ETA-USA
The Power Professionals

AOJS240 — 240W AC/DC

Features
- User selectable input voltage
- Over voltage protection
- Overcurrent protection
- Inrush Current Limit
- **4 Yr warranty**

	MODEL/CHANNEL	Unit	AOJS240-3.3	AOJS240-5	AOJS240-9	AOJS240-12	AOJS240-15	AOJS240-24	AOJS240-48
OUTPUT	Nominal Voltage	V	3.3	5	9	12	15	24	48
	Current	A	48	48	26.7	20	16	10	5
	Rated Power	W	158	240	240	240	240	240	240
	Line Regulations	mV	20	20	48	60	60	96	192
	Load Regulations	mV	40	40	96	120	120	192	384
	Temperature Drift	mV	50	75	135	180	150	240	480
	Ripple & Noise(pk-pk) (*1)	mV	120	120	150	150	150	150	250
	Turn-on Time typ.	ms	800 max (AC IN 100V, Io=100%)					1500(AC IN 100V, Io=100%)	
	Hold-up Time typ.	ms	14 (AC IN 110/220V, Io=100%)					15(AC IN 100V, Io=100%)	
INPUT	Voltage Currency	V	AC100-120/200-240(AC88-132/176~264), 50/60Hz(47-440Hz) or DC240-370(User selectable)						
	Current Typical 110V	A	5.5 (Io=100%)						
	Current Typical 220V	A	2 (Io=100%)						
	Efficicncy Typ. 110V	%	73	78	83	83	83	86	86
	Efficicncy Typ. 220V	%	73	78	83	83	83	86	86
	Inrush Current Typical 110V	A	40 (Ta=25°C Cold Start)						
	Inrush Current Typical 220V	A	40 (Ta=25°C Cold Start)						
Function	Over Voltage Protection	V	Works at 115~140% of rating, recover automatically						
	Over Current Protection (*2)	A	Works @110% of rating, Protection type: recover automatically						
	Remote Sensing	-	Available						
	Remote ON.OFF	-	Available						
	Cooling/O.T.P	-	Convection cooling						
Electrical Isolation	Input - Output	-	AC 3KV 1min., cut-off: 20mA / DC 500V 100 MΩ						
	Input - F.G	-	AC 2KV 1min., cut-off: 20mA / DC 500V 100 MΩ						
	Output - F.G	-	AC 0.5 KV 1min., cut-off: 100mA / DC 500V 100 MΩ						
Environment	Operating temp. & Hum.	-	-25~70°C with derating 20~90% RH (non-condensing)						
	Storage temp. & Humidity	-	-40~85°C, 20~90% RH (non-condensing)						
	Vibration	-	10~55Hz @ 1G 3 minutes PERIOD, 30 minutes along X,Y & Z axis						
Dimension	Size(LxWxH)/Weight	mm/g	201Lx98Wx38H/700						
	Safety	-	Approved						
	Emission	-	Compiles with EN55022-B, FCC-B, EN55011						

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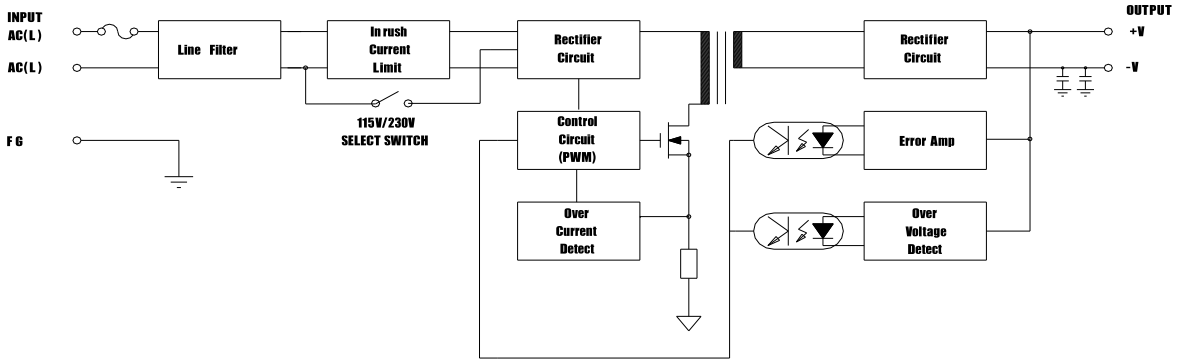
AOJS-240 240W Power Supply

1. BLOCK DIAGRAM



Mark Pin	Connection Function	FUNCTION
L	AC Live line	SMPS AC input Terminal (Fuse in Line)
N	AC Neutral line	SMPS AC input Terminal
F.G	Frame ground	SMPS AC Grounding
+V	DC Output (+)	DC Output (+) Terminal
−V	DC Output (−)	DC Output (−) Terminal

3-1. Adjustable output voltage range

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o Output voltage can be adjustable within ±10% but it could cause malfunction if it is out of Adjustable range

3-2. O.C.P : Over Current Protection

Over current protection circuit is to be in operation to cut off the output in order to protect SMPS if output current exceeds over 110% of rated output current due to malfunction of application system or short-circuit of external connection.

3-3. O.V.P : Over Voltage Protection

o Over voltage protection circuit is to be in operation to cut off the output in order to protect SMPS if output voltage exceeds over 115% of rated output voltage or reversal voltage occurs.

o Over voltage protection feature is to be off, once the system is restored after the problem for malfunction is resolved, followed by cutting off AC input power for 3 minutes. If output voltage is NOT restored to normal, however, it is highly recommended to consult with personnel at customer support to monitor possible internal damage to the product.

