

Certificate of Compliance

Certificate: 1057278 **Master Contract:** 157759 (LR 102502)

Project: 70188789 **Date Issued:** 2018-07-18

Issued to: Turck Inc.

3000 Campus Dr

Plymouth, Minnesota 55441-2656

USA

Attention: Paul E. Harms

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Michael Chung

Issued by: Michael Chung

PRODUCTS

CLASS 5852 01- HARNESSES – Wiring CLASS 5852 81- HARNESSES – Wiring – Certified to US Standards

Design Specific Wiring Harnesses:

<u>PART A</u>: Special-use attachment plugs, connectors, receptacles and inlets, moulded and unmoulded to flexible cords or AWM "Minifast" Series, "Eurofast" Series and "Microfast" Series. Minifast Series RK, RS, RY, WK, WS, WY, RKF, RSF, RXF, rated 600V max with flexible cord Type ST and 300V max with AWM or flexible cord type SJT, 2 or 3 pin rated 13A (16AWG), 4 or 5 pin 9A (18AWG), 4 or 5 pin 10A (16AWG) and 6 pin 8A (18AWG). "Eurofast" Series RK, RS, WK, WS, WAK, WAS, WWAK, WWAS, FK, FS, "Microfast" Series KB, WKB, SB, WSB, FKB, FSB, Special use "Y" connection Cat No VB2-FSBM 5/2KB 3T-*/*/S648, rated 4A max, 250V max.

<u>PART B</u>: Special use connectors moulded to flexible cords or appliance wiring material "Eurofast" Series with LED indication, Cat No W (right angle only) with suffixes -N or -P and 7X and 2 or 3, rated 30V dc max, 4A max.

<u>PART C</u>: Special use connectors moulded to flexible cords or appliance wiring material "Picofast" Series with or without LED indication, Cat No P followed by K (Female Plug) or S (Male Plug) followed by G (Straight) or W (Right Angle) with suffixes, rated 125V ac/dc max (without LED indication), 3 or 4 pin configuration, 4A max (3

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wire) or 2A max (4 wire), 6 pin configuration, 2A max. (6wire). Special use receptacles with appliance wiring material conductors attached, "Picofast" Series, Cat No MF followed by K (Female) or S (Male) with suffixes, rated 125V ac/dc max, 3 or 4 pin configuration, 4A max (3 wire) or 2A max (4 wire), 6 pin configuration, Cat No MF followed by S (Male) with suffixes rated 125V ac/dc max, 2A max (6 wire).

PART D: Special use connectors moulded to flexible cords or appliance wiring material, DIN 43650 (DIN VALVE PLUG) Connector Series, Cat No V or H with suffixes and with circuits- type 1 (straight through) or Type 2 (Indicator LED), or type 4 (Indicator LED, Diode Protection) rated 250V ac/300V dc max, 4 amps max or Type 3 (Indicator LED, MOV protection) rated 24 - 48V ac/dc, 4 amps max. All types used with straight or right angle Eurofast, microfast or picofast connectors and must be followed by S3231 suffix.

<u>PART E</u>: "Armorfast Minifast" (minifast series with armour) series Cord sets to add armoured cable with PVC covering and with PP and PVC insulated conductors in place of AWM or flexible cord.

<u>PART F</u>: "Minifast Junction Tees", Cat No R (straight connector) or W (90 degree connector) followed by K (female) or S (male) with suffixes, rated 250V, 9.0 Amp.

<u>PART G</u>: "Eurofast" 6 or 8 pin cord sets, R or W followed by K (female) or S (male) with suffixes, and "Eurofast" receptacles, F followed by K (female) or S (male) with suffixes, rated 60V ac/75V dc, 2 Amp max.

<u>PART H</u>: "Eurofast" 4 or 5 pin cord sets, RKS (female) and RSS (male) with S suffix denoting shield tied to coupling nut, rated 250V, 4A.

<u>PART I</u>: "Eurofast" 2 through 5 pin cord sets, RKG (female) and RSG (male) with G suffix denoting large coupling nut and larger plug body, rated 250V, 4A and 2 pin only with 18AWG leads, rated 600V, 4A.

