

Features

- Class I structure
- Input voltage: 100-277Vac
- Compliant with EMC EN55035/55032 Class B
- Operating temperature up to 75°C
- Over-voltage Category: III
- OVP/OLP/SCP/OTP protection.
- 5 years warranty



Applications

Industrial control system, industrial equipment, power system, rail transportation, lighting system



Model list

Model No.	Input Voltage	Power max.	Output Voltage	Output Current max.	Efficiency typ.	Ripple Voltage	Voltage ADJ.
DL-350W-V12-EXS	100-277Vac	350W	12Vdc	29.17A	92%	150mV	±10%
DL-350W-V15-EXS	100-277Vac	350W	15Vdc	23.33A	92%	150mV	±10%
DL-350W-V24-EXS	100-277Vac	350W	24Vdc	14.58A	93.5%	240mV	±10%
DL-350W-V36-EXS	100-277Vac	350W	36Vdc	9.72A	93.5%	260mV	±10%
DL-350W-V48-EXS	100-277Vac	350W	48Vdc	7.29A	93.5%	260mV	±10%
DL-350W-V12R-EXS	100-277Vac	350W	12Vdc	29.17A	92%	150mV	±10%
DL-350W-V15R-EXS	100-277Vac	350W	15Vdc	23.33A	92%	150mV	±10%
DL-350W-V24R-EXS	100-277Vac	350W	24Vdc	14.58A	93.5%	240mV	±10%
DL-350W-V36R-EXS	100-277Vac	350W	36Vdc	9.72A	93.5%	260mV	±10%
DL-350W-V48R-EXS	100-277Vac	350W	48Vdc	7.29A	93.5%	260mV	±10%

Remark :

1. The above parameters are tested under the following conditions: Ta = 25°C , 230Vac input, and after 30 minutes of full load operation.
2. Ripple and noise measurement method: use a 12" twisted-pair wire terminated with 0.1μF & 47μF parallel capacitor, and measured at 20MHz bandwidth.
3. Model selection: R version with redundancy (e.g., DL-350W-V12R-EXS)

Input characteristics

Parameter	Min.	Typ.	Max.	Remark
Rated input voltage	100Vac	230Vac	277Vac	-
Input voltage range	90Vac	-	305Vac	DC input range: 120-420Vdc
Rated frequency	47Hz	50/60Hz	63Hz	-
Power factor	-	>0.97	-	100% load,@230Vac
T.H.D.	-	≤10%	-	100% load,@230Vac
Input current@100Vac	-	-	3.4A	100% load.@100Vac
Inrush current@230Vac	-	-	40A	@230Vac, start (25℃)
Leakage current	-	-	0.75mA	RMS Max.

Output characteristics

Parameter	Min.	Typ.	Max.	Remark
Output tolerance	-	±1%	-	0-100% load
Line regulation	-	±1%	-	Rated load
Load regulation	-	±1%	-	@230Vac
Setup/Rise Time	-	2000/80ms	-	@230Vac
Hold up time	-	-	10ms	100Vac, rated load

Protection

Function	Description
Output overload protection	1.4-1.8 times the rated output power; hiccup restart mode, which can automatically recover after the abnormal load condition is removed
Output short-circuit protection	Hiccup mode: recovers automatically after fault condition is removed
Over temperature protection	Self-healing type When the casing temperature exceeds 90℃, the output will shut down as the casing temperature rises
Output overvoltage protection	The output voltage will shut down when it exceeds 1.08-1.2 times the rated voltage

Function

function	function declaration
DC OK	When the power supply is not working properly, the DCOK signal voltage is -0.1-0.5V; when it is working normally, the DCOK signal voltage is 4.5-6V(60mA).
DRS DigitalRemoteSwitch	When the DC voltage of the signal source is $\leq 0.8V$, the power supply is turned on; when the DC voltage is ≥ 4 to 30V, the power supply is turned off. The maximum cannot exceed 30A
Redundant	Parallel protection: For parallel applications, if one PSU fails to operate, the other PSU will automatically activate. This can prevent system crashes and enhance the reliability of the system.

