ORDERING CODE

ZP 20 S 12 00 W L

Example:

ZP = Zettler standard series

AP = Customized series

HP = High Performance series DP = DC-DC

Total Output Power (W)

Example:

03 = 3W

20 = 20W

Output Type

S = Single Output

D = Dual Output

T = Triple Output

First Output Voltage

05 = 5V, 12 = 12V

Second Output Voltage

06 = 6V, 12 = 12V

00 = No Second Output

Input AC Voltage Range

W = Wide Voltage Input

H = High Voltage Input (⩾165VAC)

L = Low Voltage Input (＜165VAC)

Additional Case Type

Example

A: A Type case

B: B Type case…

FEATURES

- PCB mounted switching Power module
- AC input voltage range: 85VAC~264VAC
- DC input voltage range: 100VDC~370VDC
- Ambient temperature range: -25℃~50℃
- Storage temperature range: -25℃~85℃
- Leakage current (input :264VAC): ＜0.3mA
- Isolation voltage: input – Output ≥3000Vac 60S
- Insulation Resistance: Input – Output 500VDC ≥100M Ohms
- MTBF(at 25℃ 70%RH environment): ＞300000hrs
- Compact size, easy installation
- High efficiency low standby Power consumption, environment-friendly
- Built-in output over current protection, over-voltage protection, short circuit protection
- Built-in EMI filter components, comply with the EN55032 class B standard
- Insulation: class Ⅱ

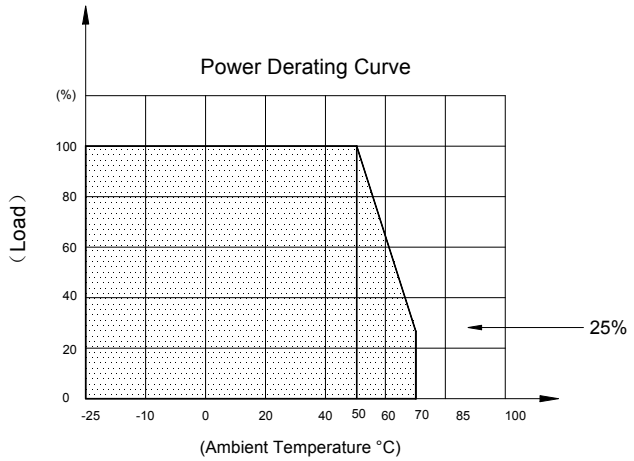
MODEL LIST

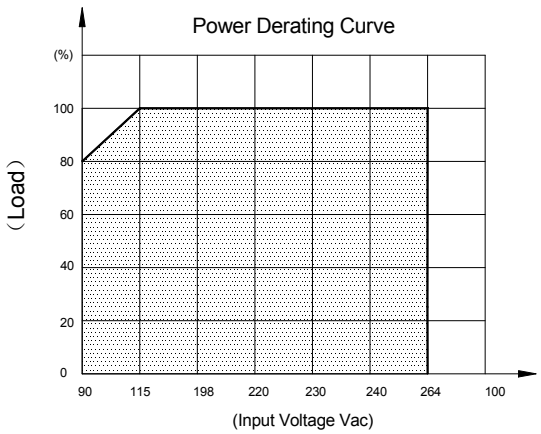
Part No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC，% Typ.	Ripple&Noise (max)	Ambient TEMP(℃)	Weight	Certificate
								UL
ZP20S0500WL	20W	5 Vdc	4000mA	83%	＜200mV	50	59g	
ZP20S1200WL	20W	12Vdc	1670mA	85%	＜200mV	50	59g	●
ZP20S1500WL	20W	15Vdc	1330mA	85%	＜200mV	50	59g	
ZP20S2400WL	20W	24Vdc	833mA	85%	＜200mV	50	59g	

