

Specification

PA566-01-01/C-A

Items		Model	2518		3318		3325		5033	
			Vo1	Vo2	Vo1	Vo2	Vo1	Vo2	Vo1	Vo2
1	Nominal Output Voltage	V	2.5	1.8	3.3	1.8	3.3	2.5	5.0	3.3
2	Minimum Output Current	A	0							
3	Maximum Output Current	A	15	17	15	17	15	17	13	16
4	Maximum Output Current Combination	A	Io1+Io2 = 18							
5	Maximum Output Power Combination (*1)	W	Po1+Po2 = 37.5		Po1+Po2 = 49.5		Po1+Po2 = 49.5		Po1+Po2 = 65	
6	Efficiency (Typ) (*2)	%	86.0		86.0		87.0		90.0	
7	Input Voltage Range	V	36 ~ 76 VDC							
8	Input Current (Typ) (*2)	A	0.82		0.97		1.10		1.36	
9	Output Voltage Accuracy (*2)	%	± 2							
10	Output Voltage Trim Range (*3)	%	± 10							
11	Maximum Output Ripple & Noise (*4)	mV	75	75	100	75	100	75	100	100
12	Maximum Line Regulation (*5)	mV	±6.6	±6.6	±6.6	±6.6	±6.6	±6.6	±10	±6.6
13	Maximum Load Regulation (*6)	mV	±16.5	±16.5	±16.5	±16.5	±16.5	±16.5	±25	±16.5
14	Over Current Protection (OCP); (Io1+Io2) (*7,*8,*10)	%	105 ~ 160							
			Current limiting with inverter shutdown (Option available : Refer to option table)							
15	Over Voltage Protection (OVP) (*7,*8)	%	120 ~ 140							
			Inverter shutdown (Option available : Refer to option table)							
16	Remote On / Off Control (*8)	-	Negative logic (Option available : Refer to option table)							
17	Parallel Operation	-	-----							
18	Series Operation	-	-----							
19	Operating Temperature	°C	-40°C ~ +85°C							
20	Operating Humidity	%RH	5 ~ 95 (No dewdrop)							
21	Storage Temperature	°C	-40°C ~ +100°C							
22	Storage Humidity	%RH	5 ~ 95 (No dewdrop)							
23	Cooling (*8,*9)	-	Convection cooling / forced air cooling with derating							
24	Temperature Coefficient	%/°C	0.02							
25	Withstand Voltage	-	Input - Output : 1.5kVDC for 1 min.							
26	Isolation Resistance	-	More than 100Mohm at 25°C and 70 %RH, Input - Output : 500 VDC							
27	Vibration	-	At no operating, 10 ~ 55Hz (Sweep for 1 min.) Amplitude 0.825mm constant (Maximum 49.0 m/s ²) X,Y,Z 1 hour each							
28	Shock	m/s ²	196.1 m/s ² (In package)							
29	Weight (Typ)	g	40							
30	Size (W x H x D)	mm	36.8 x 10.2 x 57.9 (Refer to outline drawing)							

Notes :

- *1 : Maximum allowable combination output power for both channel; also maximum output current for each channel and combination output current for both channel should not exceeded.
- *2 : At 48 VDC, ambient temperature = +25°C and air velocity = 2m/S; 5033: Io1 = Io2 = 7.5A; 3325, 3318, 2518: Io1 = Io2 = 8.5A.
- *3 : Additional external components have to be connected; Both outputs are trim simultaneously ; Refer to application notes.
- *4 : Measured at Ta = 25°C, Vin = 48VDC and with external components connected; refer to basical connection drawing. For all temperature range, please refer to the application notes.
- *5 : 36 ~ 76 VDC with respect to nominal input line 48V; constant load; ambient temperature = +25°C.
- *6 : No load ~ full load with respect to 50% of maximum load; other output: no load; constant input voltage; ambient temperature = +25°C.
- *7 : CNT reset or manual reset. Auto-restart option available.
- *8 : Refer to application notes.
- *9 : Refer to PA566-01-03/C_- & PA566-01-04/C_- for output derating curve.
- *10 : Percentage is with respect to maximum combination current which is 18A.

