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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

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|--|-----------------------------|---|---------------------------|---|---------------|----------|
| APPLICABLE STANDARD | | UL approved (E52653). | | | | |
| RATING | OPERATING TEMPERATURE RANGE | -25°C TO +85°C | STORAGE TEMPERATURE RANGE | -10°C TO +60°C | | |
| | VOLTAGE | AC 60 V , DC 60 V | WIRE SIZE | AWG #26 MAX (NO. 1, 3, 4, 6) AWG #20 MAX (NO. 2, 5) | | |
| | CURRENT | 1 A (NO. 1, 3, 4, 6) 4 A (NO. 2, 5) | APPLICABLE CABLE | φ5±0.2 | | |
| SPECIFICATIONS | | | | | | |
| ITEM | | TEST METHOD | | REQUIREMENTS | QT | AT |
| CONSTRUCTION | | | | | | |
| GENERAL EXAMINATION | | VISUALLY AND BY MEASURING INSTRUMENT. | | ACCORDING TO DRAWING. | X | X |
| MARKING | | CONFIRMED VISUALLY. | | | X | X |
| ELECTRIC CHARACTERISTICS | | | | | | |
| 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 |
| MECHANICAL CHARACTERISTICS | | | | | | |
| CONNECTOR INSERTION AND WITHDRAWAL FORCES | | MEASURED BY APPLICABLE CONNECTOR. | | INSERTION AND WITHDRAWAL FORCES LOCKING DEVICE WITH UNLOCK : 25 N MAX. | X | - |
| MECHANICAL OPERATION | | 1000 TIMES INSERTIONS AND EXTRACTIONS. | | CONTACT RESISTANCE: 30 mΩ MAX. | X | - |
| VIBRATION | | FREQUENCY: 10 → 55 → 10 (Hz) (1CYC, 5min), SINGLE AMPLITUDE 0.75 mm, AT 10 CYC, FOR 3 DIRECTIONS. | | ① NO ELECTRICAL DISCONTINUITY OF 10 μs. 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 ² DURATIONS OF PULSE 11 ms. | | ① NO ELECTRICAL DISCONTINUITY OF 10 μs. 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 | - |
| ENVIRONMENTAL CHARACTERISTICS | | | | | | |
| DAMP HEAT (STEADY STATE) | | EXPOSED AT 40 °C, 90 TO 95 %, 96 h. | | ① INSULATION RESISTANCE: 10 MΩ MIN (AT HIGH HUMIDITY). ② INSULATION RESISTANCE: 100 MΩ MIN (AT DRY). ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X | - |
| RAPID CHANGE OF TEMPERATURE | | TEMPERATURE -55 → R/T ⁽¹⁾ → +85 → R/T °C TIME 30 → 2 TO 3 → 30 → 2 TO 3 min UNDER 5 CYCLES. | | ① INSULATION RESISTANCE: 100 MΩ MIN. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X | - |
| CORROSION SALT MIST | | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h. | | NO MAJOR CORROSION DAMAGE TO ELECTRICAL AND MECHANICAL FUNCTIONS (INTERMATEABILITY). | 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 | | SOLDER TEMPERATURE, +350±10°C, FOR IMMERSION DURATION, 5±1 s. | | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | X | - |
| SOLDERABILITY | | SOLDERED AT SOLDER TEMPERATURE, +350±10°C FOR IMMERSION DURATION, 2 TO 3 s. | | SOLDER SURFACE TO BE FREE FROM PIN-HOLE, NO WETTING AND OTHER DEFECTS. | X | - |
| SEALING (MATING SIDE) (2) | | EXPOSED AT A DEPTH OF 1.8 m FOR 48 h. | | NO WATER PENETRATION INSIDE CONNECTOR. | X | - |
| AIR TIGHTNESS (MATING SIDE) (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 | |
| △ | | | | | | |
| REMARK | | | | APPROVED | HY. KOBAYASHI | 18.03.15 |
| NOTES(1)R/T : ROOM TEMPERATURE | | | | CHECKED | HY. KOBAYASHI | 18.03.15 |
| (2)SEALING AND AIRTIGHTNESS SHALL BE TESTED BY APPLICABLE CONNECTOR. | | | | DESIGNED | TY. SUZUKI | 18.03.15 |
| Unless otherwise specified, refer to IEC 60512.(JIS C 5402) | | | | DRAWN | TY. SUZUKI | 18.03.15 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | ELC-119201-31-00 | | |
| HRS | SPECIFICATION SHEET | | PART NO. | LF07WBP-6P-A (31) | | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL136-0016-0-31 | △ | 1/1 |