| APPLICA                                | BLE STAN                  | DARD   |   |         | OTOP         | 405   |                           |        |                                  |          |                 |  |
|--|---------------------------|--|---|---------|--------------|---|---------------------------|--------|----------------------------------|----------|-----------------|--|
|  | OPERATING<br>TEMPERATUR   | E RANGE  | -55 °C TO 85  | °C      | TEMP         | TORAGE<br>EMPERATURE RANGE  |                           |        | -10 °C TO 60 °C                  |          |                 |  |
| RATING                                 | VOLTAGE                   |  | OF  |         | OPER<br>RANG | -   | HUMIDIT                   | Y      | 40 % TO 80 %                     |          |                 |  |
|  | CURRENT                   |  | ST  |         |              | DRAGE HUMIDITY  |                           |        | 40 % TO 70 %                     |          |                 |  |
|  | CONTENT                   |  |   |         |              |   |                           |        | 10 /0 10 10 /0                   |          |                 |  |
| IT                                     | EM                        | TEST METHOD  |   |         |              | REQUIREMENTS  |                           |        |                                  | QT       | A               |  |
| CONSTRUCTION                           |                           |  |   |         |              |   |                           |        |                                  |          |                 |  |
|  | XAMINATION                |  | LY AND BY MEASURING I   | NSTRUM  | ENT.         | ACCO  | RDING T                   | O DRA  | WING.                            | ×        | ×               |  |
|  |                           |  | RMED VISUALLY.  |         |              |   |                           |        |                                  | ×        | ×               |  |
| ELECTRIC CHARACT<br>CONTACT RESISTANCE |                           | 1 ERISTICS<br>100 mA (DC OR 1000 Hz).  |   |         |              |   | 80 mΩ MAX. <sup>(1)</sup> |        |                                  |          | T               |  |
| CONTACT RESISTANCE                     |                           | 20 mV MAX, 1 mA(DC OR 1000Hz)  |   |         |              | $100 \text{ m}\Omega \text{ MAX}.^{(2)}$  |                           |        |                                  | ×        |                 |  |
| MILLIVOLT LEVEL<br>METHOD              |                           |  |   |         |              |   |                           |        |                                  |          |                 |  |
| INSULATION                             |                           | 250 V DC   |   |         |              |   |                           | 100 M  | Ω MIN.                           | ×        |                 |  |
| RESISTANCE                             |                           |  |   |         |              |   |                           |        |                                  |          |                 |  |
| VOLTAGE PROOF                          |                           | 300 V AC FOR 1 min. NO FLASHOVER OR BREAKDOWN.   |   |         |              |   |                           |        |                                  | ×        |                 |  |
| MECHANI                                |                           | -  | STICS<br>RED BY APPLICABLE CON  |         | <u>, I</u> I | NSEP  |                           | RCE    |                                  | ×        |                 |  |
| WITHDRAWAL FORCE                       |                           | MEASURED BT AFFEICABLE CONNECTOR.  |   |         |              | INSERTION FORCE : 70.0 N MAX.<br>WITHDRAWAL FORCE : 6.5 N MIN.  |                           |        |                                  |          |                 |  |
| MECHANICAL<br>OPERATION                |                           | 50 TIMES INSERTIONS AND EXTRACTIONS.   |   |         |              | <ol> <li>CONTACT RESISTANCE:100 mΩ MAX. <sup>(2)</sup></li> <li>NO DAMAGE, CRACK AND LOOSENESS<br/>OF PARTS.</li> </ol> |                           |        |                                  | ×        |                 |  |
| VIBRATION                              |                           | FREQUENCY 10 TO 55 Hz,<br>AMPLITUDE : 1.5 mm,  |   |         |              | <ol> <li>OF PARIS.</li> <li>NO ELECTRICAL DISCONTINUITY OF<br/>1 μs.</li> </ol>   |                           |        |                                  | ×        |                 |  |
|  |                           | 2 hrs IN 3 DIRECTIONS.   |   |         |              | 2 CONTACT RESISTANCE:100 m $\Omega$ MAX. <sup>(2)</sup>   |                           |        |                                  |          |                 |  |
|  |                           | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms<br>FOR 3 TIMES IN 3 DIRECTIONS.   |   |         |              | ③ NO DAMAGE, CRACK AND LOOSENESS<br>OF PARTS.   |                           |        |                                  |          |                 |  |
