| APPLICA                            | BLE STAN    | IDARD   | TIA/EIA-568-A CAT5 1   | >      |   |  |                 |                |                        |      |      |
|------------------------------------|-------------|---|--|--------|---|--|-----------------|----------------|------------------------|------|------|
| RATING OPERATING TEMPERATUR        |             | RE RANGE  | 1 /N -hh <sup>o</sup> ('   ( ) &h <sup>o</sup> ( '   |        |   | ORAGE MPERATURE RANGE  A -25°C TO  JRRENT  1 A |                 |                | <b>⚠</b> −25°C TO 60°0 |      |      |
| RATING                             | VOLTAGE     |   |  |        |   |  |                 | 1 A            |                        |      |      |
|                                    |             |   | SPEC   | IFIC/  | ATIO  | NS   |                 |                |                        |      |      |
| IT                                 | EM          |   | TEST METHOD  |        |   |  | REC             | QUIRE          | MENTS                  | QT   | АТ   |
| CONSTR                             | UCTION      |   |  |        |   |  |                 |                |                        | •    |      |
| GENERAL E                          | XAMINATION  | VISUALLY AND BY MEASURING INSTRUMENT.   |  |        |   | ACCORDING TO DRAWING.                          |                 |                | X                      | Χ    |      |
| MARKING                            |             | CONFIR  | MED VISUALLY.  |        |   |  |                 |                |                        | Χ    | Х    |
| <b>ELECTR</b>                      | IC CHARA    | CTERI   | STICS  |        |   |  |                 |                |                        |      |      |
| CONTACT F                          | RESISTANCE  | MEASUR  | M (DC OR 1000 Hz AC). REMENT POINTS SHALL BE A 100 mm PLUG  MODULAR CAE (COPPER-FOIL)  RECEPTACLE TEST POINT |        | ows.  | 230  | mΩ MAX.         |                |                        | X    | X    |
|                                    |             | -   | CAMPLE OF CONNECTOR  |        |   |  |                 |                |                        |      |      |
| INSULATION<br>RESISTANCE           |             | CONFIGURATION IS SHOWN. ) 100 V DC.   |  |        |   | 100 MΩ MIN.                                    |                 |                | X                      | Х    |      |
| VOLTAGE PROOF (CONTACT TO CONTACT) |             | 500 V AC FOR 1 min.   |  |        |   | NO FLASHOVER OR BREAKDOWN.                     |                 |                | Х                      | Х    |      |
| NEAR END CROSSTALK<br>(NEXT)LOSS   |             | MEASURED MINIMUM NEXT LOSS FOR EACH PAIR COMBINATION AT 100 Hz.   |  |        |   | 40 dB MIN.                                     |                 |                | Х                      | -    |      |
|                                    | IICAL CHA   |   |  |        |   | I  |                 |                |                        |      |      |
| MECHANICA                          |             |   | ES INSERTIONS AND EXT  | RACTIO | NS.   | 1) CON   | NTACT RES       | SISTAN         | NCE: 250 mΩ MAX.       |      | T    |
| OPERATION                          |             |   |  |        |   | 2) NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.   |                 |                | , X                    | -    |      |
| VIBRATION                          |             | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h , FOR 3 DIRECTIONS.   |  |        | 1) NO ELECTRICAL DISCONTINUITY OF 5µs.  |  |                 | Х              | _                      |      |      |
| SHOCK                              |             | 490 m/s <sup>2</sup> DIRECTIONS OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS.  |  |        | 2) CONTACT RESISTANCE: 250 mΩ MAX. 3) NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.   |  |                 |                | _                      |      |      |
| ENVIRO                             | VMENTAL     | CHAR  | ACTERISTICS  |        |   | 1  |                 |                |                        | - I  |      |
