

LM-20 SERIES**---- AC-DC MODULE POWER SUPPLY 20W****PRODUCT FEATURES**

- Wide voltage input range 85 ~ 305VAC (100 ~ 430VDC)
- Working temperature -40°C ~ +85°C
- Complete protection functions (short circuit protection self-recovery, etc.)
- High efficiency, high reliability
- Small size, plastic shell flame retardant packaging
- Industrial product technical design

APPLIED RANGE

Power systems for wireless networks, telecommunications/data communication, power systems, industrial control systems, measurement instruments, and intelligent fields. Suitable for designs requiring large input range fluctuations, power isolation, compact board space, as well as modular product functionality to enhance reliability.

PRODUCT MODEL

Model	Output voltage Vo	Output Io	Efficiency (TYP)	Certification category
LM-20-S5	5V	4000mA	78%	CE
LM-20-S12	12V	1666mA	83%	CE
LM-20-S15	15V	1333mA	85%	CE
LM-20-S24	24V	833mA	85%	CE
LM-20-S5L	5V	4000mA	78%	UL
LM-20-S12L	12V	1666mA	83%	UL
LM-20-S15L	15V	1333mA	85%	UL
LM-20-S24L	24V	833mA	85%	UL

* IF YOU NEED OTHER SPECIFICATIONS AND MODELS, PLEASE CONTACT US DIRECTLY.

INPUT CHARACTERISTICS

Input voltage range	85 ~ 305VAC (100 ~ 430VDC)		
Incoming frequency	47 ~ 63Hz		
Input current	500mA (TYP) @115VAc	300mA (TYP)@ 230VAc	
External fuse (recommended value)	2A/250V slow break		

OUTPUT CHARACTERISTIC

Output voltage regulation accuracy	±2%
Source effect	±0.5% (typ)
Load adjustment ratio (10%~100%)	±1% (typ)
Minimum load	10%
Output ripple + noise (peak-to-peak)	100mV(typ) (20MHz Bandwidth)
Short-circuit protection	Can be short-term, self-restore
Output overvoltage protection	≥1.1 times

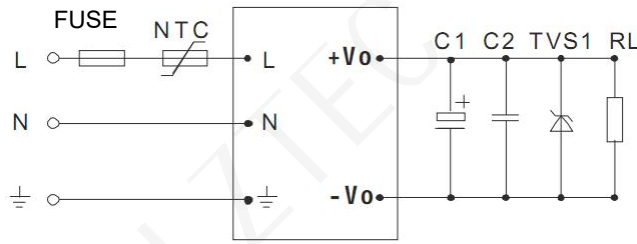
GENERAL CHARACTERISTIC

temperature characteristic	working temperature	-40°C ~ +85°C
	Power downgrades	3.75%/ °C ,
	Storage temperature	-40°C ~ +90°C
	case temperature	+90°C max
Time of outage		40ms(typ)/ at Vin:320Vdc
Humidity		85%RH(max)
Warming up		0.02%/°C
Switching frequency		65kHz(typ)
Isolation voltage	Input-output	3000Vac/1Min
Leakage current		<5mA RMS typ. 230VAC/50Hz
*ESD immunity	IEC/EN 61000-4-2 level 3	6kV/8kV
*RF radiation immunity	IEC/EN 61000-4-3	
*Fast transient pulse group	IEC/EN 61000-4-4 level 3	2 kV
*Surge immunity	IEC/EN 61000-4-5 level 3	1kV/2kV
* Conduction/radiation		EN55022, level A
security classification		CLASS I
Enclosure class		UL94V-0 flame retardant plastic
install		PCB
MTBF		>200,000h @25°C

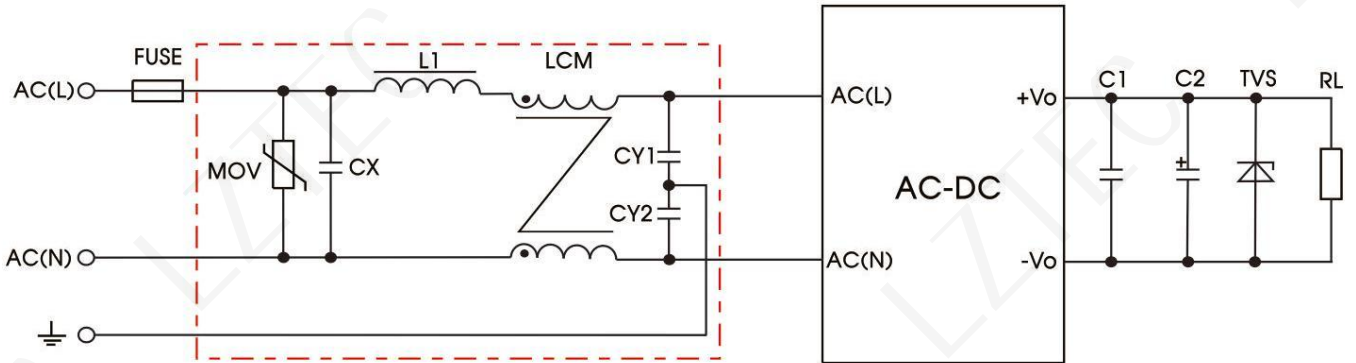
Note: 1. To mark the * test item, it is necessary to add peripheral EMC recommended circuit;

