| APPLICABLE STANDARD | | | | |
|---|---|---|---|---|
| Rating | Operating Temperature Range | -40 °C to +105 °C<br>Include Temperature Rise<br>Caused by Current-carrying | Storage Temperature Range | -40 ℃ to 60 ℃ (Note 1) |
| | Voltage | AC,DC 600 V<br>AC,DC 1500 V (Note 2) | Current | 300A(UL,C-UL,TUV) (Appendix 1)<br>430A(Derating curve : 25℃)<br>(Appendix 2) |
| | Busbar Thickness | 5.88 to 6.45 | | |

# SPECIFICATIONS

| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
|---|---|---|---|---|
| **CONSTRUCTION** | | | | |
| General Examination | Visually and by measuring instrument. | According to drawing. | X | X |
| Marking | Confirmed visually. | | X | X |
| **ELECTRIC CHARACTERISTICS** | | | | |
| Contact Resistance | DC 1 A. | 0.5 mΩ max. | X | X |
| **MECHANICAL CHARACTERISTICS** | | | | |
| Insertion and Extraction Force | Measured by applicable busbar. | Insertion force : 50 N max.<br>Extraction force : 3 N min. | X | — |
| Mechanical Operation | 50 times Insertions and extractions. | 1)Contact resistance: 0.7 mΩ max.<br>2)No damage, crack and looseness of parts. | X | — |
| Vibration | Frequency 10 to 55 hz, single amplitude 0.75 mm,<br>3 axial directions, 10 cycles each. | 1) No electrical discontinuity of 10 μs.<br>2) No damage, crack and looseness of parts. | X | — |
| Shock | 490 m/s$^2$ duration of pulse 11 ms<br>at 3 times for 3 both axial directions. | | X | — |
| **ENVIRONMENTAL CHARACTERISTICS** | | | | |
| Humidity | Exposed at +40 °C, 90 to 95 %, 96 h | 1)Contact resistance: 0.7 mΩ max.<br>2)No damage, crack and looseness of parts. | X | — |
| Rapid Change of Temperature | Temperature -40 → 105 °C<br>Time 30 → 30 min<br>under 5 cycles.<br>chamber transfer time is 2 to 3 min. | 1)Contact resistance: 0.7 mΩ max.<br>2)No damage, crack and looseness of part | X | — |
| Dry Heat | Exposed at 105±2 °C for 96 h. | 1)Contact resistance: 0.7 mΩ max.<br>2)No damage, crack and looseness of part | X | — |
| Cold | Exposed at -40±2 °C for 96 h. | 1)Contact resistance: 0.7 mΩ max.<br>2)No damage, crack and looseness of part | X | — |
| Corrosion Salt Mist | Exposed in 5% salt water spray for 48 h. | Contact resistance: 0.7 mΩ max. | X | — |

| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|---|---|---|---|---|---|
| △0 | | | | | |

REMARK

(Note 1) Storage temperature range shows storage condition for unused products including packing materials. Follow the operating temperature range for storage condition after mounting.

(Note 2) The table below related to creepage distance of the copper bar's and voltage in the case of basic insulation.

| Voltage | Pollution degree2 | Pollution degree 3 |
|---|---|---|
| 600V (※1) | 6.3 mm | 10 mm |
| 1500V (※2) | 15 mm | 25 mm |

※1. This dimension is specified by IEC(EN) 61984 follows the overvoltage category Ⅳ.

※2. Because rated voltage in IEC(EN) 61984 is specified only up to 1000 V, Hirose calculates the creepage distance for 1500 V. Depending on surrounding environment or required specification, please ask customers to change the creepage distance.

Unless otherwise specified, refer to IEC 60512.

| | | |
|---|---|---|
| APPROVED | MN. KENJO | 20220711 |
| CHECKED | KG. OKITA | 20220711 |
| DESIGNED | MO. SHIMOYAMA | 20220708 |
| DRAWN | MO. SHIMOYAMA | 20220708 |

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC-398502-00-00

| | | | | |
|---|---|---|---|---|
| HRS | SPECIFICATION SHEET | PART NO. | PS4A-6.35T-F19 | |
| | HIROSE ELECTRIC CO., LTD. | CODE NO. | CL0236-1089-0-00 △0 | 1/2 |

