



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 07.0028X

Issue No: 1

Certificate history:

Status: **Current**

Issue No. 1 (2017-05-11)

Issue No. 0 (2007-06-08)

Date of Issue: **2017-05-11**

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

Equipment: **Alarm Latch Relay Type ALR-2**

Optional accessory:

Type of Protection: **Ex Ia**

Marking:

Austdac Pty Ltd
Alarm Latch with
Acknowledgement
Type: ALR-2
Ex ia I
IECEX TSA 07.0028X
Serial No.xxxxxxxx

*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](#).

Certificate issued by:

TestSafe Australia
919 Londonderry Road
Londonderry NSW 2753
Australia





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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/ExTR07.0026/00

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 Alarm Latch Relay Type ALR-2 is designed to accept an alarm signal input and provide relay contact output status and/or visual LED indications of the alarm condition. The status of the potential free output relay contacts can be either latched or mono. The relay output contacts are potential free and could be connected to a separate intrinsically safe power supply.

The alarm input signal can be from a separate intrinsically safe power supply when the input relay K1 is fitted and resistor R5 is not fitted. When the input relay K1 is not fitted and resistor R5 is fitted the alarm signal is powered from the same intrinsically safe power supply that power the relay module.

The two alarm LED indicators are mounted on the Printed Circuit Board. The external indicators can be connected to the External Alarm LED Output.

The reset signal is not required for the mono version.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to the attached conditions of certification for IECEx TSA 07.0028X.



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

Issue 1:

1. 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"

2. Adding another manufacturing address

Dongguan Hubbell Electrical Products Company Limited (DGHAL)

Xincheng Industrial Zone

Hengli Town, Dongguan City

523460, Guangdong, China



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Additional Information:

Refer to attached list of drawings for IECEx TSA 07.0028X.

Annex:

Annexe_IECEX TSA 07 0028X-1.pdf



IECEX Certificate of Conformity Annexe

Annexe for Certificate No.:	IECEX TSA 07.0028X	Issue No.:	1
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Drawing list pertaining to Issue 0 of this Certificate:

Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
56-002-03	1	Alarm Latch Relay With Acknowledge Type ALR-2 PCB0030A Schematic Diagram	09	2007/05/01
56-003-04	1	Alarm Latch Relay With Acknowledge Type ALR-2 Assembly Details	06	2006/11/23
56-004-13	1	Alarm Latch Relay With Acknowledge Type ALR-2 Label Details	04	2007/05/07
56-005-18	1	Alarm Latch Relay With Acknowledge Type ALR-2 Connection Diagram	05	2006/11/28
56-010-18	1	Alarm Latch Relay With Acknowledge Type ALR-2 Isolation Input Option Connection Diagram	02	2006/11/28
56-006-21	3	Alarm Latch Relay With Acknowledge Type ALR-2 PCB0030A Artwork Details	04	2007/05/01
56-009-14	2	Alarm Latch Relay With Acknowledge Type ALR-2 PCB0030A Bill Of Materials	08	2007/05/01
56-012-07	2	Alarm Latch Relay With Acknowledge Type ALR-2 PCB0030A Component Loading Diagram	02	2007/05/01
56-013-14	2	Alarm Latch Relay With Acknowledge Type ALR-2 Bill Of Materials	01	2006/09/18

Conditions of Certification pertaining to Issue 0 of this Certificate:

1. The ALR-2 Relay should not be used as a barrier between hazardous and safe areas.
2. All the power supplies that may be connected to the ALR-2 Relay must be Intrinsically Safe.

Certificate issued by:

	TestSafe Australia 919 Londonderry Road Londonderry NSW 2753 Australia
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IECEX Certificate of Conformity Annexe

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- The ALR-2 Relay must be installed inside an enclosure that has level of protection IP54 or more.
- The following electrical parameters shall be taken into account during installation:

Power supply Input:

Electrical Parameter	Terminals 3 and 4
Maximum Input Voltage (Ui)	16.5 VDC
Maximum Input Current (Ii)	3 A
Maximum Internal Capacitance (Ci)	0 µF
Maximum Internal Inductance (Li)	0 mH

Output Terminals:

Electrical Parameter	Output 1 (Terminals 13,11,12) Output 2 (Terminals 16,18,17) Output 3 (Terminals 14,15)
Maximum Input Voltage (Ui)	30 VDC
Maximum Input Current (Ii)	1.0 A

Alarm Input:

Electrical Parameter	R5 not fitted and K1 is fitted Terminals 1 and 2	R5 is fitted and K1 not fitted Terminals 1 and 6
Maximum Output Voltage (Uo)	0 V	16.5 V
Maximum Output Current (Io)	0 A	1.737 A
Maximum External Capacitance (Co)	-	11 µF
Maximum External Inductance (Lo)	-	50 µH
Ratio Lo/Ro	-	65 µH/Ω
Maximum Input Voltage (Ui)	30 VDC	0 V
Maximum Input Current (Ii)	3 A	0 A
Maximum Internal Capacitance (Ci)	0 µF	0.178 µF
Maximum Internal Inductance (Li)	0 mH	0 mH

External Alarm LED Output:

Electrical Parameter	Terminals 7 and 8
Maximum Output Voltage (Uo)	16.5 V
Maximum Output Current (Io)	37 mA
Maximum External Capacitance (Co)	11 µF
Maximum External Inductance (Lo)	50 µH
Ratio Lo/Ro	60 µH/Ω
Maximum Input Voltage (Ui)	0 V
Maximum Internal Capacitance (Ci)	0 µF
Maximum Internal Inductance (Li)	0 mH

Conditions of safe use pertaining to the certificate IECEX TSA 07.0028X (Continue...):

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Reset Input:

Electrical Parameter	Terminals 5 and 6
Maximum Output Voltage (Uo)	16.5 VDC
Maximum Output Current (Io)	1.737 A
Maximum External Capacitance (Co)	11 μ F
Maximum External Inductance (Lo)	50 μ H
Ratio Lo/Ro	65 μ H/ Ω
Maximum Input Voltage (Ui)	0 V
Maximum Internal Capacitance (Ci)	0.178 μ F
Maximum Internal Inductance (Li)	0 mH

Variation permitted by Issue 1:

1. 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"

2. Adding another manufacturing address

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

Conditions of Certification pertaining to Issue 1 of this Certificate:

No changes. The previous conditions still apply.

Certificate issued by:

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