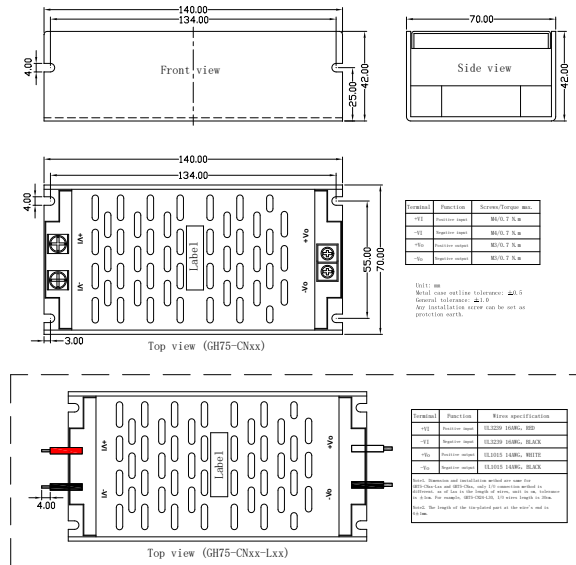




GH75-CNxx(-Lxx)

DC-DC Power Supply Module

Ultra wide input, isolated single output

GH xx - CN xx - Lxx

- Optional, I/O with wires (no screw terminals), xx is the wire length in cm
- Output voltage in volt
- Internal reserved letter and number
- Rated output power in watt
- Product series name, normally including two or three letters

Product Characteristics

- Ultra wide input voltage range, 80-1000VDC
- Standard, CE (EN62477-1)
- Input and output isolation, 4000VAC
- Applications: energy storage system, photovoltaic power station, other high voltage input industrial equipment
- Input reversed polarity protection, UVP
- Output protection, OCP and SCP
- No minimum load requirement

Model Selection Table

Model	Dimensions (L*W*H)	Output power		Output voltage/current		Typical efficiency (Vin=500VDC)
		NORMAL	PULSE	Vo	Io	
GH75-CN12	140*70*42mm	75W	120W (3seconds max.)	12V	6250mA	80%
GH75-CN15				15V	5000mA	82%
GH75-CN24				24V	3120mA	83%
GH75-CN28				28V	2670mA	85%
GH75-CN32				32V	2340mA	86%
GH75-CN48				48V	1560mA	86%

Input Characteristics

Item	Test Condition / Description	MIN	TYP	MAX
Input voltage range	DC input	80VDC	500VDC	1000VDC
Input current	Vin = 1000VDC, Output full load	-	200mA	-
Surge current	Vin = 1000VDC	-	100A	-
Input UVP	Input under voltage trigger point	-	60VDC	-
	Input under voltage released point	-	70VDC	-
Input reversed polarity protection	If input polarity is reversed, the PSU should not be damaged	Available		
External input fuse		Required		

Output Characteristics

Item	Test Condition / Description		MIN	TYP	MAX
Voltage accuracy			-	±2%	-
Line regulation	100%Io		-	±1%	-
Load regulation	10%-100%Io		-	±1.5%	-
Ripple and noise*1	20MHz bandwidth (Peak-peak value)	Vo: 12 to 15VDC	-	120mV	-
		Vo: 24 to 48VDC	-	240mV	-
OCP	Output over current protection		≥110%Io, Self recovery		
SCP	Output short circuit protection		Self recovery		
Start-up delay time	Vin = 500VDC		-	3s	-
Hold-up time	Vin = 500VDC		-	10ms	-
Hot plug			Prohibited		
Paralleled working			Prohibited		

