



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

Certificate No.: **IECEx TRA 16.0015X**

Page 1 of 5

Certificate history:

Status: **Current**

Issue No: 4

[Issue 3 \(2020-03-09\)](#)

[Issue 2 \(2017-09-27\)](#)

[Issue 1 \(2017-05-31\)](#)

[Issue 0 \(2017-04-04\)](#)

Date of Issue: 2023-09-18

Applicant: **CMI Electrical Products**
Unit F3
29 Birnie Avenue
Lidcombe NSW 2141
Australia

Equipment: **125A 660V / 1100V Restrained Range of Plug and Receptacles**

Optional accessory:

Type of Protection: **Flameproof 'd'**

Marking: Ex db I Mb

IP 66

Approved for issue on behalf of the IECEx
Certification Body:

David Price

Position:

Certification Authority

Signature:
(for printed version)

Date:
(for printed version)

2023-09-18

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 or use of this QR Code.



Certificate issued by:

Ex Testing and Certification Pty Ltd
1/30 Kennington Drive
Tomago NSW 2322
Australia



TESTING & CERTIFICATION



IECEX Certificate of Conformity

Certificate No.: **IECEX TRA 16.0015X**

Page 2 of 5

Date of issue: 2023-09-18

Issue No: 4

Manufacturer: **CMI Electrical Products**
Unit F3
29 Birnie Avenue
Lidcombe NSW 2141
Australia

Manufacturing
locations: **CMI Electrical Products**
Unit F3
29 Birnie Avenue
Lidcombe NSW 2141
Australia

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 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

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/EXTC/ExTR17.0008/00](#)
[AU/TRA/ExTR17.0007/00](#)

[AU/ExTC/ExTR20.0003/00](#)

[AU/TRA/ExTR16.0020/00](#)

Quality Assessment Report:

[AU/TSA/QAR11.0009/09](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx TRA 16.0015X**

Page 3 of 5

Date of issue: 2023-09-18

Issue No: 4

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The 125A 660V / 1100V series is comprised of a Restrained Plug and Restrained Receptacle manufactured from either stainless steel 304 grade or high tensile brass type C86500.

This range is intended to supply power to underground mobile equipment in mines such as Shuttle cars. It is specifically designed to connect a trailing supply cable to the cable reels on the mine equipment and is rated at 150A when fitted with 35mm² cross-sectional cable.

Refer to Annex for more details.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to the Annex for details.



IECEx Certificate of Conformity

Certificate No.: **IECEx TRA 16.0015X**

Page 4 of 5

Date of issue: 2023-09-18

Issue No: 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Refer to the Annex for details.



IECEx Certificate of Conformity

Certificate No.: **IECEx TRA 16.0015X**

Page 5 of 5

Date of issue: 2023-09-18



Issue No: 4

Additional information:

ExTC Job: 23028

Annex:

[IECEx TRA 16.0015X-4 Certificate Annex Final.pdf](#)

 <h1 style="text-align: center;">IECEx Certificate of Conformity</h1> <h2 style="text-align: center;">Annexe</h2>		 <p style="text-align: center;">TESTING & CERTIFICATION</p>
Annexe for Certificate No.:	IECEx TRA 16.0015X	Issue No.: 4

Description:

The 125A 660V / 1100V series is comprised of a Restrained Plug and Restrained Receptacle manufactured from either stainless steel 304 grade or high tensile brass type C86500.

This range is intended to supply power to underground mobile equipment in mines such as Shuttle cars. It is specifically designed to connect a trailing supply cable to the cable reels on the mine equipment and is rated at 150A when fitted with 35mm² cross-sectional cable.

The restrained receptacle is provided with a jacking screw locking mechanism. The equipment is manufactured by CMI Electrical Products, which are also known as Minto Industrial Products (M.I.P).

When the receptacle and plug are mated together the parts create a flameproof enclosure, which has three power conducting (phase) sockets and one pilot circuit socket, and a receptacle with corresponding phase pins and pilot pin. The equipment is intended for and may only be used in restricted earth fault AC power supply circuits. The range includes: 660V and 1100V plugs and 1100V left and right hand receptacles. The range uses a late make early break pilot connection for safety and has an earthed phase barrier in the plug. The receptacle utilises a complete metal interior with Teflon insulators.

When the receptacle is mounted to an Ex d separately certified cable reel, the spigot, which is held in place internally by a keeper plate, forms a flameproof joint between the enclosure and receptacle and must be installed in accordance with the instructions for both products.

The range also includes a 150 Amp 1100V stainless steel back to back restrained receptacle which is used to connect two plugs inline. The back to back receptacle has the same electrical pin arrangement, restraining mechanism and flamepaths on both ends, as the 150 Amp 1100V cable reel receptacle.

The electrical equipment has been designed to AS/NZS 1299:2009 (incorporating amendment No.1) and has been tested for Short Circuit Impulse Withstand and HV tests at a current rating of 125A.

IECEx Certificate of Conformity



Annexe



Annexe for Certificate No.:

IECEx TRA 16.0015X

Issue No.:

4





Typical assemblies.

Specific Conditions of Use pertaining to Issue 0 of this Certificate:

1. Some flamepaths are different from the standard and must be considered during maintenance / repair using the information supplied by the manufacturer.

