



**THE DATASHEET OF  
DF37C-34DP-0.4V(51)**



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| APPLICABLE STANDARD   |  |   |                           |                     |                         |                          |
|---|--|---|---------------------------|---------------------|-------------------------|--------------------------|
| RATING  | OPERATING TEMPERATURE RANGE  | -35°C TO +85°C (NOTES 1)  | STORAGE TEMPERATURE RANGE | -10°C TO +60°C      |                         |                          |
|   | VOLTAGE  | 30V AC  | APPLICABLE CONNECTOR      | DF37*-*DS-0.4V (**) |                         |                          |
|   | CURRENT  | 0.3A  |                           |                     |                         |                          |
| <b>SPECIFICATIONS</b>   |  |   |                           |                     |                         |                          |
| ITEM  | TEST METHOD  | REQUIREMENTS  | QT                        | AT                  |                         |                          |
| <b>CONSTRUCTION</b>   |  |   |                           |                     |                         |                          |
| GENERAL EXAMINATION   | CONFIRMED VISUALLY AND BY MEASURING INSTRUMENT.  | ACCORDING TO DRAWING.   | X                         | X                   |                         |                          |
| MARKING   | CONFIRMED VISUALLY.  |   | X                         | X                   |                         |                          |
| <b>ELECTRIC CHARACTERISTICS</b>                               |  |   |                           |                     |                         |                          |
| CONTACT RESISTANCE  | 20mV AC OR LESS 1kHz, 1mA.   | 100mΩ MAX.  | X                         | -                   |                         |                          |
| INSULATION RESISTANCE   | 100V DC.   | 50MΩ MIN.   | X                         | -                   |                         |                          |
| VOLTAGE PROOF   | 100V AC FOR 1 min.   | NO FLASHOVER OR BREAKDOWN.  | X                         | -                   |                         |                          |
| <b>MECHANICAL CHARACTERISTICS</b>                             |  |   |                           |                     |                         |                          |
| INSERTION AND WITHDRAWAL FORCES                               | MEASURED BY APPLICABLE CONNECTOR.  |   | X                         | -                   |                         |                          |
|   |  | PIN COUNT   |                           |                     | INSERTION FORCE [N MAX] | WITHDRAWAL FORCE [N MIN] |
|   |  | 10  |                           |                     | 15.4                    | 2.6                      |
|   |  | 16  |                           |                     | 20.7                    | 3.6                      |
|   |  | 20  |                           |                     | 24.3                    | 4.4                      |
|   |  | 24  |                           |                     | 27.8                    | 5.1                      |
|   |  | 30  |                           |                     | 33.1                    | 6.2                      |
|   |  | 34  |                           |                     | 40.8                    | 6.9                      |
|   |  | 40  |                           |                     | 41.9                    | 8                        |
|   |  | 44  |                           |                     | 45.4                    | 8.7                      |
| 50  | 50.7   | 9.8   |                           |                     |                         |                          |
| 60  | 59.5   | 11.7  |                           |                     |                         |                          |
| 70  | 68.4   | 13.5  |                           |                     |                         |                          |
| 74  | 71.9   | 14.2  |                           |                     |                         |                          |
| MECHANICAL OPERATION  | 10TIMES INSERTIONS AND EXTRACTIONS.  | ① CONTACT RESISTANCE: 100mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                       | X                         | -                   |                         |                          |
| VIBRATION   | FREQUENCY 10 TO 55 TO 10 Hz, APPROX 5min, SINGLE AMPLITUDE 0.75 mm, 10CYCLES, FOR 3 DIRECTIONS.                  | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                 | X                         | -                   |                         |                          |
| SHOCK   | 490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.  | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                 | X                         | -                   |                         |                          |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>                          |  |   |                           |                     |                         |                          |
| RAPID CHANGE OF TEMPERATURE                                   | TEMPERATURE -55 → +85 °C<br>TIME 30 → 30 min<br>UNDER 5 CYCLES.<br>(RELOCATION TIME TO CHAMBER: WITHIN 2 ~3 MIN) | ① CONTACT RESISTANCE: 100mΩ MAX.<br>② INSULATION RESISTANCE: 50MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X                         | -                   |                         |                          |
| DAMP HEAT (STEADY STATE)                                      | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.  | ① CONTACT RESISTANCE: 100mΩ MAX.<br>② INSULATION RESISTANCE: 25MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X                         | -                   |                         |                          |
| SULPHUR DIOXIDE   | EXPOSED IN 25 PPM FOR 96h, 25°C, 75%. (REFER TO JIS C 60068)   | ① CONTACT RESISTANCE: 100mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                       | X                         | -                   |                         |                          |
| SALT MIST   | EXPOSED IN 5% SALT MIST FOR 48h.   | ① CONTACT RESISTANCE: 100mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                       | X                         | -                   |                         |                          |
| COUNT   | DESCRIPTION OF REVISIONS   | DESIGNED  | CHECKED                   | DATE                |                         |                          |
|   | 1 DIS-H-00003087   | YT. TAKAGI  | TS. MIYAZAKI              | 17.09.28            |                         |                          |
| REMARKS   |  | APPROVED  | MO. NAKAMURA              | 07.01.29            |                         |                          |
| NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT              |  | CHECKED   | KH. IKEDA                 | 07.01.29            |                         |                          |
| Unless otherwise specified, refer to JIS C 5402 and IEC 60512 |  | DESIGNED  | KY. MIDORIKAWA            | 07.01.29            |                         |                          |
|   |  | DRAWN   | KY. MIDORIKAWA            | 07.01.29            |                         |                          |
| Note  | QT:Qualification Test AT:Assurance Test X:Applicable Test  | DRAWING NO.   | ELC4-314974-01            |                     |                         |                          |
|   | SPECIFICATION SHEET  | PART NO.  | DF37C-*DP-0.4V (51)       |                     |                         |                          |
|   | HIROSE ELECTRIC CO., LTD.  | CODE NO.  | CL684                     | 1/1                 |                         |                          |

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