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| COUNT                                                            | DESCRIPTION OF REVISIONS    | BY                                                                                                                                                                                                                                                                                                                                                                                                                                        | CHKD | DATE | COUNT                                                                                                                  | DESCRIPTION OF REVISIONS | BY         | CHKD      | DATE      |
|------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------------------------------------------------------------------------------------------------------------------------|--------------------------|------------|-----------|-----------|
| △                                                                |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      | △                                                                                                                      |                          |            |           |           |
| △                                                                |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      | △                                                                                                                      |                          |            |           |           |
| <b>APPLICABLE STANDARD</b>                                       |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      |                                                                                                                        |                          |            |           |           |
| <b>RATING</b>                                                    | OPERATING TEMPERATURE RANGE | -30 °C TO 85 °C(NOTE 1)                                                                                                                                                                                                                                                                                                                                                                                                                   |      |      | STORAGE TEMPERATURE RANGE                                                                                              | -10°C TO 60 °C           |            |           |           |
|                                                                  | VOLTAGE                     | 250V AC                                                                                                                                                                                                                                                                                                                                                                                                                                   |      |      | CURRENT                                                                                                                | 3A                       |            |           |           |
| <b>SPECIFICATIONS</b>                                            |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      |                                                                                                                        |                          |            |           |           |
| <b>ITEM</b>                                                      |                             | <b>TEST METHOD</b>                                                                                                                                                                                                                                                                                                                                                                                                                        |      |      | <b>REQUIREMENTS</b>                                                                                                    |                          |            | <b>QT</b> | <b>AT</b> |
| <b>CONSTRUCTION</b>                                              |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      |                                                                                                                        |                          |            |           |           |
| GENERAL EXAMINATION                                              |                             | VISUALLY AND BY MEASURING INSTRUMENT.                                                                                                                                                                                                                                                                                                                                                                                                     |      |      | ACCORDING TO DRAWING.                                                                                                  |                          |            | ×         | ×         |
| MARKING                                                          |                             | CONFIRMED VISUALLY.                                                                                                                                                                                                                                                                                                                                                                                                                       |      |      |                                                                                                                        |                          |            | ×         | ×         |
| <b>ELECTRIC CHARACTERISTICS</b>                                  |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      |                                                                                                                        |                          |            |           |           |
| CONTACT RESISTANCE                                               |                             | 100 mA (DC OR 1000 Hz).                                                                                                                                                                                                                                                                                                                                                                                                                   |      |      | 30 mΩ MAX.                                                                                                             |                          |            | ×         | —         |
| INSULATION RESISTANCE                                            |                             | 500V DC.                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |      | 1000 MΩ MIN.                                                                                                           |                          |            | ×         | —         |
| VOLTAGE PROOF                                                    |                             | 650 V AC FOR 1 min.                                                                                                                                                                                                                                                                                                                                                                                                                       |      |      | NO FLASHOVER OR BREAKDOWN.                                                                                             |                          |            | ×         | —         |
| <b>MECHANICAL CHARACTERISTICS</b>                                |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      |                                                                                                                        |                          |            |           |           |
| MECHANICAL OPERATION                                             |                             | 50 TIMES INSERTIONS AND EXTRACTIONS.                                                                                                                                                                                                                                                                                                                                                                                                      |      |      | ① CONTACT RESISTANCE: 30 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.                                        |                          |            | ×         | —         |
| VIBRATION                                                        |                             | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75mm AT 2 h, FOR 3 DIRECTIONS.                                                                                                                                                                                                                                                                                                                                                                  |      |      | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.                                  |                          |            | ×         | —         |
| SHOCK                                                            |                             | 490 m/s <sup>2</sup> DIRECTIONS OF PULSE 11 ms AT 3 TIME FOR 3 DIRECTION.                                                                                                                                                                                                                                                                                                                                                                 |      |      | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.                                  |                          |            | ×         | —         |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>                             |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      |                                                                                                                        |                          |            |           |           |
| RAPID CHANGE OF TEMPERATURE                                      |                             | TEMPERATURE -55→ 5 TO 35→85→ 5 TO 35 °C<br>TIME 30→10 TO 15→30→10 TO 15min<br>UNDER 5 CYCLES.                                                                                                                                                                                                                                                                                                                                             |      |      | ① CONTACT RESISTANCE: 30 mΩ MAX.<br>② INSULATION RESISTANCE:1000MΩ MIN.<br>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.<br>② INSULATION RESISTANCE:500MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.  |                          |            | ×         | —         |
| RESISTANCE TO SOLDERING HEAT                                     |                             | 1) AUTOMATIC SOLDERING (REFLOW) (REFLOW AREA)<br>MAX 240°C WITHIN 10 sec.<br>MIN 220°C 10 sec to 30 sec.<br>(PREHEATING AREA)<br>150°C 100 sec. To 120 sec.<br>PUT THROUGH IN REFLOW FUMACE TWICE.<br>LEAVE IN AMBIENT TEMPERATURE AND HUMIDITY FOR 1 HOUR. CONNECTOR TEMPERATURE TO BE AMBIENT FOR SECOND REFLOW.<br>2) MANUAL SOLDERING<br>SOLDERING IRON TEMPERATURE : 290±10°C,<br>SOLDERING TIME : 3 sec.<br>NO STRENGTH ON CONTACT. |      |      | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.                                                        |                          |            | ×         | —         |
| SOLDERABILITY                                                    |                             | SOLDERING TEMPERATURE : 230°C<br>SOLDERING TIME : 3 sec.                                                                                                                                                                                                                                                                                                                                                                                  |      |      | A NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95 % OF THE SURFACE BEING IMMersed.                             |                          |            | ×         | —         |
| REMARKS<br>NOTE1:INCLUDE THE TEMPERATURE RISING BY CURRENT.      |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      | DRAWN                                                                                                                  | DESIGNED                 | CHECKED    | APPROVED  | RELEASED  |
|                                                                  |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      | M.Nakamoto                                                                                                             | H.Umehara                | T.Miyajiki | T.Oma     |           |
| Unless otherwise specified, refer to JIS C 5402.                 |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      | '04.03.25                                                                                                              | '04.03.25                | '04.03.25  | 04.03.25  |           |
| Note QT: Qualification Test AT: Assurance Test ×:Applicable Test |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      |                                                                                                                        |                          |            |           |           |
| <b>HRS</b> HIROSE ELECTRIC CO., LTD.                             |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      | <b>SPECIFICATION SHEET</b>                                                                                             |                          |            | PART NO.  |           |
| CODE NO.(OLD)                                                    |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      | DRAWING NO.                                                                                                            |                          |            | PEART NO  |           |
| CL                                                               |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      | ELC4-305939-12                                                                                                         |                          |            | CL543-    |           |
|                                                                  |                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      |                                                                                                                        |                          |            | 1<br>1    |           |