AOPS100 Series 100 Watt AC/DC Power Supply

- Universal Input
- Inrush current protection
- Over Voltage Protection
- Over Current Protection
- UL, CE recognized
- 2 year Warranty

RoHS

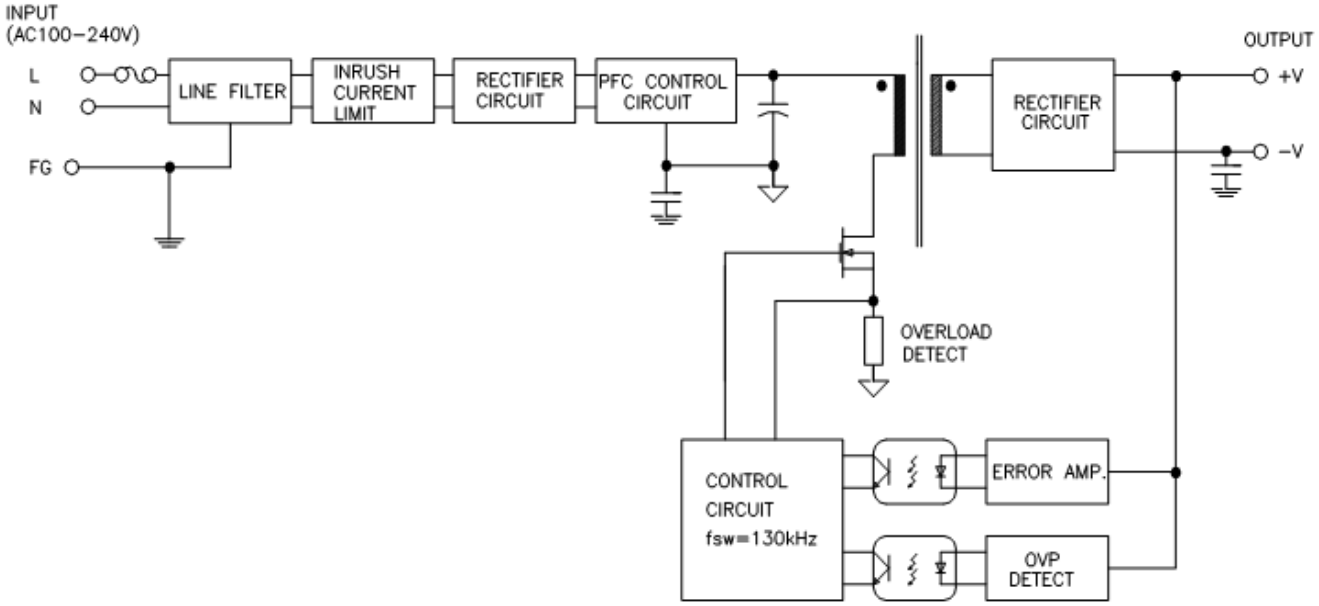
		UNIT	
INPUT	**Voltage/Freq**	V	AC100V - 240V (AC85V ~ 264V or DC125V~ 370V), 50 / 60Hz (47 ~ 440Hz) Universal Input voltage
	Current Typ. 110V	A	0.9 1.3
	220V		0.45 @ 3.3 VDC 0.65 all other voltages
	Power Fac 110V	-	0.99
	220V		0.95
	Inrush Current	A	110V 20 (Ta=25℃ , Io=100% at cold Start); 220V 40 (Ta=25℃ , Io=100% at cold Start)
	Leakage	mA	110V=0.4 220V=0.75

		UNIT	AOPS100-3.3	AOPS100-5	AOPS100-9	AOPS100-12
OUTPUT	**Nominal Voltage**	VDC	3.3	5	9	12
	Efficiency typ	%	77 80	81 83	81 85	82 86
	Current	A	20	20	11.0	8.4
	Line Regulation	mV	25	25	45	60
	Load Regulation	mV	50	50	90	120
	Ripple	mVp-p	80	80	90	120
	Ripple Noise maximum	mVp-p	120	120	140	170
	Temperature Drift [0-+50C]	mV	50	75	135	180
	Rise Time	mS	1000 max [AC IN 85 I_o =100%]			
	Hold up Time	mS	17 typ [AC IN 85V,I_o =100%]			
	OVP	-	3.8-4.6	5.7-7.0	10.3-12.6	13.8-16.8
	OCP	-	22.0-29.0	22.0-29.0	12.1-16.0	9.2-12.2
	Remote ON OFF		-	-	-	-
	Remote Sensing		-	-	-	-
	Power Fail Signal		-	-	-	-
	Parallel/Series Operation		Series operation possible			
	Cooling OTP		Convection Cooling			

