

|   |       |                          |    |      |      |   |       |                          |    |      |      |
|---|-------|--------------------------|----|------|------|---|-------|--------------------------|----|------|------|
| △ | 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(NOTE1) | STORAGE TEMPERATURE RANGE | -10 °C TO +60 °C(NOTE3) |
|                     | OPERATING MOISTURE RANGE    | 20 %TO 80 %(NOTE2)      | STORAGE MOISTURE RANGE    | 40 %TO 70 %(NOTE3)      |
|                     | CURRENT                     | 1 A                     | VOLTAGE                   | 150 V AC(DC)            |

**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                         | 100 mA (DC OR 1000 Hz).       | 30 mΩ MAX.                 |   |   |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD. | 20 mV MAX, 1mA (DC OR 1000Hz) |                            | × | — |
| INSULATION RESISTANCE                      | 100 V DC.                     | 500 MΩ MIN.                | × | — |
| VOLTAGE PROOF                              | 500 V AC FOR 1 min.           | NO FLASHOVER OR BREAKDOWN. | × | — |

**MECHANICAL CHARACTERISTICS**

|                      |  |   |   |   |
|----------------------|--|---|---|---|
| MECHANICAL OPERATION | 50 TIMES INSERTIONS AND EXTRACTIONS.                                       | ① CONTACT RESISTANCE: 30 mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | × | — |
| VIBRATION            | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h, FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.  | × | — |
| SHOCK                | 490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.  | ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                     | × | — |

**ENVIRONMENTAL CHARACTERISTICS**

|                              |  |  |   |   |
|------------------------------|--|--|---|---|
| RAPID CHANGE OF TEMPERATURE  | TEMPERATURE -55 →5 TO 35 →+85 →5 TO 35°C<br>TIME 30 →10 TO 15 →30 →10 TO15min<br>UNDER 5 CYCLES.   | ① CONTACT RESISTANCE: 30 mΩ MAX.<br>② INSULATION RESISTANCE: 500 MΩ MIN.                   | × | — |
| DAMP HEAT (STEADY STATE)     | EXPOSED AT 40 ± 2 °C, 90 ~ 95 %, 96 h.   | ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.  | × | — |
| RESISTANCE TO SOLDERING HEAT | (1) REFLOW SOLDERING<br>《REFLOW AREA》<br>MAX 250°C WITHIN 10 sec.<br>MIN 230°C WITHIN 60 sec<br>《PREHEATING AREA》<br>170°C to 190 °C 60 sec. To 120 sec.<br>PUT THROUGH IN REFLOW FURNACE TWICE.<br>LEAVE IN AMBIENT TEMPERATURE AND HUMIDITY FOR 1 HOUR.<br>CONNECTOR TEMPERATURE TO BE AMBIENT FOR SECOND REFLOW.<br>(2) MANUAL SOLDERING<br>SOLDERING IRON TEMPERATURE 350 ±5°C, FOR 5 ±1 sec.<br>NO STRENGTH ON CONTACT. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.                            | × | — |
| SOLDERABILITY                | SOLDERING TEMPERATURE : 235 ±5°C<br>DURATION OF IMMERSION :<br>SOLDERING, FOR 3 sec  | A NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95 % OF THE SURFACE BEING IMMersed. | × | — |

|  |                             |                              |                                |                                |          |
|--|-----------------------------|------------------------------|--------------------------------|--------------------------------|----------|
| REMARKS  | DRAWN                       | DESIGNED                     | CHECKED                        | APPROVED                       | RELEASED |
| NOTE1:INCLUDING THE TEMPERATURE RISE BY CURRENT.<br>NOTE2:NON-CONDENSING<br>NOTE3:APPLY TO THE CONDITION OF LONG TERM STORAGE FOR UNUSED PRODUCTS BEFORE PCB ON BOARD, AFTER PCB BOARD,OPERATING TEMPERATURE AND HUMIDITY RANGE IS APPLIED FOR INTERIM STORAGE DURING TRANSPORTATION.<br>Unless otherwise specified, refer to JIS C 5402 | <i>F. Matsuki</i><br>03.3.7 | <i>S. Senpouya</i><br>03.3.7 | <i>T. Miyazaki</i><br>03.03.25 | <i>T. Miyazaki</i><br>03.03.25 |          |

Note QT:Qualification Test AT:Assurance Test ×:Applicable Test

|                                      |                               |                                  |
|--------------------------------------|-------------------------------|----------------------------------|
| <b>HRS</b> HIROSE ELECTRIC CO., LTD. | SPECIFICATION SHEET           | PART NO.<br>DF14A- * P-1.25H(55) |
| CODE NO.(OLD)<br>CL                  | DRAWING NO.<br>ELC4-160309-16 | PART NO.<br>CL538-               |

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