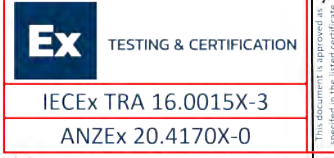
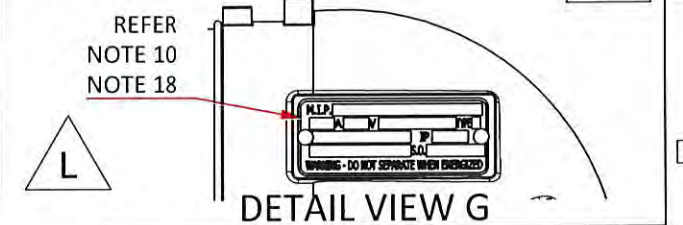


- NOTES:
1. WALL THICKNESS OF FLAMEPROOF ENCLOSURE AROUND AND UNDER BLIND HOLES SHALL BE THE GREATER OF 3 (MIN) OR ONE-THIRD OF THE NOMINAL DIAMETER OF THE FASTENER
 2. SPECIFICATIONS, DIMENSIONS AND RATINGS COMPLY WITH AS/NZS 1299
 3. SPECIFICATIONS AND DIMENSIONS COMPLY WITH IEC 60079
 4. SPECIAL FASTENERS COMPLY WITH ISO 262 TOLERANCE FIT 6g/6H
 5. THREAD ENGAGEMENT \geq MAJOR DIA. CLEARANCE HOLE $<$ H13 (ISO 286-2)
 6. MACHINED FLAMEPATH SURFACES AVERAGE $R_a < 6.3\mu m$ (ISO 468)
 6. MATERIALS:
 - 6.1 HIGH TENSILE BRASS C86500 TO AS 1565-1996 (MIN) T = 450 MPa AND (MIN) e = 10%
 - 6.2 COPPER:
 - (SULFUR BEARING) C14700 OR
 - (ETP) C11000 OR
 - (OFHC) C10100 TO AS/NZS 1567-1997
 - 6.3 COPPER HARDNESS: > 70 HB OR 87 HV
 - 6.4 FREE CUTTING BRASS C38500 TO AS/NZS 1567-1997
 - 6.5 STAINLESS STEEL 303 GRADE (EQUIVALENT OR HIGHER GRADE)
 - 6.6 SILVER PLATING TO AS 1856-2004 CuAg 08
 - 6.7 VIRGIN PTFE (CTI: V600) COLOUR: NATURAL
 - 6.8 STEEL/ZINC PLATED TO AS 1789-2003
 - 6.9 RUBBER: NITRILE OR EPDM
 7. CAP SCREW TORQUE = 10Nm (MIN)
 8. STEEL FASTENER PROPERTY CLASS: 12.9 (Tmin 1220 MPa)
 9. MILD STEEL FASTENER CLASS: 4.6 (MIN)
 10. PLACE RATING PLATE IN POSITION AS SHOWN (RETAIN WITH U-DRIVE SCREWS)
 11. THIMBLE AND CABLE TERMINATED USING UTILUX CRIMP DIE AS PER AS/NZS 4325 (IEC 1238) OR SOLDER
 12. WHEN TIGHTENING FASTENER WITH NO WASHER INTO A BLIND HOLE ONE FULL FREE THREAD (MIN) SHALL REMAIN AT BASE OF HOLE
 13. -
 14. M4x0.7 - 6g/6H THREADED FASTENER SECURED (LOCTITE 263) SWAGED AFTER ASSEMBLY
 15. MAX SURFACE TEMPERATURE $< 150^{\circ}C$
 16. INDICATES EXTERNAL CASTING PAINTED SURFACE (THICKNESS $< 2mm$) (ABOUT AXIS) COLOUR:
 - a) ORANGE (X15 - AS 2700)
 - b) BLUE (B24 - AS 2700)
 17. SOCKET SPRING: 1.5 TURNS (MIN)
 18. RATING PLATE TEXT: ENGRAVE TEXT AS INDICATED, ON ALLOCATED (BLANK) AREAS AS PER (TYP) TABLE
 19. O-RINGS LOCATED AND RETAINED MECHANICALLY UNLESS OTHERWISE NOTED
 20. GROMMET CABLE ACCEPTANCE AND THIMBLE CSA VALUES ARE INDICATIVE ONLY INSTALLER TO CONFIRM ACTUAL CABLE (Cu) DIMENSIONS UPON ASSEMBLY AND MATCH PARTS ACCORDINGLY
 21. CREEPAGE AND CLEARANCE DIMENSION
 22. PILOT THIMBLE CABLE INSERTION DEPTH: 15 (MIN)
 23. FLAMEPATH GAP (WHEN ASSEMBLED) 0.4 (MAX)
 24. REFERENCE DIMENSIONS (I) ARE INFORMATIVE ONLY
 25. THE CMI PLUG/RECEPTACLE COMBINATION IS RATED AT 150A WHEN FITTED WITH 35mm² CSA CABLE (REFER IECEX CERTIFICATE)