| ENVIRON                                | MENTAL CI                 |  |   |         |              | 51  |                           |        |                                  | I        | <u> </u>        |  |
| DAMP HEAT                              |                           | EXPOSE   | DAT 40±2 °C, 90 ~ 9   | 5 %, 96 | hrs.         | 1) CO   | NTACT F                   | RESIST | ΓΑΝCE:100 mΩ MAX. <sup>(2)</sup> | ×        |                 |  |
| (STEADY STATE)<br>RAPID CHANGE OF      |                           |  |   |         |              |   |                           |        |                                  |          | _               |  |
| TEMPERATURE                            |                           | TEMPERATURE-55 $\rightarrow$ +15 $\sim$ +35 $\rightarrow$ +85 $\rightarrow$ +15 $\sim$ +35 $^{\circ}$ C<br>TIME 30 $\rightarrow$ 2 $\sim$ 3 $\rightarrow$ 30 $\rightarrow$ 2 $\sim$ 3 min<br>5 CYCLES. |   |         |              | (3) NO DAMAGE, CRACK AND LOOSENESS<br>OF PARTS.   |                           |        |                                  | ×        |                 |  |
| CORROSION SALT MIST                    |                           | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 hrs.  |   |         |              | (1) CONTACT RESISTANCE:100 m $\Omega$ MAX. (2)<br>(2) NO DEFECT SUCH AS CORROSION                                       |                           |        |                                  | ×        |                 |  |
| HYDROGEN SULPHIDE                      |                           | EXPOSED IN 3 PPM FOR 96 hrs.<br>(TEST STANDARD: JEIDA 38)  |   |         |              | WHICH IMPAIRS THE FUNCTION OF CONNECTOR.  |                           |        |                                  | ×        |                 |  |
| RESISTANCE TO                          |                           | 1) REFLOW SOLDERING : 250 °C MAX,  |   |         |              | NO DEFORMATION OF CASE OF   |                           |        |                                  | ×        |                 |  |
| SOLDERING HEAT                         |                           | : 220 °C MIN,<br>FOR 60 s  |   |         |              | EXCESSIVE LOOSENESS OF THE<br>TERMINALS.  |                           |        |                                  |          |                 |  |
|  |                           | 2) SOLDERING IRONS : 360 °C,   |   |         |              |   |                           |        |                                  | ×        | +               |  |
|  |                           | 001555   | FOR   | 5 s     |              |   |                           |        |                                  |          |                 |  |
| SOLDERABILITY                          |                           | SOLDERED AT SOLDER TEMPERATURE,<br>240°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.                      |                           |        |                                  | ×        |                 |  |
|  |                           |  | · · ·   |         |              |   |                           |        |                                  |          |                 |  |
| COUN                                   | T DE                      | SCRIPTI  |   |         | DESIG        | NED   |                           |        | CHECKED                          | DA       |                 |  |
| $\wedge$                               |                           |  |   |         |              |   |                           |        |                                  |          |                 |  |
| REMARK                                 |                           |  | S INITIAL CONTACT RESISTANCE SHALL BE 80 m $\Omega$ ,<br>BULK RESISTANCE OF STACKING HEIGHT 16 mm T |         |              | APPROVED  |                           |        | NH. NAKATA                       |          | )2. 2           |  |
| (                                      | <sup>2)</sup> AFTER TEST, | THE CHANGE OF THE CONTACT RESISTANCE   |   |         |              | CHECKEL   |                           |        | HT. YAMAGUCHI                    | 18.02.   |                 |  |
| Linicae ath                            | SHALL BE 20 r             |  |   |         |              | DESIGNE   |                           |        |                                  |          | )2.2            |  |
|  | •                         |  |   |         |              |   |                           | VN     | MK. INOUE                        | 18.0     |                 |  |
|  |                           |  |   |         |              | RAWING NO.  |                           |        | ELC-150883-68-00                 |          |                 |  |
| HRS                                    |                           | PECIFICATION SHEET<br>OSE ELECTRIC CO., LTD.   |   |         | PART NO.     |   | FX8C-100S-SV (68)         |        |                                  |          | 4 /4            |  |
|  | -2-1                      |  |   |         | CODE         | JE NO.   UL3/8-   |                           |        | -0000-3-08                       | $\wedge$ | 1/ <sup>.</sup> |  |