ECCO Electronics Technology Co.,ltd

300W DC-DC converter

Typical Performance

FEATURES

- Wide Input voltage range (2:1)
- Typical Efficiency:85%
- Switching frequency：300KHz
- Output Overcurrent protect,Short circuit protection
- input under voltage protection,output over voltage protection
- input-output isolated
- PCB Board in-line type installs
- High reliability
- Optional heat sink



3-Years Product Warranty

Technology parameter Test condition:General Nominal Line,Tc=25℃， Rated resistant load unless other wisespecified

Input Features	Min	Nom	Max	Notes
	Test condition			
Start voltage	96V(65~150Vin)			65V
	110V(82~180Vin)			82V
	280V(200~400Vin)			200V
Input under voltage protection	96V(65~150Vin)			60V
	110V(82~180Vin)			70V
	280V(200~400Vin)			180V
Input voltage（Vdc）	65	96	150	W 2:1
	82	110	180	W 2:1
	200	280	400	W 2:1
Start time	Not capacitive load			20mS
Remote On/Off Function				
CTL	CNT Pin connect -Vin			ON

	CNT Pin left open			OFF
Output Feature				
	Test condition			
Voltage accuracy	Io=0.1...1.0xIonom,Vi=Vrated			±1.0%
Line regulation	Vimin≤Vi≤Vimax			±0.2%
Load regulation	Io=0.1...1.0xIonom,Vimin≤Vi≤ Vimax,,Vi=Vrated			±0.5%
Ripple&noise	2-MHz Broadband			1%
Over current protection	Vimin≤Vi≤Vimax			120%
Peak Deviation	25% Rated Load Vary			±5.0%
Dynamic Response Setting Time				400us
Output Voltage Trim	Vimin≤Vi≤Vimax			10%
Switching frequency	Vimin≤Vi≤Vimax			300KHz
General Feature				
	Test condition			
Efficiency				85% typical
Board temperature	Industry level			-25℃ ~ +55℃
Working environment temperature	Military level			-25℃ ~ +85℃
Max Board temperature	Industry level			+85℃
	Military level			+105℃
Storage temperature	Industry level			-40℃ ~ +105℃
	Military level			-50℃ ~ +105℃
Relative humidity	No condensation			5%~90%RH
Temperature coefficient				±0.02%/℃
case material				aluminium baseplate
Isolated resistance	Input-Output			100M ohm
Vibration resistance	10~55Hz			5G
Over current mode	Full input range	Protection type : Hiccup mode, recovers automatically		
Cooling		Heatsink,nature cooling		
Case material		epoxy,Aluminum base plate		
Isolated Voltage	Input-output 1500Vdc; input-FG 1500Vdc,Output-FG 500Vdc			

MTBF	MIL-HDBK-217F2		5X10^{6}Hrs

Product Nomination Method

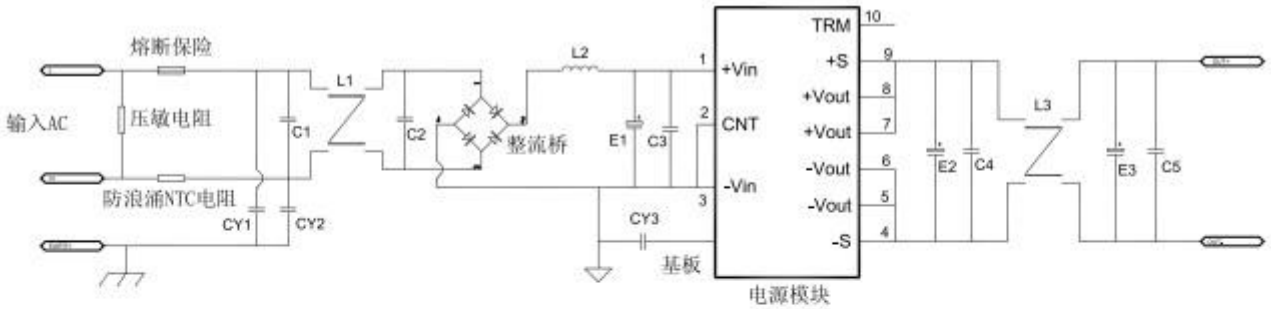
example	L D 200 – H 48 S 12 ① ② ③ ④ ⑤ ⑥ ⑦		
①	Wide input voltage：2：1	④	H:high voltage input
②	Power adaptation mode：D（DC-DC）	⑤	Normal input voltage
③	Output power(W)	⑥	S=Single route output
⑦	output voltage		