TYPICAL RATING PLATE DETAILS			LEGEND	
MIP	125A	TYPE "A"	# = 6 (660V)	
AF2#4R*		IECEX TRA 16.0015X	# = 1 (1100V)	
IP66		S.O xxxxx-xx	* = B (BRASS)	
Ex db I Mb			* = S (ST. STEEL)	
ANZEx 20.4170X				
WARNING DO NOT SEPARATE WHEN ENERGIZED				



ITEM	PART NUMBER	DESCRIPTION	MATERIAL	QTY
14	201-341#	125A CABLE GLAND GROMMET SERIES	NEOPRENE RUBBER	1
13	3000-1	125A CABLE REEL BODY CASTING	REF NOTE 6.1 / 6.4	1
12	3589-1	PILOT THIMBLE	REF NOTE 6.2	1
11	3685-2	POLARISING RIVET	REF NOTE 6.3	1
10	4719	125A EARTH SLEEVE	REF NOTE 6.4	1
9	AH009788	3/16" X No.4 U-DRIVE SCREW	REF NOTE 6.7	2
8	AH151017	M10 X 50 SKT HD CAP SCREW	REF NOTE 6.7	3
7	AI019003	O-RING ID 63.17 X SECT 2.62	REF NOTE 6.8	1
6	AX004076	RATING PLATE	CARTRIDGE BRASS 70-30	1
5	F-201-338-1	125A CABLE CLAMPING CAP CASTING	REF NOTE 6.1 / 6.4	1
4	F-3013	125A MAIN SOCKET ASSY	REF NOTE 6.2 / 6.5	3
3	F-3015	125A PILOT SOCKET ASSY	REF NOTE 6.2 / 6.5	1
2	F-3850	125A PLUG INTERIOR ASSY	NEOPRENE RUBBER	1
1	F-3851#	125A MAIN THIMBLE SERIES	REF NOTE 6.2 / 6.5	3

NOTE:
- REFER NOTE 20 FOR COMPONENT SELECTION
- CABLE/THIMBLE INSERTION DEPTH: 20 (MIN)

THIMBLES		
PART No.	I.D (Ømm)	UTILUX DIE No.
F-3851-0	5.0	38-57Cu
F-3851-1	6.5	38-74Cu
F-3851-2	8.0	38-92Cu
F-3851-3	9.0	38-115Cu
F-3851-4	10.5	38-115Cu

NEOPRENE GROMMETS		
OLD PART No.	PART No.	CABLE ACCEPTANCE (Ømm)
201-341-2	201-341-25	21 - 25
201-341-3	201-341-28	24 - 28
201-341-4	201-341-32	27 - 32
201-341-5	201-341-35	31 - 35
201-341-6	201-341-38	34 - 38
201-341-7	201-341-41	37 - 41
201-341-8	201-341-44	40 - 44
201-341-9	201-341-48	43 - 48

