

CERTIFICATE NUMBER 20-1952738-1-PDA

EFFECTIVE DATE 11-November -2020

EXPIRATION DATE 09-February-2025

ABS TECHNICAL OFFICE Singapore Engineering Services

CERTIFICATE OF

Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

CCG CABLE TERMINATIONS PTY LTD

located at

33-37 FORGE ROAD, SPARTAN IND, SOUTH AFRICA, 1620

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Junction Boxes, Marine

Model Handi Fit Range, Posi Fit Range, Bottom Entry (Ex), Bottom Entry Angle (Ex), Angle Box Ex, Screw Fit Box (Ex), Switch Box (Ex), Utility, Flameproof Box, Flameproof-SPG Box

This Product Design Assessment (PDA) Certificate remains valid until 09-February-2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping

Manoraaju, Engineer/ Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

33-37 FORGE ROAD, SPARTAN IND

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South Africa 1620

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Web: www.ccgcablegland.co.za

Tier: 3 - Type Approved, unit certification not required

Product: Junction Boxes, Marine

Model: Handi Fit Range, Posi Fit Range, Bottom Entry (Ex), Bottom Entry Angle (Ex), Angle Box

Ex, Screw Fit Box (Ex), Switch Box (Ex), Utility, Flameproof Box, Flameproof-SPG Box

Intended Service:

Junction box for use on ABS Classed Vessels and Offshore Installations in accordance with the listed ABS Rules and International Standards.

Description:

Refer to attachment.

Rating:

Refer to attachment.

Service Restriction:

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

- 1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- 2. The glands and terminals are to be installed strictly in accordance with instructions supplied by the manufacturer.
- 3. Junction boxes are not to be used for propulsion cables as indicated in 4-8-/21.25 of Marine Vessel Rules.
- 4. Restricted to those areas/spaces where type Ex "e" as indicated in 4-8-3/13.3.3 and 4-8-4/27.5.1 of Marine Vessel Rules.
- 5. ATEX certified equipment is not to be installed in hazardous areas on U.S vessels unless it can be prove to have been tested to the applicable IEC 60079 series standards by an independent laboratory accepted by the U.S coast Guard. USCG notice 01-12 (February 7, 2012).

Notes/Drawing/Documentation:

Documents:

Drawing No. 3-Way Bottom Entry, Junction Box, Revision: -, Pages: 2

Drawing No. 5-Way Handi Fit, Junction Box, Revision: -, Pages: 2

Drawing No. Angle Box, Junction Box, Revision: -, Pages: 2

Drawing No. Bottom Entry Angle Box, Junction Box, Revision: -, Pages: 2

Drawing No. Bottom Entry Angle Box EX, Junction Box, Revision: -, Pages: 2

Drawing No. Bottom Entry Switch Box, 16A Switch Box, Revision: -, Pages: 2

Drawing No. FlameProof Box, Junction Box, Revision: -, Pages: 2

Drawing No. FlameProof SPG Box, Junction Box, Revision: -, Pages: 2

Drawing No. Handi Fit 4-Way, Handi Fit Y, Handi Fit H, Junction Box, Revision: -, Pages: 2

Drawing No. Handi Fit 4-Way Fire Rated, Handi Fit Y Fire Rated, Handi Fit H Fire Rated, Junction Box, Revision: -, Pages: 2

Drawing No. Posi Fit 4-Way/TX, Posi Fit Y, Posi Fit H, Junction Box, Revision: -, Pages: 2

Drawing No. Screw Fit, 3-Way Bottom Entry Junction Box, Revision: -, Pages: 2

Drawing No. Screw Fit 4-Way, Junction Box, Revision: -, Pages: 2

Drawing No. Screw Fit 4-Way Ex, Junction Box, Revision: -, Pages: 2

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Drawing No. Utility Box, Junction Box, Revision: -, Pages: 2

Drawing No. 3-Way Bottom Entry Ex, Junction Box, Revision: -, Pages: 2

Report No. CML 14CA370-1, DTS-01 Deluge Test for JBs by CMLEx, Dated: 04 December 2014, Revision: -,