Environmental

Environmental Categories	Parameter
Max. operating temperature range	-40 ~ 75°C, @100-277Vac; When the operating temperature exceeds the rated working temperature by 50°C, the power will be reduced by 2% for per 1°C increase in temperature. please refer to the derating curve for details.
Working humidity	20 ~ 90% RH, non-condensing
Storage temperature, humidity	-40~+80°C, 10 ~ 90% RH non-condensing
Vibration	10 ~ 500Hz, 5G 12min/cycle, 72 min, each along X, Y, Z axes
MTBF	230Khrs min. MIL-HDBK-217F (Ta=25°C)
Lifetime	70,000 hours@230Vac, ambient temperature 20°C, please refer to "Lifetime/ Ambient temperature curve"

Safety and EMC

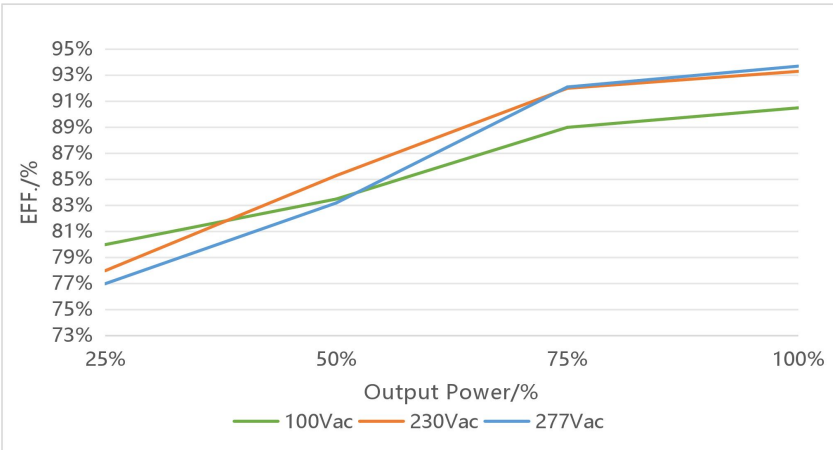
Safety categories	Standard
Safety	UL62368-1, TUV BS EN/EN62368-1, BS EN/EN60335-1, BS EN/EN61558-1/-2-16, GB 4943.1
EMC	EMI BS EN/EN55032, EN55035 Class B
	Harmonic Current BS EN/EN 61000-3-2 ClassB
	ESD BS EN/EN 61000-4-2
	EFT/Burst BS EN/EN 61000-4-4
Surge protection	Differential mode L-N $\pm 2KV$ (2 Ω), common mode L, N-G $\pm 4 KV$ (12 Ω) Harmonic Current Refer to IEC61000-4-5 2014
Withstand voltage	I/P-O/P: 4KVac I/P-PE: 2KVac O/P-PE: 1.25KVac
Insulation resistance	I/P-PE: 100M Ω / 500VDC; I/P-O/P: 100M Ω / 500Vdc / 25°C/ 70% RH

Remark:

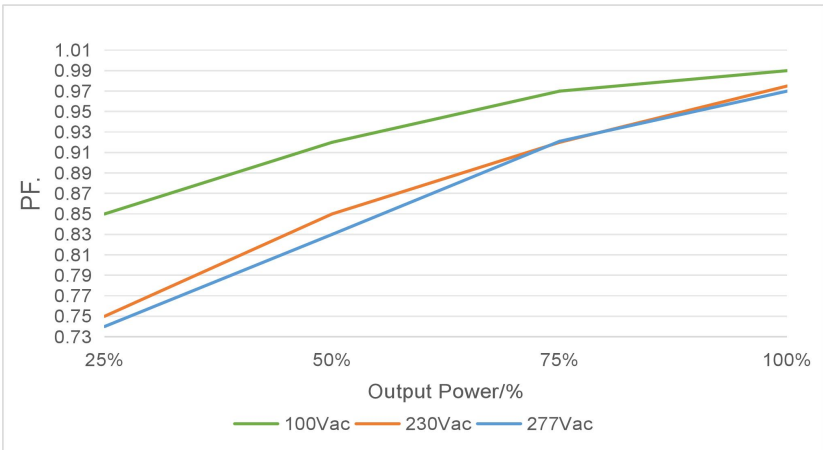
1. The power supply is considered a component which will be installed into the terminal equipment.
2. The EMC is affected by the entire equipment.
3. The terminal equipment must be reconfirmed to meet the EMC directives.

