

Date : Feb.25,2021

Temperature increase of main components: 主要部品温度上昇

Model: PCA1500F

1. Conditions

- (1) Input : 95 ~ 264 [VAC]
 (2) Output : Rated output *Derating is required at 85-95[VAC] input.
 (3) Mounting method : As shown in Fig.1.1

2. Result

No.	Parts name	Symbol No.	Increase (ΔT)						Rated temp. [°C]	Reference
			[deg]							
			5V	12V	15V	24V	32V	48V		
1	Line filter	L101	45.2	41.8	38.4	57.6	32.2	43.3	130	
2	Relay	X101	14.5	14.5	14.5	14.5	14.5	14.5	85	
3	Rectifier(Input)	SS102	76	68.8	70.1	81.5	69.6	67.6	150	Junction Temp.
4	Choke coil(PFC)	L104	56.8	61.8	56.4	68.3	54.2	60.3	130	
5	Transistor(PFC)	TR104	84.2	85.6	80	79.8	60.9	76.9	150	Junction Temp.
6	Diode(PFC)	SS110	64.5	63	60.2	61.4	57.7	56.8	150	Junction Temp.
7	Input Capacitor	C134	46.1	36.1	36.4	38.9	46.4	46.8	105	
8	Switching transistor1(DCDC)	TR301	73.7	71.6	72.6	80	71	74.8	150	Junction Temp.
9	Switching transistor2(DCDC)	TR314	85.1	59.1	57	72.7	73.8	68.3	150	Junction Temp.
10	Diode(DCDC)	SS301	78.8	62.2	66.3	78.7	83.3	85.3	175	Junction Temp.
11	Setp down Choke coil	L301	48.4	42.1	34.8	67.3	52	55.2	130	
12	Transformer	T501	66.2	47.5	36.3	44.6	47.2	50.3	155	
13	Rectified transistor(Output)	TR520	64	—	—	—	—	—	150	Junction Temp.
14	Rectified transistor(Output)	TR525	—	45	35.4	38.4	44.7	44.4	150	Junction Temp.
15	Output capacitor	C502	13.6	9.1	7.1	17.1	17.4	18	125	
16										
17										
18										
19										
20										



(Side view)

Fig.1.1 Mounting method
(Normal position)

*All information presented herein are not guaranteed.

*本資料は参考資料であり、その内容を保証するものではありません。