



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 TSA 10.0030X Issue No: 2 Certificate history:
Status: **Current** Issue No. 2 (2017-05-11)
Date of Issue: **2017-05-11** Issue No. 1 (2016-09-12)
Page 1 of 5 Issue No. 0 (2010-11-30)

Applicant: **Austdac Pty Ltd**
Unit 1, 42 Carrington Road
Castle Hill NSW 2154
Australia

Equipment: **Io Thermal Limiter type FWT1**
Optional accessory:

Type of Protection: **Ex Ia**

Marking:
Io Thermal Limiter Type FWT1-XXX-Y
IECEX TSA 10.0030X Ex ia I
Input Port (1, 2, 3)
U_i = 18 V
I_i = 3.3 A
Output Port (4, 5, 6)
U_o = U_i
Io (Thermal) = Z, (refer label drawing)
Serial Number
Austdac Pty Ltd

Approved for issue on behalf of the IECEx
Certification Body:

Debbie Wouters

Position:

Acting Quality & Certification Manager

Signature:
(for printed version)

Date:

11 MAY 2017

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

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Manufacturer: **Austdac Pty Ltd**
Unit 1, 42 Carrington Road
Castle Hill NSW 2154
Australia

Additional Manufacturing location(s):

Dongguan Hubbell Electrical Products Company Limited (DGHAL)
Xincheng Industrial Zone
Hengli Town, Donggaun City
523460, Guangdong
China

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 : 2004 Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
Edition:4.0
IEC 60079-11 : 2006 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:5

*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/ExTR10.0055/00 AU/TSA/ExTR10.0055/01

Quality Assessment Report:

AU/ITA/QAR15.0002/01 AU/ITA/QAR06.0001/11



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The equipment is designed to limit thermal output current of an intrinsically safe power supply. It consists of two fuses mounted on a single PCB. Both fuses are connected together to the single supply input terminals 1, 2 and 3. There are two output terminals. The output terminal 4 is connected to one fuse and the output terminal 6 is connected to other fuse. Therefore the thermal output current is limited by the rating of fuses used. The spark current is limited only by the input current supplied to this apparatus. All PCB tracks are 2 mm wide. The PCB is mounted inside a plastic enclosure which is provided with DIN rail mounting. This has IP20 level of protection. Therefore apparatus is meant to be placed inside a host enclosure with IP54 rating when used in hazardous area. The screw terminals are directly soldered on to the PCB.

SPECIFIC CONDITIONS OF USE: YES as shown below:

See the Annexe of this certificate.



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

Issue 2:

Change of both Applicant address and Manufacturer address from
"1 / 4 Packard Avenue, Castle Hill, NSW 2154, Australia"

To

"Unit 1, 42 Carrington Road, Castle Hill, NSW 2154, Australia"



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Additional information:

none

Annex:

Annexe_IECEX TSA 10 0030X-2.pdf



IECEX Certificate of Conformity Annexe

Annexe for Certificate No.:	IECEX TSA 10.0030X	Issue No.:	2
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Drawing list pertaining to Issue 0 of this Certificate:

Document No.	Sheets	Document Title	Issue	Date (yyyy/mm/dd)
50-021-37	2	Io Thermal Limiter Type FWT1 Document List	03	2010/11/17
50-022-03	1	Io Thermal Limiter Type FWT1 PCB0285A Schematic Diagram	02	2010/11/17
50-023-21	3	Io Thermal Limiter Type FWT1 PCB0285A Artwork Details	02	2010/10/20
50-024-07	1	Io Thermal Limiter Type FWT1 PCB0285A Component Loading Diagram	02	2010/10/25
50-025-14	2	Io Thermal Limiter Type FWT1 Bill of Materials	01	2010/08/04
50-026-04	1	Io Thermal Limiter Type FWT1 Assembly Details	01	2010/08/05
50-027-13	1	Io Thermal Limiter Type FWT1 Label Details	02	2010/10/21
50-028-13	1	Io Thermal Limiter Type FWT1 Connection Label Details	01	2010/08/04
50-029-13	1	Io Thermal Limiter Type FWT1 Certification Labels Label Details	03	2010/11/17
50-030-12	7	Io Thermal Limiter Type FWT1 User's Manual	02	2010/11/17
90-369-04	1	Encapsulated Barrier Network Fuse Type EBNF1 Assembly Diagram	01	2007/08/20
90-395-13	1	Encapsulated Barrier Network Fuse Type EBNF1 Label Details	01	2009/03/10

Certificate issued by:



TestSafe Australia
919 Londonderry Road
Londonderry NSW 2753 Australia



IECEX Certificate of Conformity Annexe

Annexe for Certificate No.:	IECEX TSA 10.0030X	Issue No.:	2
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Conditions of Certification pertaining to Issue 0 of this Certificate:

1. The input output parameters specified below must be taken in to account when installed.

Input Port: Terminals 1, 2, 3

The thermal output currents vary depending on the type of fuse fitted to this apparatus. Refer the chart below for the fuse ratings and I_o (Thermal) values.