Option Table :

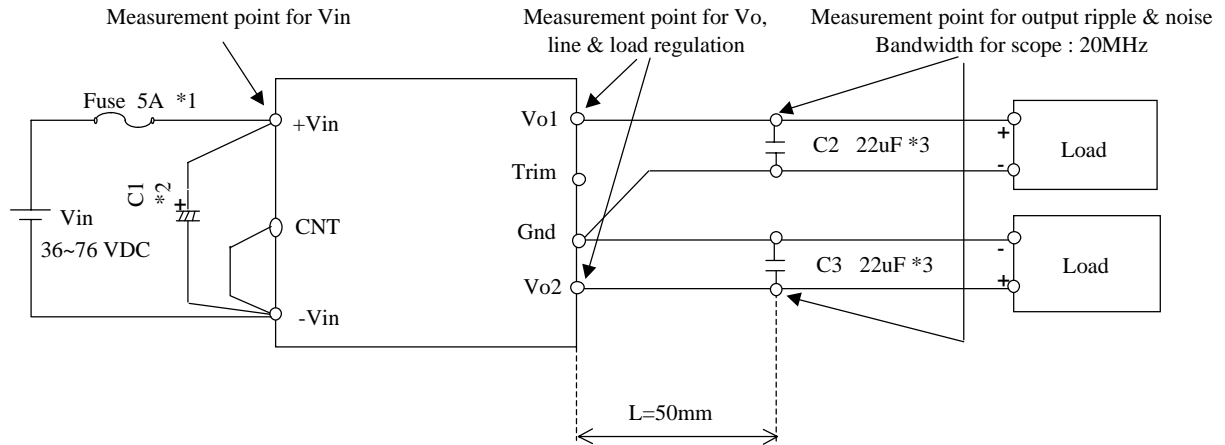
Option :	On/Off Logic	OVP / OCP
/ C	Negative	Shut-down
/ CP	Positive	Shut-down
/ CV	Negative	Auto-restart
/ CPV	Positive	Auto-restart

Example :

PAQ65D48-3325/CPV; Represent positive logic, OVP/OCP Auto-restart

Basical Connection

PA566-01-02/C-A

Ex. Negative logic basic connection**Notes**

*1 : Use external fuse (fast blow type) for each unit.

*2 : Recommended input capacitor C1

-20 °C ~ +85°C : 33 μ F electrolytic type capacitor.

-40 °C ~ +85°C : 33 μ F ceramic capacitor or equivalent such as 5 parallel 6.8 μ F ceramic type capacitor.

*3 : 22 μ F Ceramic capacitor

PAQ65D48/C

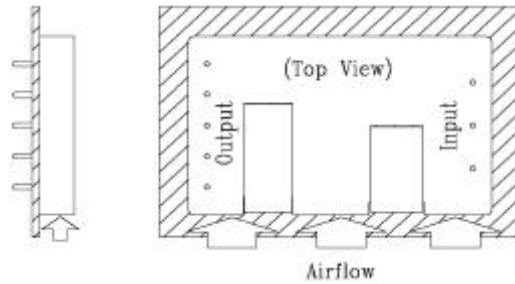
Output Derating Curve

PA566-01-03/C-B

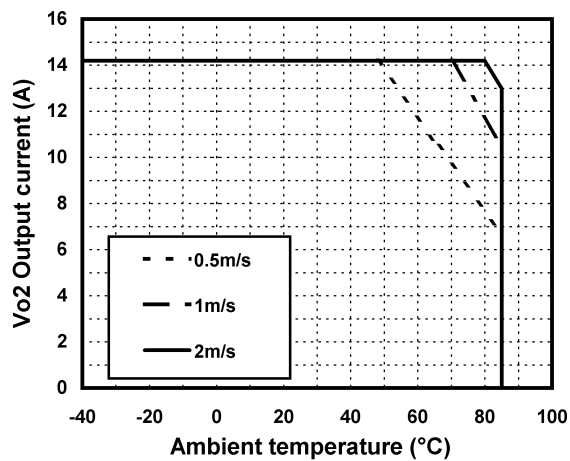
Condition

- i) $V_{in} = 48V$
- ii) $I_{o1} : PAQ65D48 -5033 = 3.6A$ (fixed)
 $I_{o1} : Other\ models = 30\%$ Rated Current (fixed)
- iii) Derating is done by reducing I_{o2} current

