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

| APPLICABLE STANDARD | | | | | |
|--|--|---|---------------------------|---------------------|----------|
| RATING | OPERATING TEMPERATURE RANGE | -25 °C TO +85 °C | STORAGE TEMPERATURE RANGE | -10 °C TO +60 °C | |
| | VOLTAGE | AC 100 V , DC 140 V | | | |
| | CURRENT | 2 A | APPLICABLE CABLE | φ7 | |
| 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 | 10 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 | | | | | |
| CONTACT INSERTION AND WITHDRAWAL FORCES | φ0.53 ± 0.003 BY STEEL GAUGE. | INSERTION AND WITHDRAWAL FORCES : 0.15 N MIN. | X | - | |
| CONNECTOR INSERTION AND WITHDRAWAL FORCES | MEASURED BY APPLICABLE CONNECTOR. | INSERTION AND WITHDRAWAL FORCES LOCKING DEVICE WITH UNLOCK : — N MAX. LOCKING DEVICE WITH LOCK : 70 N MAX. | X | - | |
| MECHANICAL OPERATION | 1000 TIMES INSERTIONS AND EXTRACTIONS. | CONTACT RESISTANCE: 15 mΩ MAX. | X | - | |
| VIBRATION | FREQUENCY: 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, — m/s ² AT 2h, FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS. | X | - | |
| SHOCK | 490 m/s ² DIRECTIONS OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS. | 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 | - | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40 °C, 90 TO 95 %, 96 h. | ① INSULATION RESISTANCE: 5 MΩ MIN (AT HIGH HUMIDITY). ② INSULATION RESISTANCE: 50 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 → 10 TO 15 → 30 → 10 TO 15 min UNDER 5 CYCLES. | ① INSULATION RESISTANCE: 1000 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 RUIN 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 | - | |
| | | | | | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| ① | | | | | |
| REMARK | | | APPROVED | MO. SATOH | 06.11.08 |
| NOTE (1) R/T : ROOM TEMPERATURE | | | CHECKED | EJ. KUNII | 06.11.08 |
| | | | DESIGNED | TP. KOMATSU | 06.11.07 |
| Unless otherwise specified, refer to JIS C 5402. | | | DRAWN | MK. SATO | 06.10.31 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | ELC4-024071-73 | | |
| HRS | SPECIFICATION SHEET | | PART NO. | HR10A-13J-20SC (73) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL110-0705-1-73 | △ 1/1 |