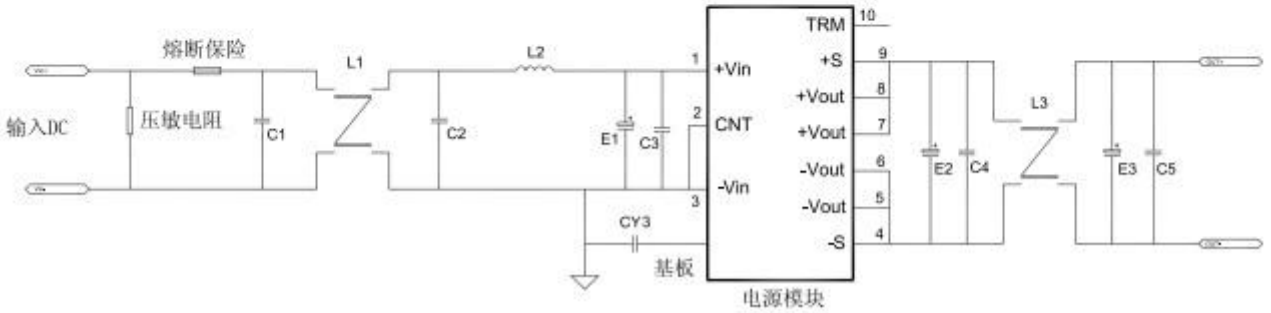
Product Program

PART #	Input voltage range	Output voltage / current				
		VO1		VO2		Typical Efficiency
		V	A	V	A	%
LD300H-96S12	96V(65~150V)	12V	25A			86
LD300H-96S15		15V	20A			86
LD300H-96S24		24V	12.5A			87
LD300H-96S28		28V	10.7A			87
LD300H-96S48		48V	6.25A			86
LD300H-110S12	110V(82-180V)	12V	25A			86
LD300H-110S15		15V	20A			86
LD300H-110S24		24V	12.5A			87
LD300H-110S28		28V	10.7A			87
LD300H-110S48		48V	6.25A			86
LD300H-300S12	300V(200~400V)	12V	25A			86
LD300H-300S15		15V	20A			86
LD300H-300S24		24V	12.5A			87
LD300H-300S28		28V	10.7A			87
LD300H-300S48		48V	6.25A			86

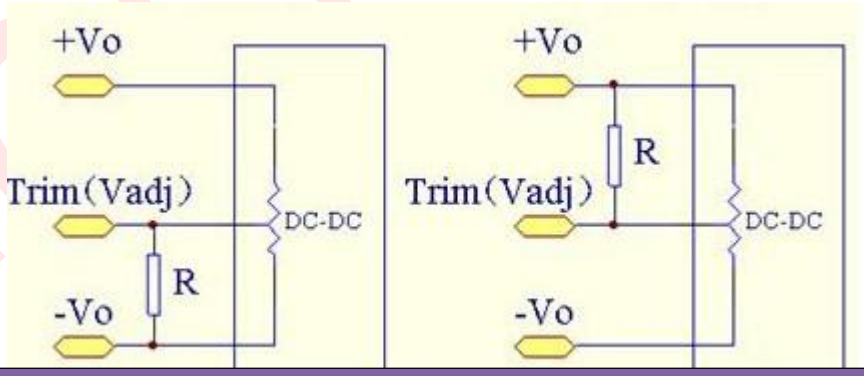
Recommended Circuit

Rated voltage	Fuse	voltage dependent resistor	rectifier bridge	NTC	C1C2C3	CY1CY2CY3	E1
110V	10A	300V	20A	4Ω/Φ20	105/200V	472/3KV	470μF/200V
220V	6.3A	560V	8A	5Ω/Φ20	105/400V	472/3KV	470μF/400V

