

Very Low Noise  
AC/DC Switching Power Supply

# DFS150A



DFS150A is a Switching Power Supply designed for applications need low noise.

The resonant switching technology significantly reduces the noise level for your systems.

De-facto standard size & pitch can easily replace your power

supplies without taking extra resources.

This is an ideal solution for low noise, small, light weight and high efficiency power supply applications.

## Features

- Low Ripple & Noise  
30mVp-p (5Vout), 40mVp-p (12, 15, 24 & 48Vout)
- Universal Input
- High Efficiency
- Meet EMC Safety Standards
- RoHS Free, Vinyl Chloride Free,

## Model No.

DFS150A - XX - X

↓      ↘  
G : Remote control / No cover  
F-2 : With cover / No Remote control  
Specify output voltage option 5/12/15/24/48V

## Specification

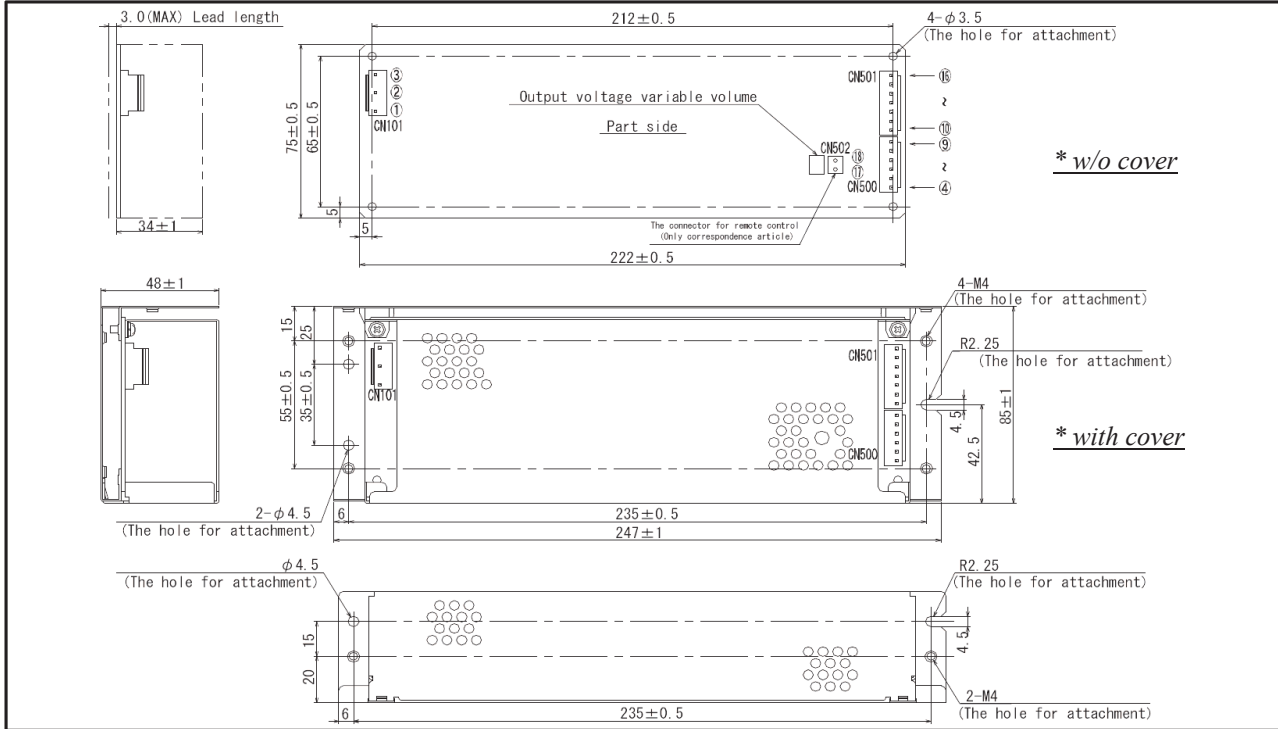
Model Number		DFS150A-5	DFS150A-12	DFS150A-15	DFS150A-24	DFS150A-48		
Input	Input Voltage Range	Rating 100-240Vac Single Phase * Range : 85Vac to 264Vac						
	Frequency Range	Rating : 50/60Hz, * Range : 47Hz to 63Hz						
	Input Current 100/200VAC * 1	1.2A / 0.6A at Full Load		2.0A / 1.0A at Full Load				
	Efficiency * 1	73% / 75%		82% / 84%		82% / 85%	85% / 86%	86% / 88%
	Inrush Current 100 / 200VAC * 1	15A / 30A * When it operates under cold start						
	Leakage Current	0.17mA typ@100Vac, 60Hz / 0.44mA typ@ 240Vac, 60Hz						
	Power Factor [ AC100Vin / 200Vin ]	0.98 / 0.91		0.99 / 0.95				
Output	DC Output Voltage	5V	12V	15V	24V	48V		
	Output Current	16A	12.5A	10A	6.3A	3.2A		
	Maximum Output Power	80.0W	150.0W	150.0W	151.2W	153.6W		
	Line Regulation / Load Regulation [Max]	40mV / 80mV	48mV / 96mV	60mV / 120mV	96mV / 150mV	192mV / 300mV		
	Ripple & Noise * 2	30mVp-p		40mVp-p				
Others	OCP * 3	> 110% ( Shut down output)						
	OVP * 3	> 115% (Shut down output)						
	Remote Control	Available * Option						
	Cooling System	Convection						
Mechanical	Size & Weight	Without cover type : 75 x 37 x 222 mm, 450g (2.95" x 1.46" x 8.74" inch, 0.99 lbs) With cover type : 85 x 48 x 247mm, 800g (3.35" x 1.89" x 9.72" inch, 1.76 lbs)						
	Input & Output Terminal	Connector						
	Noise Immunity	EN61000-4-2, -3, -4, -5, -6, -8, -11						
Others	Conduction Noise	EN55022-B, FCC-B, VCCI-B						
	Safety Certifications	UL60950-1, CSA-C22.2, NO. 60950-1, EN60950-1 * UL File No. E237238						

