ETA-USA

The Power Professionals

AOJS150 — 150W AC/DC

Features

Inrush Current Limit
Wide Input voltage range
User selectable input 100-240 VAC
Over voltage protection
Overcurrent protection

3 Yr warranty

MODEL/CHANNEL		Unit	AOJS150-3.3	AOJS150-5	AOJS150-9	AOJS150-12	AOJS150-15	AOJS150-24	AOJS150-48
OUTPUT	Nominal Voltage	V	3.3	5	9	12	15	24	48
	Setting Voltage Range	V	3.2~3.4	4.9~5.1	8.9~9.1	11.7~12.2	14.85~15.15	23.76~24.24	47.5~48.5
	Current	A	30	26	16.5	12.5	10	6.5	3.3
	Rated Power	W	99	130	149	150	150	156	158
	Line Regulation	mV	17	25	45	60	75	120	250
	Load Regulation	mV	66	50	90	60	75	120	240
	Temperature Drift	mV	50	75	135	180	225	360	720
	Ripple & Noise(pk-pk) (*1)	mV	80	80	120	120	120	120	200
	Turn-on Time typ.	ms	1500 max (AC IN 100V, Io=100%)						
	Hold-up Time typ.	ms	14 (AC IN 100V, Io 100%)						
INPUT	Voltage, Frequency	V	AC100–120/200-240V (AC88~132/176~264VAC), 50/60Hz(47-440) or DC240 370V (User selectable)						
	Current Typ 110V 220V	A	2.2 (Io=100%) 1.2 (Io=100%)						
	Efficiency 110V 220V	%	74	78	80	83	85	85	87
	Inrush Current Typ. 110V 220V	A	20A(AC IN 110V, Io=100%); 40A(AC IN 220V, Io=100%), Cold Start						
Function	Over Voltage Protection	V	Works at 115~140% of rating, recover automatically						
	Over Current Protection (*2)	A	Works @110% of rating.Recovers automatically						
	Remote Sensing	-	Available						
	Remote ON.OFF	-	Available						
	Cooling / O.T.P	-	Convection cooling						
Electrical Isolation	(1) Input - Output	-	AC 3 KV 1 min., cut-off: 20mA / DC 500V 100 MO						
	(2) Input - F.G	-	AC 2 KV 1 min., cut-off: 20mA / DC 500V 100 MO						
	(3) Output - F.G	-	AC 0.5 KV 1 min., cut-off: 100mA / DC 500V 100 MO						
Environment	Operating temp. & Humidity	-	-10 ~+70°C with derating. 20~90% RH (NON condensing)						
	Storage temp. & Humidity	-	-20 ~75°C. 20~90% RH (NON condensing)						
	Vibration	-	10~55Hz @ 1 G 3 minutes PERIOD, 30 minutes along X,Y & Z axis						
Dimension	Size(WxLxH) / Weight	mm/g	159Lx 98Wx38H/600						
Safety	CB, CE, RU	-	Approved						
Emission	Conducted Emission	-	Complies with EN55022-B, FCC-B, EN55011						

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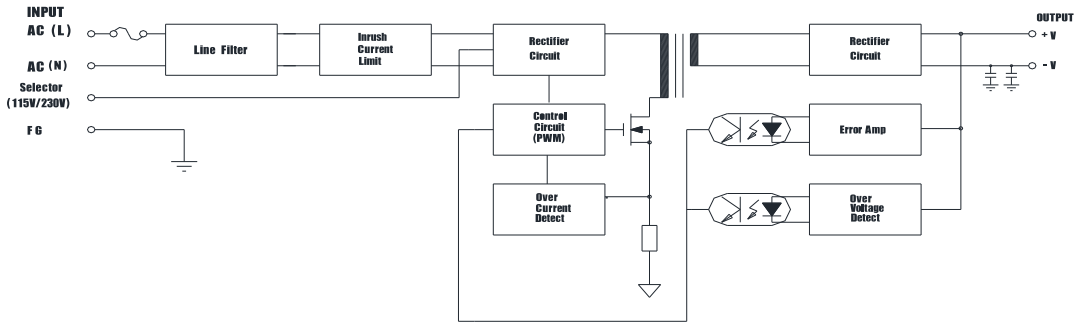
Block Diagram 150W



Terminal Connection 150W

Mark	*Pin Connection*	*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, CASE Grounding
+V	DC Output (+)	DC (+) output Terminal
-V	DC Output (-)	DC (-) output Terminal

Adjustable Output Voltage Range 150W

• Output voltage can be adjustable within ±5% but it could cause malfunction if it is out of Adjustable range

Over Current Protection 150W

• 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.