Pages: 5

Report No. Report No. 1066, Fire Test by CSIRO, Dated: 20 July 2000, Revision: -, Pages: 10

Certificate No. MASC S/10-216, Explosion Proof Certification, Revision: -, Pages: 7

Terms of Validity:

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Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:

Rules for Conditions of Classification (2020) – 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following: 2020 Rules for Building and Classing Marine Vessels: 4-8-3/9.21;

ABS Rules for Conditions of Classification (2020) - High-Speed Crafts 1-1-4/11.9, 1-1-A2, 1-1-A3, which covers the following:

Rules for Building and Classing High Speed Craft: 4-6-3/5.33;

Rules for Conditions of Classification (2020) – Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

Rules for Building and Classing Mobile Offshore Units: 4-3-3/5.25;

National:

NA

International:

IEC 60079-0:2017

Government:

NA

EUMED:

NA

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OTHERS:

NA

Company: 33-37 FORGE ROAD, SPARTAN IND, PO BOX 192, KEMPTON PARK, 1620, VAT NO 4860104209, SOUTH AFRICA, 1620

Model: Handi Fit Series, Posi Fit Series, Flameproof Box, Flameproof-SPG Box

Certificate No: 20-1952738-1-PDA Issued Date: 11-Nov-2020 Expiry Date: 9-Feb-2025

Revision: 1

Model	Variants	Description	Hazardous Installation
Handi Fit	4 Way	Fastening: Cylindrical shaped body with a screw on lid on top or Screw Fit lid (SF-series), fastened with four screws. Service Temperature: -60 deg.C to 110 deg.C Box Material: Impact, corrosion and UV resistant glass reinforced polyester compound.	N/A
	Y Box		
	Н Вох	Ingress Protection: IP 66/68 Option: Red Fire Rated Box for emergency circuits available (925 deg.C for 3 hours).	
	Bottom Entry Box	Fastening: Cylindrical shaped body with a screw on lid on top or Screw Fit lid (SF-series), fastened with four screws.	
	Bottom Entry Angle Box	Service Temperature: -60 deg.C to 110 deg.C Box Material: Impact, corrosion and UV resistant glass reinforced polyester compound. Ingress Protection: IP 66/68	N/A
	Bottom Entry Angle Switch Box	Fastening: Cylindrical shaped body with a screw on lid on top or Screw Fit lid (SF-series), fastened with four screws. Service Temperature: -10 deg.C to 70 deg.C Box Material: UV Resistant Glass Reinforeced Polyester Ingress Protection: IP 66 Electrical Rating: 16A, 240V	N/A
	4 Way/ TX Box	Fastening: Cylindrical shaped body with a screw on lid on top or Screw Fit lid (SF-series), fastened with four screws. Box Material: Impact, corrosion and UV resistant glass reinforced polyester compound.	For Installation in hazardous area
Posi Fit	Y Box		based on certificate MASC S/10-
	Н Вох		216X.
	Angle Box		Certified "Explosion Protected" Ex e IIC Gb, Ex nA IIC Gc, Ex t IIIC Db
	3 Way Bottom Entry Box		
	Bottom Entry Angle Box		IP66/67/68 (2 m cont.).
Flameproof Box	-	Type: Cast iron cylindrical junction box and consists of two parts, a base and cover with a flanged joint. Box Material: High quality cast iron and corrosion protection metallic finish Ambient Temperature: -20 deg.C to 55 deg.C Ingress Protection: IP 66/68	For installation in hazardous area based on certificate CML 15ATEX1065X.

	Type: Cast iron cylindrical junction box and consists of two parts, a base	Rating: Ex db I/II* T6 Mb/Gb
	and cover with a spigot joint.	Ex tb IIIC T85ºC Db
Flameproof-SPG Box	- Box Material: High quality cast iron and corrosion protection metallic finish	IP66/68 (2m cont).
	Ambient Temperature: -20 deg.C to 55 deg.C	
	Ingress Protection: IP 66/68	