<u>PART J</u>: Special use "Y" connection Cat No "VB2-" series, with Certified "Eurofast" 2-branch moulded junctions, 4-pin series wired VB2/S719, 4 and 5 pin parallel wired VB2/S651, rated 4A max, 250V max and "Eurofast" 2-branch moulded junctions with Valve Plugs, 4 wire series, 5 pin, rated 4Amax, 250V max. May also use "microfast" and "picofast" Certified connections rated 4A, 250V.

<u>PART L</u>: Special-use attachment plugs, connectors, receptacles and inlets, moulded and unmoulded to Certified flexible cord type STOOW or appliance wire type TEW, Powerfast Series RKM, RSM, RSF, RKF, rated 600V, 3 or 4 pins 15A (14AWG).

Notes

- 1. Wiring assemblies are supplied only to manufacturers, as components, for the assembly of Certified electrical equipment, where the acceptability of the suitability of the combination is determined in the end use.
- 2. These devices are not intended for interrupting current.
- 3. Suffixes may be added to describe type of coupling nut and threads, mounting style, number and size of conductors. Prefix may be added "P" = Process Automation or "E" = Encoders.
- 4. Wiring assemblies are normally constructed in accordance with an assembly technical diagram and are designed for a specific application which is indicated on the technical diagram which appears in each carton/package of wiring assemblies.
- 5. A wiring assembly may consist of a single wire cut and stripped in accordance with an assembly technical diagram.



6. The specific section part numbers (i.e. "Part A", "Part B", etc.) above represent corresponding descriptions within the certification report.

CLASS 6233 01 - RECEPTACLES – Attachment Plug Type and Plugs CLASS 6233 81 - RECEPTACLES – Attachment Plug Type and Plugs – Certified to US Standards

<u>Note:</u> The following Special-use attachment plugs, connectors, receptacles and inlets are only for use in the wiring assemblies listed above.

PART A: Special-use attachment plugs, connectors, receptacles and inlets, "Minifast" Series (RK, RS, RY, WK, WS, WY, RKF, RSF, RXF, rated 600V, 2 or 3 pin rated 13A (16AWG), 4 or 5 pin 9A (18AWG), 4 or 5 pin 10A (16AWG) and 6 pin 8A (18AWG)), 9, 10 and 12 pin 7A (16 or 18 AWG), "Eurofast" Series (RK, RS, WK, WS, WAK, WAS, WWAK, WWAS, FK, FS, rated at 4A, 250V max.) and "Microfast" Series (KB, WKB, SB, WSB, FKB, FSB, rated at 4A, 250V max.), and Special use "Y" connection Cat No VB2-FSBM 5/2KB 3T-*/*/S648, rated 4A max, 250V max.

<u>PART B</u>: Special use connectors "Eurofast" Series with LED indication, Cat No W (right angle only) with suffixes -N or -P and 7X and 2 or 3, rated 30V dc max, 4A max.

<u>PART C</u>: Special use connectors "Picofast" Series with or without LED indication, Cat No P followed by K (Female Plug) or S (Male Plug) followed by G (Straight) or W (Right Angle) with suffixes, rated 125V ac/dc max (without LED indication), 3 or 4 pin configuration, 4A max (3 wire) or 2A max (4 wire), 6 pin configuration, 2A max. (6wire). Special use receptacles "Picofast" Series, Cat No MF followed by K (Female) or S (Male) with suffixes, rated 125V ac/dc max, 3 or 4 pin configuration, 4A max (3 wire) or 2A max (4 wire), 6 pin configuration, Cat No MF followed by S (Male) with suffixes rated 125V ac/dc max, 2A max (6 wire).

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<u>PART D</u>: Special use connectors, DIN 43650 (DIN VALVE PLUG) Connector Series, Cat No V with suffixes and with circuits- type 1 (straight through) or Type 2 (Indicator LED), or type 4 (Indicator LED, Diode Protection) rated 250V ac/300V dc max, 4 amps max or Type 3 (Indicator LED, MOV protection) rated 24 - 48V ac/dc, 4 amps max. All types used with straight or right angle Eurofast, microfast or picofast connectors and must be followed by S3231 suffix.

<u>PART F</u>: "Minifast Junction Tees", Cat No R (straight connector) or W (90 degree connector) followed by K (female) or S (male) with suffixes, rated 250V, 9.0 Amp.