		UNIT	AOPS100-15	AOPS100-24	AOPS100-48	
OUTPUT	**Nominal Voltage**	VDC	15	24	48	
	Efficiency typ	%	81 85	81 85	82 85	
	Current	A	6.7	4.2	2.1	
	Line Regulation	mV	75	120	240	
	Load Regulation	mV	150	240	480	
	Ripple	mVp-p	150	240	480	
	Ripple Noise maximum	mVp-p	200	290	530	
	Temperature Drift [0-+50C]	mV	225	360	720	
	Rise Time	mS	1000 max [AC IN 85 I_o =100%]			
	Hold up Time	mS	17 typ [AC IN 85V,I_o =100%]			
	OVP	-	17.2-21.	27.6-33.6	55.2-67.2	
	OCP	-	7.3-9.7	4.6-6.1	2.3-3.1	
	Remote ON OFF		-	-	-	
	Remote Sensing		-	-	-	
	Power Fail Signal		-	-	-	
	Parallel/Series Operation		Series operation possible			
	Cooling OTP		Convection Cooling			

Isolation	**Input-Output**	AC 3,000V 1 minute current 20mA, DC 500V 50MΩ (At room temperature & Humidity)
	Input-Case	AC 2,000V 1 minute current 20mA, DC 500V 50MΩ (At room temperature & Humidity)
	Output-Case	AC 500V 1 minute current 100mA, DC 500V 50MΩ (At room temperature & Humidity)
Environment	**Operating temp/hum**	-10 ~ +70 , 20 ~ 90% RH(Non condensing)
	Storage temp/hum	-20 ~ +75 , 20 ~ 90% RH(Non condensing)
	Vibration	10 ~ 55Hz at 1G, 3 minutes period, 30 minutes along X, Y and Z axis
	Impact	10G for 20ms once on each X, Y and Z axis
Safety	**UL/CE**	UL 60950-1, 2nd Ed+AM1+AM2
	Line Emission	, EN55022-A
Size	**MM/G**	82x37x165 400 grams

