

Features

- Class I structure
- Input voltage:100-277V ~ 50/60Hz
- Efficiency :90%(Typ.)
- Constant power driver and constant current output
- Function selection:
 - Fixed current : Adjusted by external potentiometer (A version)
 - Isolated 3-in-1 dimming: 0-10V/PWM/Resistor; Timer dimming (P version)
- Input surge protection: DM 6kV, CM 10kV
- Supports operation at temperatures from - 60°C to +55°C
- All-Around protection: IUVP/SCP/OVP/OTP
- Ingress protection rating: IP67
- Warranty: 5 years



Applications

Road lighting
 Industrial lighting
 Stadium lighting
 Landscape lighting
 Horticulture lighting



Model list

Model NO.	Input voltage	Output power	Output voltage	Output current	Default current	Eff. (Typ.)	THD (Typ.)	PF (Typ.)
DL-80Z-115P-MXL	100-277Vac 50/60Hz	80W	57-115Vdc	0.15-1.05A	0.7A	90%	7%	0.97

Note :

1. Test conditions for the above parameters: Ta = 25°C, 230 Vac input, 30 minutes full load.
2. The rated output power is 80W at an input voltage of 100-277Vac, please refer to the output power vs. input voltage curve

Input characteristics

Parameter	Min	Typ.	Max	Note
Rated input voltage	100Vac	230Vac	277Vac	
Input voltage range	90Vac		305Vac	
Input frequency	47Hz	50/60Hz	63Hz	
Leakage current	-	-	0.70mA	IEC 60598-1; 240Vac/60Hz
	-	-	0.75mA	UL 8750; 277Vac/60Hz
Power factor(PF)	0.95	0.97	-	At 100~240Vac and 70%~100% load
	0.92	0.95		At 277Vac and 70%~100% load
THD	-	7%	10%	At 100~277Vac and 70%~100% load
Input current	-	-	1A	At 120Vac and full load conditions
Inrush current	-	-	55A	At 230Vac and 25°C cold start

Output characteristic

Parameter	Min	Typ.	Max	Note
Efficiency@100Vac	85.0%	86.0%	-	At full load conditions ; Io=0.70A
Efficiency@230Vac	88.0%	90.0%	-	At full load conditions ; Io=0.70A
Efficiency@277Vac	89.0%	90.5%	-	At full load conditions ; Io=0.70A
Output voltage range	57Vdc		115Vdc	Constant power range: 76-115Vdc
Open circuit voltage	-	-	160Vdc	
Output current range	0.5A	-	1.05A	Default current is 0.7A
Output current tolerance	-5%	-	+5%	At full load conditions
Output Current Ripple(PK-AV)	-	5% Iomax	10% Iomax	At full load conditions , 20 MHz BW
Start-up overshoot current	-	-	10%	At full load conditions
Line regulation	-5%	-	+5%	Measured at full load,input voltage changes from 100Vac to 277Vac,.
Load regulation	-5%	-	+5%	At 230Vac input and load change from 70% to 100%
Turn-on delay time	-	-	10s	At 100~277Vac and full load, Soft start from 10% to 100% at -30°C to +55°C
Turn-on delay time	-	-	10s+180s	Soft start from 10% to 60% at -60°C to -30°C,100% output in 180 sec.

Note: The output current range is limited by the input and output voltage, please refer to I-V Work area curve

Dimming characteristic (P version)

Dimming	Parameter	Min	Typ.	Max	Note
0-10V Dimming (Optional)	Safe operating voltage	0V	-	10V	On the Dim+ pin, Dim+ source current 150uA
	Dimming range	10%	-	100%	
	Recommended dimming input range	0V	-	10V	
	Turn-on voltage	0.6V	-	0.9V	
	Turn-off voltage	0.4V	-	0.6V	
PWM Dimming (Optional)	PWM in high level	9.5V	-	10.5V	
	PWM in low level	0	-	0.3V	
	PWM in frequency scope	300Hz	-	2000Hz	-
	PWM in duty cycle	1%	-	99%	-
	Turn-on duty cycle	7%	8%	10%	
	Turn-off duty cycle	4%	6%	7%	
Resistor Dimming (Optional)	External resistor value	10KΩ	-	100KΩ	-
	Dimming range	10%	-	100%	Full power output at 99% duty cycle
Timer Dimming (Optional)	3 modes:Timing,Virtual Midnight,Self-adaptive				Default close, Set by the programmer
Output lumen compensation	Setting the output power with reference to the luminaire life				Default close, Set by the programmer

Note: The P version is 1-10V dimming (0V can be turned off). The maximum voltage of the dimming port is 12V. If the external power supply voltage exceeds 12V or the signal cable is inverted, the power supply will be damaged.

