



### ORDERING CODE

Example:

ZP=Zettler standard series

AP=Customized series

HP=High Performance series

DP=DC-DC

L=Chipset identifier

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

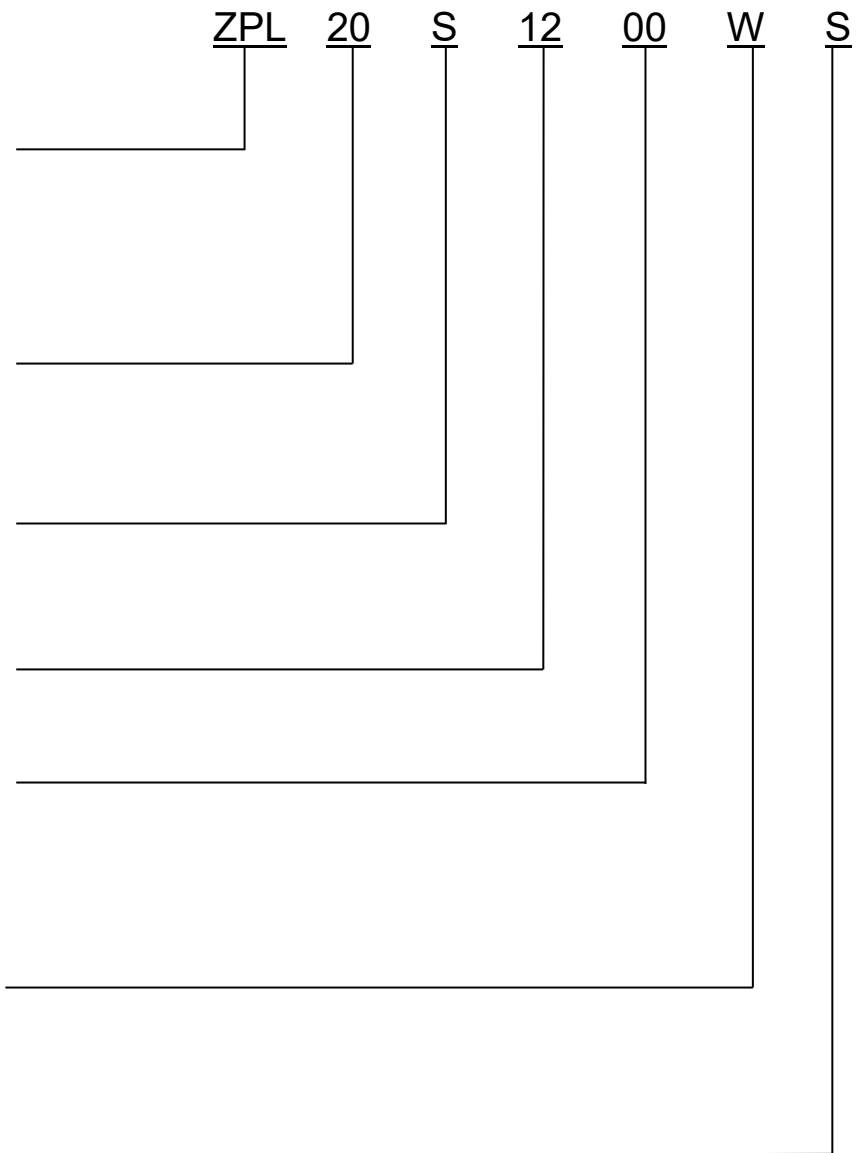
H=High Voltage Input ( $\geq 165\text{VAC}$ )

L=Low Voltage Input ( $< 165\text{VAC}$ )

Case Dimension

A: A Type case

B: B Type case...



## FEATURES

- PCB mounted switching Power module
- AC input voltage range: 90VAC~305VAC
- DC input voltage range: 120VDC-430VDC
- Ambient temperature range: -25°C~50°C
- Storage temperature range: -25°C~85°C
- Leakage current (input :264VAC): <0.3mA
- Isolation voltage: input –Output  $\geq$ 3000VAC 60S
- Insulation Resistance: Input –Output 500VDC  $\geq$ 100M Ohms
- MTBF: 300Khrs 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

## APPLICATIONS

This series could be widely applied in the applications of harsh industrial, EV charger, Automotive etc.

