

Very Low Noise AC/DC Switching Power Supply

DFS100A



DFS100A 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

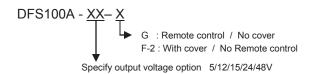
your power supplies without taking extra resources.

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

Features

- Low Ripple & Noise
 40mVp-p (5Vout), 50mVp-p (12, 15, 24 & 48Vout)
- Universal Input
- High Efficiency
- Meet EMC Safety Standards
- RoHS Free, Vinyl Chloride Free,

Model No.



Specification

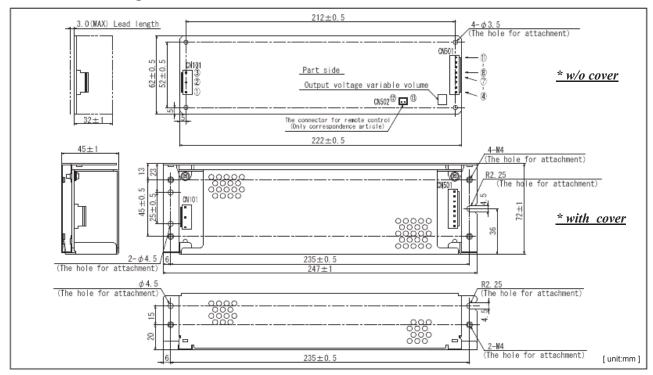
	Model	Number	DFS100A-5	DFS100A-12	DFS100A-15	DFS100A-24	DFS100A-48
Input	Input Voltage Range		Rating 100-240Vac Single Phase * Range: 85Vac to 264Vac				
	Frequency Range		Rating : 50/60Hz, *Range : 47Hz to 63Hz				
	Input Current 100/200VAC	* 1	1.0A / 0.5 A at Full Load	1.4 A / 0.7 A at Full Load			
	Efficiency	* 1	76% / 78%	83% / 85%	84% / 86%	85% / 87%	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		10A	8.4A	6.7A	4.2A	
	Maximum Output Power		50.0W	100.8W	100.5W	100.8W	100.8W
	Line Regulation / Load Regulation [Max]		20mV / 40mV	48mV / 96mV			
	Ripple & Noise	* 2	40mVp-p	-p 50mVp-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: 62 x 35 x 222 mm, 380g(2.44" x 1.38″ x 8.74″ inch, 0.84 lbs) With cover type: 72 x 45 x 247mm, 670g(2.83″ x 1.77″ x 9.72″ inch, 1.48 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 / 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 100mA * 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

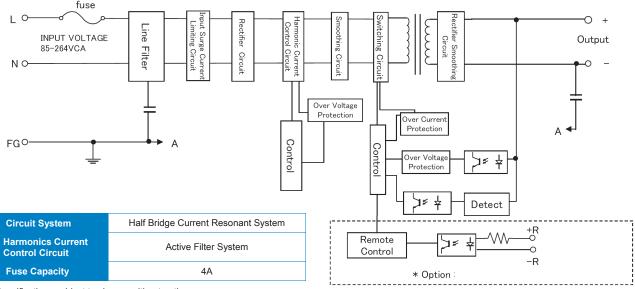


Connector	CN101	Connector	CN501	Connector	CN502	
1	Input (L)	4 to 7	Output (+)	12	+R: + Remote Control	
2	Input (N)	8 to 11	Output (-)	13	- R : - Remote Control	
3	FG	* - G option only				

	вом	CN101	CN501	CN502 * G only
	Connector	B3P5-VH	B8P-VH	B2B-XH-AM
	Connector	JST	JST	JST
	Housing	VHR-5N	VHR-8N	XHP-2
	Terminal	BVH-21T	-P1.1	BXH-001T-P0.6
	reminai	SVH-21T	-P1.1	SXH-001T-P0.6
	Crimping Tool	YC-16	0R	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

