



# 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.:  issue No.:  Certificate history:

Status:

Date of Issue:  Page 1 of 3

Applicant: **Temperature Controls Pty Ltd**  
7 Yamma St  
Sefton NSW 2162  
Australia

Electrical Apparatus: **Terminal Head and Temperature Probe Assembly Types TC20FIXTA (with fixed nipple probe) and TC20SPRTA (with spring loaded nipple probe)**  
Optional accessory:

Type of Protection: **Ex de and Ex tD**

Marking: **For fixed nipple probe:**  
Temperature Controls Pty Ltd  
Type TC20FIXTA 40V 3W  
Ex de IIC T6 IP66 or Ex tD A21 T6 IP66  
IECEX 09.0045X  
Serial No. \_\_\_\_ or  
**For spring loaded probe:**  
Temperature Controls Pty Ltd  
Type TC20SPRTA 40V 3W  
Ex de IIC T6 IP66 or Ex tD A21 T6 IP66  
IECEX 09.0045X  
Serial No. \_\_\_\_


Approved for issue on behalf of the IECEx  
Certification Body:

Ujen Singh

Position:

Quality & Certification Manager

Signature:  
(for printed version)

  
14 DECEMBER 2009.

Date:

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:

**TestSafe Australia**  
919 Londonderry Road  
Londonderry NSW 2753  
Australia





# IECEX Certificate of Conformity

Certificate No.: IECEx TSA 09.0045X

Date of Issue: 2009-12-14

Issue No.: 0

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Manufacturer: **Temperature Controls Pty Ltd**  
7 Yamma St  
Sefton NSW 2162  
Australia

**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 : 2004</b> Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2003</b> Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
<b>IEC 60079-7 : 2001</b> Edition: 3	Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'
<b>IEC 61241-0 : 2004</b> Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
<b>IEC 61241-1 : 2004</b> Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 1: Protection by enclosures "tD"

*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:

AU/TSA/ExTR06.0012/00  
AU/TSA/ExTR06.0013/00  
AU/TSA/ExTR06.0121/00  
AU/TSA/ExTR06.0137/00  
AU/TSA/ExTR08.0033/00  
AU/TSA/ExTR09.0053/00

Quality Assessment Report:

AU/TSA/QAR06.0018/00  
AU/TSA/QAR06.0018/01  
AU/TSA/QAR06.0018/02



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Certificate No.: IECEx TSA 09.0045X

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## Schedule

### EQUIPMENT:

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

The model TC20FIXTA and the model TC20SPRTA temperature assemblies consist of a terminal enclosure and a temperature probe.

The terminal enclosure is a circular, cast aluminium alloy enclosure with a screw-on lid. There is a threaded side entry intended to accept 20mm screwed conduit and a 1/2" NPT bottom entry intended for a temperature probe.

The temperature probes consist of a stainless steel nipple with a 1/2" NPT thread for introduction into the terminal enclosure. The actual probe consists of a MIMS cable of varying length, with a welded steel end cap enclosing the thermo-couple or the RTD. The probe may be fixed in the nipple (assembly model TC20FIXTA) or be spring loaded (assembly model TC20SPRTA).

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

Refer to Annexe for conditions of certification.



# IECEX Certificate of Conformity Annexe

<b>Annexe for Certificate No.:</b>	<b>IECEX TSA 09.0045X</b>	<b>Issue No.:</b>	<b>0</b>
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### Conditions of Certification pertaining to Issue 0 of this Certificate:

1. Each apparatus is to be supplied with an Instruction Manual.
2. The probe may only be installed in an atmosphere with an ambient temperature between -20 °C and +60 °C and be used for media with a maximum temperature of +1100 °C.
3. It is a condition of safe use that when the probe is installed in a media with temperatures exceeding +80 °C, a lagging extension must be used to maintain temperature Class of T6 on the Terminal Head (in an ambient temperature of up to +60 °C).

### Drawing list pertaining to Issue 0 of this Certificate:

<b>Document No.</b>	<b>Sheets</b>	<b>Document Title</b>	<b>Issue</b>	<b>Date (yyyy/mm/dd)</b>
TCISEXEDSTA	1	Ex de Ex tD A21 Certified Spring Loaded Temperature Probe Assembly Installation Instructions for Model TCSPRTA	F	2009/11/25
TCISEXEDTA	1	Ex de Ex tD A21 Certified Fixed Temperature Probe Assembly Installation Instructions for Model TC20FIXTA	F	2009/11/26
F FTH306 001	1	Flameproof Cum Weatherproof Thermocouple Head	3	2004/02/02
5754 (Sheet 1)	1	Ex d Terminal Head Main Detail Sheet 1 of 8	04	2006/09/28
5754 (Sheet 2)	1	Ex d Terminal Head Body Detail Sheet 2 of 8	02	2006/08/11
5754 (Sheet 3)	1	Ex d Terminal Head Cap Detail Sheet 3 of 8	03	2006/08/11
5754 (Sheet 4)	1	Ex d Terminal Head Terminal Block Mounting Details Sheet 4 of 8	03	2006/08/11
5754 (Sheet 5)	1	Ex d Terminal Head Block Mounting Hole Clearance Sheet 5 of 8	02	2006/08/11
5754 (Sheet 6)	1	Ex d Terminal Head Block Mounting Hole Clearance Sheet 6 of 8	01	2006/08/11
5754 (Sheet 7)	1	Ex d Terminal Head Block Mounting Hole Clearance Sheet 7 of 8	01	2006/08/11
5754 (Sheet 8)	1	Ex d Terminal Head Block Mounting Hole Clearance Sheet 8 of 8	01	2006/08/11

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# IECEX Certificate of Conformity Annexe

<b>Annexe for Certificate No.:</b>	<b>IECEX TSA 09.0045X</b>	<b>Issue No.:</b>	<b>0</b>
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Document No.	Sheets	Document Title	Issue	Date (yyyy/mm/dd)
5755	1	PART : TCHNEXD12	02	2006/08/11
5756 (Sheet 1)	1	PART: TCHNSPEXD12 Sheet 1 of 2	01	2006/08/11
5756 (Sheet 2)	1	PART: TCHNSPEXD12 Sheet 2 of 2	01	2006/08/11
5784	1	Ex e Terminal Head Din Rail Terminal Assembly	04	2006/08/11
5850	1	Fixed Hex Nipple Element Model No TCFIXEX	04	2006/11/09
5875	1	Fixed Hex Nipple Assembly General Arrangement	03	2006/11/09
5876	1	Ex d Spring Loaded Temperature Assembly Model No TCSPREX	04	2006/11/09
5877	1	Spring Loaded Nipple Assembly General Arrangement	03	2006/11/09
6616	1	PART: TCHNEXDM20	01	2006/08/11
6617	1	PART : TCHNSPEXDM20	01	2006/08/11
6682	1	Lagging Extension for Temperature Rating	04	2006/12/20
6685	1	Spring Loaded Nipple Assembly Model No TC20SPRTA	04	2006/09/28
6686	1	Fixed Hex Nipple Assembly Model No TC20FIXTA	04	2006/09/28
7638	1	Ex de & Ex tD A21 Temperature Assembly Tagging Arrangement	0	2009/10/31
7639	1	Ex de & Ex tD A21 Temperature Assembly Model TC20SPRTA	1	2009/11/25

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