| APPLICAE                                   | BLE STAND         | DARD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                 |         |          |                                                                                              |                                  |                                    |                                |                                       |                |  |
|--------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------|----------|----------------------------------------------------------------------------------------------|----------------------------------|------------------------------------|--------------------------------|---------------------------------------|----------------|--|
| OPERATING                                  |                   | E DANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | STO TO OF OR W                                                                                                  |         |          | RAGE                                                                                         |                                  |                                    | -10 °C TO 60 °C <sup>(2)</sup> |                                       |                |  |
| RATING                                     | TEMPERATURE RANGE |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 100 V AC                                                                                                        |         | OPER     | OPERATING HU                                                                                 |                                  |                                    | 40 % TO 80 %                   |                                       |                |  |
| 10//1110                                   |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |         |          | ANGE<br>TORAGE HUMIDITY                                                                      |                                  |                                    |                                |                                       |                |  |
|                                            | CURRENT           | TO THE LEAST OF THE PARTY OF TH |                                                                                                                 |         |          |                                                                                              |                                  | 60 % RH MAX                        | (2)                            |                                       |                |  |
|                                            |                   | SPECIFICATIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                 |         |          |                                                                                              |                                  |                                    |                                |                                       |                |  |
|                                            | ΞM                | TEST METHOD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                 |         |          | REQUIREMENTS                                                                                 |                                  |                                    |                                | QT                                    | AT             |  |
| CONSTRU                                    |                   | T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                 |         |          |                                                                                              |                                  |                                    |                                |                                       |                |  |
|                                            | XAMINATION        | VISUALLY AND BY MEASURING INSTRUMENT. ACCORDING TO DRAWING.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                 |         |          |                                                                                              |                                  |                                    |                                | ×                                     | ×              |  |
| MARKING                                    |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |         |          |                                                                                              |                                  |                                    |                                | ×                                     | ×              |  |
| ELECTRIC CHARACT CONTACT RESISTANCE        |                   | 100 mA (DC OR 1000 Hz).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                 |         |          |                                                                                              | 50 mΩ MAX.                       |                                    |                                |                                       |                |  |
| CONTACT RESISTANCE                         |                   | 20 mV MAX, 1 mA(DC OR 1000Hz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                 |         |          | 60 mΩ MAX.                                                                                   |                                  |                                    |                                | ×                                     | -<br>  -       |  |
| MILLIVOLT LEVEL<br>METHOD                  |                   | , , ,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                 |         |          |                                                                                              |                                  |                                    |                                |                                       |                |  |
| INSULATION                                 |                   | 250 V DC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                 |         |          | 100 MΩ MIN.                                                                                  |                                  |                                    |                                |                                       | -              |  |
| RESISTANCE<br>VOLTAGE PROOF                |                   | 300 V AC FOR 1 min.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                 |         |          | NO ELACUOVED OD DDEAKDOWN                                                                    |                                  |                                    |                                | ×                                     | <u> </u>       |  |
| MECHANICAL CHAR                            |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |         |          |                                                                                              | NO FLASHOVER OR BREAKDOWN.       |                                    |                                |                                       |                |  |
| MECHANICA                                  |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | STICS<br>ES INSERTIONS AND EXT                                                                                  | RACTION | vs T     | ⊕ <u>८०</u> ।                                                                                | NTACT RE                         | SISTAN                             | ICE: 60 mO MAX                 | ×                                     | Τ_             |  |
| OPERATION                                  |                   | 300 TIMES INSERTIONS AND EXTRACTIONS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                 |         |          | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS<br>OF PARTS.            |                                  |                                    |                                |                                       |                |  |
| VIBRATION                                  |                   | FREQUENCY 10 TO 55 Hz,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                 |         |          | NO ELECTRICAL DISCONTINUITY OF                                                               |                                  |                                    |                                | ×                                     | T -            |  |
|                                            |                   | SINGLE AMPLITUDE: 0.75mm,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                 |         |          | 1 μs.                                                                                        |                                  |                                    |                                |                                       |                |  |
| SHOCK                                      |                   | AT 10 CYCLES FOR 3 DIRECTIONS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                 |         |          | ② NO DAMAGE, CRACK AND LOOSENESS                                                             |                                  |                                    |                                |                                       |                |  |
| SHOCK                                      |                   | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                 |         |          | OF PARTS.                                                                                    |                                  |                                    |                                | ×                                     | _              |  |
