

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.

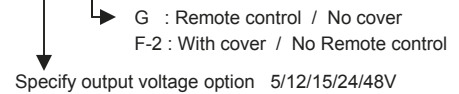
This is an ideal solution for low noise, small, light weight and high efficiency power supply applications.

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



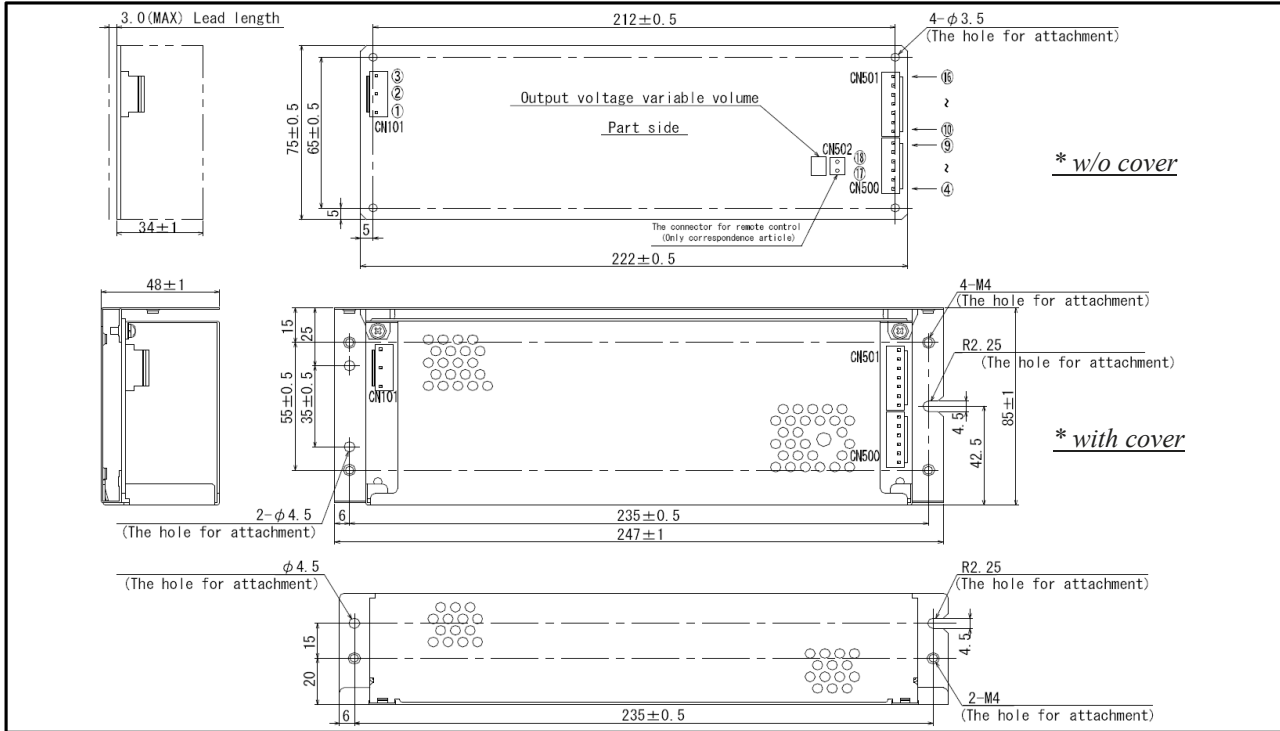
Specification

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 ² 10 to 55Hz 1minute Period 1hour for each X, Y, Z direction
Shock Resistance	< 196.1m/s ² 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.

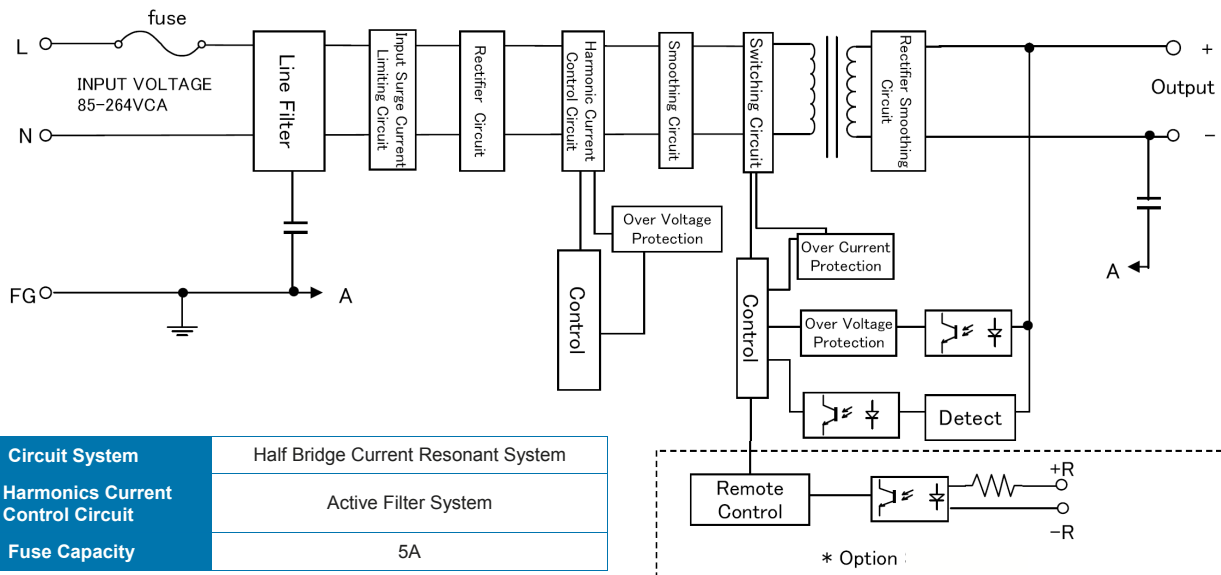
Mechanical Drawings



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)	Connector CN501		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	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