

Temperature increase of main components

Model: CHS4004812

1. Conditions

- (1) Input : DC 48 [V]
 (2) Output : Rated output
 (3) Air flow : 2.0[m/s]
 (4) Measuring method : Shown as Fig1.1

2. Result

Table 2.1 Temperature increase of main components

| Table 2.1 Temperature increase of main components | | | | | | | |
|---|--------------------|------------|-------------------------|--|--|--------------------------------|----------------|
| No. | Parts name | Symbol No. | Increase (ΔT) | | | Rated temp. $^{\circ}\text{C}$ | Reference |
| | | | $^{\circ}\text{C}$ | | | | |
| | | | 12V | | | | |
| 1 | Switching MOS-FET | TR102 | 89 | | | 150 | Junction temp. |
| 2 | Switching MOS-FET | TR104 | 86 | | | 150 | Junction temp. |
| 3 | Transformer | T101 | 76 | | | 150 | |
| 4 | Rectifying MOS-FET | TR511 | 91 | | | 150 | Junction temp. |
| 5 | Rectifying MOS-FET | TR521 | 81 | | | 150 | Junction temp. |
| 6 | Power control IC | IC431 | 72 | | | 150 | Junction temp. |
| 7 | Power control IC | IC710 | 68 | | | 150 | Junction temp. |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |

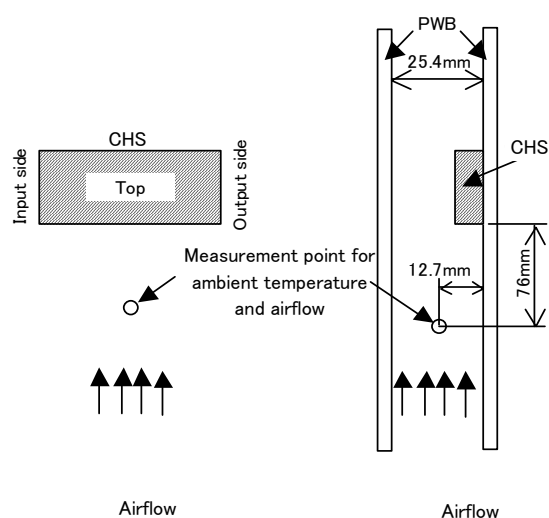


Fig1.1 Measuring method

CHS400 主要部品温度上昇データ

1. 測定データ

CHS400 の周囲温度に対する温度上昇を以下に示す。

表1.1 主要部品温度上昇データ

| No. | 部品名 | 品番 | 上昇値 (ΔT) | | | 定格 温度 [℃] | 備考 |
|-----|----------|-------|----------|--|--|-----------------|-----------|
| | | | [℃] | | | | |
| | | | 12V | | | | |
| 1 | インバータFET | TR102 | 89 | | | 150 | ジャンクション温度 |
| 2 | インバータFET | TR104 | 86 | | | 150 | ジャンクション温度 |
| 3 | OTトランス | T101 | 76 | | | 150 | |
| 4 | 出力整流FET | TR511 | 91 | | | 150 | ジャンクション温度 |
| 5 | 出力整流FET | TR521 | 81 | | | 150 | ジャンクション温度 |
| 6 | 制御用IC | IC431 | 72 | | | 150 | ジャンクション温度 |
| 7 | 制御用IC | IC710 | 68 | | | 150 | ジャンクション温度 |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |

2. 測定条件

- 2.1 入力電圧 : DC 48 [V]
 2.2 負荷率 : 100 [%]
 2.3 風速 : 2.0 [m/s]
 2.4 測定方法 : 図2.1 参照

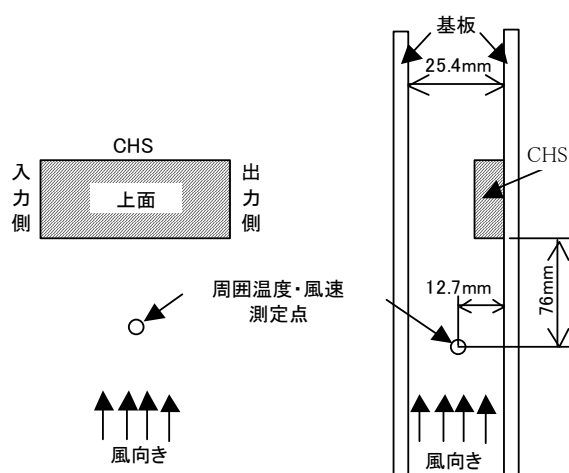


図2.1 温度測定方法