Over Voltage Protection 150W

• 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.
• 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.

AOJS150 150W

4. Series operation / Parallel operation
4-1. Both connection systems as shown at A (Fig 1.) or B (Fig 2.) can be used during series operation.
User's guide
4. Series operation / Parallel 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).

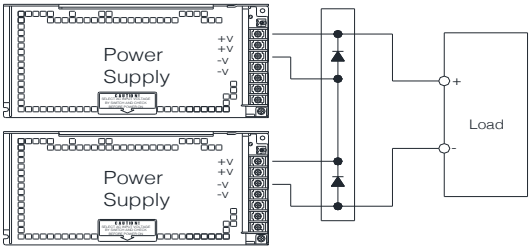


Fig 1.

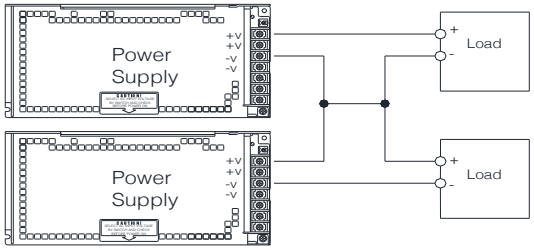


Fig 2.

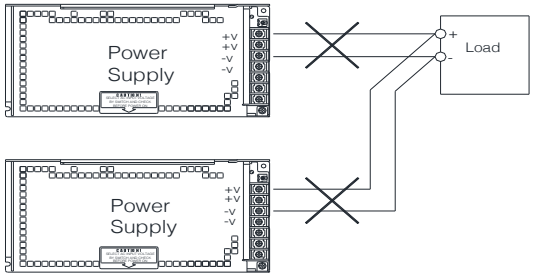


Fig 3.

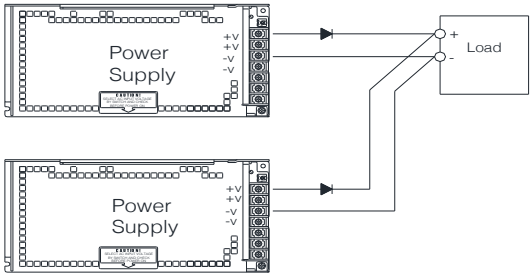
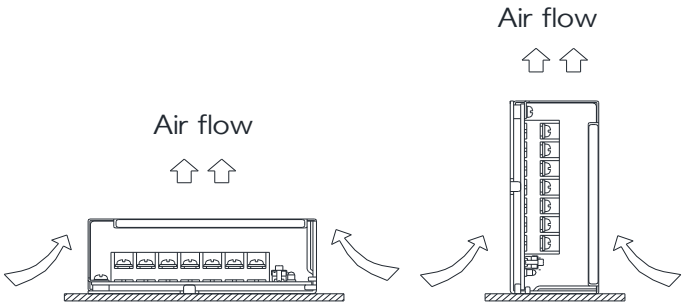


Fig 4.

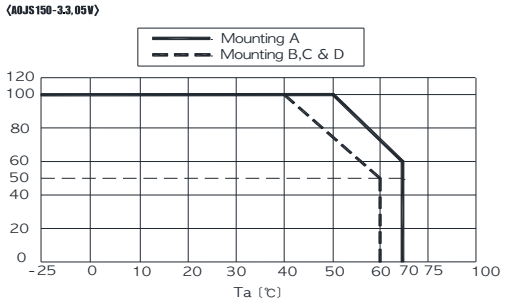
Mounting Method 150W

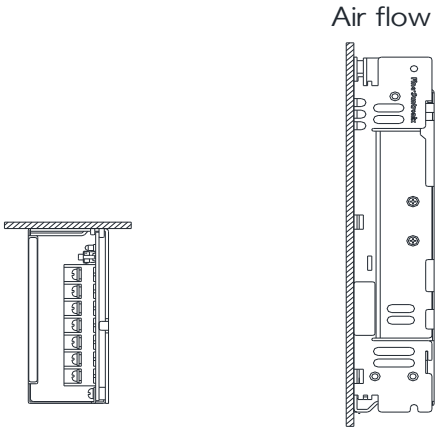
It should be mounted as follow in the consideration of air cooling
• Mounting method should be considered with airflow
• Leave enough spaces between units when several units mounted togather
• Forced air cooling makes protection against heat better