| DAMP HEAT<br>(STEADY STATE)        |             |   |  |        | 1) CONTACT RESISTANCE: 250 mΩ MAX. 2) INSULATION RESISTANCE: 1 MΩ MIN. (AT HIGH HUMIDITY) 3) INSULATION RESISTANCE: 10 MΩ MIN. (AT DRY) 4) NO DAMAGE, CRACK AND LOOSENESS OF PARTS. |  |                 | ) X            | _                      |      |      |
| RAPID CHANGE OF<br>TEMPERATURE     |             | TEMPERATURE $-55\pm3 \rightarrow 5 \text{ TO } 35 \rightarrow 85\pm2 \rightarrow 5 \text{ TO } 35 ^{\circ}\text{C}$ TIME 30 TO 35 $\rightarrow$ 5 MAX $\rightarrow$ 30 TO 35 $\rightarrow$ 5 MAX min. UNDER 5 CYCLES. |  |        | 1) CONTACT RESISTANCE: $250~\text{m}\Omega$ MAX. 2) INSULATION RESISTANCE: $100~\text{M}\Omega$ MIN. 3) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.                                    |  |                 | X              | _                      |      |      |
| COUN                               | T DE        | SCRIPTI   | ON OF REVISIONS  |        | DESIG   | SNED   |                 |                | CHECKED                | DA   | TE   |
| <u> </u>                           |             |   | -E-00002148  |        | SH. KO  |  |                 | Т              | U. TANIGUCHI           | 2019 |      |
| REMARKS                            | 1           | GCONNECTOR: TM21P-88P.  |  |        |   | APPROVE  |                 | HO. MIWA       | 2006                   |      |      |
| 1 APPI                             | LICABLE PLU |   |  |        | CHECKE  |  | D               | SJ. SHIMIZU    | <del></del>            |      |      |
|                                    |             |   |  |        |   |  | DESIGNE         | D              | TS. ITO                | 2006 | 0831 |
| Unless oth                         | nerwise spe | cified, refer to JIS C 5402.  |  |        |   |  | DRAWN           | 1              | TS. ITO                | 2006 | 0831 |
|                                    |             |   | t AT:Assurance Test X:Applicable Test  |        |   | DRAWING NO.                                    |                 |                | ELC4-121791-01         |      |      |
| HS.                                | SI          | SPECIFICATION SHEET   |  |        | PART  | TM21R-5A-3232-L                                |                 | -5A-3232-LP (5 | 0)                     |      |      |
|                                    | HIR         | OSE E   | ELECTRIC CO., LTD.   |        | CODE NO.  |  | CL222-2873-5-50 |                | $\Lambda$              | 1/2  |      |

|                          | SPECIFIC <i>A</i>  | MONS            | 5  |                 |                 |    |
|--------------------------|--|-----------------|--|-----------------|-----------------|----|
| ITEM                     | TEST METHOD  |                 | REQUIR   | REMENTS         | QT              | ΑТ |
| CORROSION SALT MIST      | EXPOSED IN 5 % SALT WATER SPRAY 48 h.  | 2) N            | CONTACT RESIST.<br>NO DEFECT SUCH<br>WHICH AFFECT OF<br>CONNECTOR. | AS CORROSION    | Х               | _  |
| ESISTANCE TO             | SOLDER TEMPERATURE,260±5°C FOR   | NO              | DEFORMATION C  | F CASE AND      |                 |    |
| OLDERING HEAT            | IMMERSION, DURATION, 10±1s. (WHEN USING FLOW SOLDER)   |                 | CESSIVE LOOSEN<br>RMINALS.   | IESS OF THE     | Х               | -  |
| OLDERABILITY             | SOLDER AT SOLDER TEMPERATURE,<br>245±5°C FOR IMMERSION, DURATION, 3±<br>(WHEN USING FLOW SOLDER) |                 | % OR MORE AREA<br>OAKING SHALL BE                                  |                 | Х               | -  |
|                          |  |                 |  |                 |                 |    |
|                          |  |                 |  |                 |                 |    |
| lote QT:Qualification Te | est AT:Assurance Test X:Applicable Test  | DRAV            | WING NO.   | ELC4-121791     | <del>-</del> 01 |    |
| HS s                     | PECIFICATION SHEET  ROSE ELECTRIC CO., LTD.  | DRAV<br>PART NO | o. TM21  | R-5A-3232-LP (5 | 0)              | 2/ |