

FEATURES

- PCB mounted switching Power module
- AC input voltage range: 85VAC - 305VAC
- DC input voltage range: 100VDC - 430VDC
- Ambient temperature range: -40°C~85°C
- Storage temperature range: -40°C~85°C
- Leakage current (input :305VAC):<0.3mA
- Isolation voltage: Input - Output 4200VAC 60s
- Insulation Resistance: Input - Output 500VDC \geq 100M Ohms
- MTBF: 500Khrs Min MIL-HDBK-217F (25°C)
- Compact size, easy installation
- High efficiency low standby power consumption, green environmental protection function
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55032 class B standard
- Class II Construction
- OVC III (2000m) according to EN IEC 61558



APPLICATIONS

This series could be widely applied in the LED, light control, Instrument, Industry, smart home and other home appliances.

MODEL LIST

Model No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Capacitive Load(max)	Ripple & Noise (max)	Ambient TEMP(°C)	Weight	Certificate		
									UL	TUV	CB
ZPO40S1200WN	40W	12Vdc	3330mA	89%	4400uF	<150mV	50	110g	●	●	●
ZPO40S1500WN	40W	15Vdc	2666mA	89%	3000uF	<150mV	50	110g		●	
ZPO40S1800WN	40W	18Vdc	2222mA	89%	3000uF	<150mV	50	110g		●	
ZPO40S2400WN	40W	24Vdc	1670mA	89%	1500uF	<150mV	50	110g		●	
ZPO40S4800WN	40W	48Vdc	833mA	88%	470uF	<150mV	50	110g		●	