REFERENCE:
AF214RB
AF264RB
AF214RS
AF264RS

REV	DATE	ZONE	REV
1	29/02/20	K	J
2	21/08/17	H	I
3	05/05/17	G	F
4	16/03/17	F	E

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GENERAL TOLERANCE ± 0.25 UNLESS OTHERWISE SPECIFIED

MATERIAL

FINISH

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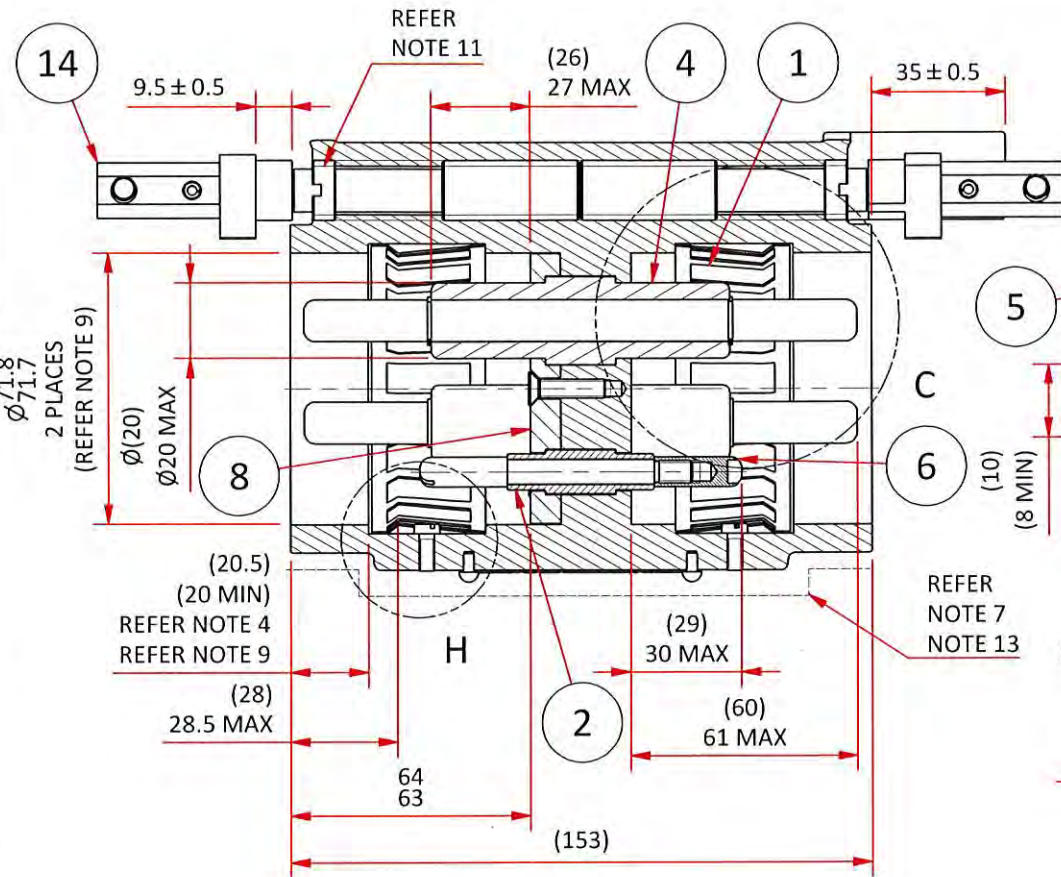
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SCALE 1:2 DATE 10/06/2016