Drawing list pertaining to Issue 0 of this Certificate:

Manufacturer's Documents				
Title:	Drawing No.:	Pages	Rev. Level:	Date:
125A 660/1100V CABLE REEL PLUG	F-198	1	H	2017-03-16
125A 1100V CABLE REEL RECEPTACLE RIGHT HAND	F-848	1	C	2017-03-16
125A 1100V CABLE REEL RECEPTACLE LEFT HAND	F-848-1	1	C	2017-03-16
Instructions for 125A Cable Reel Plug and Receptacle Inst. Rest 125A - 1	Inst. Rest 125A – 1	3	B	2017-03-15

 <h1 style="text-align: center;">IECEX Certificate of Conformity</h1> <h2 style="text-align: center;">Annexe</h2>		 TESTING & CERTIFICATION
Annexe for Certificate No.:	IECEX TRA 16.0015X	Issue No.: 4

Variations permitted by Issue 1 of this certificate:



1. The addition of an optional 125A 1100V back to back stainless steel receptacle to the range.
2. A change to the 125A 1100V stainless steel receptacle body casting and the amendment to drawings F-848 & F-848-1 to cover such changes.
3. An amendment of Drawing F-198 to remove Note 13 regarding a 12.5mm flamepath which is not part of the certified plug's flamepaths.
4. Variations to the certified product description and Instructions (Inst. Rest 125A – 1) to include the 125A 1100V back to back receptacle.

Specific Conditions of Use pertaining to Issue 1 of this certificate:

Previous conditions apply.

Drawings Associated with the Issue 1 of this Certificate:

Manufacturer's Documents				
Title:	Drawing No.:	Pages	Rev. Level:	Date:
125A 660/1100V CABLE REEL PLUG	F-198	1	J	2017/05/05
125A 1100V CABLE REEL RECEPTACLE RIGHT HAND	F-848	1	D	2017/05/22
125A 1100V CABLE REEL RECEPTACLE LEFT HAND	F-848-1	1	D	2017/05/22
125A 1100V BACK TO BACK SS RECEPTACLE	F-850	1	C	2017/05/05
Instructions for 125A Cable Reel Plug, Receptacle And Back To Back Receptacle Inst. Rest 125A - 1	Inst. Rest 125A – 1	4	C	2017/05/16

 <h1 style="text-align: center;">IECEx Certificate of Conformity</h1> <h2 style="text-align: center;">Annexe</h2>		 <p style="text-align: center;">TESTING & CERTIFICATION</p>
Annexe for Certificate No.:	IECEx TRA 16.0015X	Issue No.: 4

Variations permitted by Issue 2 of this certificate:



Minor changes to certified documents regarding copper hardness of the contact pins, and in the instruction manual. Compliance has been assessed in report AU/EXTC/ExTR17.0008/00 (REP17123-01).

Specific Conditions of Use pertaining to Issue 2 of this certificate:

Previous conditions apply.

Drawings Associated with the Issue 2 of this Certificate:

Manufacturer's Documents				
Title:	Drawing No.:	Pages	Rev. Level:	Date:
125A 660/1100V CABLE REEL PLUG	F-198	1	K	2017-08-21
125A 1100V CABLE REEL RECEPTACLE RIGHT HAND	F-848	1	E	2017-08-21
125A 1100V CABLE REEL RECEPTACLE LEFT HAND	F-848-1	1	E	2017-08-21
125A 1100V BACK TO BACK SS RECEPTACLE	F-850	1	D	2017-08-21
Instructions for 125A Cable Reel Plug, Receptacle And Back To Back Receptacle Inst. Rest 125A - 1	Inst. Rest 125A – 1	4	D	2017-08-22

 <h1 style="text-align: center;">IECEX Certificate of Conformity</h1> <h2 style="text-align: center;">Annexe</h2>		 <p style="text-align: center;">TESTING & CERTIFICATION</p>
Annexe for Certificate No.:	IECEX TRA 16.0015X	Issue No.: 4

Variations permitted by Issue 3 of this certificate:

- The equipment current rating has been increased from 125A to 150A when fitted with 35mm² cross-sectional cable. All equipment descriptions have been updated to reflect this change.
- The receptacle earthing point has had a post lug added to assist with the connection of the earth.

Specific Conditions of Use pertaining to Issue 3 of this certificate:

- Some flamepaths are different from the standard and must be considered during maintenance / repair using the information supplied by the manufacturer.
- The increased rating only applies to the products listed in this certificate when used with 35mm² cable.

Drawings Associated with the Issue 3 of this Certificate:

Manufacturer's Documents				
Title:	Drawing No.:	Pages	Rev. Level:	Date:
125A 660/1100V CABLE REEL PLUG	F-198	1	L	2020-02-28
125A 1100V CABLE REEL RECEPTACLE RIGHT HAND	F-848	1	F	2020-02-28
125A 1100V CABLE REEL RECEPTACLE LEFT HAND	F-848-1	1	F	2020-02-28
125A 1100V BACK TO BACK SS RECEPTACLE	F-850	1	E	2020-02-28
Instructions for 125A Cable Reel Plug, Receptacle And Back To Back Receptacle Inst. Rest 125A - 1	Inst. Rest 125A – 1	4	E	2020-02-28

Variations permitted by Issue 4 of this certificate:

Change of Applicant and Manufacturer location to new facility.

Specific Conditions of Use pertaining to Issue 4 of this Certificate:

No changes to the conditions from Issue 3 of the certificate.

Drawings Associated with the Issue 4 of this Certificate:

No changes to drawings from Issue 3 of the certificate.

This form is identified as QMA-HAE-08-710 Issued 2022-10-14