

| APPLICABLE STANDARD  |   |   |                           |                   |                  |
|--|---|---|---------------------------|-------------------|------------------|
| RATING   | OPERATING TEMPERATURE RANGE   | -25 °C TO +85 °C  | STORAGE TEMPERATURE RANGE | -10 °C TO +60 °C  |                  |
|  | VOLTAGE   | AC 30 V , DC 42 V   | WIRE SIZE                 | _____             |                  |
|  | CURRENT   | 2 A   | APPLICABLE CABLE          | _____             |                  |
| SPECIFICATIONS   |   |   |                           |                   |                  |
| ITEM   | TEST METHOD   | REQUIREMENTS  | QT                        | AT                |                  |
| <b>CONSTRUCTION</b>  |   |   |                           |                   |                  |
| GENERAL EXAMINATION  | VISUALLY AND BY MEASURING INSTRUMENT.   | ACCORDING TO DRAWING.   | X                         | X                 |                  |
| MARKING  | CONFIRMED VISUALLY.   |   | X                         | X                 |                  |
| <b>ELECTRIC CHARACTERISTICS</b>  |   |   |                           |                   |                  |
| CONTACT RESISTANCE   | CONTACT SHALL BE MEASURED AT DC 1 A   | 15 mΩ MAX.  | X                         | X                 |                  |
| INSULATION RESISTANCE  | 100 V DC.   | 1000 MΩ MIN.  | X                         | X                 |                  |
| VOLTAGE PROOF  | 300 V AC. FOR 1 min.  | NO FLASHOVER OR BREAKDOWN.  | X                         | X                 |                  |
| <b>MECHANICAL CHARACTERISTICS</b>  |   |   |                           |                   |                  |
| CONTACT INSERTION AND WITHDRAWAL FORCES  | φ0.68 [REDACTED] BY STEEL GAUGE.  | INSERTION AND WITHDRAWAL FORCES : 0.2 N MIN.  | X                         | -                 |                  |
| CONNECTOR INSERTION AND WITHDRAWAL FORCES  | MEASURED BY APPLICABLE CONNECTOR WITHOUT LOCKING DEVICE.  | INSERTION AND WITHDRAWAL FORCES<br>LOCKING DEVICE WITH UNLOCK : 25 N MAX.<br>LOCKING DEVICE WITH LOCK : - N MAX.                                      | X                         | -                 |                  |
| MECHANICAL OPERATION   | 1000 TIMES INSERTIONS AND EXTRACTIONS.  | CONTACT RESISTANCE: 30 mΩ MAX.  | X                         | -                 |                  |
| VIBRATION  | FREQUENCY: 10 → 55 → 10 (Hz) (1CYC, 5min),<br>SINGLE AMPLITUDE 0.75 mm, AT 10 CYC, FOR 3 DIRECTIONS.          | ① NO ELECTRICAL DISCONTINUITY OF 10 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.  | X                         | -                 |                  |
| SHOCK  | IN OPPOSITE DIRECTIONS OF EACH 3 DIMENSION AXIS FOR 3 TIMES AT 490 m/s <sup>2</sup> DURATIONS OF PULSE 11 ms. | ① NO ELECTRICAL DISCONTINUITY OF 10 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.  | X                         | -                 |                  |
| BREAKING STRENGTH  | MAX 100 N SHALL BE APPLIED TO CABLE IN UP AND DOWN, LEFT AND RIGHT DIRECTIONS WHEN MATED.                     | NO BREAKAGE MAX 100N.   | X                         | -                 |                  |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>   |   |   |                           |                   |                  |
| DAMP HEAT (STEADY STATE)   | EXPOSED AT 40 °C, 90 TO 95 %, 96 h.   | ① INSULATION RESISTANCE: 10 MΩ MIN (AT HIGH HUMIDITY).<br>② INSULATION RESISTANCE: 100 MΩ MIN (AT DRY).<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X                         | -                 |                  |
| RAPID CHANGE OF TEMPERATURE  | TEMPERATURE -55 → R/T <sup>(1)</sup> → +85 → R/T °C<br>TIME 30 → 2 TO 3 → 30 → 2 TO 3 min UNDER 5 CYCLES.     | ① INSULATION RESISTANCE: 100 MΩ MIN. .<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.  | X                         | -                 |                  |
| CORROSION SALT MIST  | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.   | NO HEAVY CORROSION RUINS THE FUNCTION.  | X                         | -                 |                  |
| DRY HEAT   | EXPOSED AT + 85 °C, 96 h.   | NO DAMAGE, CRACK AND LOOSENESS OF PARTS.  | X                         | -                 |                  |
| COLD   | EXPOSED AT - 55 °C, 96 h.   | NO DAMAGE, CRACK AND LOOSENESS OF PARTS.  | X                         | -                 |                  |
| RESISTANCE TO SOLDERING HEAT   | PLACE SOLDERING IRON (IRON TIP TEMPERATURE +350±10°C) AND SOLDER TO DIP AREA FOR 5±1 s.                       | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.   | X                         | -                 |                  |
| SOLDERABILITY  | PLACE SOLDERING IRON (IRON TIP TEMPERATURE +350±10°C) AND SOLDER TO DIP AREA FOR 2 TO 3 s.                    | A SOLDERING SIDE IS TO BE WET WITH SOLDER. AND, NO SMALL LUMP OF THE SOLDER.  | X                         | -                 |                  |
| SEALING (2)  | EXPOSED AT A DEPTH OF 1.8 m FOR 48 h.   | NO WATER PENETRATION INSIDE CONNECTOR.  | X                         | -                 |                  |
| AIR TIGHTNESS (2)  | APPLY AIR PRESSURE 17.6kPa FOR 0.5min TO INSIDE CONNECTOR.  | NO AIR BUBBLES INSIDE CONNECTOR.  | X                         | -                 |                  |
|  | COUNT   | DESCRIPTION OF REVISIONS  | DESIGNED                  | CHECKED           | DATE             |
| ①  |   |   |                           |                   |                  |
| REMARK   |   |   | APPROVED                  | HY. KOBAYASHI     | 18. 02. 22       |
| NOTES (1) R/T : ROOM TEMPERATURE   |   |   | CHECKED                   | HY. KOBAYASHI     | 18. 02. 22       |
| (2) SEALING AND AIRTIGHTNESS SHALL BE TESTED UNDER MATED CONDITION WITH AN APPLICABLE CONNECTOR. |   |   | DESIGNED                  | TY. SUZUKI        | 18. 02. 22       |
| Unless otherwise specified, refer to IEC 60512(JIS C 5402).                                      |   |   | DRAWN                     | HM. SAITO         | 18. 02. 20       |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                                   |   |   | DRAWING NO.               |                   | ELC-119579-31-00 |
| <b>HRS</b>   | SPECIFICATION SHEET   |   | PART NO.                  | LF07WBRB-3SD (31) |                  |
|  | HIROSE ELECTRIC CO., LTD.   |   | CODE NO.                  | CL136-1025-0-31   | △ 1/1            |