



1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Component intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 09ATEX1277U** Issue: **0**

4 Component: **7117 \*\*and 8117 \*\* Ranges of Enclosures**

5 Applicant: **International Metal Engineering Pte Limited**

6 Address: **Blk 13  
Toa Payoh Lorong 8  
# 06-05 Braddell Tech Park  
Singapore  
319261**

7 This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of a component intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2009

EN 60079-1:2007

IEC 60079-31:2008

10 The sign 'U' is placed after the certificate number to indicate that the product assessed is a component and may be subject to further assessment when incorporated into equipment. Any special conditions for safe use are listed in the schedule to this certificate.

11 This EC type-examination certificate relates only to the design and construction of the specified component. If applicable, further requirements of this Directive apply to the manufacture and supply of this component.

12 The marking of the component shall include the following:



II 2 G D

Ex d IIC Gb

Ex tb IIIC Db IP68

Project Number 19866

C. Index 04

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C Ellaby  
Certification Officer



## SCHEDULE

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#### 13 DESCRIPTION OF COMPONENT

##### 7117 \*\*

The 7117 \*\* series junction box, which has a maximum internal volume of 780 cm<sup>3</sup>, are cylindrical, single compartment enclosures comprising a base and cover. The enclosures are manufactured from stainless steel or cast aluminium with an optional epoxy paint finish. The enclosure covers may contain a circular tempered glass window. Each 7117 enclosure may have up to four conduit openings, with entry sizes selected from ½" NPT, ¾" NPT, 1" NPT, ½" BSP, M20 x 1.5 or M25 x 1.5.

Ref.	Material	Option	Ref.	Material	Option	Ref.	Material	Option
7117 ST	Stainless steel	Window cover	7117 WT	Aluminium, epoxy coated	Window cover	7117 CT	Aluminium, cast finished	Window cover
7117 SM	Stainless steel	Window cover	7117 WM	Aluminium, epoxy coated	Window cover	7117 CM	Aluminium, cast finished	Window cover
7117 TT	Stainless steel	Blind cover	7117 AT	Aluminium, epoxy coated	Blind cover	7117 NT	Aluminium, cast finished	Blind cover
7117 TM	Stainless steel	Blind cover	7117 AM	Aluminium, epoxy coated	Blind cover	7117 NM	Aluminium, cast finished	Blind cover

##### 8117 \*\*

The 8117 \*\* series instrument enclosure, which has a maximum internal volume of 990 cm<sup>3</sup>, are cylindrical single compartment enclosures comprising a base and cover. The enclosures are manufactured from stainless steel or cast aluminium with an epoxy paint finish. The enclosure covers may contain a circular tempered glass window. Each 8117 enclosure may have up to three conduit openings with entry sizes selected from ½" NPT, ¾" NPT, 1" NPT, ½" BSP, M20 x 1.5 or M25 x 1.5.

Ref.	Material	Option	Ref.	Material	Option
8117 ST	Stainless steel	Window cover	8117 WT	Aluminium, epoxy coated	Window cover
8117 SM	Stainless steel	Window cover	8117 WM	Aluminium, epoxy coated	Window cover
8117 TT	Stainless steel	Blind cover	8117 AT	Aluminium, epoxy coated	Blind cover
8117 TM	Stainless steel	Blind cover	8117 AM	Aluminium, cast finished	Blind cover

#### 14 DESCRIPTIVE DOCUMENTS

##### 14.1 Drawings

Refer to Certificate Annexe.

##### 14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	22 Jun 10	R19866A/00	The release of prime certificate.

#### 15 SPECIAL CONDITIONS FOR SAFE USE

15.1 These component enclosures shall only be used within the temperature range of -40°C to +85°C.

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### Sira Certification Service

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**SCHEDULE**

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**16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)**

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

**17 CONDITIONS OF CERTIFICATION**

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

# Certificate Annexe



Certificate Number: Sira 09ATEX1277U  
Component: 7117 \*\* and 8117 \*\* Ranges of Enclosures  
Applicant: International Metal Engineering Pte Limited

## Issue 0

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
1080-023	1 of 1	1	22 Jun 10	M4 x 6 SS earth green screw
1080-043	1 of 1	1	22 Jun 10	M20 Metric label
8080-006	1 of 1	1	22 Jun 10	M4 x 10 SS set screw
8080-007	1 of 1	1	22 Jun 10	Stainless steel rivets
8080-012	1 of 1	1	22 Jun 10	Window cement specification
8080-080	1 of 1	1	22 Jun 10	Window assembly procedure
8117-00x	1 of 1	3	22 Jun 10	8117 Window backup ring
8117-001	1 of 1	2	22 Jun 10	O-ring for window
8117-005	1 of 1	-	22 Jun 10	O-ring for 8117 aluminium housing
8117-006	1 of 1	-	22 Jun 10	O-ring for 8117 SS housing
8117-007	1 of 1	-	22 Jun 10	M25 Metric label
8117-008	1 of 1	1	22 Jun 10	8117 Tempered glass
7117xx-xx-xx	1 of 1	-	22 Jun 10	7117 Aluminium junction box assembly
7117-xx-xx-xx	1 of 1	2	22 Jun 10	7117 Aluminium junction box housing
8117-102-xx	1 of 1	3	22 Jun 10	8117 Aluminium blind cover
8117-103-xx	1 of 1	1	22 Jun 10	8117 Aluminium window cover
8117-204-xx	1 of 1	-	22 Jun 10	8117 Aluminium window cover assembly
8117W-xx	1 of 1	-	22 Jun 10	8117 Aluminium instrument housing
8117xx-xx	1 of 1	-	22 Jun 10	8117 Aluminium instrument enclosure assembly
7117-xx-SS-xx	1 of 1	1	22 Jun 10	7117 Stainless steel junction box
7117xx-xx-xx	1 of 1	-	22 Jun 10	7117 Stainless steel junction box assembly
8117-002	1 of 1	2	22 Jun 10	8117 Stainless steel window cover
8117-003	1 of 1	-	22 Jun 10	8117 Stainless steel blind cover
8117-202	1 of 1	-	22 Jun 10	8117 Stainless steel window cover assembly
8117S-xx	1 of 1	-	22 Jun 10	8117 Stainless steel junction box
8117xx-xx	1 of 1	-	22 Jun 10	8117 Stainless steel instrument enclosure assembly
7117-601-xx-xx-xx	1 of 1	-	22 Jun 10	Rectangular SS label for 7117 T series – ATEX, IECEx
7117-602-xx-xx-xx	1 of 1	-	22 Jun 10	Semi-circular SS label for 7117 M series – ATEX, IECEx, CSA, FM
7117-604-xx-xx-xx	1 of 1	-	22 Jun 10	Rectangular SS label for 7117 T series – ATEX, IECEx
7117-605-xx-xx-xx	1 of 1	-	22 Jun 10	Semi-circular SS label for 7117 M series – ATEX, IECEx, CSA, FM
8117-601-xx-xx	1 of 1	-	22 Jun 10	Rectangular SS label for 8117 T series – ATEX, IECEx
8117-602-xx-xx	1 of 1	-	22 Jun 10	Rectangular SS label for 8117 M series – ATEX, IECEx, CSA, FM
8117-604-xx-xx	1 of 1	-	22 Jun 10	Rectangular SS label for 8117 T series – ATEX, IECEx
8117-605-xx-xx	1 of 1	-	22 Jun 10	Rectangular SS label for 8117 M series – ATEX, IECEx, CSA, FM

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