48W POWER ADAPTER SINGLE OUTPUT   DA-48 Series

TOP DRIVER®

CE RoHS

■Applications

.Industrial automation machinery
.Industrial control system
.Testing and measuring instruments
.Household appliances
.Led lighting appliances
.Aging equipment
.IT communication equipment

■Features
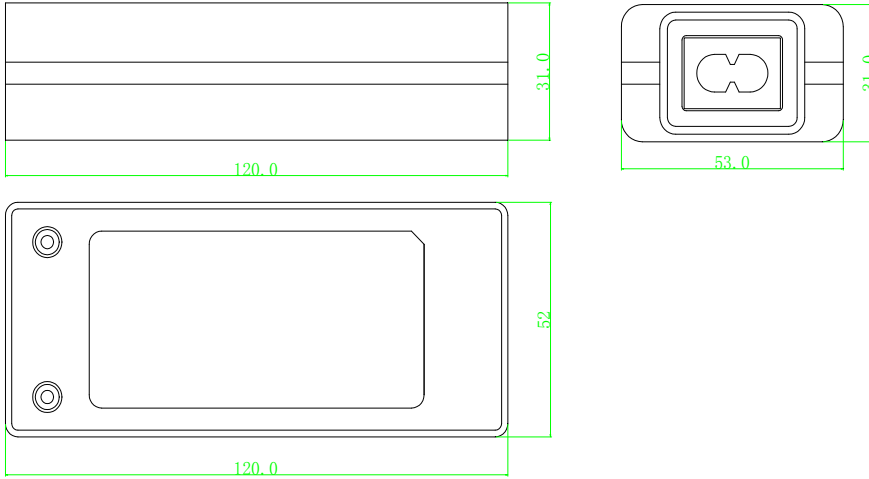
·Universal input voltage
·Protection: short-circuit, overload
·100% full-load aged
·Withstand 300VAC surge input for 5 seconds
·-20～+60℃Working temperature
·5G vibration tested
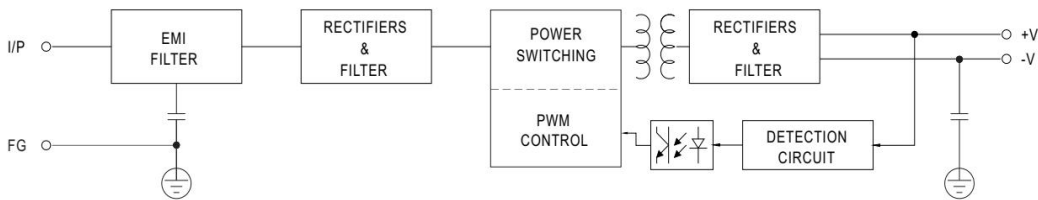·High efficiency, long life span, and high reliability
·3 years warranty

Specifications

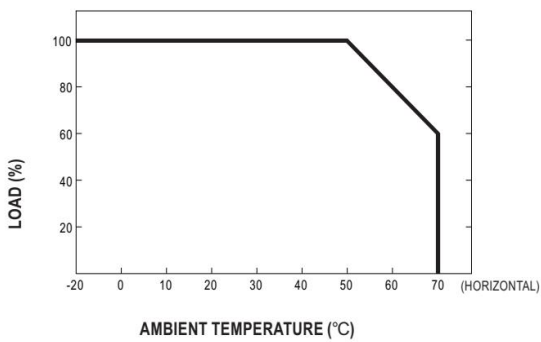|	Product No.	DA-48-12	DA-48-24				
Output	DC voltage	12V	24V				
	Rated Current	4A	2A				
	Current Range	0-4A	0-2A				
	Rated Power	48W	48W				
	Ripple and Noise(Max)Note.2	150mVp-p	240mVp-p				
	Voltage adjustment						
	Voltage Accuracy Note3	±1%	±1%				
	Linear Adjustment Note4	±0.5%	±0.5%				
	Load Adjustment Note5	±0.5%	±0.5%				
	Start and rise time	1000ms,30ms/230VAC 1000ms,30ms/110V					
	Hold time（Typ）	50ms/230VAC 10ms/115AC					
Input	Voltage range	100-240V					
	Frequency range	50-60Hz					
	Efficiency（Typ）	80%	82%				
	AC current（Typ）	0.8A/90V 0.33A/220V					
	Surge current (Typ)	Cold Start：65A/230VAC					
	Current leak	<2mA/240VAC					
Protection	Overload	>105% rated output power					
		Protection type : Hiccup mode, recovers automatically after fault condition is removed					
	Overvoltage						
	Overheat						
Environment	Working temp.	-20～+60℃(Refer to the tenuation curve)					
	Working humidity	20～90% RH, without condense					
	Storage temp & hmdty	-40～+80℃					
	Temp. coefficient	±0.03%/℃（0～50℃）					
	Vibration proof	10～500HZ,5G 10min / cycle，X、Y、Z axes 60 min each					
Safety reg. & EMC (Note.6）	Safety regulation	GB195110.1-2004/IEC61347-1:2003 CE(EMC+LVD)					
	Voltage proof	I/P-O:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC					
	insulation resistance	I/P-O/P, I/P-FG,O/P-FG:100M Ohms/500VDC/25℃/70% RH					
	EMC irradiation	EN 55032A:2006;EN61000-3-2:1995+A2:2005					
	EMC disturbance proof	EN 61000-3-2:2006;					
	Dimensions	120*53*31mm					
	Packing	0.25Kg/PCS;50PCS/12.5kg					
Notes:	1. All parameters NOT specially mentinoed are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2.Ripple and noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with a 0.1µF and a 47 µF parallel capacitor. 3.Accuracy: including preset errors, linear adjustment rate and load adjustment rate. 4.Linear adjustment: taken under rated load from low voltage to high voltage. 5.Load adjustment: taken under 0~100% of rated load. 6. The power supply is taken as part of the whole system, and needs to be confirmed with final equipment for EMC.						

■**Mechanical Specification**

31.0

120.0

53.0

31.0

52

120.0

■**Block Diagram**

I/P

EMI FILTER

RECTIFIERS & FILTER

POWER SWITCHING

RECTIFIERS & FILTER

+V
-V

FG

PWM CONTROL

DETECTION CIRCUIT

■**Derating Curve**

LOAD (%)

100
80
60
40
20

-20 0 10 20 30 40 50 60 70 (HORIZONTAL)

AMBIENT TEMPERATURE (℃)

■**Output Derating VS Input Voltage**

LOAD (%)

100
90
80
70
60
50
40

85 95 100 115 120 140 160 180 200 220 240 264

INPUT VOLTAGE (VAC) 60Hz