2. All the above data are measured under the condition of TA=25°C and humidity <75% unless otherwise specified.

Typical applications



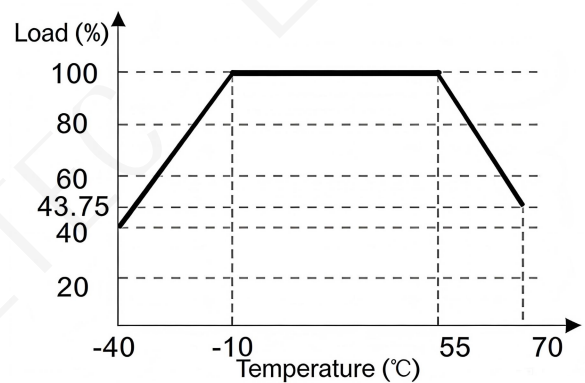
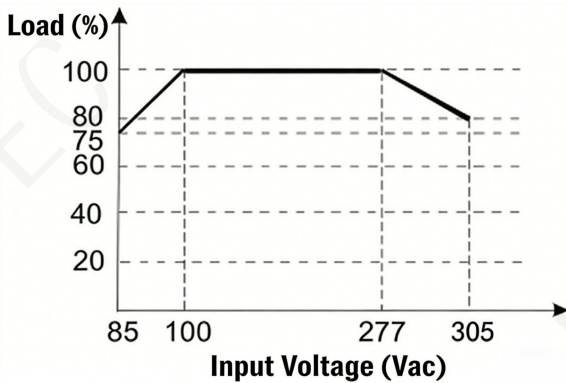
EMC recommended circuits



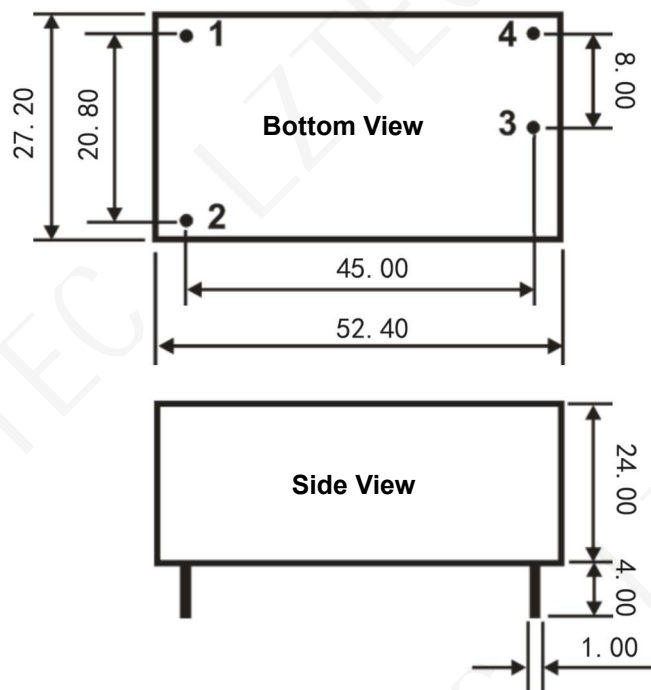
Device	Recommended value
MOV	14D561
CY1、CY2	1000pF/400VAC
CX	0.1uF/275VAC
LCM	>10mH
L1	4.7uH/2A
FUSE	3.15A/300V, slow break

INPUT VOLTAGE AND LOAD RELATIONSHIP DIAGRAM

TEMPERATURE AND LOAD RELATIONSHIP DIAGRAM



APPEARANCE AND SIZE

Unit: mm Tolerance: ± 0.25 mm

Pin	1	2	3	4
Definition	AC(L)	AC(N)	+Vo	-Vo

Zhuhai Lizhi Technology Co., Ltd

E-Mail: sales@lyztec.com

E-Mail: zena.liu@lyztec.com

WEB:WWW.LYZTEC.COM