Environmental Condition	
Operating Temperature / Humidity	- 10 degree C to + 60 degree C * With output / 30%RH to 90% RH * Non Condensing
Storage Temperature / Humidity	- 20 degree C to + 85 degree C / 10%RH to 95% RH * Non Condensing
Vibration Resistance	19.6m/s <sup>2</sup> 10 to 55Hz 1minute Period 1hour for each X, Y, Z direction
Shock Resistance	< 196.1m/s <sup>2</sup> 11ms 1 time for each X, Y, Z direction
Isolation	
Isolation Voltage	Input— Output : 3KVac for 1min Cut off current 20mA * Under normal temp & humidity condition
	Input— FG : 2KVac for 1min Cut off current 20mA * Under normal temp & humidity condition
	Output—FG : 500Vac for 1min Cut off current 20mA * Under normal temp & humidity condition
Isolation Resistance	Input— Output , Input—FG, Output—FG DC500V > 100M ohm

\*1 Conditions: Ta = 25 degree C \*2 JEITA specified measuring method \*3 Upon over voltage or over current conditions, input power must be removed to allow unit reset to occur within 1 minute.  
Note: Derating is required by operating temperature. Follow the overload and specification in manual to avoid the damage of power supply.

<http://www.daitronpower.com>  
[sales@daitronpower.com](mailto:sales@daitronpower.com)

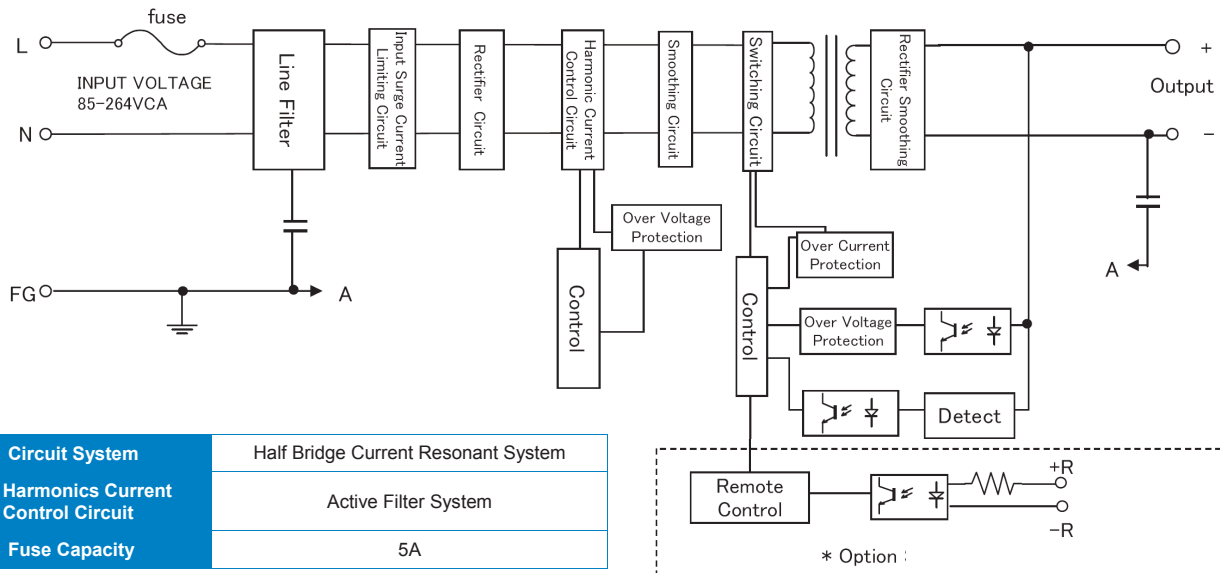
**Mechanical Drawings**



Connector	CN101	Connector	CN500	Connector	CN502	BOM	CN101	CN500	CN501	CN502
1	Input (L)	4 to 9	Output (+)	17	+R : + Remote Control	Connector	B3P5-VH	B6P-VH	B7P-VH	B2B-XH-AM
2	Input (N)	<b>Connector CN501</b>		18	- R : - Remote Control		JST	JST	JST	JST
3	FG	10 to 16	Output (-)			Housing	VHR-5N	CHR-6N	VHR-7N	XHP-2
						Terminal	BVH-21T-P1.1		BXH-001T-P0.6	
							SVH-21T-P1.1		SXH-001T-P0.6	
						Crimping Tool	YC-160R		YC-110R	

- Warning: Large capacitive load should be applied or removed only with NO AC power applied. Large inrush current may result in damage.
- Incorrect operation will damage Power Supply.

**Block Diagram**



• Specifications subject to change without notice