Type FWT1-XXX-Y	Fuse Type of F1 and F2	Interrupting ratings of fuse		U_i	I_o (Thermal) = Z mA
FWT1-0050-1	EBNF1 50 mA	250 V	1500 A	16 V	85
FWT1-0062-0	259.062	125 V	50 A	16 V	106
FWT1-0080-1	EBNF1 80 mA	250 V	1500 A	16 V	136
FWT1-0100-1	EBNF1 100 mA	250 V	1500 A	16 V	170
FWT1-0125-0	259.125	125 V	50 A	16 V	213
FWT1-0160-1	EBNF1 160 mA	250 V	1500 A	16 V	272
FWT1-0200-1	EBNF1 200 mA	250 V	1500 A	16 V	340
FWT1-0250-0	259.250	125 V	50 A	16 V	425
FWT1-0250-1	EBNF1 250 mA	250 V	1500 A	16 V	425
FWT1-0375-0	259.375	125 V	50 A	16 V	638
FWT1-0500-0	259.500	125 V	50 A	16 V	850
FWT1-0750-0	259.750	125 V	50 A	16 V	1275
FWT1-1000-0	259001	125 V	50 A	16 V	1700

Output Port: Terminals 4, 5, 6

$U_o = U_i$

I_o (Thermal) = Z (as per the chart above)

I_o (Spark) = I_i

2. The apparatus must be in a host enclosure of IP 54 when installed in hazardous area.

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Londonderry NSW 2753 Australia



IECEX Certificate of Conformity Annexe

Annexe for Certificate No.:	IECEX TSA 10.0030X	Issue No.:	2
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Drawing list pertaining to Issue 1 of this Certificate:

Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
50-022-03	1	Io THERMAL LIMITER TYPE FWT1 PCB0285A SCHEMATIC DIAGRAM	03	2016-08-29
50-029-13	1	Io THERMAL LIMITER TYPE FWT1 CERTIFICATION LABELS LABEL DETAILS	05	2016-08-29

Conditions of Certification pertaining to Issue 1 of this Certificate:

1. The input output parameters specified below must be taken into account when installed. Co and Lo of the connecting power source must be taken into account when installed.

Input Port: Terminals 1, 2, 3

The thermal output currents vary depending on the type of fuse fitted to this apparatus. Refer the chart below for the fuse ratings and Io (Thermal) values.

Type FWT1-XXX-Y	Fuse Type of F1 and F2	Interrupting ratings of fuse		Ui	Io (Thermal) = Z mA
		250 V	1500 A		
FWT1-0050-1	EBNF1 50 mA	250 V	1500 A	18 V	85
FWT1-0062-0	259.062	125 V	50 A	18 V	106
FWT1-0080-1	EBNF1 80 mA	250 V	1500 A	18 V	136
FWT1-0100-1	EBNF1 100 mA	250 V	1500 A	18 V	170
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FWT1-0160-1	EBNF1 160 mA	250 V	1500 A	18 V	272
FWT1-0200-1	EBNF1 200 mA	250 V	1500 A	18 V	340
FWT1-0250-0	259.250	125 V	50 A	18 V	425
FWT1-0250-1	EBNF1 250 mA	250 V	1500 A	18 V	425
FWT1-0375-0	259.375	125 V	50 A	18 V	638
FWT1-0500-0	259.500	125 V	50 A	18 V	850
FWT1-0750-0	259.750	125 V	50 A	18 V	1275
FWT1-1000-0	259001	125 V	50 A	18 V	1700

Output Port: Terminals 4, 5, 6

Uo = Ui

Io (Thermal) = Z (as per the chart above)

Io (Spark) = Ii

2. The apparatus must be in a host enclosure of IP 54 when installed in hazardous area.

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Annexe for Certificate No.:	IECEX TSA 10.0030X	Issue No.:	2
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Variation permitted by Issue 2:

- Change of both Applicant address and Manufacturer address from
 "1 / 4 Packard Avenue, Castle Hill, NSW 2154, Australia"
To
 "Unit 1, 42 Carrington Road, Castle Hill, NSW 2154, Australia"

Conditions of Certification pertaining to Issue 2 of this Certificate:

No changes. The previous conditions still apply.

Certificate issued by:

	TestSafe Australia 919 Londonderry Road Londonderry NSW 2753 Australia
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