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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 | -55 °C TO 85 °C (1) | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C (2) |
| | VOLTAGE | 50 V AC | OPERATING HUMIDITY RANGE | 95 % RH MAX. (NO DEW CONDENSATION IS PERMITTED) |
| | CURRENT | 0.3 A | | |

## SPECIFICATIONS

| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
|---|---|---|---|---|
| **CONSTRUCTION** | | | | |
| GENERAL EXAMINATION | VISUALLY AND BY MEASURING INSTRUMENT. | ACCORDING TO DRAWING. | × | × |
| MARKING | CONFIRMED VISUALLY. | | × | × |
| **ELECTRIC CHARACTERISTICS** | | | | |
| CONTACT RESISTANCE | 100 mA (DC OR 1000 Hz). | 70 mΩ MAX. | × | – |
| INSULATION RESISTANCES | 100 V DC | 100 MΩ MIN. | × | – |
| VOLTAGE PROOF | 150 V AC FOR 1 min. | NO FLASHOVER OR BREAKDOWN. | × | × |
| **MECHANICAL CHARACTERISTICS** | | | | |
| INSERTION AND WITHDRAWAL FORCE | MEASURED BY APPLICABLE CONNECTOR. | INSERTION FORCE: 108 N MAX.<br>WITHDRAWAL FORCE: 7.2 N MIN. | × | – |
| MECHANICAL OPERATION | 50 TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE: 80 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | – |
| VIBRATION | FREQUENCY 10 TO 55 Hz,<br>SINGLE AMPLITUDE : 0.75 mm,<br>AT 10 CYCLES FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1 μs MIN.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | – |
| SHOCK | 490 m/s$^2$, DURATION OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS. | | × | – |
| **ENVIRONMENTAL CHARACTERISTICS** | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40±2 °C, 90 ～ 95 %, 96 h. | ① CONTACT RESISTANCE: 80 mΩ MAX.<br>② INSULATION RESISTANCE:100 MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | – |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE -55→+15～+35→+85→+15～+35°C<br>TIME 30 → 2～3 → 30 → 2～3 min.<br>UNDER 5 CYCLES. | | × | – |
| DRY HEAT | EXPOSED AT 85 ℃, 96 h. | ① CONTACT RESISTANCE: 80 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | – |
| COLD | EXPOSED AT - 55 ℃, 96 h. | | × | – |
| CORROSION SALT MIST | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h. | NO HEAVY CORROSION. | × | – |
| SULPHUR DIOXIDE | EXPOSED IN 10 PPM FOR 96 h.<br>(TEST STANDARD: JIS C 0090) | ① CONTACT RESISTANCE: 80 mΩ MAX.<br>② NO HEAVY CORROSION. | × | – |
| RESISTANCE TO SOLDERING HEAT | 1) REFLOW SOLDERING : 250 °C MAX,<br>: 220 °C MIN,<br>FOR 60 s | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL. | × | – |
| | 2) SOLDERING IRONS : 360 °C,<br>FOR 5 s | | × | – |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE,<br>240±3°C,<br>FOR IMMERSION DURATION, 3 s. | A NEW UNIFORM COATING OF SOLDER SHALL OVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. | × | – |

| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|---|---|---|---|---|---|
| 0 | | | | | |

REMARK (1) TEMPERATURE RISE INCLUDED WHEN ENERGIZED.
(2) THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED.

Unless otherwise specified, refer to JIS C 5402.

| | | |
|---|---|---|
| APPROVED | HS.OKAWA | 06.02.20 |
| CHECKED | HS.OZAWA | 06.02.20 |
| DESIGNED | KY.NAKAMURA | 06.02.20 |
| DRAWN | KY.NAKAMURA | 06.02.20 |

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

DRAWING NO. ELC4-152617-25

| | | | | |
|---|---|---|---|---|
| HRS | SPECIFICATION SHEET | PART NO. | FX11A-120P/12-SV0.5(71) | |
| | HIROSE ELECTRIC CO., LTD. | CODE NO. | CL573-0605-2-71 | 0 1/1 |

FORM HD0011-2-1