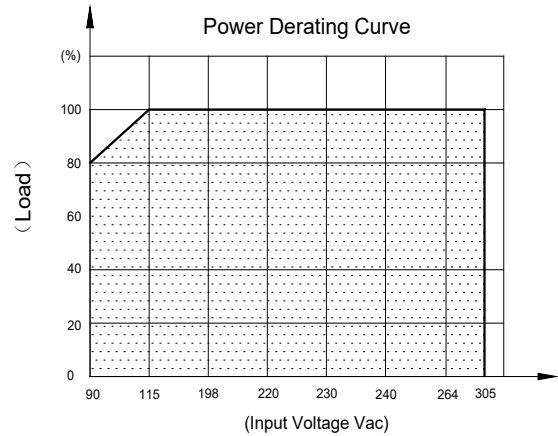
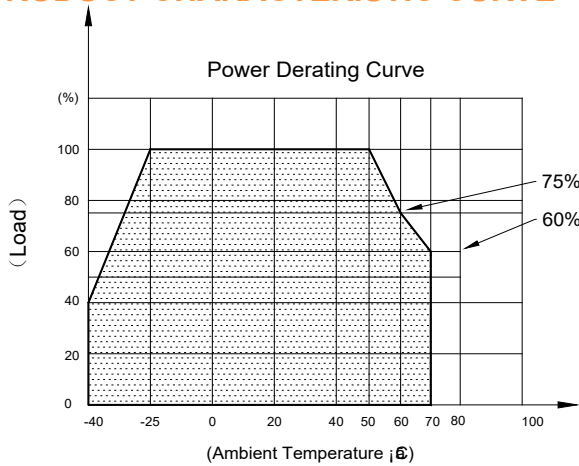
## MODEL LIST

Model No.	Output Power	DC Voltage	Rated Current	Efficiency 230VAC, % Typ.	Ripple&Noise (max)	Ambient TEMP(°C)	Weight
ZPL20S0500WS	20W	5Vdc	4000mA	80%	<200mV	50	81g
ZPL20S1200WS	20W	12Vdc	1666mA	85%	<200mV	50	81g
ZPL20S1500WS	20W	15Vdc	1330mA	85%	<200mV	50	81g
ZPL20S1800WS	20W	18Vdc	1111mA	85%	<200mV	50	81g
ZPL20S2400WS	20W	24Vdc	833mA	85%	<200mV	50	81g

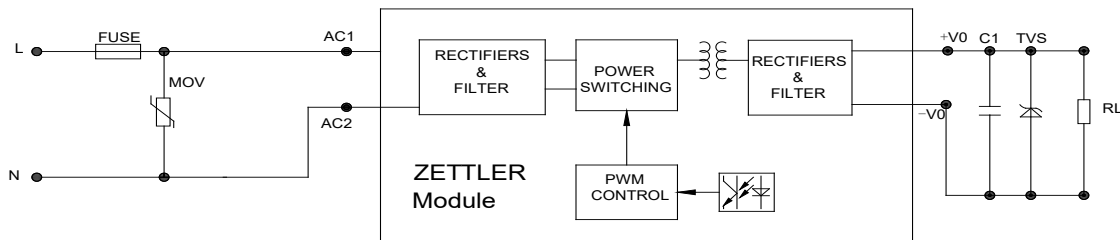
### ELECTRICAL SPECIFICATION

Model No.		ZPL20SXX00WS		
Input	Rated Voltage	100~277VAC		
	Voltage Range	90-305VAC or 120~430VDC		
	Frequency (Hz)	47-63 Hz		
	Current (Full load)	115VAC	230VAC	
		500mA	300mA	
	Inrush Current (<500us)	20A	40A	
	No Load Loss	0.3W Max @230VAC		
HOT PLUG	Unavailable			
Output	Voltage (V)	Refer to "Model List"		
	Current (mA) max.	Refer to "Model List"		
	Voltage Accuracy	±3%		
	Line Regulation	±1.5%		
	Load Regulation	±1.5%		
	Minimum Load (mA)	0		
	Ripple & Noise	Refer to "Model List"		
	Efficiency (typ.)	Refer to "Model List"		
	Set-up Time	253ms/230VAC,169ms/115VAC		
	Hold up Time	76.9ms/230VAC ,13.6ms/115VAC		
Protection	Over Current Protection	Hiccup mode		
	Short Circuit Protection	Hiccup mode		
Environment	Operating Temperature	-40°C...+70°C (Power Module can start up with 0.6A @-40°C &85VAC) Refer to the derating curve		
	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°C)		
Physical	Case Material	Plastic (UL 94V-0 rated)		
	Weight	81g (REF.)		
Safety & EMC	Dielectric Strength	I/P-O/P : 3000VAC		
	Safety Standards	Compliance With UL/EN62368-1		
	EMI	Compliance With EN55032, CLASS B EN61000-3-2, EN61000-3-3	Need to add external EMC component (Refer to the Schematic)	
	EMS (Noise Immunity)	Compliance With EN 55035		
Reliability Requirement	MTBF	300Khrs Min MIL-HDBK-217F (25°C)		
	Burn-In Test	The unit shall be burned in for 2~4 hours under277Vac input and DC with full load at normal temperature		

## PRODUCT CHARACTERISTIC CURVE



## TYPICAL APPLICATION SCHEMATIC



ITEM	MOV	FUSE
1~2W	14D561K	1A/250V
3-10W	14D561K	2A/250V
10~20W	14D561K	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

