



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.:	<b>IECEx TSA 14.0033X</b>	Page 1 of 5	<u>Certificate history:</u>
Status:	<b>Current</b>	Issue No: 4	<a href="#">Issue 3 (2020-05-01)</a>
Date of Issue:	2023-09-22		<a href="#">Issue 2 (2017-11-28)</a>
			<a href="#">Issue 1 (2017-03-15)</a>
			<a href="#">Issue 0 (2014-10-23)</a>
Applicant:	<b>CMI Electrical Products</b> Unit F3, 3 - 29 Birnie Avenue Lidcombe 2141 <b>Australia</b>		
Equipment:	<b>Range of 150 A 1100 V/660 V Restrained Plugs, Dummy Plugs, Phase Condition Indicator Plugs, Back to Back Receptacles, Restrained Receptacles and Restrained Receptacles with cable gland and bracket</b>		
Optional accessory:			
Type of Protection:	<b>Flameproof "d"</b>		
Marking:	IECEx TSA 14.0033X Ex d I Mb IP66/IP68* * Refer to Annexe Table 1		

Approved for issue on behalf of the IECEx  
Certification Body:

**Debbie Wouters**

Position:

**Acting Quality & Certification Manager**

Signature:  
(for printed version)

Date:  
(for printed version)

22nd September 2023

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 [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

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





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Date of issue: 2023-09-22

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Manufacturer: **CMI Electrical Products**  
Unit F3, 3 - 29 Birnie Avenue  
Lidcombe 2141  
**Australia**

Manufacturing  
locations:

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 equipment 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](#) Explosive atmospheres - Part 0: General requirements  
Edition:6.0

[IEC 60079-1:2007](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:6

This Certificate **does not** indicate compliance with 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 Reports:

[AU/TSA/ExTR14.0011/00](#)  
[AU/TSA/ExTR14.0011/03](#)

[AU/TSA/ExTR14.0011/01](#)

[AU/TSA/ExTR14.0011/02](#)

Quality Assessment Report:

[AU/TSA/QAR11.0009/08](#)



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## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The 150 A series comprises Restrained Plugs, Dummy Plugs, Phase Condition Indicator Plugs, Back-to-Back Receptacles, Restrained Receptacles and Restrained Receptacles with cable gland and bracket, as designated in Table 1. The restrained receptacle range is used to monitor and supply power reticulation systems and mobile equipment such as Shuttle car, Continuous miner, Longwalls, Drills rigs in mines.

The restrained receptacle, restrained receptacle with cable gland and bracket, and back-to-back receptacle are provided with a jacking screw or quick release locking mechanism. The equipment is manufactured by CMI Electrical Products, who is also known under the name Minto Industrial Products (M.I.P).

The complete assembly consists of a plug, which has three power conducting (phase) sockets and one pilot circuit socket, and a receptacle with corresponding phase and pilot pin. Two plugs may be coupled together by means of a restrained coupling device referred to as restrained back-to-back receptacle. 150 A Range covers: 660 V and 1100 V all with 3-pins plus 1 pilot pin. The range uses a late make early break pilot connection for safety and has an earthed phase barrier. The special fasteners and/or nuts used to assemble the plugs, receptacles and Ex d enclosure shall be of minimum grade 4.6 (yield stress 240 MPa).

When the receptacle is mounted to Ex d enclosure, the flanged joint between the enclosure and receptacle must be in accordance with instruction number TRP-6 to maintain the flameproof integrity of the assembly.

The manufacturer's document TRP-6 "Termination and Maintenance Instructions for 150 AMP 660/1100 VOLT Restrained Range" is available and provides instruction about installation of the equipment.

The equipment is supplied with 150A Restrained Termination and Maintenance instruction TRP-6.

For more details refer to attached Annexe.

## SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Some flameproof joint (flamepath) have dimensions that are different than the values given in Table 1 of IEC 60079-1. Refer to the manufacturer's drawings for details.
2. The width of flamepath flange joint between the receptacle and the Ex d enclosure shall be with flamepath minimum width  $L = 12.5$  mm and maximum gap  $i = 0.4$  mm. Refer to the manufacturer's drawings for details.



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## **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

Variations Permitted by Issue 4:

Applicant and Manufacturer address has been relocated to Unit F3, 3 - 29 Birnie Avenue, Lidcombe NSW 2141 Australia, previously 18-20 Railway Road, Meadowbank NSW 2114 Australia.



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**Additional information:**

**Routine tests:**

None.

**Annex:**

[Annexe\\_IECEx TSA 14.0033X-4\\_1.pdf](#)



# IECEx Certificate of Conformity Annexe

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Equipment description continue

**Table 1: Summary of Certified Equipment - Part Number List:**

Part Number	Description
AT1#4R	150A 660/1100V Restrained Phase Condition Indicator
AR1#1R	150A 660/1100V Restrained Dummy Plug
AG1#4B	150A 660/1100V Restrained Receptacle
AF1#4R	150A 660/1100V Restrained Plug
AH1#4B	150A 1100V Restrained B /B Receptacle
AG1#4BQR	150A 660/1100V Q/R Restrained Receptacle
AH1#4BQR	150A 660/1100V Q/R Restrained B /B Receptacle
F-4629-##	150A Gland Adaptor
AV1	150A Angle Mounting Bracket

**Note:**

Marking:

1. # Volts: 6=660V, 1=1100V.
2. ## Threaded Gland Entry: M16 to M63 – all with 1.5 pitch.

**IP rating for the restrained receptacle when coupled with plug is in accordance with IEC 60529 only:**

- IP66/IP68 (2 metres for 30 minutes) for: Restrained Plug, Back to Back Receptacle, Restrained Receptacle, Gland Adaptor and all QR Receptacles.
- IP66 only: Dummy Plug and Phase Condition Indicator Plug.

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# IECEx Certificate of Conformity Annexe

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**Drawing list pertaining to Issue 4 of this Certificate:**

<b>Document / Drawing No:</b>	<b>Page/s:</b>	<b>Title:</b>	<b>Revision Level:</b>	<b>Date: (yyyy-mm-dd)</b>
AV1	1	150A Angle Mounting Bracket	B	2017-10-30
F-045	1	150A 660/1100V Restrained Phase Condition Indicator	G	2017-02-22
F-046	1	150A 660/1100V Restrained Dummy Plug	G	2017-02-22
F-234	1	*150A 660/1100V Restrained Receptacle	K	2020-02-14
F-234-1	1	Main Phase/Pilot Thimbles, Restrained Product Range	A	2017-02-22
F-235	1	150A 660/1100V Restrained Plug	L	2017-02-22
F-308	1	150A 660/1100V Restrained B /B Receptacle	E	2017-02-22
F-467	1	*150A 660/1100V Q/R Restrained Receptacle	J	2020-02-14
F-468	1	150A 660/1100V Q/R Restrained B /B Receptacle	F	2017-02-22
F-4629	1	150A Gland Adaptor	A	2017-02-22

Note: An “\*” is added before the title of documents that are new or revised.

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