Parametric curves

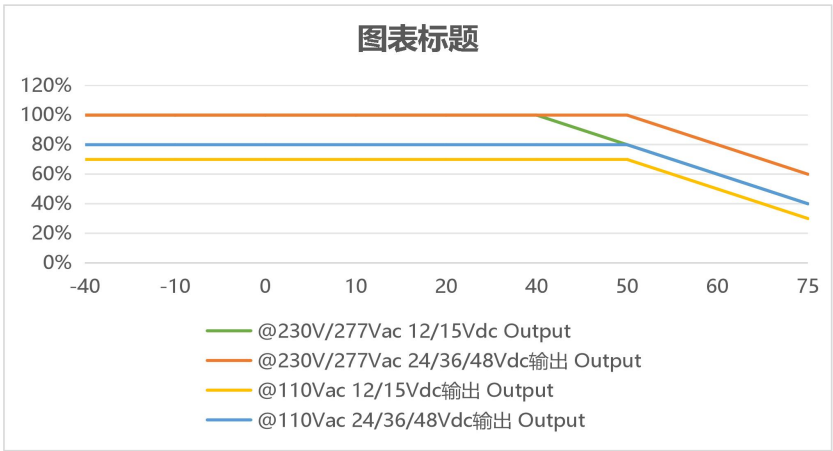
Efficiency/Output Power



PF/Output Power

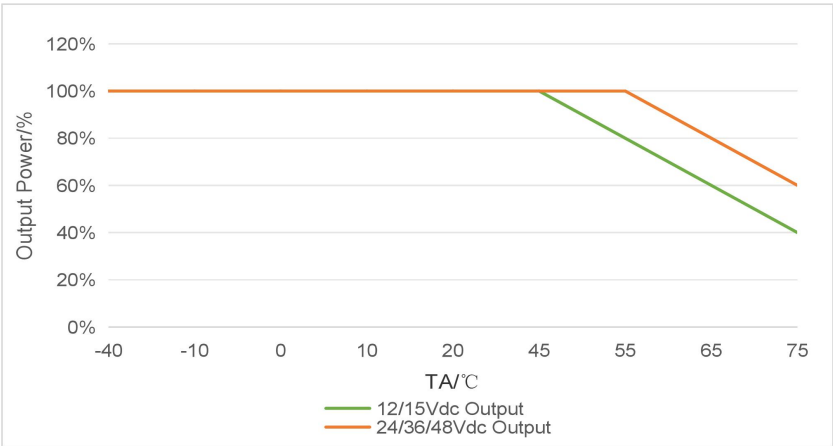


Power/ Ambient temperature (Aluminum-free plate)

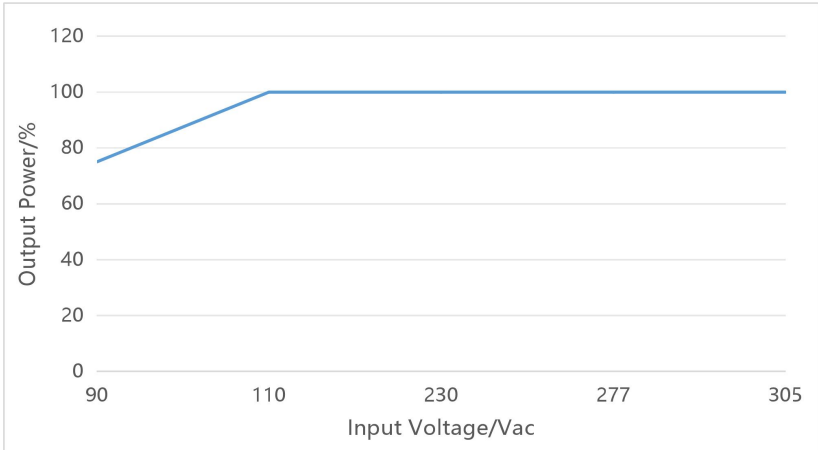




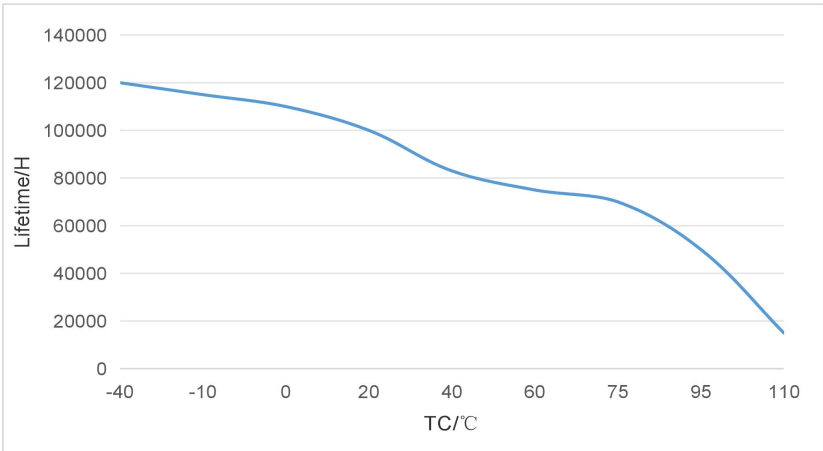
Power/ Ambient temperature (Aluminum Strip)