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4. Series operation / Parallel operation

4-1. Both connection systems as shown at Figure 1 or Figure 2 can be used during series operation.

4-2. In parallel operation A at Figure 4, current capacity cannot be increased, while it should be used for backup only. Moreover, diode that is to be added during parallel operation should be selected after considering its voltage drop (Vf), output voltage (Vo) and current capacity (Io).

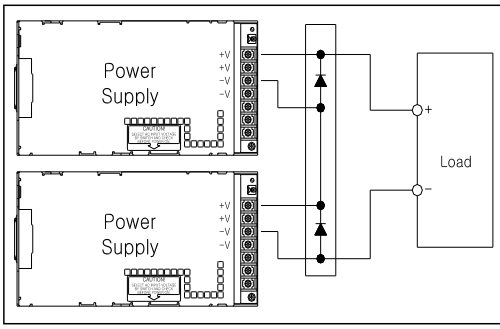

Fig 1. Series operation A

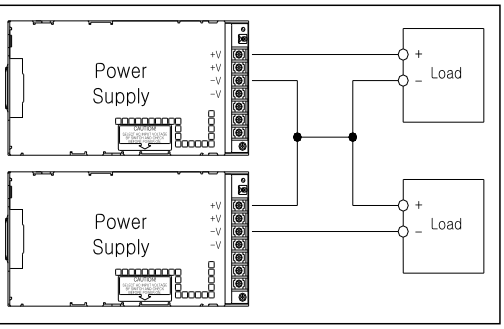

Fig 2. Series operation B

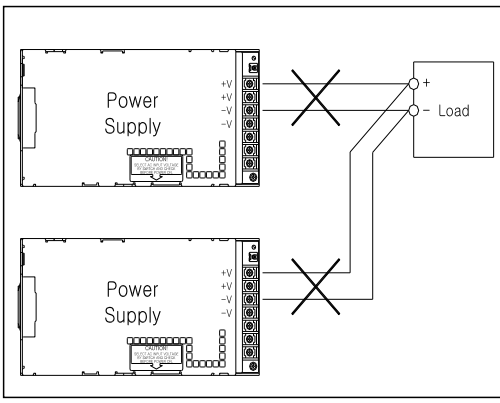

Fig 3. Parallel operation A (X)

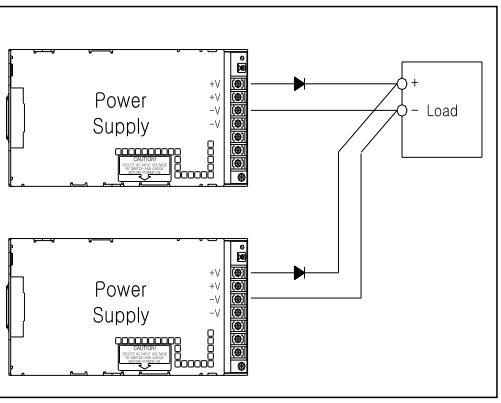

Fig 4. Parallel operation B (Back up)

5. Mounting method

5-1. It should be mounted as follow in the consideration of air cooling

o Mounting method should be considered with airflow

o Leave enough spaces between units when several units mounted togather

o Forced air cooling makes protection against heat better

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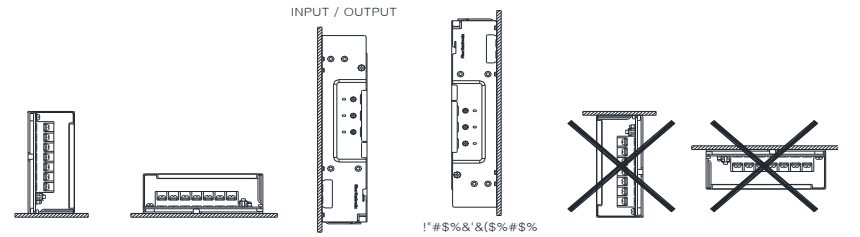
o Life span of The air cooling fan for AOJS240 is approximately 50,000 Hrs at 25°C

(Notice) the expected life span would be shorter when ambitent temperature is over 25℃



(1) MOUNT A (2) MOUNT B (3) MOUNT C (4) MOUNT D (5) Don't USE (6) Don't USE

<Fig 5. Installation method>

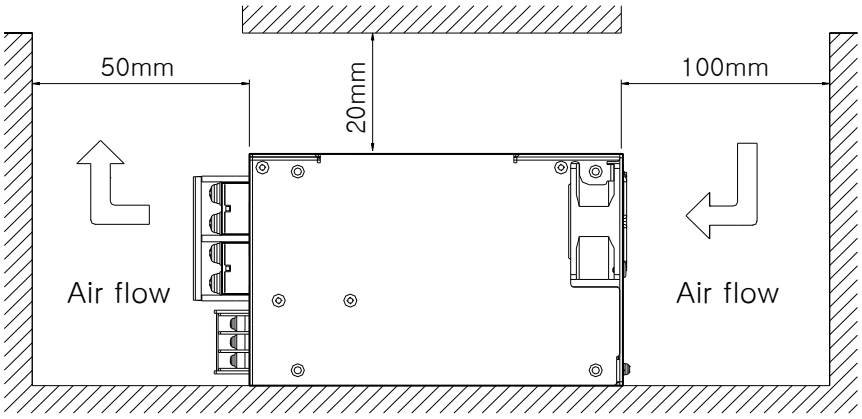


Fig 6.

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o Please refer to below Graph when Output derating curve is applied at AC95V input voltage.