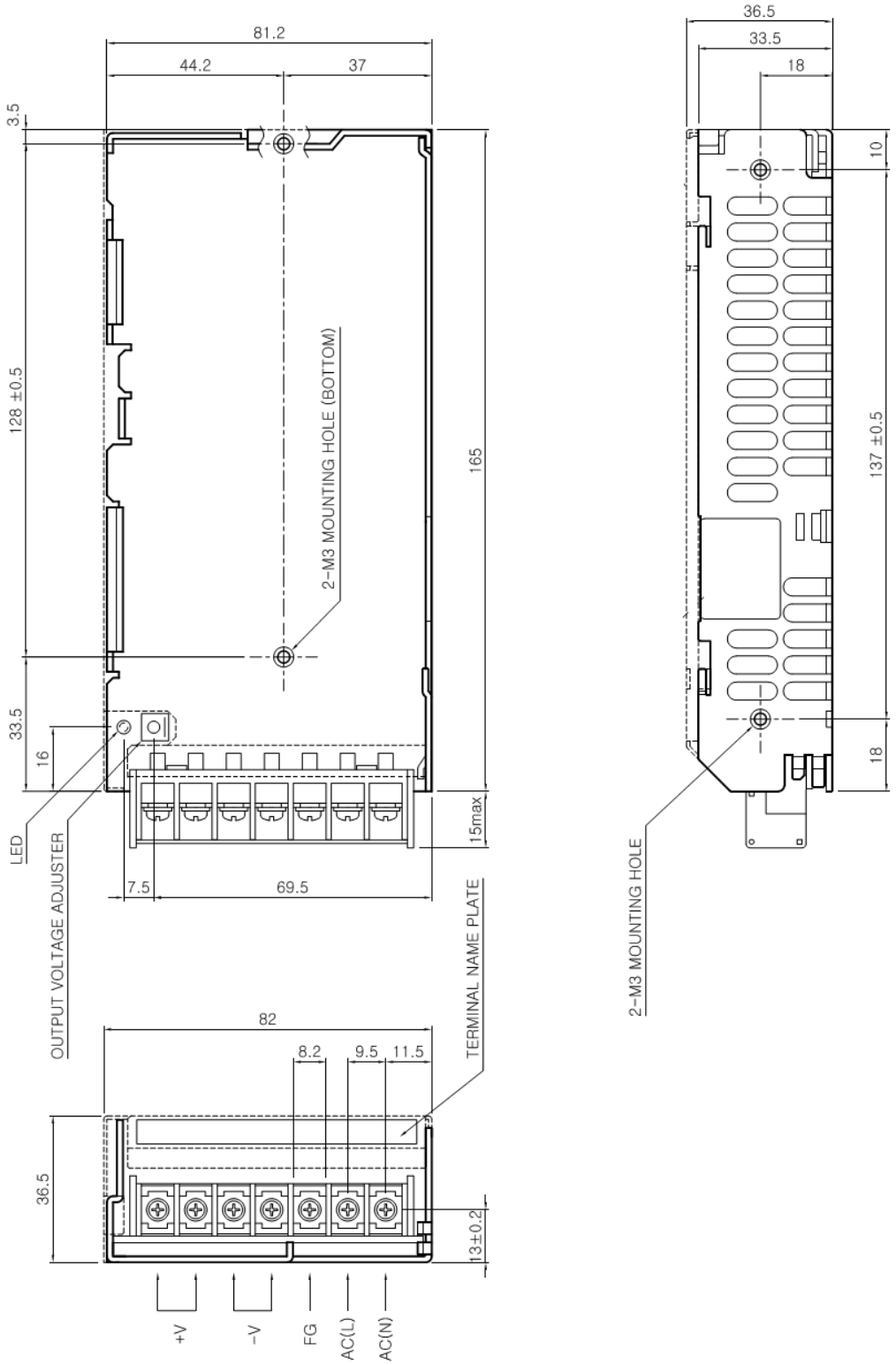
BLOCK DIAGRAM



Terminal Output

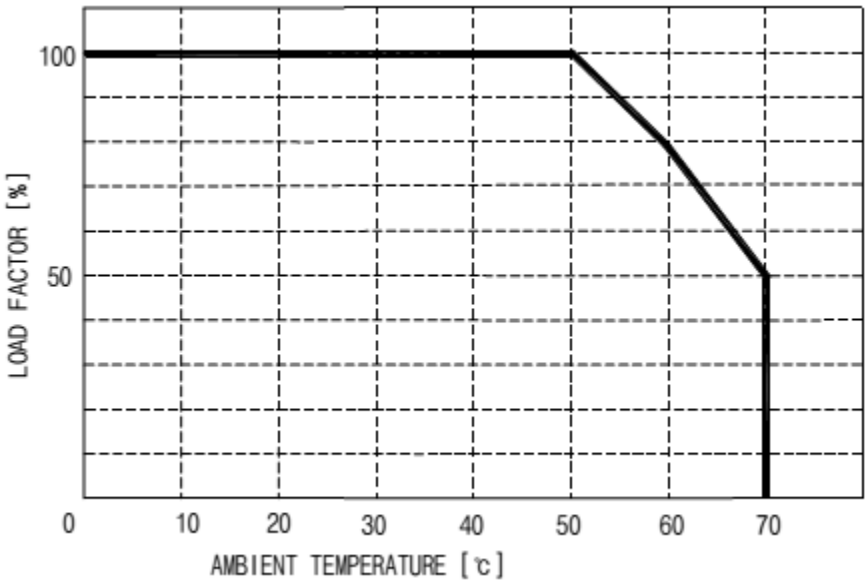
Mark	Pin Connection	Function
L	AC L	AC Terminal (Fuse in Line)
N	AC N	AC Terminal
F.G	Frame ground	AC CASE
+V	DC Output (+)	DC (+) Terminal
-V	DC Output (-)	DC (-) Terminal

DIMENSIONAL DRAWING (mm)

