

Oct.1.2025 Copyright 2025 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 | -55 °C TO 85 °C ⁽¹⁾ | | | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C ⁽²⁾ | | | |
| | VOLTAGE | 125 V AC | | | OPERATING HUMIDITY RANGE | 40 % TO 80 % | | | |
| | CURRENT | 0.5 A | | | STORAGE HUMIDITY RANGE | 40 % TO 70 % ⁽²⁾ | | | |
| SPECIFICATIONS | | | | | | | | | |
| ITEM | | TEST METHOD | | | REQUIREMENTS | | | QT | AT |
| CONSTRUCTION | | | | | | | | | |
| GENERAL EXAMINATION | | VISUALLY AND BY MEASURING INSTRUMENT. | | | ACCORDING TO DRAWING. | | | × | × |
| MARKING | | CONFIRMED VISUALLY. | | | | | | × | × |
| ELECTRICAL CHARACTERISTICS | | | | | | | | | |
| CONTACT RESISTANCE | | 100 mA (DC OR 1000 Hz). | | | 45 mΩ MAX. | | | × | |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD | | 20 mV MAX, 1 mA(DC OR 1000Hz) | | | 55 mΩ MAX. | | | × | |
| INSULATION RESISTANCE | | 250 V DC. | | | 100 MΩ MIN. | | | × | |
| VOLTAGE PROOF | | 300 V AC FOR 1 min. | | | NO FLASHOVER OR BREAKDOWN. | | | × | |
| MECHANICAL CHARACTERISTICS | | | | | | | | | |
| INSERTION AND WITHDRAWAL FORCES | | MEASURED BY APPLICABLE CONNECTOR | | | INSERTION FORCE : (0.882 × **) N MAX WITHDRAWAL FORCE : (0.098 × **) N MIN | | | × | |
| MECHANICAL OPERATION | | 500 TIMES INSERTIONS AND EXTRACTIONS. | | | ① CONTACT RESISTANCE: 55 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | | × | |
| VIBRATION | | FREQUENCY 10 TO 55 Hz, AMPLITUDE : 1.52 mm, AT 2 h FOR 3 DIRECTION. | | | ① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | | × | |
| SHOCK | | 490 m/s ² , DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS. | | | | | | × | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | | | | | |
| DAMP HEAT (STEADY STATE) | | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h. | | | ① CONTACT RESISTANCE: 55 mΩ MAX. ② INSULATION RESISTANCE: 100 MΩ MIN. | | | × | |
| RAPID CHANGE OF TEMPERATURE | | TEMPERATURE -55→+15~+35→+85→+15~+35°C TIME 30 → 10~15 → 30 → 10~15 min UNDER 5 CYCLES. | | | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | | × | |
| CORROSION SALT MIST | | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h. | | | ① CONTACT RESISTANCE: 55 mΩ MAX. ② NO HEAVY CORROSION. | | | × | |
| HYDROGEN SULPHIDE | | EXPOSED IN 3 PPM FOR 96 h. (TEST STANDARD: JEIDA-38) | | | | | | × | |
| RESISTANCE TO SOLDERING HEAT | | 1) SOLDER BATH: SOLDER TEMPERATURE, 260±5°C FOR IMMERSION, DURATION, 10±1s. 2) SOLDERING IRONS : 360°C FOR 5 s. | | | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL. | | | × | |
| SOLDRABILITY | | SOLDERED AT SOLDER TEMPERATURE 240±3°C FOR IMMERSION DURATION, 2s. | | | A NEW UNIFORM COATING OF SOLDER SHALL OVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. | | | × | |
| REMARKS | | | | | | | | | |
| 1) TEMPERATURE RISE INCLUDED WHEN ENERGIZED. 2) THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. 3) ** INDICATES THE NUMBER OF CONTACTS. | | | | DRAWN | DESIGNED | CHECKED | APPROVED | RELEASED | |
| | | | | A.SUZUKAWA 05.03.24 | H. Doi 05.03.25 | X. Ozawa 05.03.25 | X. Ozawa 05.03.25 | | |
| Unless otherwise specified, refer to MIL-STD-1344. | | | | | | | | | |
| Note QT:Qualification Test AT:Assurance Test ×:Applicable Test | | | | | | | | | |
| HRS HIROSE ELECTRIC CO., LTD. | | | | SPECIFICATION SHEET | | | PART NO. FX2-**-S-1. 27DSL (71) | | |
| CODE NO.(OLD) | | DRAWING NO. | | | CODE NO. | | | 1 1 | |
| CL | | ELC4 - 083296-21 | | | CL 572 | | | | |

TO
PCK