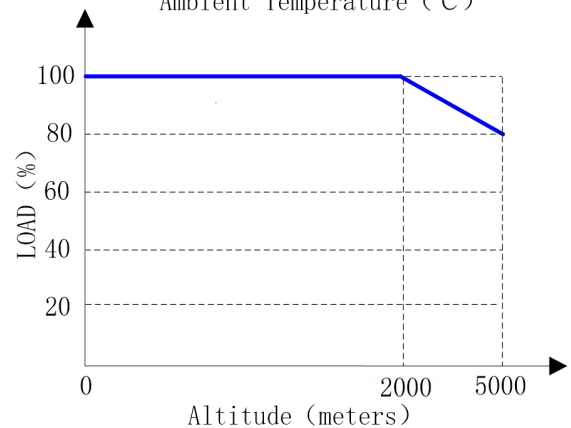
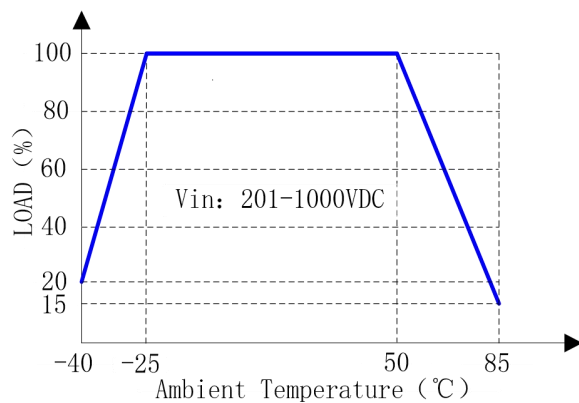
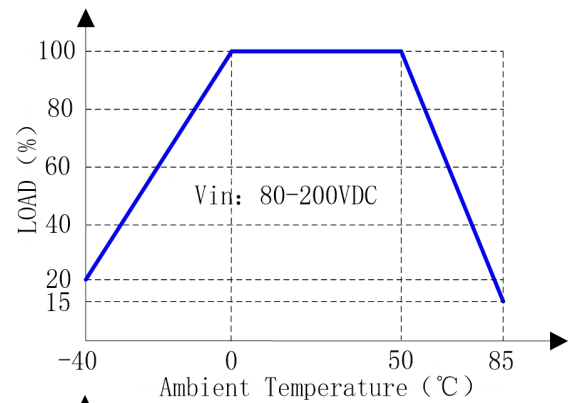
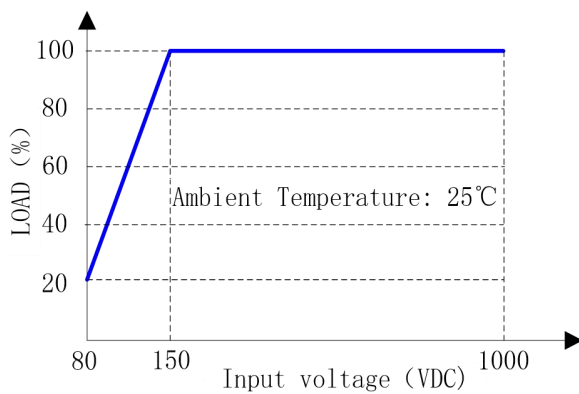
Remark*1: Oscilloscope probe should be connected with the paralleled combination of a 10uF high frequency low resistance electrolytic capacitor and a 0.1uF ceramic capacitor.

General Characteristics

Item	Test Condition / Description	MIN	TYP	MAX
Working temperature		-40℃	-	+85℃
Storage temperature		-40℃	-	+85℃
Storage humidity		-	-	95%RH
Switching frequency		-	65kHz	-

Isolation voltage	Input to output, 60s, $\leq 5\text{mA}$	4000VAC	-	-
	Input to metal case, 60s, $\leq 5\text{mA}$	2000VAC	-	-
	Output to metal case, 60s, $\leq 5\text{mA}$	2000VAC	-	-
MTBF	MIL-HDBK-217F@25°C	215000h	-	-
Weight		-	500g	-
Cooling method		Natural air cooling		

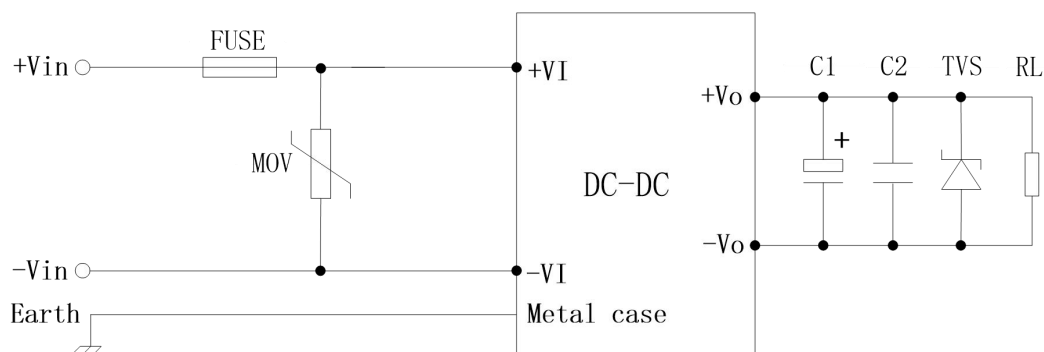
Derating Curves



Comment: Derating should be considered base on temperature, input voltage and altitude.

Application Notes

1. Application circuit recommendation



2. Input part recommendation

Component	Function and description	Recommendation
FUSE	Cut off fault circuit	Required, 4A/1000VDC, time lag type is preferred
MOV	Absorb surge energy	Varistor, 142KD14

3. Output part recommendation

Output voltage	C1	C2	TVS	RL
12V	680 μ F/25V	1 μ F/50V	1.5KE18CA	User load
15V	680 μ F/25V	1 μ F/50V	1.5KE20CA	
24V	470 μ F/35V	1 μ F/50V	1.5KE30CA	
28V	470 μ F/35V	1 μ F/50V	1.5KE36CA	
32V	220 μ F/50V	1 μ F/50V	1.5KE39CA	
48V	100 μ F/63V	1 μ F/100V	1.5KE62CA	

Remarks:

- C1: Output filter electrolytic capacitor, high frequency low resistance electrolytic capacitor is recommended.
- C2: Ceramic capacitor to suppress high frequency noise.
- TVS: Transient suppression diode to protect post-stage circuit (user load).

Notes:

- If not specified, the test condition is ambient temperature 25℃, humidity < 75%, input voltage 500VDC and output rated load.
- All parameters listed in the data sheet are tested according to the company's enterprise standards.
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