

APPROVAL SHEET

Customer: Ideal Power

Part No.: _____

Description: AC/AC ADAPTOR

Model No.: 77DB-12-24

Designed No.: S2110026

Date: 2025/06/20

Customer:	Ideal Power		
Approved By	Approved By	Checked By	Designed By

Ref. No:	Date	Description
1-0	2021/11/03	NEW
2-0	2025/06/20	Modify input voltage and no-load voltage

HEAD OFFICE:

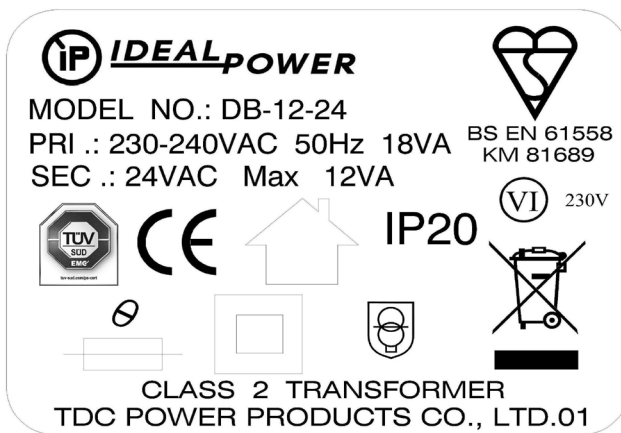
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Ideal Power LTD

77DB-12-24

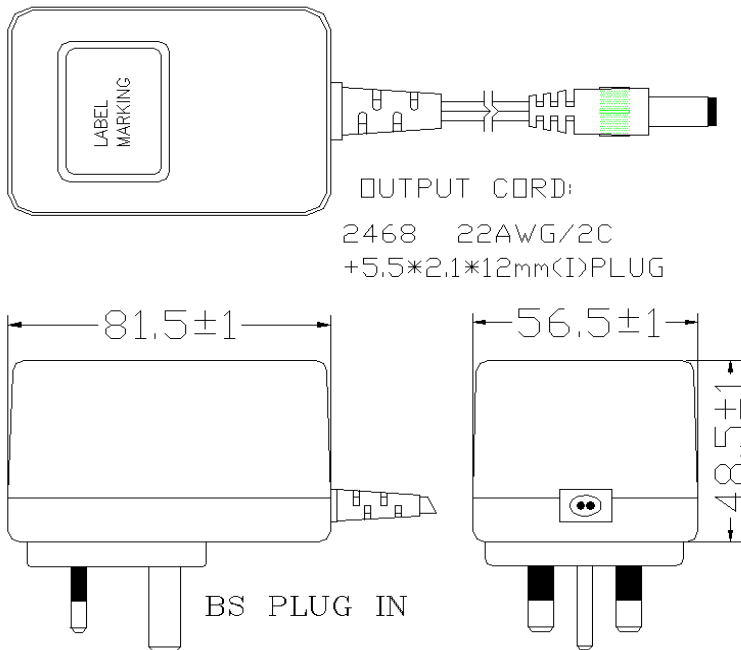
INPUT VOLTAGE 230~240VAC
OUTPUT VOLTAGE 24VAC

ELECTRICAL & MECHANICAL SPECIFICATION



ELECTRONICAL SPECIFICATION

Input Voltage	230	Volts
Frequency (Hz)	50	Hz
Power Rated (W)	18	W
Exciting Current With No load	70	mA Max
Exciting Current With Full load	120	mA Max
Output Voltage	24.0	Volts±5%
Output Current	0.5	Amp
Output Voltage Without Load @ 240Vac	31.0	Volts Max



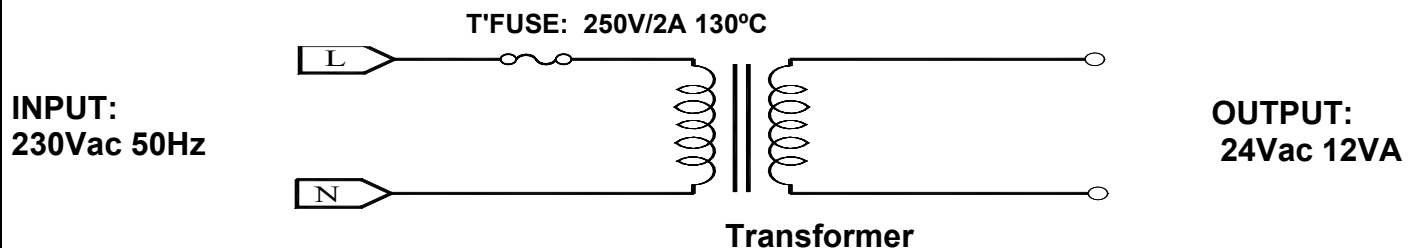
HI-POT :