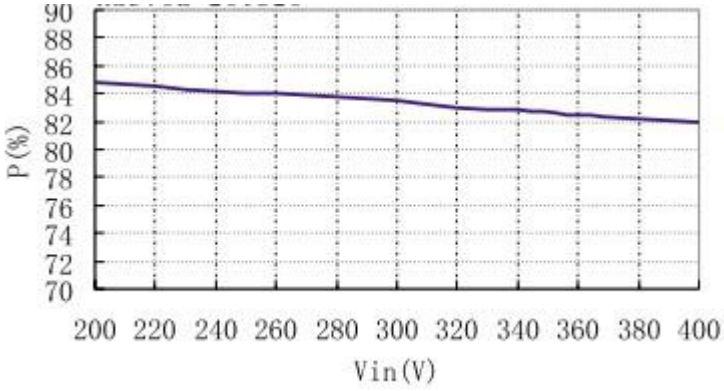




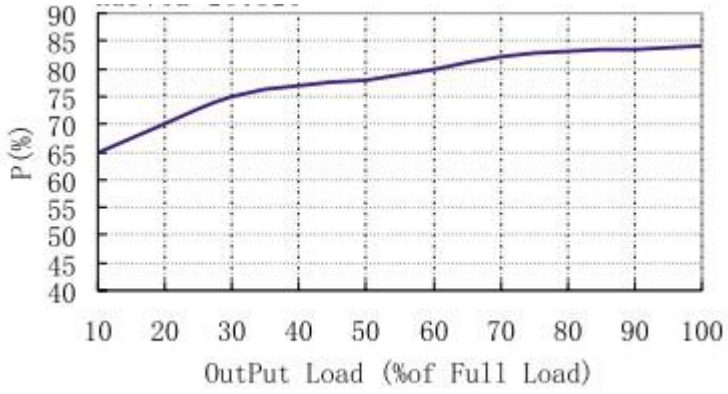
TRIM



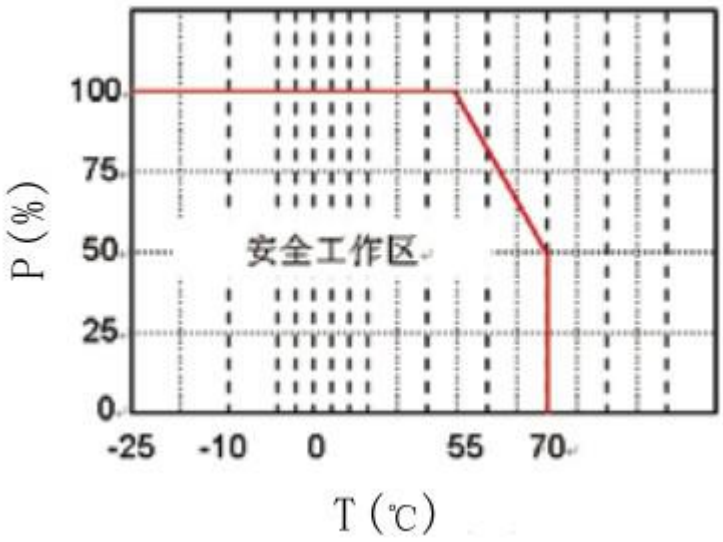
Input voltage--Efficiency



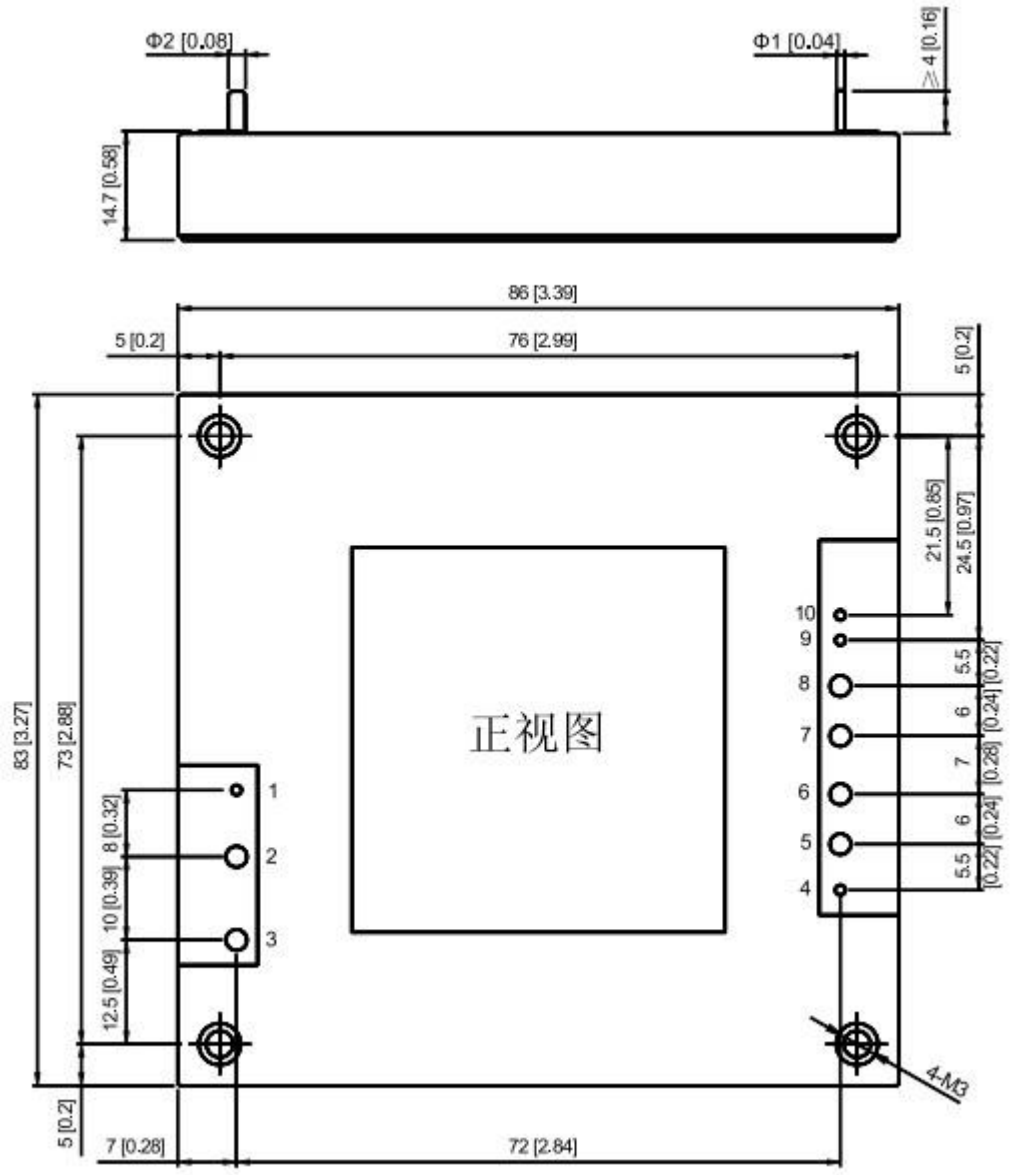
Output Load--Efficiency



Temperature Curve



Mechanical Dimension



BOTTON VIEW

Unit:mm(inch)

Tolerance:±0.2mm(±0.008inch)

Mechanical Data

WATT	L x W x H	Packing No.
300W	86*83*14.7mm	

Pin Assignment

Pin	1	2	3	4	5	6	7	8	9	10
Single O/P	CTL	-Vin	+Vin	+S	+Vout	+Vout	-Vout	-Vout	-S	TRIM

*Note：The power modules such as the definition of the pin does not match with the hand book,please refer to the actual item.