RoHS



ORDERING CODE

ZPO 40 S 15 00 W N

Example:
ZPO=Zettler standard series

Output Power (W)
40=40W

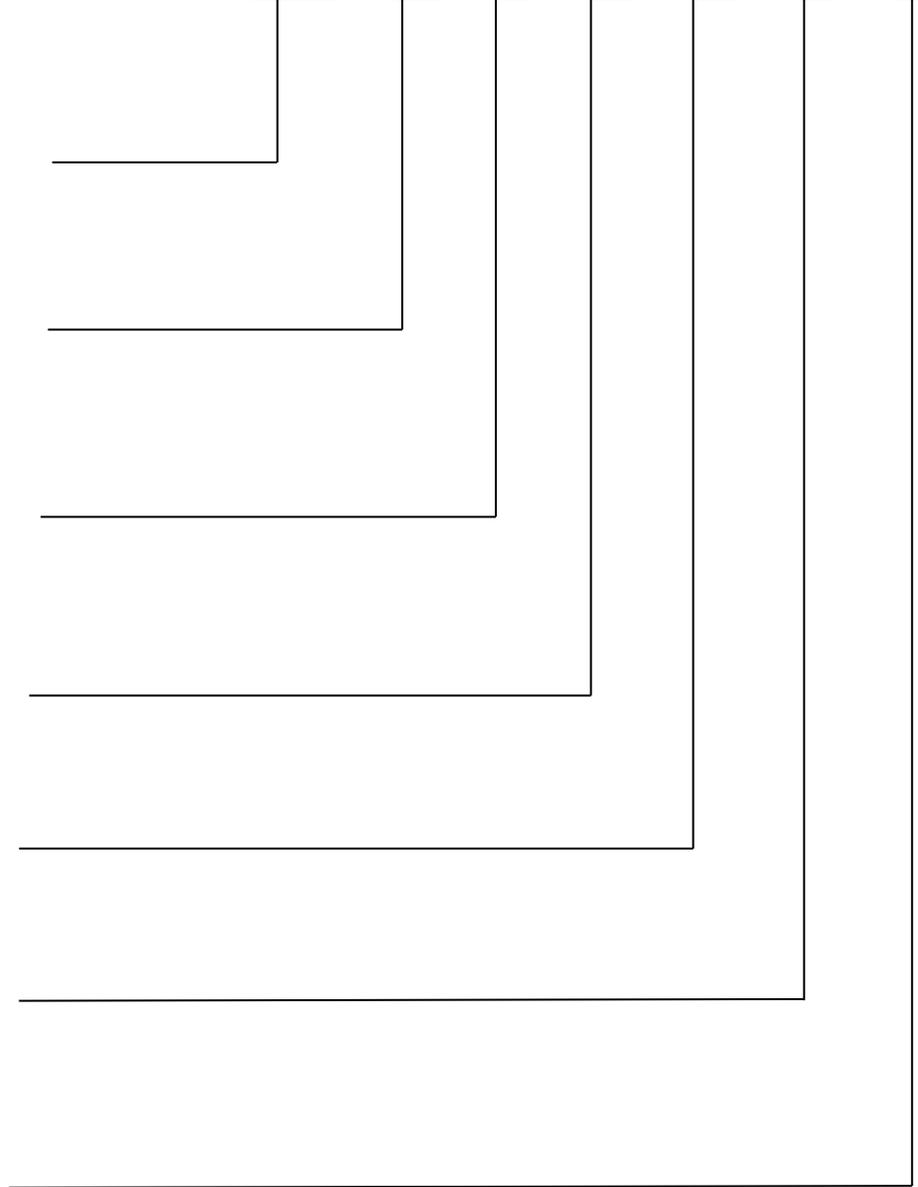
Output Type
S=Single Output

First Output Voltage
15=15V

Second Output Voltage
00= No Second Output

Input AC Voltage Range
W=Wide Voltage Input

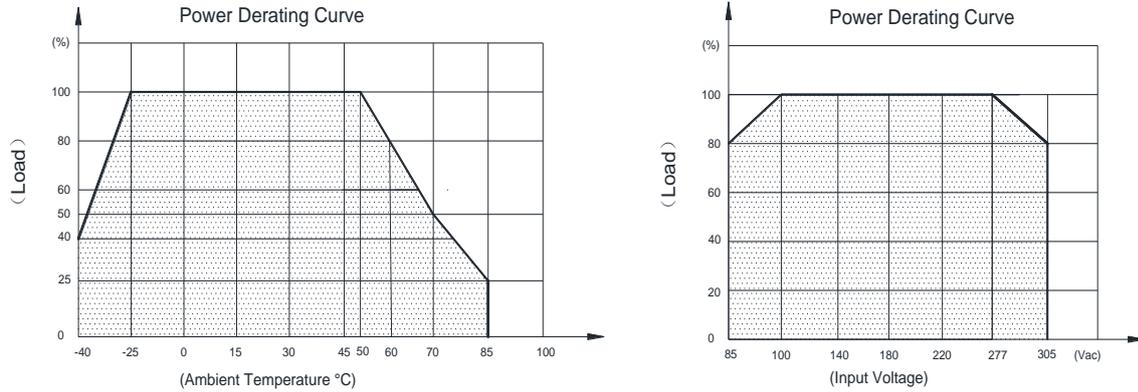
"N"=Enclosure code



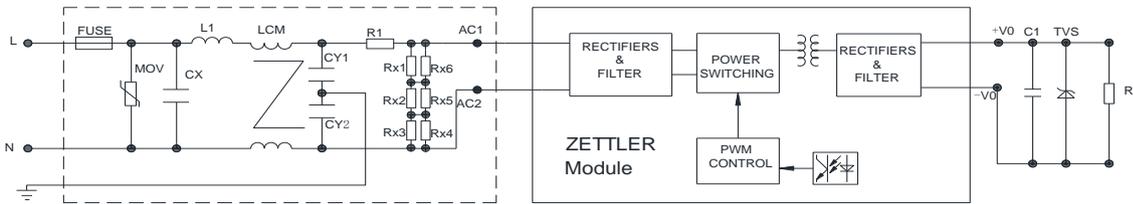
ELECTRICAL SPECIFICATION

Input	Rated Voltage	100 - 277VAC		
	Voltage Range	85 - 305VAC or 100 - 430VDC		
	Frequency (Hz)	47 - 63 Hz		
	Current (Full load)	115VAC	230VAC	
		1000mA	600mA	
	Inrush Current (<500us)	40A	80A	
	No Load Loss	0.3W Typ. @230VAC		
HOT PLUG	Unavailable			
Output	Voltage (V)	Refer to "Model List"		
	Current (mA) max.	Refer to "Model List"		
	Voltage Accuracy	±2% (Typ.)		
	Line Regulation	±0.5%		
	Load Regulation	±1%		
	Minimum Load (mA)	0		
	Ripple & Noise	<150mV		
	Efficiency (typ.)	Refer to "Model List"		
	Start-up Time	Max 3s		
	Hold up Time	50ms min/230VAC , 5ms min/115VAC		
Protection	Over Current Protection	Hiccup mode		
	Short Circuit Protection	Hiccup mode		
Environment	Operating Temperature	-40°C...+85°C (refer to the Power Derating Curve)		
	Operating Humidity	20~90% RH (No Condensing) at full load		
	Storage Temperature	-40°C~85°C		
	Storage Humidity	10~95% RH		
	Temperature Coefficient	±0.05%/°C (0~50°C)		
	Operating Altitude	EN IEC 61558	2000m (OVC III)	
EN IEC 62368		5000m (OVC II)		
Physical	Case Material	Plastic (UL 94V-0 rated)		
	Weight	110g (ref.)		
Safety & EMC	Dielectric Strength	I/P - O/P : 4200VAC		
	Protection against electric shock	Class II construction <input type="checkbox"/>		
	Safety Standards	Compliance with UL/EN62368-1.EN61558-2-16		
	EMI	Compliance with EN55032 CLASS B, EN61000-3-2, EN61000-3-3	Need to add external EMC component	
	EMS (Noise Immunity)	Compliance With EN55035		
	Over Voltage Category	EN IEC 61558	OVC III	
EN IEC 62368		OVC II		
Reliability Requirement	MTBF	500Khrs Min MIL-HDBK-217F (25°C)		
	Burn-In Test	The unit shall be burned in for 2~4 Hours under 277Vac input and with full load at 25°C		

PRODUCT CHARACTERISTIC CURVE



TYPICAL APPLICATION SCHEMATIC



ITEM	MOV	CX	L1	LCM	CY1,CY2	FUSE	R1	Rx1-Rx6
1~10W	14D561K	0.1-0.47uF	0.5~2mH/0.5A	10-30mH	100~2200pF	1A/300V	22Ω/2W	1206/1.5MΩ
11-20W	14D561K	0.1-0.47uF	0.5~2mH/2A	10-30mH	100~2200pF	2A/300V	12Ω/3W	1206/1.5MΩ
21~40W	14D561K	0.1-0.47uF	0.5~2mH/3A	10-30mH	100~2200pF	3.15A/300V	3Ω/5W	1206/1.5MΩ

Note: External circuit components are only recommendations, customers should choose their own components and values according to their specific system application requirements.

MECHANICAL SPECIFICATION

