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| APPLICABLE STANDARD | | MIL-C-5015 | | | |
| RATING | OPERATING TEMPERATURE RANGE | -40 °C TO +125 °C | STORAGE TEMPERATURE RANGE | -10 °C TO +60 °C | |
| | VOLTAGE | AC 500 V , DC 700 V | | | |
| | CURRENT | 13 A ⁽¹⁾ | 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. (MIL-C-2316) | 5 mΩ MAX. | X | X |
| INSULATION RESISTANCE | | 500 V DC. (MIL-STD-1344 3003) | 5000 MΩ MIN. | X | X |
| VOLTAGE PROOF | | 2000 V AC. FOR 1 min. (MIL-STD-1344 3001) | NO FLASHOVER OR BREAKDOWN. | X | X |
| MECHANICAL CHARACTERISTICS | | | | | |
| CONTACT INSERTION AND WITHDRAWAL FORCES | | φ1.562 ^{+0.003} ₀ BY STEEL GAUGE. | INSERTION AND WITHDRAWAL FORCES : 0.6 N MIN. | X | — |
| CONNECTOR INSERTION AND WITHDRAWAL FORCES | | MEASURED BY APPLICABLE CONNECTOR. (WITHOUT LOCK MECHANISM) | INSERTION AND WITHDRAWAL FORCES : 110 N MAX. | X | — |
| MECHANICAL OPERATION | | 500 TIMES INSERTIONS AND EXTRACTIONS. (MIL-C-5015 4, 6, 12, 2) | CONTACT RESISTANCE: 7.5 mΩ MAX. | X | — |
| VIBRATION | | FREQUENCY: 10 TO 500 Hz, SINGLE AMPLITUDE 0.75 mm, 98 m/s ² AT 3h, FOR 3 DIRECTIONS. (MIL-STD-1344 2005, CONDITION II) | ① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X | — |
| SHOCK | | 490 m/s ² DURATIONS OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS. (MIL-STD-1344 2004, CONDITION E) | ① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X | — |
| ENVIRONMENTAL CHARACTERISTICS | | | | | |
| DAMP HEAT (STEADY STATE) | | EXPOSED AT 71°C, 95%, 336h. (MIL-C-5015 4, 6, 10) | ① INSULATION RESISTANCE: 50 MΩ MIN. (AT HIGH HUMIDITY). ② INSULATION RESISTANCE: 500 MΩ MIN. (AT DRY). ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X | — |
| RAPID CHANGE OF TEMPERATURE | | TEMPERATURE -55 → R/T ⁽²⁾ → +125 → R/T °C TIME 30 → 10 TO 15 → 30 → 10 TO 15 min UNDER 5 CYCLES. (MIL-C-5015 4, 6, 4) | ① INSULATION RESISTANCE: 5000 MΩ MIN.. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | X | — |
| SEALING ⁽³⁾ | | EXPOSED AT A DEPTH OF 1.8 m FOR 48 h. | NO WATER PENETRATION INSIDE CONNECTOR. | X | — |
| AIRTIGHTNESS ⁽³⁾ | | APPLY AIR PRESSURE 40 kPa FOR 30 s TO INSIDE CONNECTOR. | NO AIR BUBBLES FROM CONNECTOR INTERFACE. | X | — |
| RESISTANCE TO SOLDERING HEAT | | SOLDERED AT SOLDER TEMPERATURE, +380°C±10°C FOR SOLDERING DURATION, 10±1 s. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | X | — |
| SOLDERABILITY | | SOLDERED AT SOLDER TEMPERATURE, +350°C±10°C FOR SOLDERING DURATION, 5±1 s. | WETTING ON SOLDER SURFACE. NO SOLDER CLUSTER. | X | — |
| CORROSION SALT MIST | | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h. (MIL-STD-1344 1001 CONDITION B) | NO HEAVY CORROSION RUIN THE FUNCTION. | X | — |
| OIL RESISTING ⁽³⁾ | | DROP CUTTING OIL FOR 48 HOURS AT THE RATE OF 0.5 L/h. (JIS B 6015) | NO OIL SEEPAGE INSIDE CONNECTOR. | X | — |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| 0 | | | | | |
| REMARK NOTES (1) 13 A RATED CURRENT IS THE MAXIMUM CURRENT FLOW PER CONTACT. BUT THE CURRENT CAPACITY OF WHOLE IS CONNECTOR 44.2 A MAX.. (2) R/T : ROOM TEMPERATURE (3) SEALING AND AIRTIGHTNESS SHALL BE TESTED BY APPLICABLE CONNECTOR. | | | APPROVED | HY. KOBAYASHI | 18.02.22 |
| | | | CHECKED | HY. KOBAYASHI | 18.02.22 |
| | | | DESIGNED | HY. KISHI | 18.02.21 |
| | | | DRAWN | MK. INOUE | 18.02.07 |
| Unless otherwise specified, refer to IEC 60512 (JIS C 5402). | | | | | |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | | ELC-046662-31-00 |
| HRS | SPECIFICATION SHEET | | PART NO. | H/MS3108B20-29S (31) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL120-0711-1-31 | △ 1/1 |