

| COUNT   | DESCRIPTION OF REVISIONS    | BY  | CHKD | DATE                       | COUNT  | DESCRIPTION OF REVISIONS  | BY                                   | CHKD     | DATE |
|---|-----------------------------|---|------|----------------------------|--|---|--------------------------------------|----------|------|
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| △   |                             |   |      |                            | △  |   |                                      |          |      |
| <b>APPLICATION STANDARD</b>                                       |                             |   |      |                            |  |   |                                      |          |      |
| RATING  | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °C   |      |                            | STORAGE TEMPERATURE RANGE  | -10 °C TO 60 °C   |                                      |          |      |
|   | VOLTAGE                     | AC 50 V   |      |                            | OPERATING HUMIDITY RANGE   | RELATIVE HUMIDITY : 95 % MAX (NO DEW CONDENSATION IS PERMITTED) |                                      |          |      |
|   | CURRENT                     | 0.3 A   |      |                            |  |   |                                      |          |      |
| <b>SPECIFICATIONS</b>   |                             |   |      |                            |  |   |                                      |          |      |
| ITEM  |                             | TEST METHOD   |      |                            | REQUIREMENT  |   |                                      | QT       | AT   |
| <b>CONSTRUCTION</b>   |                             |   |      |                            |  |   |                                      |          |      |
| GENERAL EXAMINATION   |                             | VISUALLY AND BY MEASURING INSTRUMENT.   |      |                            | ACCORDING TO DRAWING   |   |                                      | X        | X    |
| MARKING   |                             | CONFIRMED VISUALLY.   |      |                            |  |   |                                      | X        | X    |
| <b>ELECTRICAL CHARACTERISTICS</b>                                 |                             |   |      |                            |  |   |                                      |          |      |
| CONTACT RESISTANCE  |                             | 100 mA (DC OR 1000 Hz).   |      |                            | 70 mΩ MAX.   |   |                                      | X        | X    |
| INSULATION RESISTANCE   |                             | 100 V DC.   |      |                            | 100 MΩ MIN.  |   |                                      | X        | —    |
| VOLTAGE PROOF   |                             | 150 V AC FOR 1 min.   |      |                            | NO FLASHOVER OR BREAKDOWN.   |   |                                      | X        | X    |
| <b>MECHANICAL CHARACTERISTICS</b>                                 |                             |   |      |                            |  |   |                                      |          |      |
| INSERTION AND WITHDRAWAL FORCES                                   |                             | MEASURED BY APPLICABLE CONNECTOR.   |      |                            | INSERTION FORCE: 48 N MAX.<br>WITHDRAWAL FORCE: 2 N MIN.                                   |   |                                      | X        | —    |
| MECHANICAL OPERATION  |                             | 50 TIMES INSERTION AND EXTRACTIONS.   |      |                            | 1)CONTACT RESISTANCE: 80 mΩ MAX.<br>2) NO DAMAGE, CRACK AND LOOSENESS OF PART.             |   |                                      | X        | —    |
| VIBRATION   |                             | FREQUENCY: 10 TO 55 Hz, SINGLE<br>AMPLITUDE: 0.75 mm, m/s <sup>2</sup><br>AT 10 CYCLES FOR 3 DIRECTIONS.    |      |                            | 1)NO ELECTRICAL DISCONTINUITY OF<br>1 μs MIN.<br>2)NO DAMAGE, CRACK AND LOOSENESS OF PART. |   |                                      | X        | —    |
| SHOCK   |                             | 490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.                                   |      |                            |  |   |                                      | X        | —    |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>                              |                             |   |      |                            |  |   |                                      |          |      |
| 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.                   |   |                                      | X        | —    |
| RAPID CHAGE OF TEMPERTURE   |                             | TEMPERTURE -55→-15→35→ 85→15→35°C<br>TIME 30→ 2~ 3→ 30→ 2~ 3 min.<br>UNDER 5 CYCLES.                        |      |                            | 3)NO DAMAGE, CRACK AND LOOSENESS OF PART.  |   |                                      | X        | —    |
| DRY HEAT  |                             | EXPOSED AT 85 °C, 96 h.   |      |                            | 1)CONTACT RESISTANCE: 80 mΩ MAX.   |   |                                      | X        | —    |
| COLD  |                             | EXPOSED AT -55 °C, 96 h.  |      |                            | 2)NO DAMAGE, CRACK AND LOOSENESS OF PART.  |   |                                      | X        | —    |
| CORROSION SALT MIST   |                             | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.   |      |                            | NO HEAVY CORROSION.  |   |                                      | X        | —    |
| 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.                                  |   |                                      | X        | —    |
| RESISTANCE TO SOLDERING HEAT                                      |                             | REFLOW :RECOMMENDED TEMPERATURE PROFILE<br><br>25°C (60 S) 150°C 160°C (30 S) 240°C 5 S MAX 200°C (20~30 S) |      |                            | NO MELTING OF RESIN WHICH AFFECTS THE PERFORMANCE OF COMPONENT.                            |   |                                      | X        | —    |
| SOLDERABILITY   |                             | SOLDERED AT SOLDER TEMPERATURE, 235 °C FOR IMMERSION DURATION, 2 s.   |      |                            | NO PINHOLE OR DEWETTING ON SOLDERED SURFACE.   |   |                                      | X        | —    |
| REMARKS   |                             |   |      | DRAWN                      | DESIGNED   | CHECKED   | APPROVED                             | RELEASED |      |
|   |                             |   |      | <i>Matsukawa</i>           | <i>Matsukawa</i>   | <i>H. Okawa</i>   | <i>J. Yoshimura</i>                  |          |      |
| UNLESS OTERWISE SPECIFIED ,REFER TO JIS C 5402.                   |                             |   |      | 00.06.20                   | 00.06.20   | 00.06.21  | 00.06.23                             |          |      |
| NOTE QT: QUALIFICATION TEST AT: ASSURANCE TEST X: APPLICABLE TEST |                             |   |      |                            |  |   |                                      |          |      |
| <b>HRS</b> HIROSE ELECTRIC CO.,LTD.                               |                             |   |      | <b>SPECIFICATION SHEET</b> |  |   | PART NO. <b>FX11A - 80P - SV(21)</b> |          |      |
| CODE NO.(OLD)   |                             | DRAWING NO.   |      |                            | CODE NO.   |   |                                      | 1/1      |      |
| CL  |                             | ELC4 - 152439 - 01  |      |                            | CL 573 - 0548 - 0 - 21   |   |                                      | 1/1      |      |