Power/ Input voltage

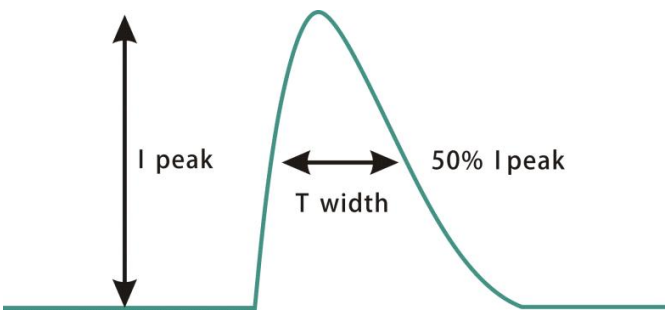


Lifetime/ Ambient temperature



Inrush current

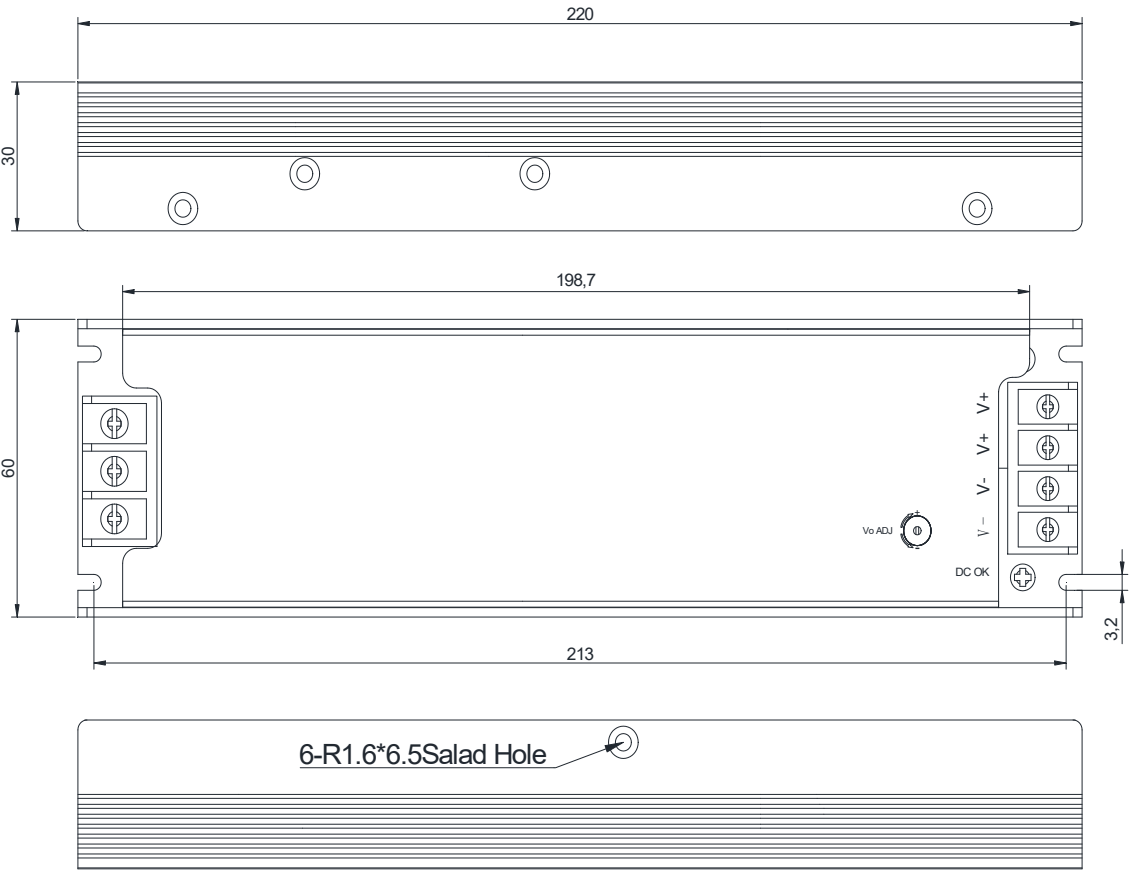
Input voltage	Peak current	T (@50% peak current)
100Vac	32A	222us
230Vac	63.2A	381us
277Vac	67A	395us



