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| COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE |
|-------|--------------------------|----|------|------|-------|--------------------------|----|------|------|
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|                     |                             |                                |                           |                                |
|---------------------|-----------------------------|--------------------------------|---------------------------|--------------------------------|
| APPLICABLE STANDARD |                             |                                |                           |                                |
| RATING              | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °C <sup>(1)</sup> | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C <sup>(2)</sup> |
|                     | VOLTAGE                     | 125 V AC                       | OPERATING HUMIDITY RANGE  | 40 % TO 80 %                   |
|                     | CURRENT                     | 0.5 A                          | STORAGE HUMIDITY RANGE    | 40 % TO 70 % <sup>(2)</sup>    |

**SPECIFICATIONS**

| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
|------|-------------|--------------|----|----|
|------|-------------|--------------|----|----|

|                     |                                       |                       |   |   |
|---------------------|---------------------------------------|-----------------------|---|---|
| <b>CONSTRUCTION</b> |                                       |                       |   |   |
| GENERAL EXAMINATION | VISUALLY AND BY MEASURING INSTRUMENT. | ACCORDING TO DRAWING. | × | × |
| MARKING             | CONFIRMED VISUALLY.                   |                       | × | × |

|   |                               |                            |   |  |
|---|-------------------------------|----------------------------|---|--|
| <b>ELECTRICAL CHARACTERISTICS</b>         |                               |                            |   |  |
| 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. | × |  |

|                                   |  |  |   |  |
|-----------------------------------|--|--|---|--|
| <b>MECHANICAL CHARACTERISTICS</b> |  |  |   |  |
| MECHANICAL OPERATION              | 500 TIMES INSERTIONS AND EXTRACTIONS.  | ① CONTACT RESISTANCE: 55 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.       | × |  |
| VIBRATION                         | FREQUENCY 10 TO 55 Hz,<br>AMPLITUDE : 1.52 mm,<br>AT 2 h FOR 3 DIRECTION.      | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × |  |
| SHOCK                             | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS. |  | × |  |

|                                      |  |  |   |  |
|--------------------------------------|--|--|---|--|
| <b>ENVIRONMENTAL CHARACTERISTICS</b> |  |  |   |  |
| DAMP HEAT (STEADY STATE)             | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.   | ① CONTACT RESISTANCE: 55 mΩ MAX.<br>② INSULATION RESISTANCE: 100 MΩ MIN.                     | × |  |
| RAPID CHANGE OF TEMPERATURE          | TEMPERATURE -55→+15~+35→+85→+15~+35°C<br>TIME 30 → 10~15 → 30 → 10~15 min<br>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.<br>② NO HEAVY CORROSION.                                    | × |  |
| HYDROGEN SULPHIDE                    | EXPOSED IN 3 PPM FOR 96 h.<br>(TEST STANDARD: JEIDA-38)  |  | × |  |
| RESISTANCE TO SOLDERING HEAT         | 1) SOLDER BATH: SOLDER TEMPERATURE, 260±5°C FOR IMMERSION, DURATION, 10±1s.<br>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 IMMERSSED. | × |  |

|   |  |                                       |  |   |          |
|---|--|---------------------------------------|--|---|----------|
| REMARKS<br>1) TEMPERATURE RISE INCLUDED WHEN ENERGIZED.<br>2) THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED.<br>3) * * INDICATES THE NUMBER OF CONTACTS. | DRAWN<br>A.SUZUKAWA<br>05.03.24                    | DESIGNED<br><i>K. Doi</i><br>05.03.25 | CHECKED<br><i>T. Ogawa</i><br>05.03.25 | APPROVED<br><i>T. Ogawa</i><br>05.03.25 | RELEASED |
|   | Unless otherwise specified, refer to MIL-STD-1344. |                                       |  |   |          |

|  |                                 |                     |     |                                   |
|--|---------------------------------|---------------------|-----|-----------------------------------|
| Note QT:Qualification Test AT:Assurance Test ×:Applicable Test |                                 |                     |     |                                   |
| <b>HRS</b> HIROSE ELECTRIC CO., LTD.                           |                                 | SPECIFICATION SHEET |     | PART NO.<br>FX2-**P-1. 27DSL (71) |
| CODE NO.(OLD)<br>CL  | DRAWING NO.<br>ELC4 - 083294-21 | CODE NO.<br>CL 572  | 1/1 |                                   |

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