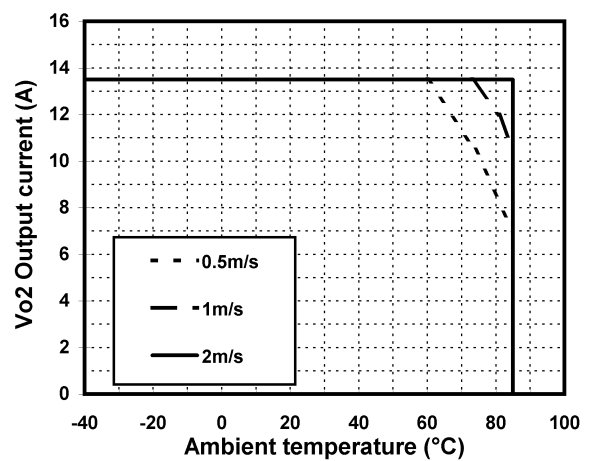
Mounting And Air Direction



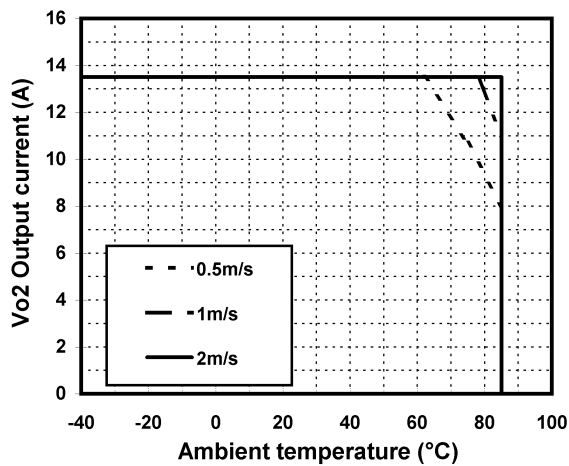
PAQ65D48-5033/C Output current derating curve
 $5V=3.6A$ (fixed), $3.3V=14.2A$ (variable)



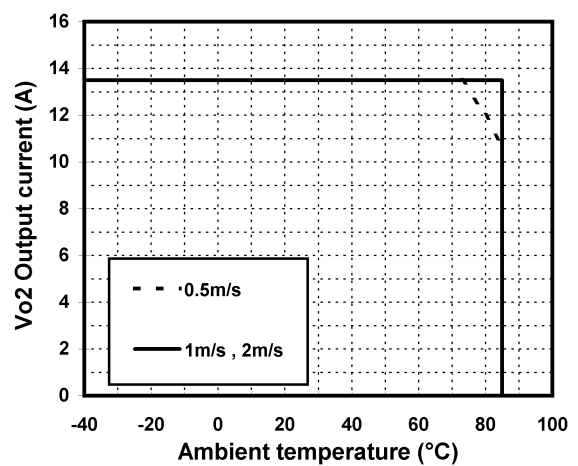
PAQ65D48-3325/C Output current derating curve
 $3.3V=4.5A$ (fixed), $2.5V=13.5A$ (variable)



PAQ65D48-3318/C Output current derating curve
 $3.3V=4.5A$ (fixed), $1.8V=13.5A$ (variable)



PAQ65D48-2518/C Output current derating curve
 $2.5V=4.5A$ (fixed), $1.8V=13.5A$ (variable)



