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| 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 | _____ | _____ | |
| | CURRENT | 2 A ⁽⁴⁾ | APPLICABLE CABLE | _____ | |
| 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 |
| | | CONTACT SHALL BE MEASURED AT DC — A | — mΩ MAX. | — | — |
| 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 | | | | | |
| CONTACT INSERTION AND WITHDRAWAL FORCES | | _____ BY STEEL GAUGE. | INSERTION AND WITHDRAWAL FORCES : _____ N MIN. | — | — |
| CONNECTOR INSERTION AND WITHDRAWAL FORCES | | MEASURED BY APPLICABLE CONNECTOR LOCKING DEVICE WITH LOCK. | INSERTION AND WITHDRAWAL FORCES : 50 N MAX. | X | — |
| MECHANICAL OPERATION | | 1000 TIMES INSERTIONS AND EXTRACTIONS. | CONTACT RESISTANCE: 30 mΩ MAX. _____ RESISTANCE: _____ mΩ MAX. | X — | — — |
| VIBRATION | | FREQUENCY 10 TO 55 Hz, (1CYC, 5MIN) SINGLE AMPLITUDE 0.75 mm, AT 10CYC, 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 DEMENSION ALAXIS 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 | — |
| CONTACT RETENTION FORCE | | APPLYING A PULL FORCE THE WIRE AFTER THE APPLICABLE CRIMPED CONTACT IS ASSEMBLED THE BODY | 20 N MIN | X | — |
| BREAKING STRENGTH | | MAX 30N SHALL BE APPLIED TO CABLE IN UP AND DOWN, LEFT AND RIGHT DIRECTIONS WHEN MATED | NO BREAKAGE OF CONNECTOR. | 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°C → R/T ⁽¹⁾ → +85°C → R/T TIME 30 → 10 TO 15 → 30 → 10 TO 15 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 HEAVY CORROSION. | 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 | — |
| SEALING ⁽³⁾ | | EXPOSED AT A DEPTH OF 1m FOR 0.5 h. | NO WATER PENETRATION INSIDE CONNECTOR. | X | — |
| AIRTIGHTNESS ⁽³⁾ | | APPLY AIR PRESSURE 17.6 kPa FOR 0.5min TO INSIDE CONNECTOR | NO AIR BUBBLES INSIDE CONNECTOR | X | — |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| 0 | | | | | |
| REMARK | | | APPROVED | HY. KOBAYASHI | 18.03.16 |
| NOTES(1) R/T : ROOM TEMPERATURE | | | CHECKED | HY. KOBAYASHI | 18.03.16 |
| (2) ABOVE SPECIFICATIONS SHOWS THE VELVE IN ASSEMBLED CONDITION WITH APPLICABLE CRIMP CONTACT. | | | DESIGNED | DS. MATSUNE | 18.03.16 |
| (3) SEALING AND AIRTIGHTNESS SHALL BE TESTED BY APPLCIABLE CONNECTOR. | | | DRAWN | DS. MATSUNE | 18.03.16 |
| (4) 2 A RATE CURRENT IS THE MAXIMUM CURRENT FLOW PER CONTACT. THE CURRENT CAPACITY OF WHOLE CONNECTOR IS 17 A MAX. | | | | | |
| Unless otherwise specified, refer to IEC 60512.(JIS C 5402) | | | | | |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | | ELC-112154-31-00 |
| HRS | SPECIFICATION SHEET | | PART NO. | HR30-7R-10PC (31) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL130-1012-5-31 | △ 1/1 |