<u>PART G</u>: "Eurofast" 6 or 8 pin, R or W followed by K (female) or S (male) with suffixes, and "Eurofast" receptacles, F followed by K (female) or S (male) with suffixes, rated 60V ac/75V dc, 2 Amp max.

PART H: "Eurofast" 4 or 5 pin, RKS (female) and RSS (male) with S suffix denoting shield tied to coupling nut, rated 250V, 4A.

<u>PART I</u>: "Eurofast" 2 through 5 pin, RKG (female) and RSG (male) with G suffix denoting large coupling nut and larger plug body, rated 250V, 4A and 2 pin only with 18AWG leads, rated 600V, 4A.

<u>PART J</u>: Special use "Y" connection Cat No "VB2-" series, with Certified "Eurofast" 2-branch moulded junctions, 4-pin series wired VB2/S719, 4 and 5 pin parallel wired VB2/S651, rated 4A max, 250V max and "Eurofast" 2-branch moulded junctions with Valve Plugs, 4 wire series, 5 pin, rated 4Amax, 250V max. May also use "microfast" and "picofast" Certified connections rated 4A, 250V.

PART K: Minifast models RKFP and RSFP with alternate plastic housing.

<u>PART L</u>: Special-use attachment plugs, connectors, receptacles and inlets, Powerfast Series RKM, RSM, RSF, RKF, rated 600V, 3 or 4 pins 15A (14AWG), 9, 10 and 12 pin 7A (16 or 18 AWG).

Notes:

- 1. Special use connectors are supplied only to manufacturers, as components, for the assembly of Certified electrical equipment, where the acceptability of the suitability of the combination is determined in the end use.
- 2. These devices are not intended for interrupting current.
- 3. Suffixes may be added to describe type of coupling nut and threads, mounting style, number and size of conductors. Prefix may be added "P" = Process Automation or "E" = Encoders.
- 4. The specific section part numbers (i.e. "Part A", "Part B", etc.) above represent corresponding descriptions within the certification report.



APPLICABLE REQUIREMENTS

Class 5852 01/81:

Certification INFORMS Wiring Harness No. 2 - Update of CSA Certification Program for Wiring Harnesses

Class 6233 01/81:

CSA Std. C22.2 No. 182.3-M1987 (R2014) ANSI/UL Std. No. 1977 (2nd Edition)

- Special Use Attachment Plugs, Receptacles, and Connectors
- Component Connectors for Use in Data, Signal, Control and Power Applications



Supplement to Certificate of Compliance

Certificate: 1057278 **Master Contract:** 157759 (LR 102502)

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

| Project | Date | Description |
|----------|------------|---|
| 70188789 | 2018-07-18 | Three alternate body/strain relief materials. |
| 70045521 | 2016-01-15 | Update report 1057278 to add new special use connector RSF -9, -10, -12 pole rated 7A, 600V and add new insulating material BASF R3000 as a contact carrier with testing and acceptance of test data by UL, under Par A and Part L in the report. |
| 70028355 | 2015-04-07 | Add Cat. No. H with suffixes in Part D. |
| 2579716 | 2015-02-07 | Certification file review to update to UL 1977 - Second Edition as per Certification Notice Wiring Devices No. 53 to applicable report 1057278. |
| 2622608 | 2013-05-28 | Add new classes 5852 01/81 for wiring assemblies |
| 2612578 | 2013-04-04 | Add S3231 suffix to part D |
| 2445849 | 2011-08-17 | Extend moulded materials, add UL file, correct a typo and remove alternate material PD304G6YL55 by Polyram |
| 2227435 | 2010-06-22 | Add Powerfast Series RKM, RSM, RSF, RKF (Part L); Increase current rating of Minifast Series (Part A) to 10A (4 or 5 pin, 16AWG conf iguration); Add alternate materials see report for more info. |
| 2047950 | 2008-06-24 | Correct report typo. |
| 2020140 | 2008-03-18 | Include CSA Accepted Adhesive-type Label as option of marking. |
| 1945459 | 2007-10-03 | Include alternate material PD304G6YL55 manufactured by POLYRAM RAM ON Ind. LP. |
| 1827643 | 2007-01-15 | Addition of 600V rating to RK(S)G with two conductors, 18AWG |
| 1774315 | 2006-08-17 | Alternate housing RKFP ad RSFP |
| 1601870 | 2005-02-11 | Addition of 6 pin Picofast series rated 125V, 2 amps. |