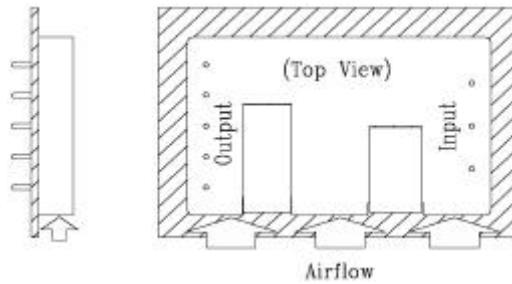
Output Derating Curve

PA566-01-04/C-B

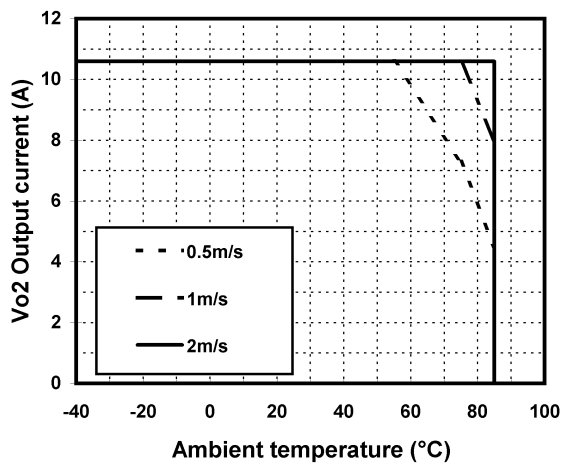
Condition

- i) $V_{in} = 48V$
- ii) I_{o1} : PAQ65D48 -5033 = 6A (fixed)
 I_{o1} : Other models = 50% Rated Current (fixed)
- iii) Derating is done by reducing I_{o2} current

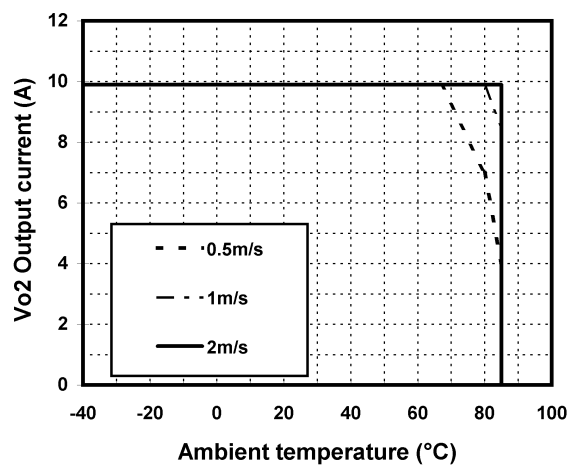
Mounting And Air Direction



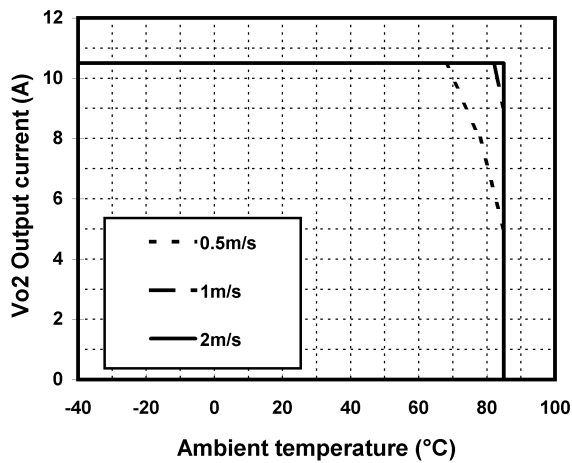
PAQ65D48-5033/C Output current derating curve
 5V=6A(fixed), 3.3V=10.6A(variable)



PAQ65D48-3325/C Output current derating curve
 3.3V=7.5A(fixed), 2.5V=9.9A(variable)



PAQ65D48-3318/C Output current derating curve
 3.3V=7.5A(fixed), 1.8V=10.5A(variable)



PAQ65D48-2518/C Output current derating curve
 2.5V=7.5A(fixed), 1.8V=10.5A(variable)