Protection

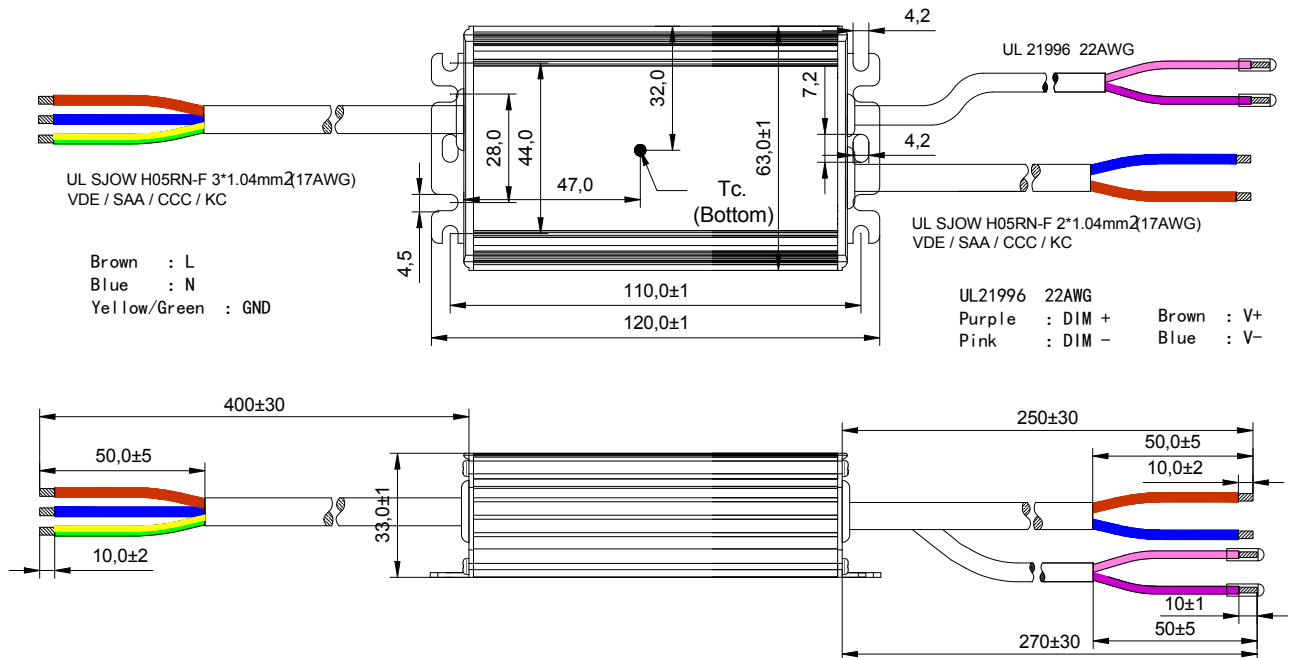
Parameter	Description
Input under voltage protection	Self-recovery type,When the input is below 70Vac, the output is automatically turned Off , and the driver will restart when the input voltage exceeds 90Vac.
Output overload protection	Hiccup mode , recovers automatically after fault condition is removed.
Output short circuit protection	Hiccup mode , recovers automatically after fault condition is removed
Over temperature protection	Self-recovery type , when the casing temperature is greater than 90°C, the output power decreases gradually.
Output over-voltage protection	Self-recovery type, automatically recovered after abnormal conditions are removed

Note: All parameters should be measured at a 230Vac/50Hz input voltage, with a rated load and an ambient temperature of 25°C, unless otherwise specified.

Mechanical specification

Size (mm) L120*W63*H33

DL-80Z-115P-MXL



Weight

Weight 405g