

Sep. 1. 2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

| APPLICABLE STANDARD | | | | | |
|--|---|--|---------------------------|------------------------|------------------|
| RATING | OPERATING TEMPERATURE RANGE | -20 °C TO +85 °C | STORAGE TEMPERATURE RANGE | -20 °C TO +85 °C | |
| | VOLTAGE | AC 200 V , DC 250 V | | | |
| | CURRENT | 3 A | APPLICABLE CABLE | (φ5.7 TO φ6.5) | |
| SPECIFICATIONS | | | | | |
| ITEM | TEST METHOD | REQUIREMENTS | QT | AT | |
| CONSTRUCTION | | | | | |
| GENERAL EXAMINATION | VISUALLY AND BY MEASURING INSTRUMENT. | ACCORDING TO DRAWING. | × | × | |
| MARKING | CONFIRMED VISUALLY. | | × | × | |
| ELECTRIC CHARACTERISTICS | | | | | |
| CONTACT RESISTANCE | CONTACT SHALL BE MEASURED AT DC 1 A (MIL-C-2316) | 20 mΩ MAX. | × | × | |
| INSULATION RESISTANCE | 500 V DC. (MIL-STD-1344 3003) | 1000 MΩ MIN. | × | × | |
| VOLTAGE PROOF | 900 V AC FOR 1 min. (MIL-STD-1344 3001) | NO FLASHOVER OR BREAKDOWN. | × | × | |
| MECHANICAL CHARACTERISTICS | | | | | |
| CONTACT INSERTION AND WITHDRAWAL FORCES | φ0.736 ⁰ _{-0.003} BY STEEL GAUGE. | INSERTION AND WITHDRAWAL FORCES : 0.2 N MIN. | × | — | |
| CONNECTOR INSERTION AND WITHDRAWAL FORCES | MEASURED BY APPLICABLE CONNECTOR. | INSERTION FORCE : 70 N MAX. WITHDRAWAL FORCE : 50 N MAX. LOCKING DEVICE WITH UNLOCK | × | — | |
| MECHANICAL OPERATION | 500 TIMES INSERTIONS AND EXTRACTIONS. (MIL-C-5015 4.6.12.2) | CONTACT RESISTANCE : 30 mΩ MAX. | × | — | |
| VIBRATION | FREQUENCY 10 TO 500 Hz, SINGLE AMPLITUDE 0.75 mm, 98 m/s ² AT 3 h, FOR 3 DIRECTIONS. (MIL-STD-1344 2005, CONDITION II) | ① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — | |
| SHOCK | 490 m/s ² DIRECTIONS OF PULSE 11ms AT 3 TIMES FOR 3 DIRECTIONS. (MIL-STD-1344 2004, CONDITION E) | ① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE -55 → R/T ⁽¹⁾ → +85 → R/T °C TIME 30 → 2 TO 3 → 30 → 2 TO 3 min UNDER 5 CYCLES. (MIL-C-5015 4.6.4) | ① INSULATION RESISTANCE: 500 MΩ MIN. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 71 °C, 95 %, 336 h. (MIL-C-5015 4.6.10) | ① INSULATION RESISTANCE: 50 MΩ MIN (AT HIGH HUMIDITY). ② INSULATION RESISTANCE: 500MΩ MIN (AT DRY). ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — | |
| SEALING | EXPOSED AT A DEPTH OF 1 m FOR 0.5 h. (JIS B 6015) | NO WATER PENETRATION INSIDE CONNECTOR. | × | — | |
| AIRTIGHTNESS | APPLY AIR PRESSURE 40 kPa FOR 30 SEC TO INSIDE CONNECTOR. | NO AIR BUBBLES FROM CONNECTOR INTERFACE. | × | — | |
| OIL RESISTING | DROP CUTTING OIL FOR 48 HOURS AT THE RATE OF 0.5L EVERY HOUR. (JIS B 6015) | NO OIL SEEPAGE INSIDE CONNECTOR. | × | — | |
| RESISTANCE TO SOLDERING HEAT | PLACE SOLDERING IRON (IRON TIP TEMPERATURE +380±10°C) AND SOLDER TO SOLDERING POT AREA FOR 3 TO 4 s. | NO DEFORMATION OF CASE AND EXCESSIVE LOOSENESS OF THE TERMINALS. | × | — | |
| SOLDERABILITY | PLACE SOLDERING IRON (IRON TIP TEMPERATURE +350±10°C) AND SOLDER TO SOLDERING POT AREA FOR 2 TO 3 s. | A SOLDERING SIDE IS TO BE WET WITH SOLDER. AND, NO SMALL LUMP OF THE SOLDER. | × | — | |
| CORROSION SALT MIST | EXPOSED IN 5% SALT WATER SPRAY FOR 48h. (MIL-STD-1344 3001, CONDITION B) | NO HEAVY CORROSION RUINS THE FUNCTION. | × | — | |
| DRY HEAT | EXPOSED AT + 85 °C, 96 h. | NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — | |
| COLD | EXPOSED AT - 55 °C, 96 h. | NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| ① | | | | | |
| REMARK | | | APPROVED | HY. KOBAYASHI | 18.02.26 |
| NOTE(1) R/T : ROOM TEMPERATURE | | | CHECKED | HY. KOBAYASHI | 18.02.26 |
| Unless otherwise specified, refer to IEC 60512(JIS C5402). | | | DESIGNED | DS. MATSUNE | 18.02.24 |
| | | | DRAWN | AI. NISHIYAMA | 18.02.16 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | | ELC-115626-31-00 |
| HRS | SPECIFICATION SHEET | | PART NO. | HR08D-12WLP A-10S (31) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL108-0221-9-31 | △ 1/1 |