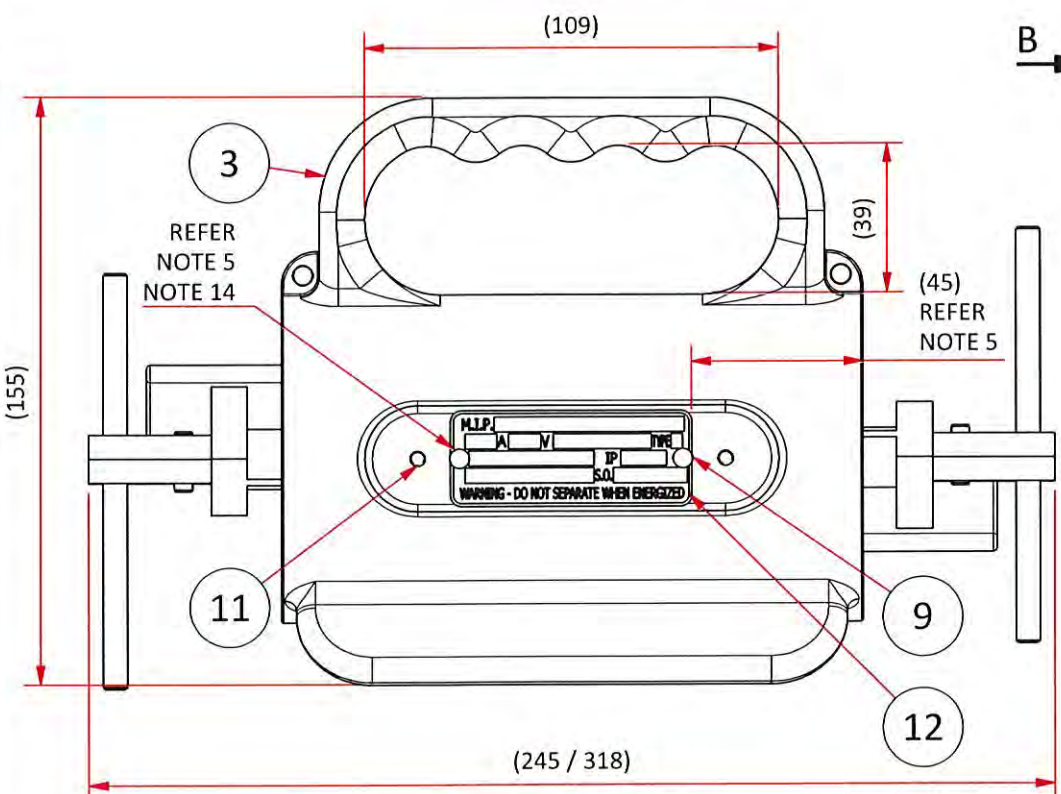
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DRAWING No. A3 F-198

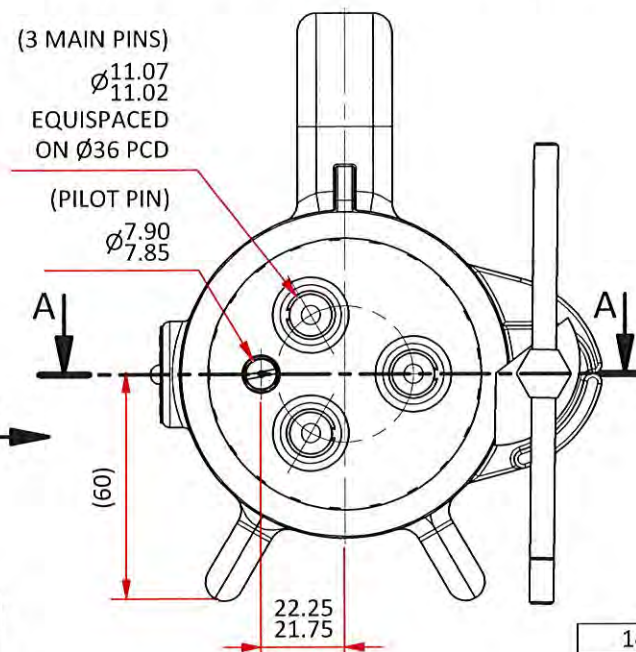




SECTION VIEW A-A



DETAIL VIEW B



DETAIL VIEW H

DETAIL VIEW C

(3 MAIN PINS)
Ø11.07
Ø11.02
EQUISPACED
ON Ø36 PCD

(PILOT PIN)
Ø7.90
Ø7.85

PRODUCT RANGE:

