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| APPLICABLE STANDARD  |                             |  |                           |  |                |                 |
|--|-----------------------------|--|---------------------------|--|----------------|-----------------|
| RATING   | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °C <sup>(1)</sup>   | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C <sup>(2)</sup>   |                |                 |
|  | VOLTAGE                     | 100 V AC   | OPERATING HUMIDITY RANGE  | 40 % TO 80 %   |                |                 |
|  | CURRENT                     | 0.5 A  | STORAGE HUMIDITY RANGE    | 40 % TO 70 % <sup>(2)</sup>  |                |                 |
| 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   |                             | 100 mA (DC OR 1000 Hz).  |                           | 40 m $\Omega$ MAX.   | x              | -               |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD  |                             | 20 mV MAX, 1 mA(DC OR 1000Hz)  |                           | 50 m $\Omega$ MAX.   | x              | -               |
| INSULATION RESISTANCE  |                             | 250 V DC   |                           | 100 M $\Omega$ MIN.  | x              | -               |
| VOLTAGE PROOF  |                             | 300 V AC FOR 1 min.  |                           | NO FLASHOVER OR BREAKDOWN.   | x              | -               |
| MECHANICAL CHARACTERISTICS   |                             |  |                           |  |                |                 |
| MECHANICAL OPERATION   |                             | 100 TIMES INSERTIONS AND EXTRACTIONS.  |                           | ① CONTACT RESISTANCE: 50 m $\Omega$ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.             | x              | -               |
| VIBRATION  |                             | FREQUENCY 10 TO 55 Hz,<br>AMPLITUDE : 1.5 mm,<br>2 hrs IN 3 DIRECTIONS.  |                           | ① NO ELECTRICAL DISCONTINUITY OF<br>1 $\mu$ s.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.       | x              | -               |
| SHOCK  |                             | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms<br>FOR 3 TIMES IN 3 DIRECTIONS.   |                           |  | x              | -               |
| ENVIRONMENTAL CHARACTERISTICS  |                             |  |                           |  |                |                 |
| DAMP HEAT (STEADY STATE)   |                             | EXPOSED AT 40 $\pm$ 2 °C, 90 ~ 95 %, 96 hrs.   |                           | ① CONTACT RESISTANCE: 50 m $\Omega$ MAX.<br>② INSULATION RESISTANCE:100 M $\Omega$ MIN.            | x              | -               |
| RAPID CHANGE OF TEMPERATURE  |                             | TEMPERATURE-55 $\rightarrow$ +15 $\sim$ +35 $\rightarrow$ +85 $\rightarrow$ +15 $\sim$ +35 $^{\circ}$ C<br>TIME 30 $\rightarrow$ MAX 5 $\rightarrow$ 30 $\rightarrow$ MAX 5 min<br>5 CYCLES. |                           | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.   | x              | -               |
| CORROSION SALT MIST  |                             | EXPOSED IN 5 % SALT WATER SPRAY FOR<br>48 hrs.   |                           | ① CONTACT RESISTANCE: 50 m $\Omega$ MAX.<br>② NO HEAVY CORROSION.                                  | x              | -               |
| HYDROGEN SULPHIDE  |                             | EXPOSED IN 3 PPM FOR 96 hrs.<br>(TEST STANDARD: JEIDA 38)  |                           |  | x              | -               |
| RESISTANCE TO SOLDERING HEAT   |                             | 1) REFLOW SOLDERING : 250 °c MAX,<br>: 220 °c MIN,<br>FOR 60 s<br>2) SOLDERING IRONS : 360 °c,<br>FOR 5 s  |                           | NO DEFORMATION OF CASE OF<br>EXCESSIVE LOOSENESS OF THE<br>TERMINALS.                              | x              | -               |
| SOLDERABILITY  |                             | SOLDERED AT SOLDER TEMPERATURE,<br>240 $^{\circ}$ C,<br>FOR IMMERSION DURATION, 3 sec.   |                           | A NEW UNIFORM COATING OF SOLDER<br>SHALL COVER A MINIMUM OF 95 % OF<br>THE SURFACE BEING IMMersed. | x              | -               |
|  |                             |  |                           |  |                |                 |
|  | COUNT                       | DESCRIPTION OF REVISIONS   |                           | DESIGNED   | CHECKED        | DATE            |
| $\triangle$  |                             |  |                           |  |                |                 |
| REMARK <sup>(1)</sup> TEMPERATURE RISE INCLUDED WHEN ENERGIZED.<br><sup>(2)</sup> THIS STORAGE INDICATES A LONG-TERM STORAGE STATE<br>FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. |                             |  |                           | APPROVED   | HS. OKAWA      | 05.11.01        |
|  |                             |  |                           | CHECKED  | HS. OZAWA      | 05.11.01        |
|  |                             |  |                           | DESIGNED   | TK. YANAGISAWA | 05.09.09        |
|  |                             |  |                           | DRAWN  | TK. YANAGISAWA | 05.09.09        |
| Unless otherwise specified, refer to MIL-STD-1344.   |                             |  |                           |  |                |                 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test   |                             |  |                           | DRAWING NO.  | ELC4-071643-22 |                 |
| <b>HRS</b>   | SPECIFICATION SHEET         |  | PART NO.                  | FX6A-50P-0.8SV1 (92)   |                |                 |
|  | HIROSE ELECTRIC CO., LTD.   |  | CODE NO.                  | CL576-0224-8-92  |                | $\triangle$ 1/1 |