

Feb. 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.

| COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE |
|---|-----------------------------|--|------|---------------------|---|--------------------------|----------------------|----------|------|
| △ | | | | | △ | | | | |
| △ | | | | | △ | | | | |
| APPLICABLE STANDARD | | | | | | | | | |
| RATING | OPERATING TEMPERATURE RANGE | -35 °C TO 85 °C(NOTE 1) | | | STORAGE TEMPERATURE RANGE | -10°C TO 60 °C | | | |
| | VOLTAGE | 250 V AC | | | APPLICABLE CONNECTORS | DF1E-*S-2.5C | | | |
| | CURRENT | AWG22~20 : 3A | | | OPERATING HUMIDITY RANGE | UL1007,1061:AWG22~20 | | | |
| 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 | | mA (DC OR 1000 Hz). | | | mΩ MAX. | | | — | — |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD. | | 20 mV MAX, 1 mA(DC OR 1000 Hz) | | | 30 mΩ MAX. | | | × | — |
| INSULATION RESISTANCE | | 500 V DC. | | | MΩ MIN | | | — | — |
| VOLTAGE PROOF | | 650 V AC FOR 1 min. | | | NO FLASH OVER OR BREAKDOWN. | | | — | — |
| MECHANICAL CHARACTERISTICS | | | | | | | | | |
| CONTACT INSERTION AND EXTRACTION FORCES | | <input type="checkbox"/> 0.635 ± 0.002 BY STEEL GAUGE. | | | INSERTION FORCE 4.41 N MAX. EXTRACTION FORCE 0.29 N MIN. | | | × | — |
| INSERTION AND WITHDRAWAL FORCES | | MEASURED BY APPLICABLE CONNECTOR. | | | INSERTION FORCE N MAX. EXTRACTION FORCE N MIN. | | | — | — |
| MECHANICAL OPERATION | | 30 TIMES INSERTIONS AND EXTRACTIONS. | | | ① CONTACT RESISTANCE: 30 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | | × | — |
| VIBRATION | | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75mm. — m/s ² AT 2 h, FOR 3 DIRECTIONS. | | | ① NO ELECTRICAL DISCONTINUITY OF 1μs. ② CONTACT RESISTANCE: 30 mΩ MAX. | | | × | — |
| SHOCK | | 490 m/s ² DIRECTIONS OF PULSE 11 ms AT 3 TIME FOR 3 DIRECTION. | | | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | | × | — |
| ENVIRONMENTAL CHARACTERISTICS | | | | | | | | | |
| RAPID CHANGE OF TEMPERATURE | | TEMPERATURE -55 → -5 TO 35 → 85 → -5 TO 35 °C TIME 30 → 5 MAX → 30 → 5 MAX min UNDER 5 CYCLES. | | | ① CONTACT RESISTANCE: 30 mΩ MAX. ② INSULATION RESISTANCE: 1000MΩ MIN ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | | × | — |
| DAMP HEAT (STEADY STATE) | | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h. | | | ① CONTACT RESISTANCE: 30 mΩ MAX. ② INSULATION RESISTANCE: 1 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | | × | — |
| CORROSION SALT MIST | | EXPOSED IN % SALT WATER SPRAY FOR h. | | | ① CONTACT RESISTANCE: mΩ MAX. ② NO HAEAVY CORROSION. | | | — | — |
| HYDROGEN SULPHIDE | | EXPOSED IN — PPM FOR — h. (TEST STANDARD: JEIDA-38) | | | ① CONTACT RESISTANCE: mΩ MAX. ② NO HAEAVY CORROSION. | | | — | — |
| SULPHUR DIOXIDE | | EXPOSED IN — PPM FOR — h. (TEST STANDARD: JEIDA-39) | | | ① CONTACT RESISTANCE: mΩ MAX. ② NO HAEAVY CORROSION. | | | — | — |
| SOLDERING HEAT | | SOLDER TEMPERATURE, °C FOR IMMERSION, DURATION, S | | | NO DEFORMATION ON CASE OR EXCESSIVE LOOSENESS OF THE TERMINALS | | | — | — |
| SOLDERABILITY | | SOLDERED AT SOLDER TEMPERATURE, °C FOR IMMERSION DURATION, S. | | | SOLDER SHALL COVER MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. | | | — | — |
| REMARKS | | | | DRAWN | DESIGNED | CHECKED | APPROVED | RELEASED | |
| NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT | | | | W. Fukuchi | W. Fukuchi | C. Hanami | K. Katayama | | |
| Unless otherwise specified, refer to MIL-STD-1344. | | | | '99.11.12 | '99.11.12 | '99.11.12 | '99.11.12 | | |
| Note QT: Qualification Test AT: Assurance Test ×: Applicable Test | | | | | | | | | |
| HRS HIROSE ELECTRIC CO., LTD. | | | | SPECIFICATION SHEET | | | PART NO. DF1E-2022SC | | |
| CODE NO.(OLD) | | DRAWING NO | | | PEART NO | | | 1/1 | |
| CL | | ELC4-161407 | | | CL541-1000-2 | | | | |

