| APPLICABLE STANDARD | | | | |
|---|---|---|---|---|
| Rating | Operating Temperature Range (2) | -40°C to +105°C | Storage Temperature Range | -10°C to +60°C |
| | Voltage | AC, DC 1000 V | — | — |
| | Current(1) | — | Applicable Cable | Φ9.0～9.8 |

## SPECIFICATIONS

| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
|---|---|---|---|---|
| **CONSTRUCTION** | | | | |
| General Examination | Examined visually and with a measuring instrument. | According to the drawing. | X | X |
| Marking | Confirmed visually. | | X | X |
| **ELECTRICAL CHARACTERISTICS** | | | | |
| Contact Resistance | Measured at DC 1A. | 5 mΩ MAX. | X | X |
| Insulation Resistance | Measured at 500 V DC. | 5000 MΩ MIN. | X | X |
| Voltage Proof | 2200 V AC applied for 1 min. | No flashover or breakdown. | X | X |
| Impulse Voltage Proof | Subjected to a standard waveform of 15kV in mated condition (1.2/50μs waveform, applied in both positive and negative polarities 3 times each). | No flashover or breakdown. | X | — |
| **MECHANICAL CHARACTERISTICS** | | | | |
| Contact Insertion and Extraction Forces | Measured with a $\phi$___ steel gauge. | Insertion and extraction forces: — N MIN. | — | — |
| Mating and Unmating Forces | Measured with an applicable connector. | Mating and unmating forces: 100 N MAX. | X | — |
| Contact Retention Force | Subjected to a 20N force from the wiring side. | No movement of contact. | X | — |
| Mechanical Operation | Mated and unmated 500 times. | Contact resistance: 10 mΩ MAX. | X | — |
| Vibration | Frequency: 10 Hz to 55 to 10 Hz every cycle (5 min per cycle)<br>Single amplitude: 0.75 mm<br>Performed over 10 cycles in each of three mutually perpendicular directions. | 1) No electrical discontinuity of more than 10 μs.<br>2) No damage, cracks or looseness of parts. | X | — |
| Shock | Acceleration: 490 m/s$^2$, Half sine wave pulses of 11 ms.<br>Performed 3 times in each of three mutually perpendicular directions. | 1) No electrical discontinuity of more than 10 μs.<br>2) No damage, cracks or looseness of parts. | X | — |
| **ENVIRONMENTAL CHARACTERISTICS** | | | | |
| Rapid Change of Temperature | Temperature: -40 → R/T(3) → +105 → R/T °C<br>Time: 30 → 2 to 3 → 30 → 2 to 3 min<br>for 5 cycles. | 1) Insulation resistance: 500 MΩ MIN.<br>2) No damage, cracks or looseness of parts. | X | — |
| Damp Heat, Steady State | Subjected to a temperature of +40°C, at a humidity of 90 to 95% for 96 hours. | 1) Insulation resistance: 50 MΩ MIN. (At high humidity)<br>2) Insulation resistance: 500 MΩ MIN. (When dry)<br>3) No damage, cracks or looseness of parts. | X | — |
| Corrosion Salt Mist(4) | Subjected to 5% salt spray for 48h. | No heavy corrosion which impairs functionality. | X | — |
| Dry Heat | Subjected to +105℃ for 96h. | No damage, cracks or looseness of parts. | X | — |
| Cold | Subjected to -40℃ for 96h. | No damage, cracks or looseness of parts. | X | — |
| Sealing(4) | Subjected to a depth of 2 m for 14 days. | No water penetration to the inside of the connector. | X | — |
| Air Tightness(4) | 17.6kPa applied to the inside of the connector for 0.5min. | No air bubbles from the inside of the connector. | X | — |

| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|---|---|---|---|---|---|
| △0 | | DIS-A-00065601 | | | |

NOTES

(1) The above specifications show the values in assembled condition with applicable crimp contacts.

(2) Including temperature rise due to current carrying.

(3) R/T : Room Temperature.

(4) CORROSION SALT MIST, SEALING AND AIRTIGHTNESS SHALL BE TESTED UNDER MATED CONDITION WITH AN APPLICABLE CONNECTOR.

Unless otherwise specified, refer to IEC 60512 (JIS C 5402).

| | | |
|---|---|---|
| APPROVED | TP. KOMATSU | 20220301 |
| CHECKED | EJ. KUNII | 20220301 |
| DESIGNED | SH. KOYAMA | 20220228 |
| DRAWN | SH. KOYAMA | 20220228 |

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC-389361-81-00

| | | | | |
|---|---|---|---|---|
| HRS | SPECIFICATION SHEET | PART NO. | HR41A-17WBPAB-3PC(81) | |
| | HIROSE ELECTRIC CO., LTD. | CODE NO. | CL0141-0232-0-81 △0 | 1/1 |

FORM HD0011-2-1