AH214S

RATING PLATE DETAILS

MIP

AH214S 125A 1100V
IP66
Ex db I Mb
ANZEx 20.4170X
S.O xxxxx-xx
WARNING
DO NOT SEPARATE WHEN ENERGIZED

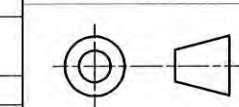
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D	DRA17043:	FACILITATE ALIGNMENT BETWEEN IECEx AND ANZEX CERTIFICATION	21/08/2017	
C	DRA17026:	DRAWING ISSUED	05/05/2017	
B	DEVELOPMENT			
A	DEVELOPMENT			
REV	ZONE	DESCRIPTION	DATE	APPROVED

NOTES:

1. WALL THICKNESS OF FLAMEPROOF ENCLOSURE AROUND AND UNDER BLIND HOLES SHALL BE THE GREATER OF 3 (MIN) OR ONE-THIRD OF THE NOMINAL DIAMETER OF THE FASTENER
2. SPECIFICATIONS, DIMENSIONS AND RATINGS COMPLY WITH AS/NZS 1299
3. SPECIFICATIONS AND DIMENSIONS COMPLY WITH IEC 60079
4. MACHINED FLAMEPATH SURFACES AVERAGE $R_a < 6.3\mu m$ (ISO 468)
5. PLACE RATING PLATE IN POSITION AS SHOWN (RETAIN WITH U-DRIVE SCREWS)
6. MATERIALS:
 - 6.1 HIGH TENSILE BRASS C86500 TO AS 1565-1996 (MIN) $T = 450 MPa$ AND (MIN) $e = 10\%$
 - 6.2 COPPER: (SULFUR BEARING) C14700 OR (ETP) C11000 OR (OFHC) C10100 TO AS/NZS 1567-1997
COPPER HARDNESS: $>70 HB$ OR $87 HV$
 - 6.3 FREE CUTTING BRASS C38500 TO AS/NZS 1567-1997
 - 6.4 STAINLESS STEEL 303 GRADE (EQUIVALENT OR HIGHER GRADE)
 - 6.5 SILVER PLATING TO AS 1856-2004 CuAg 08
 - 6.6 VIRGIN PTFE (CTI $> V600$)
 - 6.7 STEEL/ZINC PLATED TO AS 1789-2003
 - 6.8 RUBBER: NITRILE OR EPDM
7. EXTERNAL SS CASTING PAINTED SURFACE (THICKNESS $< 2mm$); COLOUR: B24 (HARBOUR BLUE)
8. WHEN TIGHTENING FASTENER WITH NO WASHER INTO A BLIND HOLE ONE FULL FREE THREAD (MIN) SHALL REMAIN AT BASE OF HOLE
9. FLAMEPATH GAP 0.4 (MAX) AFTER ASSEMBLY
10. INTERNAL (FREE) VOLUME: $230 cm^3$
11. RETAINED USING LOCTITE "BLUE MAXX 587"
12. MAX SURFACE TEMPERATURE $< 150^\circ C$
13. INDICATES EXTERNAL CASTING PAINTED SURFACE (THICKNESS $< 2mm$)
14. RATING PLATE TEXT: ENGRAVE TEXT AS INDICATED, ON ALLOCATED (BLANK) AREAS ON RATING PLATE AS PER (TYP) TABLE
15. IP RATING ACHIEVED WHEN ASSEMBLED ONTO PLUGS
16. M4x0.7 - 6g/6H THREADED FASTENER SECURED (LOCTITE 263) SWAGED AFTER ASSEMBLY
17. WALL THICKNESS: 3 (MIN)
18. CREEPAGE AND CLEARANCE DIMENSIONS (DASHED RED LINES)
19. REFERENCE DIMENSIONS () ARE INFORMATIVE ONLY
20. THE CMI PLUG/RECEPTACLE COMBINATION IS RATED AT 150A WHEN FITTED WITH $35mm^2$ CSA CABLE (REFER IECEx CERTIFICATE)