Test Time	1	Min
PRI TO SEC	4200	Volts
PRI TO CORE	4200	Volts
SEC TO CORE	2100	Volts
Efficiency	70	%
Insulation Class	B (130)	°C

MECHANICAL SPECIFICATION

Dimensions (L*W*H)	81.5*56.5*48.5	mm
Weight	385	g
Environment:		
Operating Temperature	-10 To 40	°C
Storage Temperature	-20 To 70	°C
Relative Temperature	40°C±2°	
RELATIVE HUMIDITY	90% RH	

ELECTRICAL CIRCUIT





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CONSTRUCTION DATA FORM

ITEM	DESCRIPTION	MATERIAL	APPROVED BY
1.	ENCLOSURE	NORYL FLAME	UL
2.	LABEL	POLYESPER	UL
3.1.	BOBBIN	NYLON-66	UL
3.2.	WINDING	MAGNET WIRE	UL
3.3.	THERMAL FUSE	250V/2A 130°C	VDE
3.4.	MYLAR TAPE	POLYESTER FILM	UL
3.5.	CORE	SILICON STEEL	
3.6.	HEAT SHRINKABLE TUBING	600V/125°C	UL
3.7.	POLY SWITCH	RUE135	UL
4.	LEAD WIRE	1617 22AWG	UL
5.	OUTPUT CABLE	2468 22AWG*2C	UL

Ideal Power LTD
77DB-12-24
INPUT VOLTAGE 230VAC
OUTPUT VOLTAGE 24VAC
TEST:

1. Test sample under input 230v/50Hz and output with rated load to operate at least 30 mins/測試樣品在輸入 230V/50Hz條件下,輸出帶額定負載,工作至少30分鐘.
2. Then, adjust input under 230V/50Hz and output with 100%,75%,50%,25% rated load to test output voltage,output current, input power and input current./然後調整輸入230V/50Hz條件下,分別在100%,75%,50%,25%的額定負載和空載條件下,測試輸出電壓,輸出電流,輸入功率,輸入電流.
3. Calculate average efficiency per foler kind of rated load./計算四種負載條件下的平均效率.

Sample No.1	No Load	Active Power Measurements/有效功率測試						
Percent of Rated Load/ 額定負載之百分比	0%	25%	50%	75%	100%	Average/ 平均值		
AC Input Voltage/ 輸入電壓(V)	230	230	230	230	230			
AC Input Frequency/ 輸入頻率	50	50	50	50	50			
AC Input Power/ 輸入功率(W)	0.18	3.34	6.87	11.04	16.37			
AC Input Current/ 輸入電流(mA)	1.47	14.6	30	48.12	71			
AC Output Current/ 輸出電流(mA)		107	227	370	553			
AC Output Voltage/ 輸出電壓(V)		27.8	26.2	24.3	21.7			
AC Output Power/ 輸出功率(W)		3	6	9	12			
Efficiency/ 效率		89.82	87.33	81.52	73.3	82.99		

Sample No.2	No Load	Active Power Measurements/有效功率測試						
Percent of Rated Load/ 額定負載之百分比	0%	25%	50%	75%	100%	Average/ 平均值		
AC Input Voltage/ 輸入電壓(V)								
AC Input Frequency/ 輸入頻率								
AC Input Power/ 輸入功率(W)								
AC Input Current/ 輸入電流(mA)								
AC Output Current/ 輸出電流(mA)								
AC Output Voltage/ 輸出電壓(V)								
AC Output Power/ 輸出功率(W)								
Efficiency/ 效率								

A. CORE LOSS /最大鐵損 : 0.21WATT MAX, (AT 230VAC/50Hz)

B. AVERAGE EFFICIENCY / 平均效率: 89.92% MIN. (AT 230VAC/50Hz)

C. The power supply comply with the requirements of Californian Electricity Commission / 產品符合EUP6級標準.