Mounting Method 150W

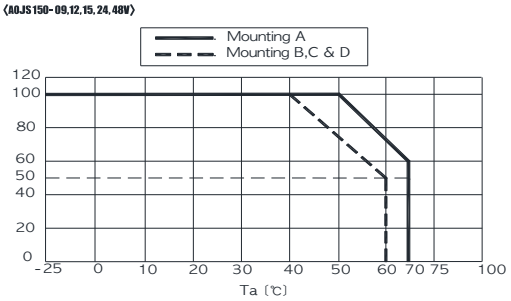


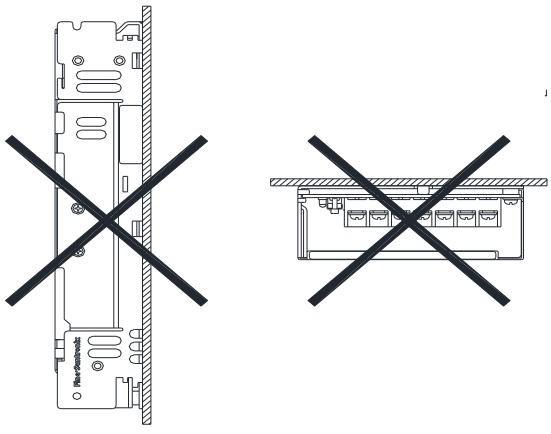
(1) MOUNT A (2) MOUNT B





(3) MOUNT C (4) MOUNT D



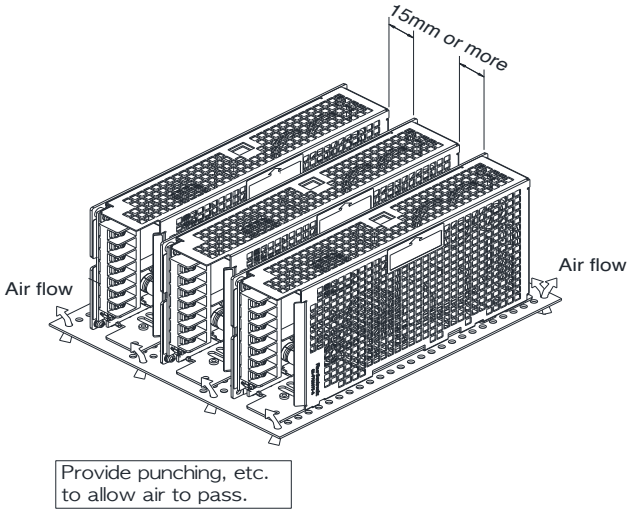


INPUT / OUTPUT

(5) Don't USE (6) Don't USE

Fig 1.

Basic Installation 150W



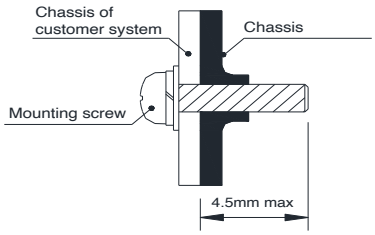
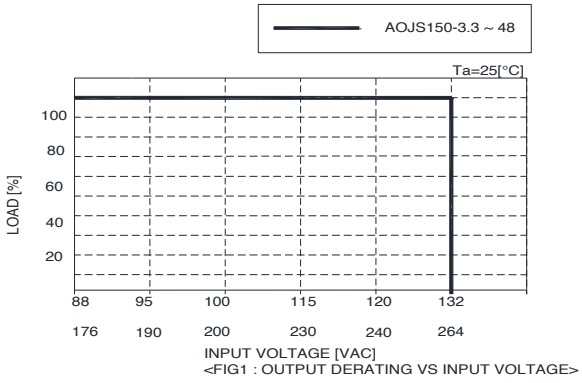


Fig 3. Screw limitation

Output Derating Curve 150W

Output derating curve should be considered based on existence of top case and installation method.



<FIG1 : OUTPUT DERATING VS INPUT VOLTAGE>

Caution 150W

• Please confirm if the capacity of the product is suitable for your intended use before putting it in use.
• Only the rated input voltage specified on the product should be used.
• Only the wires with rated capacity should be connected to this product, as allowable voltage and current is varied according to each type of wire.
• Ground terminal of this product must be grounded before use to prevent electric shock or electromagnetic interference.
• Be cautious to keep the product clean as foreign subject near input & output terminal or inside of the product could cause serious damages.
• For the purpose of safety as well as reliability of the product, please avoid using the product at the following sites:
- A place near water or fire
- A place with high room temperature and poor ventilation
- A place with a presence of foreign subject or dust
- A place near volatile or flammable compounds
- A place with high humidity
- A place vulnerable for vibration or shock