# Accompanying drawing

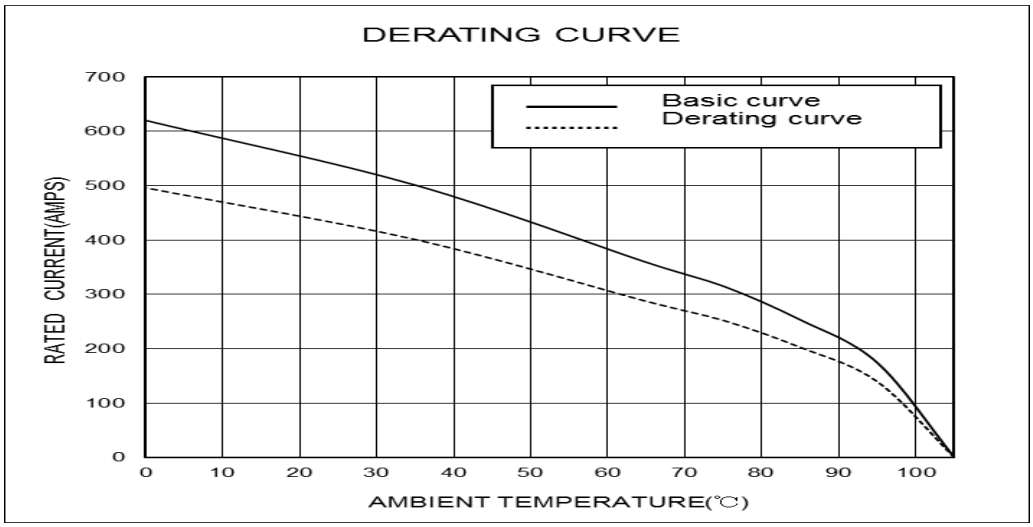
## Appendix 1. Condition of safety standard(UL、C-UL、TUV STANDARD)

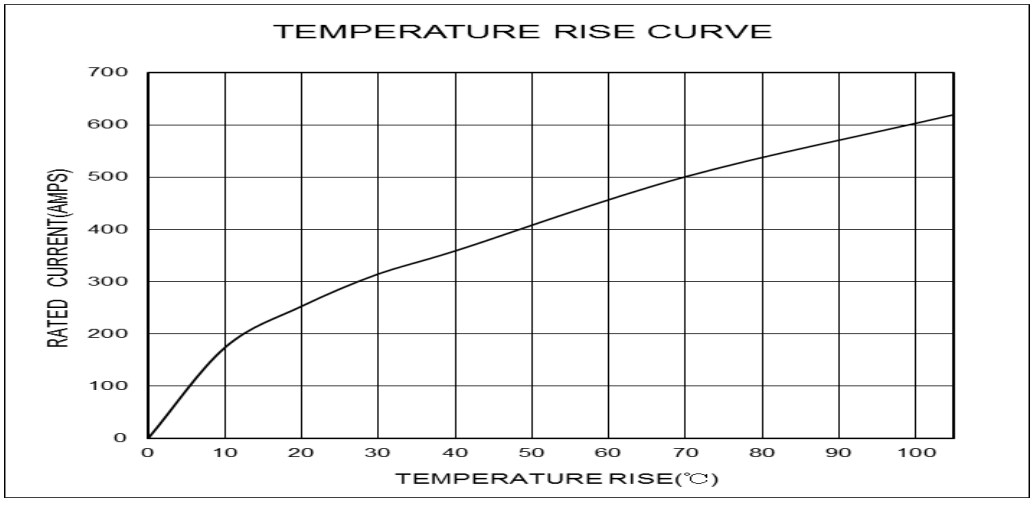
This item got approved by safety standard(UL、C-UL、TUV STANDARD)under the condition of table 1.

Table 1.UL、C-UL condition

| | Condition |
|---|---|
| Voltage rating(AC/DC) | 600 V |
| Current rating | 300 A |
| Bus bar thickness | 6.35 mm |

## Appendix 2.Derating curve and temperature rise curve (reference)




Note 3 Derating curve in derating curve is a curve gained by multiplying electric current values in basic curve by a derating coefficient of 0.8.

4 The value of rated current differs depending on the ambient temperature.
It is recommended to use the product within the derating curve zone.
If used under UL or TUV STANDARD, please refer to the appendix 1.

5 Measurement method of derating curve is shown below.
・Bus bar : 60×90×6 mm (for PS4-6.35T)
・Base bus bar : 35×125×10 mm
・Test condition : Turn on electricity under the static state and measure.
(Test report # TR0236E-20437)

| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | ELC-398502-00-00 | | |
|---|---|---|---|---|---|
| HRS | SPECIFICATION SHEET | PART NO. | PS4A-6.35T-F19 | | |
| | HIROSE ELECTRIC CO., LTD. | CODE NO. | CL0236-1089-0-00 | ⚠0 | 2/2 |

FORM HD0011-2-1