup.org
Web: www.csagroupuk.org