14	F-851	JACKING SCREW ASSEMBLY - SHORT	REF NOTE 6.1 / 6.4	2
13	F-310	150A SEALING PLUG	RUBBER / STEEL	2
12	AX004076	RATING PLATE	C26000 CARTRIDGE BRASS 70-30	1
11	AH151016	M4 X 20 CH HD SCREW	REF NOTE 6.3	2
10	AH101011	SNAP RING 11MM	MILD STEEL	6
9	AH009788	3/16" X No.4 U-DRIVE SCREW	REF NOTE 6.7	2
8	4698	125A B/B RETAINING PLATE	REF NOTE 6.4	1
7	4696	125A B/B MAIN PIN	REF NOTE 6.2 / 6.5	3
6	4695	125A B/B PILOT PIN FEMALE	REF NOTE 6.2 / 6.5	1
5	4694	125A B/B PILOT PIN MALE	REF NOTE 6.2 / 6.5	1
4	4693	125A B/B MAIN PIN INSULATOR	REF NOTE 6.6	3
3	4691	125A 1100V B/B BODY CASTING	REF NOTE 6.4	1
2	4656-1	125A B/B PILOT PIN INSULATOR	REF NOTE 6.6	1
1	3028	SCRAPING EARTH CONTACT	PHOSPHOROUS BRONZE	2
ITEM	PART NUMBER	DESCRIPTION	MATERIAL	QTY

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GENERAL TOLERANCE ± 0.25
ANGULAR TOLERANCE $\pm 0.5^\circ$
MATERIAL VARIOUS

FINISH

MINTO INDUSTRIAL PRODUCTS

DESCRIPTION	125A 1100V BACK TO BACK SS RECEPTACLE
SCALE	1 : 2
DATE	15/03/2017
DRAWN	SL
CHECKED	TA
DRAWING No.	A3 F-850



Instructions for 125A Cable Reel Plug, Receptacle AND Back to Back Receptacle

Inst. Rest 125A - 1

The equipment is certified IECEx TRA 16.0015X and ANZEx 20.4170X (maximum surface temperature = 150°C) and is designed to AS/NZS1299, IEC60079-0 & 60079-1 and the plug will accept suitably rated cables manufactured to AS/NZS1802 and AS/NZS2802. It is recommended that the equipment is overhauled at intervals that do not exceed the requirements of AS/NZS2290.1. Maintain to the requirements of AS/NZS3800 for receptacles and plugs and AS/NZS1747 for cable fitment by suitably competent persons.

Catalogue Number	Description
AF264R	125AMP 660 VOLT 4 PIN RESTRAINED CABLE REEL PLUG
AF214R	125AMP 1100 VOLT 4 PIN RESTRAINED CABLE REEL PLUG
AG214BL	125AMP 1100 VOLT 4 PIN RESTRAINED CABLE REEL RECEPTACLE LEFT HAND BRASS
AG214BR	125AMP 1100 VOLT 4 PIN RESTRAINED CABLE REEL RECEPTACLE RIGHT HAND BRASS
AG214SL	125AMP 1100 VOLT 4 PIN RESTRAINED CABLE REEL RECEPTACLE LEFT HAND S. STEEL
AG214SR	125AMP 1100 VOLT 4 PIN RESTRAINED CABLE REEL RECEPTACLE RIGHT HAND S. STEEL
AH214S	125AMP 1100 VOLT 4 PIN R BACK TO BACK RECEPTACLE S. STEEL

• **Installation**

Note: This document is to be used as a guide only. Responsibility for correct termination and termination procedure is the responsibility of the cable terminator.

