

Temperature increase of main components

Model: PJMA1500F

1. Conditions

- (1) Input : AC 85 ~ 264 [V]
- (2) Output : Rated output \*Derating is required at AC85-115[V]input.
- (3) Mounting method : As shown in Fig.1.1

2. Result

| No. | Parts name                    | Symbol No. | Increase ( $\Delta T$ ) |     |     |     |  |  | Rated temp. [°C] | Reference      |
|-----|-------------------------------|------------|-------------------------|-----|-----|-----|--|--|------------------|----------------|
|     |                               |            | [deg]                   |     |     |     |  |  |                  |                |
|     |                               |            | 12V                     | 24V | 36V | 48V |  |  |                  |                |
| 1   | Line Filter                   | L102       | 44                      | 42  | 38  | 43  |  |  | 130              |                |
| 2   | Rectifier(Input)              | SS101      | 76                      | 71  | 70  | 71  |  |  | 150              | Junction Temp. |
| 3   | Inrush Current Limiting Triac | TRC101     | 67                      | 63  | 65  | 66  |  |  | 150              | Junction Temp. |
| 4   | Choke Coil(Pfc)               | L103       | 67                      | 61  | 54  | 47  |  |  | 130              |                |
| 5   | Input Capacitor               | C130       | 10                      | 8   | 11  | 9   |  |  | 105              |                |
| 6   | Rectifier Diode(Input)        | SS103      | 47                      | 39  | 45  | 40  |  |  | 150              | Junction Temp. |
| 7   | Transistor(Pfc)               | TR102      | 55                      | 56  | 55  | 50  |  |  | 150              | Junction Temp. |
| 8   | Switching Transistor          | TR201      | 62                      | 43  | 62  | 56  |  |  | 150              | Junction Temp. |
| 9   | Transformer                   | T201       | 59                      | 44  | 63  | 53  |  |  | 130              |                |
| 10  | Rectifying Diode(Output)      | SS502      | 83                      | 49  | 40  | 45  |  |  | 150              | Junction Temp. |
| 11  | Output Choke                  | L517       | 51                      | 26  | 49  | 38  |  |  | 130              |                |
| 12  | Output Capacitor              | C501       | 18                      | 9   | 10  | 10  |  |  | 105              |                |
| 13  | Voltage Regulator             | IC701      | 36                      | 41  | 31  | 33  |  |  | 150              | Junction Temp. |
| 14  |                               |            |                         |     |     |     |  |  |                  |                |
| 15  |                               |            |                         |     |     |     |  |  |                  |                |
| 16  |                               |            |                         |     |     |     |  |  |                  |                |
| 17  |                               |            |                         |     |     |     |  |  |                  |                |
| 18  |                               |            |                         |     |     |     |  |  |                  |                |
| 19  |                               |            |                         |     |     |     |  |  |                  |                |
| 20  |                               |            |                         |     |     |     |  |  |                  |                |

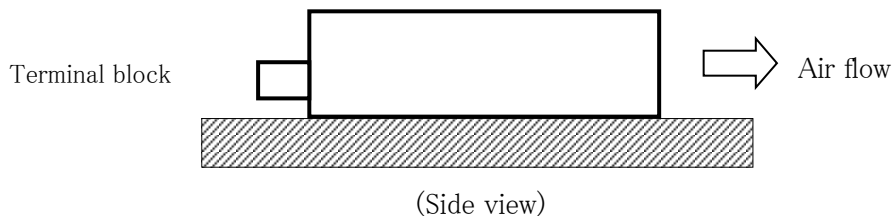


Fig.1.1 Mounting method  
(Normal position)

\*All information presented herein are not guaranteed.