Certificate Number: 01-HS244925-6-PDA 11/APR/2014



Confirmation of Product Type Approval

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product.

This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 11/APR/2017. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 10/MAY/2015 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Product Name: Electrical outfitting Items

Model Name(s): RKM, RSM, RYM, WKM, WSM, WYM, RKF 30; RFK 40, RKF 301; RKF, RSF, RYF; RK(S)M-RK(S)M-X Tees Solid construction, RK(S)M X-x.x-K(S)M-X-x.x-RK(S)M-X-x.x Splitters, Cable Ends molded on

Presented to:

Turck Inc. 5000 Fernbrook Lane North Plymouth United States

Intended Service:

To be used on board marine vessels and offshore units, in electrical systems, for control, instrumentation and signal distribution, in all indoor/outdoor locations

Description:

Product Family: Model Number/Description/Variations/Ratings/Approvals Minifast Cordsets: RKM *-*/Straight body, female connector, female threads/2-6 pin construction, with stripped leads or other molded end/9 Amps, 600 volts/UL, CSA; RSM *-*/Straight body, male connector, male threads/2-6 pin construction, with stripped leads or other molded end/9 Amps, 600 volts/UL, CSA; RYM *-*/Straight body, male connector, female threads/2-6 pin construction, with stripped leads or other molded end/9 Amps, 600 volts/UL, CSA; WKM *-*/Right angle body, female connector, female threads/2-6 pin construction, with stripped leads or other molded end/9 Amps, 600 volts/UL, CSA; WSM *-*/Right angle body, male connector, male threads/2-6 pin construction, with stripped leads or other molded end/9 Amps, 600 volts/UL, CSA; WYM *-*/Right angle body, male connector, female threads/2-6 pin construction, with stripped leads or other molded end/9 Amps, 600 volts/UL. CSA. Minifast Junction Boxes: * - RKF 30 - **/Female connector, female threads, 3-pin parallel wired/* = 4, 6, or 8 port junction box; ** = Cable length, or connector type/9 Amp total: 250VAC or 300VDC/CSA; * - RKF 40 - **/Female connector, female threads, 4-pin parallel wired/* = 4, 6, or 8 port junction box; ** = Cable length, or

connector type/9 Amp total; 250VAC or 300VDC/CSA; * - RKF 301 - **/Female connector, female threads, 3-pin Series wired/* = 4, 6, or 8 port junction box; ** = Cable length, or connector type/9 Amp total; 250VAC or 300VDC/CSA. Minifast Receptacles: RKF *-*/Female connector, female threads/2-6 pin construction, with stripped leads/9 Amps, 600 volts/UL, CSA; RSF *-*/Male connector, male threads/2-6 pin construction, with stripped leads/9 Amps, 600 volts/UL, CSA; RYF *-*/Male connector, female threads/2-6 pin construction, with stripped leads/9 Amps, 600 volts/UL, CSA. Minifast TEE's/Splitters: RK(S)M-RK(S)M-X Tees Solid construction/Varies/3-5 pin construction/9 Amps, 600 volts/UL, CSA; RK(S)M X-x.x-RK(S)M-X-x.x-RK(S)M-X-x.x Splitters, Cable ends molded on/Varies/3-5 pin construction/9 Amps, 600 volts/UL, CSA (X= number of pins, x.x= length of cable and could be blank).

Tier:

Ratings: Voltage & Current: See description; Enclosure: NEMA 6P, IP67

Service Restrictions: 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. 1. The products are suitable for use in hazardous areas only in certified intrinsically safe circuits. 2. The products may also be used in Div.2 hazardous areas. However, each installation will be reviewed on per case basis for suitability. 3. The cables used as cords are to have voltage & current ratings no less than the value specified for the whole assembly. For MODU's, 4-3-3/3.1.1 of

the MODU Rules are also to be complied with.