• **Plug installation**

- Ensure there is no visible sign of damage to plug
- Ensure the correct size Neoprene cone is available
- Slide gland cap, grommet and plug body up the cable
- Prepare cable to the dimensions given on the separately supplied stripping diagram taking care not to damage the core insulation screening or to cut into the conductor strands.
- Select, crimp or solder the thimbles to the phase, pilot and earth conductors.
- Use of PVC tape to seal cores is not recommended
- Fit the assembled thimbles and conductors to the appropriate location ensuring correct phase orientation and secure in place with screws through the sockets where appropriate.
- Install interior into plug body with correct rotation and fit sockets with screws.
- Slide earth sleeve over the interior and screw into plug body.
- Tighten screws on gland cap.

• **Receptacle installation**

- Ensure there is no visible sign of damage to the receptacle
- Ensure that the cable reel aperture has a maximum diameter of 51.25mm and a minimum flamepath length of 25mm
- Secure the receptacle to the cable reel using the keeper plate and fasteners provided by the cable reel manufacturer.



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□ **Brisbane** 485A Zillmere Road Zillmere QLD 4034
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For all account enquiries **Phone** (02) 8878 1320 **Fax** (02) 9808 4977

- **Thimbles for plug phase and pilot conductors**

- Thimble details are on drawing F-198

- **Use**

- Isolate power before connecting or disconnecting.

- **Assembly**

- Ensure sockets are clean and serviceable.
- Correct plug orientation.
- Insert plug using the receptacle operating mechanism.

- **Disassembly**

- To remove plug from receptacle, utilize the operating mechanism.
- Fit dust cover to plug and receptacle.

- **Certification Details:**

Certified to: IEC 60079-0:2011(Incorporating Corrigendum 1 & 2) IEC 60079-1:2014; AS/NZS 1299:2009 (incorporating amendment No.1)
Certificate of Conformity: IECEX TRA 16.0015X; ANZEx 20.4170X
Type of Protection: Ex db I Mb
Type (AS/NZS 1299) Type A
Ingress Protection: IP 66 (When coupled to a receptacle)

- **Certification Nameplate Details**

TYPICAL PLUG RATING PLATE DETAILS	TYPICAL RECEPTACLE RATING PLATE DETAILS
M.I.P. AF2#4\$ 125A IP66 TYPE "A" Ex db I Mb IECEX TRA 16.0015X ANZEx 20.4170X S.O xxxx-xx WARNING DO NOT SEPARATE WHEN ENERGIZED	M.I.P. AG214\$@ 125A 1100V IP66 TYPE "A" Ex db I Mb IECEX TRA 16.0015X ANZEx 20.4170X S.O xxxx-xx WARNING DO NOT SEPARATE WHEN ENERGIZED
TYPICAL BACK TO BACK RECEPTACLE RATING PLATE DETAILS	
M.I.P. AH214S 125A 1100V IP66 TYPE "A" Ex db I Mb IECEX TRA 16.0015X ANZEx 20.4170X S.O xxxx-xx WARNING DO NOT SEPARATE WHEN ENERGIZED	

LEGEND: # =6=660V
=1=1100V
\$= R=RUBBER INTERIOR

@=R=RIGHT HAND
@=L=LEFT HAND
\$=B=BRASS
\$=S=STAINLESS STEEL

- **Note:**

- The CMI Plug/Receptacle combination is rated at 150A when fitted with 35mm² CSA cable (Refer IECEX Certificate).