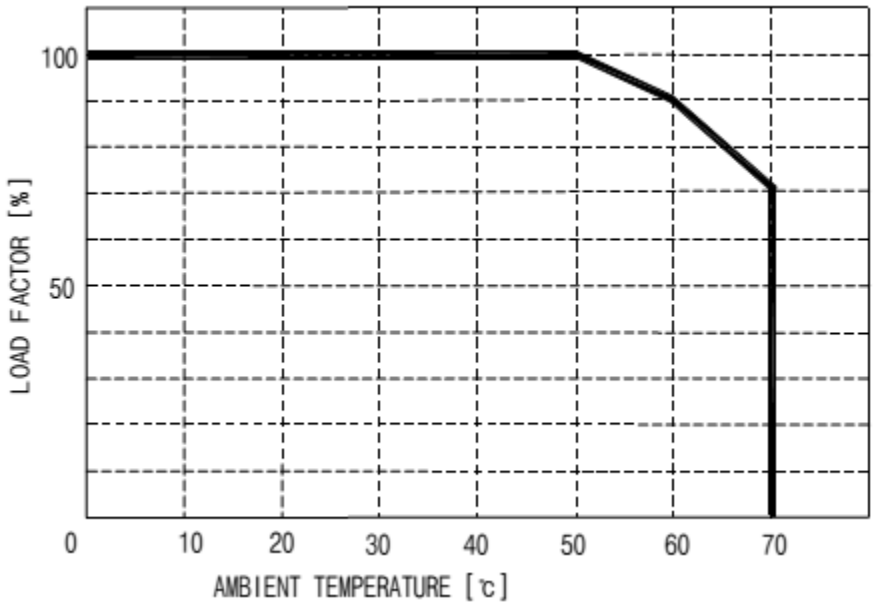


OUTPUT DERATING CURVE AND RECCOMENDED MOUNTING DIAGRAM

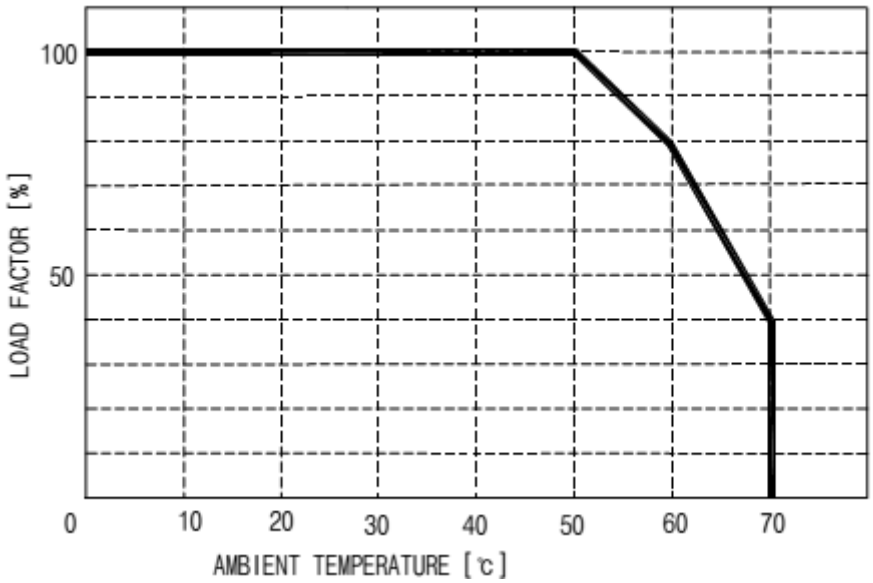
AOPS100-5

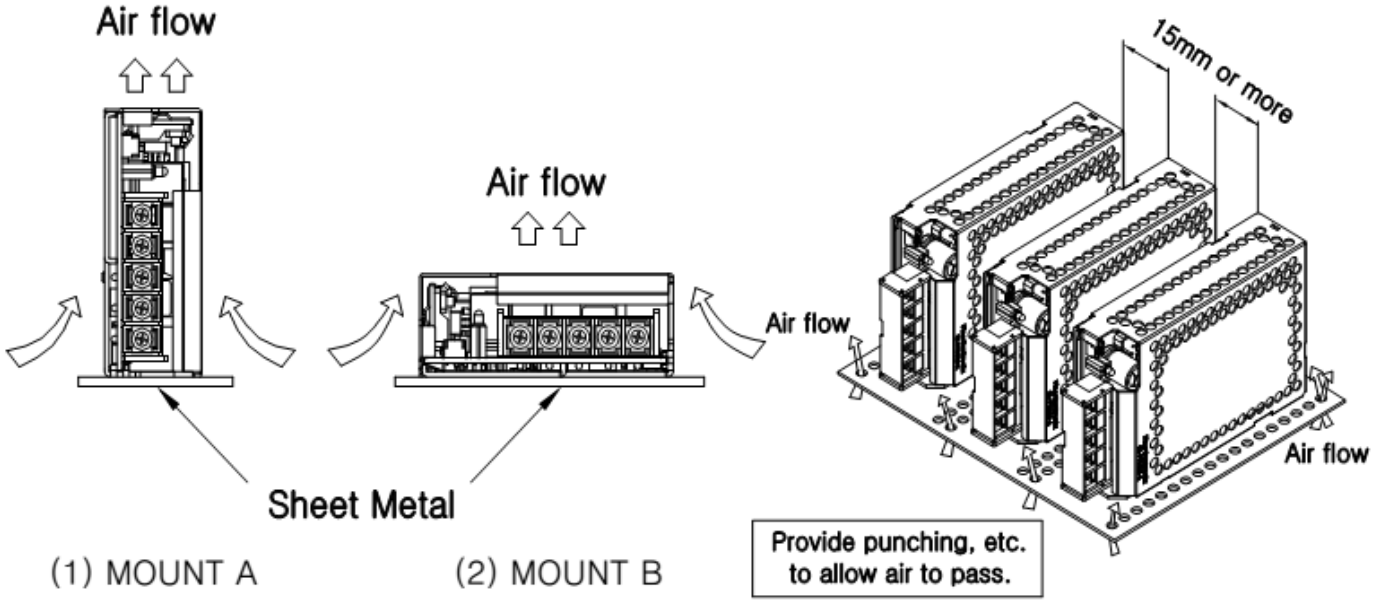


AOPS100-12

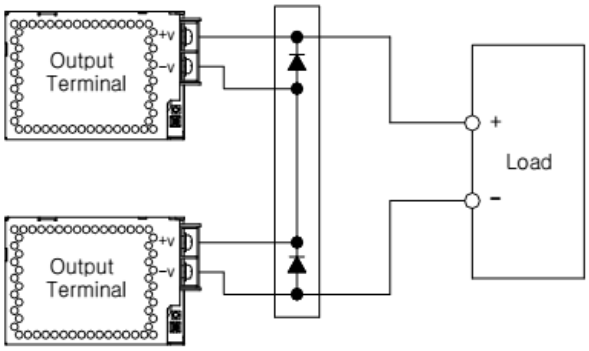


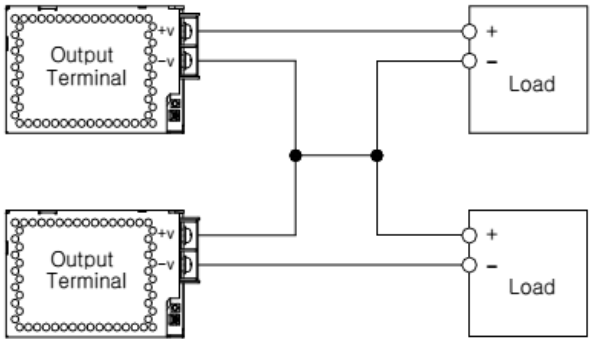
AOPS150-24


100
50
0
LOAD FACTOR [%]
10
20
30
40
50
60
70
AMBIENT TEMPERATURE [℃]


Air flow
Air flow
Air flow
15mm or more
Air flow
Sheet Metal
(1) MOUNT A
(2) MOUNT B
Provide punching, etc.
to allow air to pass.

SERIES WIRING DIAGRAM





Mouser Electronics

Authorized Distributor

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ETA-USA:

AOPS100-24 AOPS100-48 AOPS100-3.3 AOPS100-5 AOPS100-9 AOPS100-15 AOPS100-12