Comments: Duplicate PDA resides with Turck Mexico S. De R.L. De C.V. - SALTILLO; The

Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. 1. All cords with connectors are prewired and have premolded strain relief. 2. All connections in the junction boxes, receptacles and connectors are encapsulated in epoxy. 3. For products with cords attached, a numerical or alpha numerical designator consisting of 3 to 6 digits is used in the product description showing that a cable approved in accordance with UL1309, for marine shipboard use, will be attached to the product as a cord. 4. If the letter 'M' in the catalog number of a product, indicating product to be of nickel plated brass, is changed to 'V', it would indicate product to be of stainless steel material. 5. For product with prefix "P-" it would indicate the product is intended for Process

Automation/ Network applications.

Notes / Documentation: Supporting Documentation: ABS Survey Report No. SB1820927 dated 28 Apr.

2010

Term of Validity: This Product Design Assessment (PDA) Certificate 01-HS244925-6-PDA, dated

11/May/2010 remains valid until 10/May/2015 or until the Rules or specifications used in the assessment are revised (whichever occurs first). This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product. Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the

PDA. Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

ABS Rules: 2013 Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 4-8-3/1.7, 4-8-3/1.11, 4-8-3/9.1,

4-8-3/9.5 & 4-8-3/9.21; 2012 MODU Rules 4-3-1/11, 4-3-1/15, 4-3-3/3.1.1,

4-3-4/11.7, 4-3-4/13.1.1, , 4-3-4/13.1.2

National Standards: UL Std 2238, UL 2237

International Standards: CSA Std C22.2 No. 182.3-M1987.*

Government Authority:

EUMED: Others:

 Model Certificate
 Model Certificate No
 Issue Date
 Expiry Date

 PDA
 01-HS244925-6-PDA
 11/MAY/2010
 10/MAY/2015

ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.

Certificate Number: 10-HS634186-PDA 11/APR/2014



Confirmation of Product Type Approval

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product.

This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 11/APR/2017. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until 31/OCT/2015 subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Product Name: Electrical outfitting Items Model Name(s): P-4 RKFV 569-CSV19/C

Presented to:

Turck Inc. 5000 Fernbrook Lane North Plymouth United States

Intended Service:

Marine and Offshore Applications - Platforms

Description:

Passive Electrical Junction Box to Consolidate or Distribute Electrical Information

or Signals from Remote Sensing Devices.

Ratings:

Voltage Rating: 30V; Current Rating: 600 mA; Temperature Code: T5, Ta= 80°C

Enclosure Rating: NEMA 4X Hazardous Area Certification: Class 1, Division 2,

Groups A, B, C & D

Service Restrictions:

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:

None

Notes / Documentation:

Supporting Documentation: Drawing No.: U0892-86 Rev. D PathFinder 0100, 5004261 Rev. D Coupling Insert, RC-19P1N120000 Rev. 00 Connector Insert Turck P/N 101 60 570, 10267100 Rev. B Label PathFinder 0100 Rev. B, 99900026 Rev. B PWB 4 6 8 Port MultiBox, U0892-86 Rev. C PathFinder 0100, U0892 (MFG) Rev. D PathFinder 0100, Material Data Sheet for InsulCast 333 dated Oct. 1998.

Term of Validity:

This Product Design Assessment (PDA) Certificate 10-HS634186-PDA, dated 01/Nov/2010 remains valid until 31/Oct/2015 or until the Rules or specifications

Certificate Number: 10-HS634186-PDA

used in the assessment are revised (whichever occurs first). This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product. Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA. Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

ABS Rules:

2010 Steel Vessels Rules 1-1-4/7.7, 1-1-Appendix 3, 4-8-4/27,

National Standards:

International Standards:

CSA Class 2258-02 CSA-C22.2 No. 25-1966 - CSA Report No.: 1690200 dtd 13

March 2006.

Government Authority:

EUMED:

Others:

CSA-C22.2 No. 213-M1987 - Non-Incendive Electrical Equipment for use in Class

I, Division 2 Hazardous Locations.

 Model Certificate
 Model Certificate No
 Issue Date
 Expiry Date

 PDA
 10-HS634186-PDA
 01/NOV/2010
 31/OCT/2015

ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.