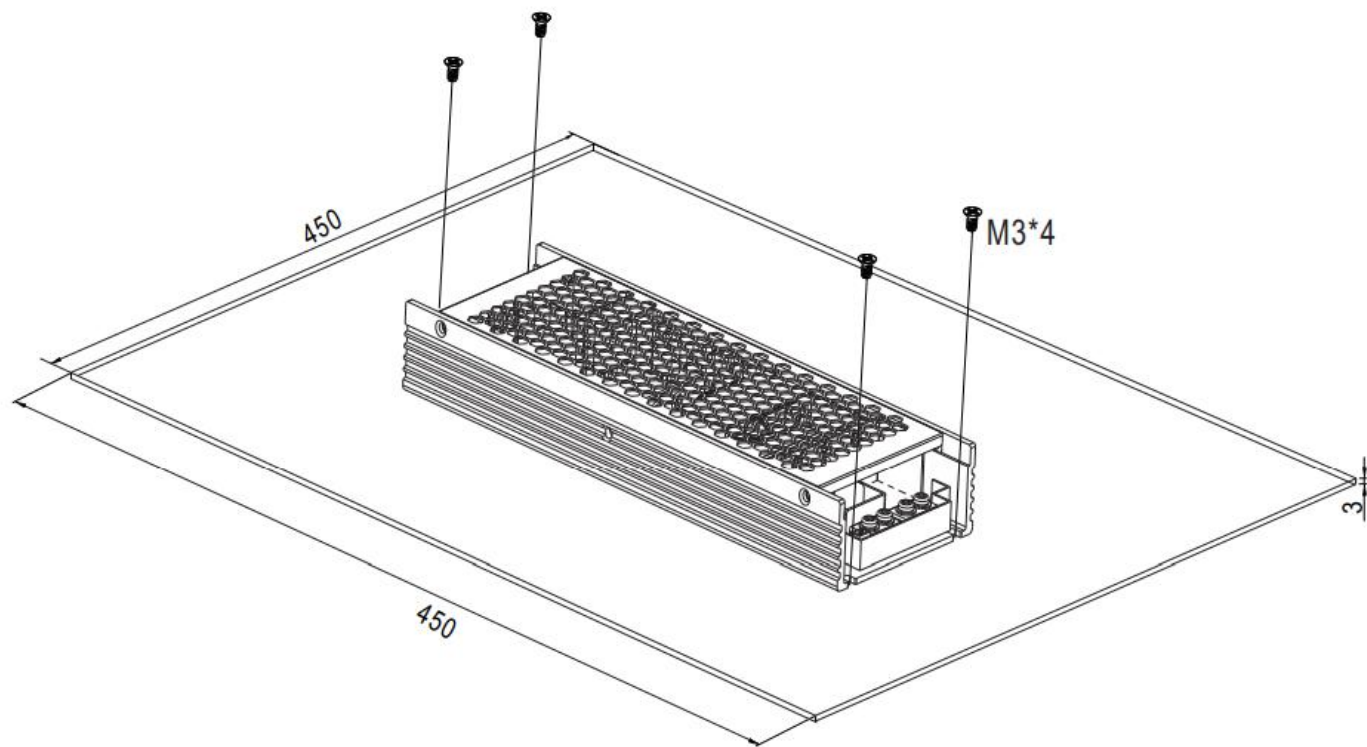
Mechanical specification

Size&Weight

Size&Weight	L220mm*W60mm*H30mm	620g
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Installation instructions for aluminum plate: This product is a self-cooling type. It is recommended to install it on a heat dissipation aluminum plate for use. The recommended aluminum plate is as shown in the following figure. At the same time, to optimize the heat dissipation performance, it is recommended to apply heat dissipation paste on the surface of the aluminum plate or keep the installation surface of the aluminum plate smooth.



Packaging

Packaging (mm)	L475*W350*H205	20 PCS / Carton
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