| ENVIRON                                    | MENTAL C          | HARAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | TERISTICS                                                                                                       |         |          |                                                                                              |                                  |                                    |                                |                                       |                |  |
| DAMP HEAT                                  |                   | EXPOSED AT $40\pm2$ °C, $90\sim95$ %, $96$ h.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                 |         |          |                                                                                              | ① CONTACT RESISTANCE: 60 mΩ MAX. |                                    |                                |                                       |                |  |
| (STEADY STATE)                             |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |         |          | ② INSULATION RESISTANCE:100 MΩ MIN.                                                          |                                  |                                    |                                | _                                     |                |  |
| RAPID CHANGE OF<br>TEMPERATURE             |                   | TEMPERATURE-55 $\rightarrow$ +15 $\sim$ +35 $\rightarrow$ +85 $\rightarrow$ +15 $\sim$ +35 $^{\circ}$ C TIME 30 $\rightarrow$ 2 $\sim$ 3 $\rightarrow$ 30 $\rightarrow$ 2 $\sim$ 3 min UNDER 5 CYCLES.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                 |         |          | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.                                                   |                                  |                                    |                                |                                       | -              |  |
| DRY HEAT                                   |                   | EXPOSED AT 85 °C, 96 h.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                 |         |          | ① CONTACT RESISTANCE: 60 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS                            |                                  |                                    |                                | ×                                     | -              |  |
| CORROSION SALT MIST                        |                   | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                 |         |          | OF PART  ① CONTACT RESISTANCE: 60 mΩ MAX. ② NO HEAVY CORROSION.                              |                                  |                                    |                                |                                       | -              |  |
| SULPHUR DIOXIDE                            |                   | EXPOSED IN 10 PPM FOR 96 h.<br>(TEST STANDARD: JEIDA 39)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                 |         |          | Ø NO                                                                                         | TILAVI CO                        |                                    | ON.                            | ×                                     | -              |  |
| RESISTANCE TO SOLDERING HEAT SOLDERABILITY |                   | 1) REFLOW SOLDERING : 240 °C MAX,<br>: 200 °C MIN,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                 |         |          | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE                                         |                                  |                                    |                                |                                       | -              |  |
|                                            |                   | 2) SOLDE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | FOR 60 s<br>2) SOLDERING IRONS : 360 °C,                                                                        |         |          |                                                                                              | TERMINALS.                       |                                    |                                |                                       |                |  |
|                                            |                   | FOR 5 s SOLDERED AT SOLDER TEMPERATURE,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                 |         |          | A NIENA                                                                                      | LINIEODA                         | LCOAT                              | ING OF SOLDER                  | ×                                     |                |  |
| SOLDERABILITY                              |                   | 240°C,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                 |         |          | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. |                                  |                                    |                                | * * * * * * * * * * * * * * * * * * * | _              |  |
|                                            |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |         |          |                                                                                              |                                  |                                    |                                |                                       |                |  |
| COUN                                       | T DE              | ESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DN OF REVISIONS                                                                                                 |         | DESIGI   | NED                                                                                          | ED                               |                                    | CHECKED                        |                                       | ATE            |  |
| $\triangle$                                |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                 |         |          |                                                                                              |                                  |                                    |                                |                                       |                |  |
|                                            |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | E RISE INCLUDED WHEN ENERGIZED.<br>INDICATES A LONG-TERM STORAGE STATE<br>SED PRODUCT BEFORE THE BOARD MOUNTED. |         |          | APPROVED<br>CHECKED<br>DESIGNED                                                              |                                  | _                                  |                                |                                       | 10.18<br>10.18 |  |
|                                            | FOR THE UNU       | SED PROD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                 |         |          |                                                                                              |                                  | _                                  | KY.NAKAMURA                    | 06.10.18                              |                |  |
| Unless of                                  | herwise spe       | ecified re                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | efer to JIS C 5402                                                                                              |         |          | DRAWN                                                                                        |                                  | -                                  | AK.SUZUKAWA                    | 06.10.18                              |                |  |
|                                            |                   | urance Test X:Applicable Te                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                 |         |          | G NO.                                                                                        | -                                | ELC4-151515-21                     |                                |                                       |                |  |
| שני                                        |                   | PECIFICATION SHEET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                 |         |          | PART NO.                                                                                     |                                  | FX5-40P-SH3 (71)                   |                                |                                       |                |  |
|                                            |                   | OSE ELECTRIC CO., LTD.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                 |         | CODE NO. |                                                                                              | CL575-0045-2-71                  |                                    |                                |                                       | 1/1            |  |
|                                            | 11110             | 222 222 7770 20., 275.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                 |         | CODE     | IVO.                                                                                         | ULU                              | 02070 0040 Z 71   <u>701</u>   1/1 |                                |                                       |                |  |