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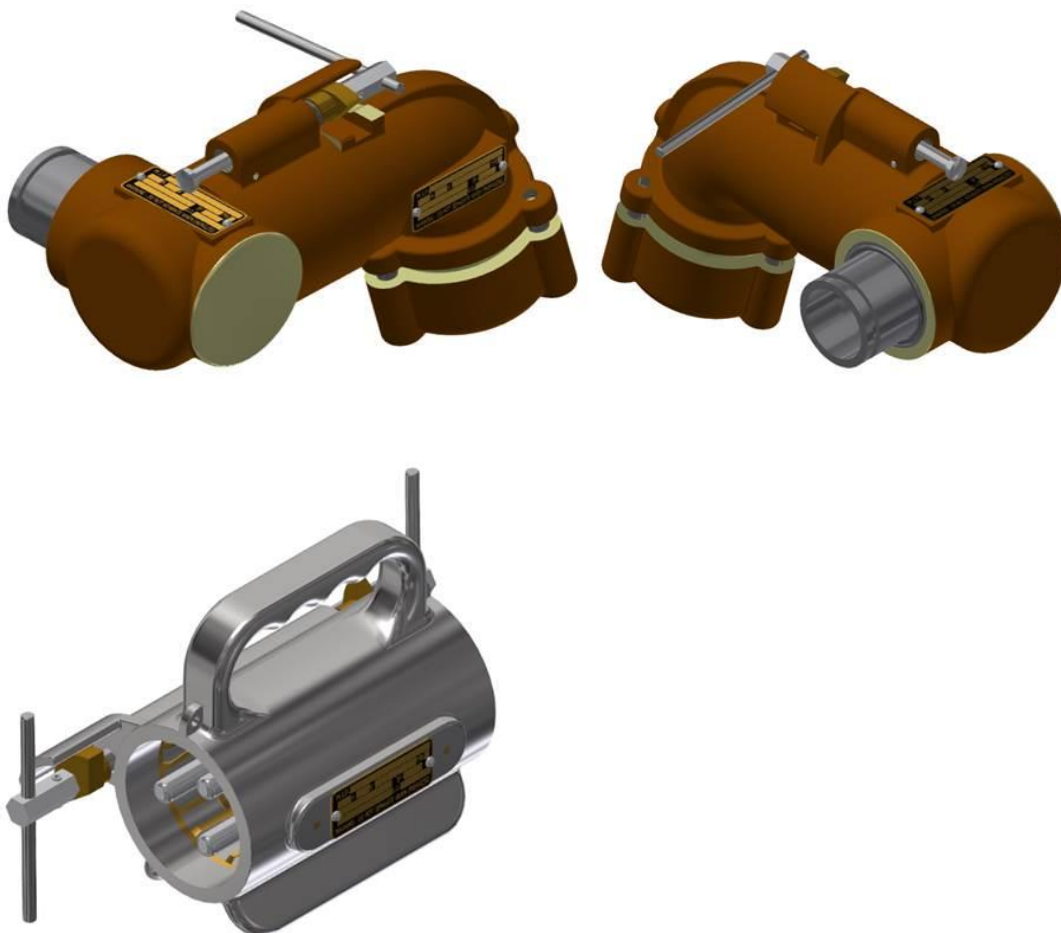
Inst. Rest 125A – 1 Page 2 of 4
Rev E 2020-02-28



• Flamepath Details

- Refer to the drawings listed on the certificate for details of flamepaths

• Typical Assembly Details



• Conditions of Certification

- When the 125A, 660V/1100V restrained cable reel plug is engaged with the receptacle, the assembly is locked by jacking screw mechanism. Further the plug is marked with the following text: "DO NOT SEPARATE WHEN ENERGIZED"

• Conditions of Use

- Some flameproof joints (flamepaths) have dimensions that are different than the values given in table 2 of IEC60079.1. Refer to the manufacture's drawings for details.



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- **Maintenance**

- Inspection shall include cleanliness and compliance with certification documentation.
- Check as per AS/NZS2290.1

- **Overhaul and Repair**

- To be carried out by suitable workshop.

- **Operating Temperature**

- Operating temperature range -20°C to +40°C and average temperature over 24 hours is not to exceed 35°C

Refer to Inst. Rest 125A - 2 for additional detailed instructions

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Inst. Rest 125A – 1 Page 4 of 4

Rev E 2020-02-28