ELECTRICAL SPECIFICATION

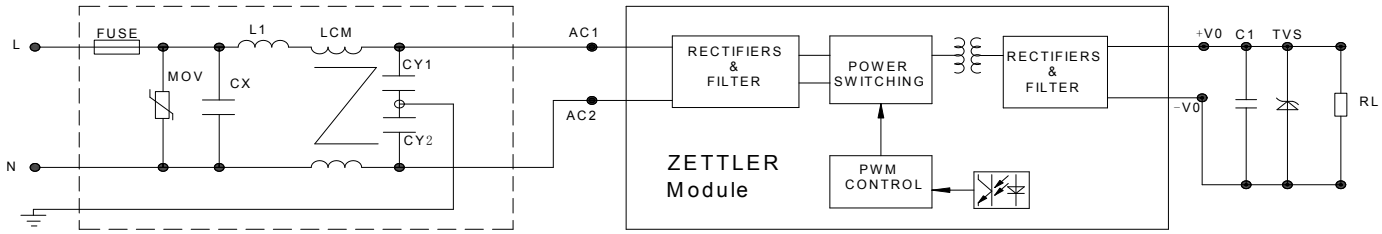
Model No.		ZP20SXX00WL Series	
Input	Input Voltage Range	85-264VAC or 100~370VDC	
	Frequency (Hz)	47-63 Hz	
	Current (Full load)	115VAC	230VAC
		300mA	150mA
	Inrush Current (<500us) max.	20A	40A
	No Load Loss	0.3W Max	
	Recommended External Input Fuse	3.15A/250V (Time lag)	
	HOT PLUG	Unavailable	
Output	Voltage 1 (V.DC.)	Refer to “Model List”	
	Current (mA) max.	Refer to “Model List”	
	Voltage Accuracy Typ.	±5%	
	Line Regulation	±1%	
	Load Regulation	±1%	
	Minimum Load (mA)	0	
	Ripple & Noise mV	Refer to “Model List”	
	Efficiency（TYP.）	Refer to “Model List”	
	Set-UP Time at Full Load	253ms/230Vac,169ms/115Vac	
	Hold-up Time	76.9ms/230Vac ,13.6ms/115Vac	
Protection Characteristics	Over Current Protection	≥120%Io Self-recovery	
	Short Circuit Protection	Hiccup ,continuous ,short capable, self-recovery	
Environment	Operating Temperature	-25°C~50°C Free air convention	
	Operating Humidity	20~90% RH (No Condensing) at full load	
	Storage Temperature	-25°C~85°C	
	Storage Humidity	10~95% RH	
	Temperature Coefficient	±0.05%/°C（0~50℃）	
Physical	Case Material	Plastic （UL 94V-0 rated）	
	Weight	Refer to “Model List”	
Safety & EMC	Dielectric Strength	3000V/50HZ 5mA 1min （OR 4200Vdc/2S）（I/P-O/P）	
	Safety Standards	Compliance With EN60950-1, UL60950-1, UL 62368-1	
	EMI	Compliance With EN55032, CLASS B	Need to add external EMC component (See the Schematic)
	EMS (Noise Immunity)	EN61000-3-2 Class A Heavy industry level（surge L-N:1KV）	
Reliability Requirement	MTBF(MIL-HDBK-217F)	300Khrs Min @230VAC input 25℃	
	Burn-In Test	The unit shall be burned in for 2~5 hours under 264Vac input and DC with full load at normal temperature	

PRODUCT CHARACTERISTIC CURVE





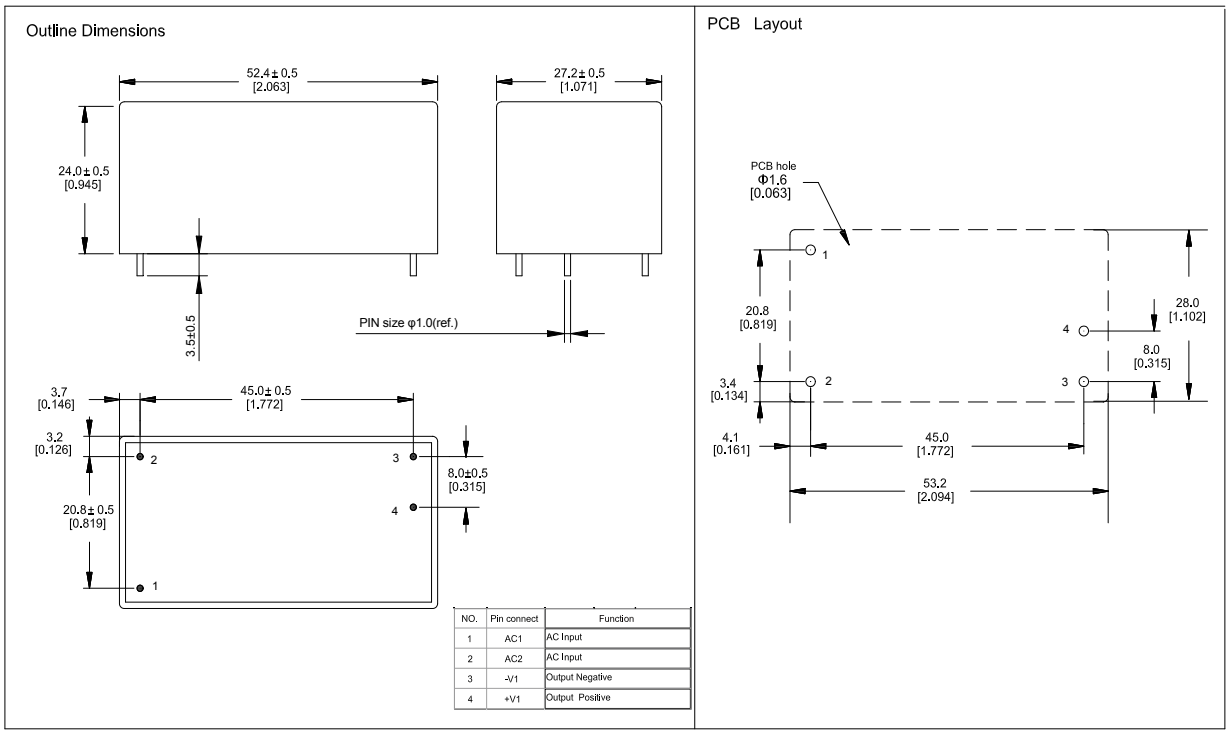
TYPICAL APPLICATION SCHEMATIC



ITEM	MOV	CX	L1	LCM	CY1,CY2	FUSE
1~2W	14D561K	0.1-0.47uF	0.5~2mH/0.5A	10-30mH	100~2200pF/400VAC	1A/250V
3-10W	14D561K	0.1-0.47uF	0.5~2mH/1A	10-30mH	100~2200pF/400VAC	2A/250V
10~20W	14D561K	0.1-0.47uF	0.5~2mH/1A	10-30mH	100~2200pF/400VAC	3.15A/250V

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

MECHANICAL SPECIFICATION



NO.	Pin connect	Function
1	AC1	AC Input
2	AC2	AC Input
3	-V1	Output Negative
4	+V1	Output Positive