

**Product Features**

- Input voltage range: 100~240 Vac;
- Constant power design, outputs programmable;
- Adjustable output current by software;
- Multiple dimming capability (P types): 0~10Vdc / PWM / Step time dimming;
- Dim to Off;
- Surge protection: 6KV line-line, 10KV line-earth;
- Protections: SCP / OVP / OTP;
- IP67 design for indoor and outdoor applications;
- Suitable for dry / damp / wet locations;
- 5 years warranty

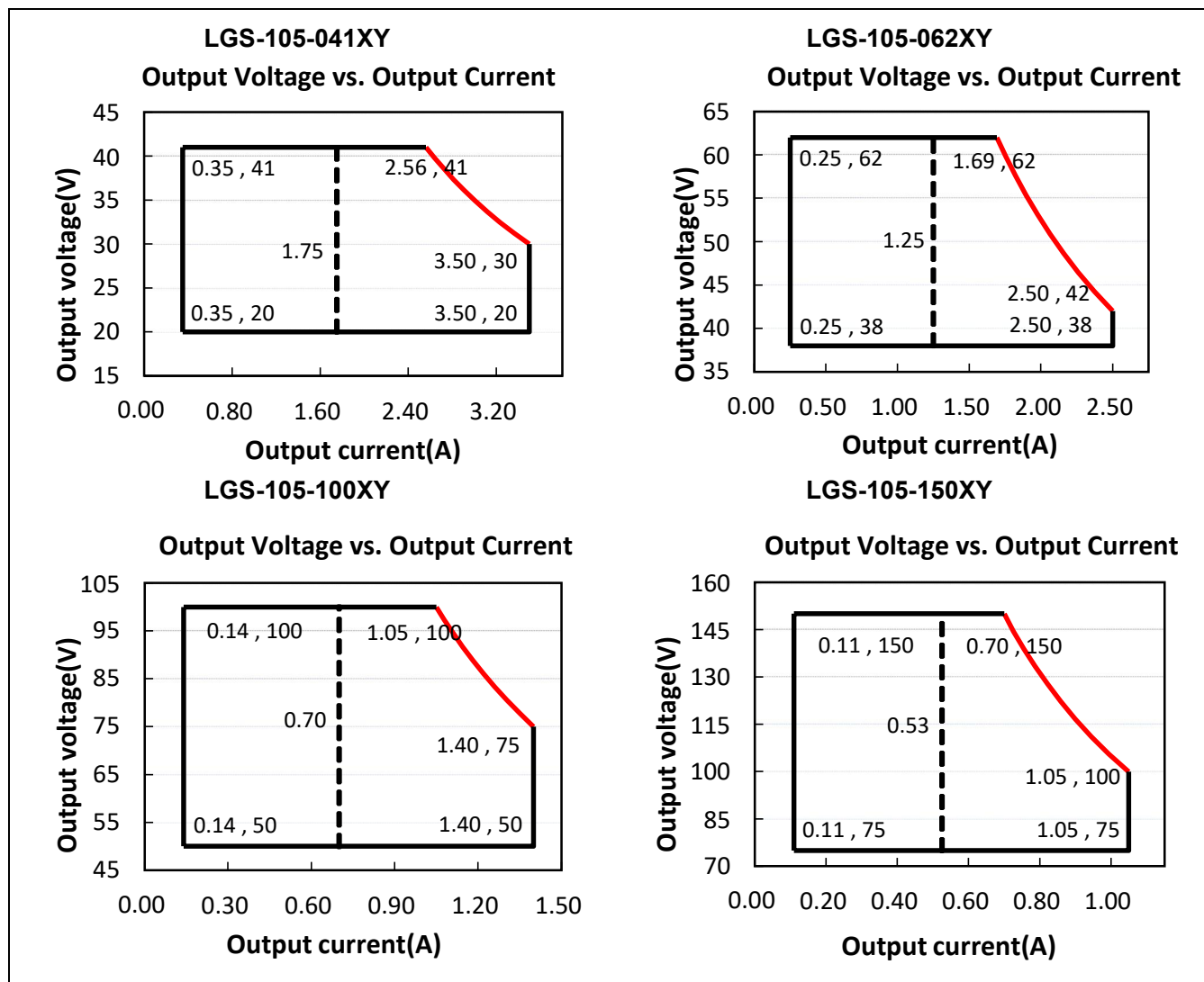
Application

Street Lighting, architecture lighting, industrial lighting, flood lighting, etc.

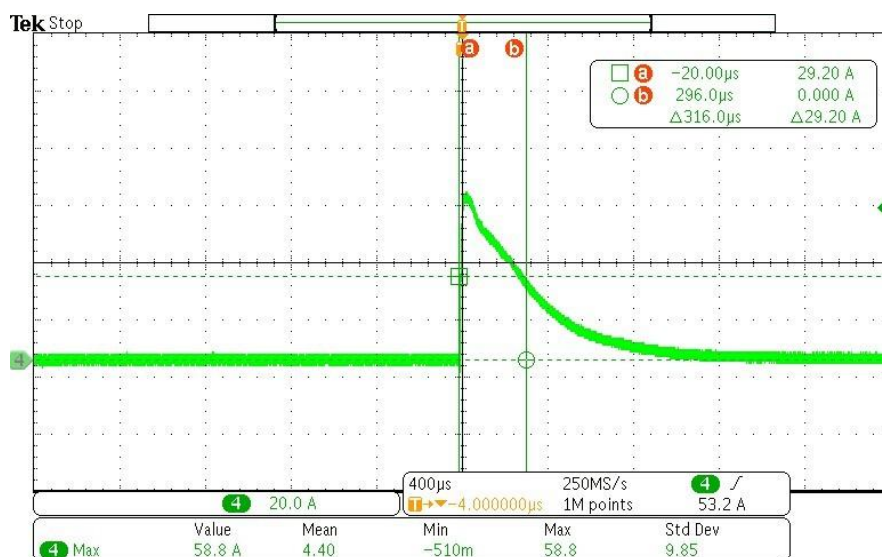
Notes: Class I type,.

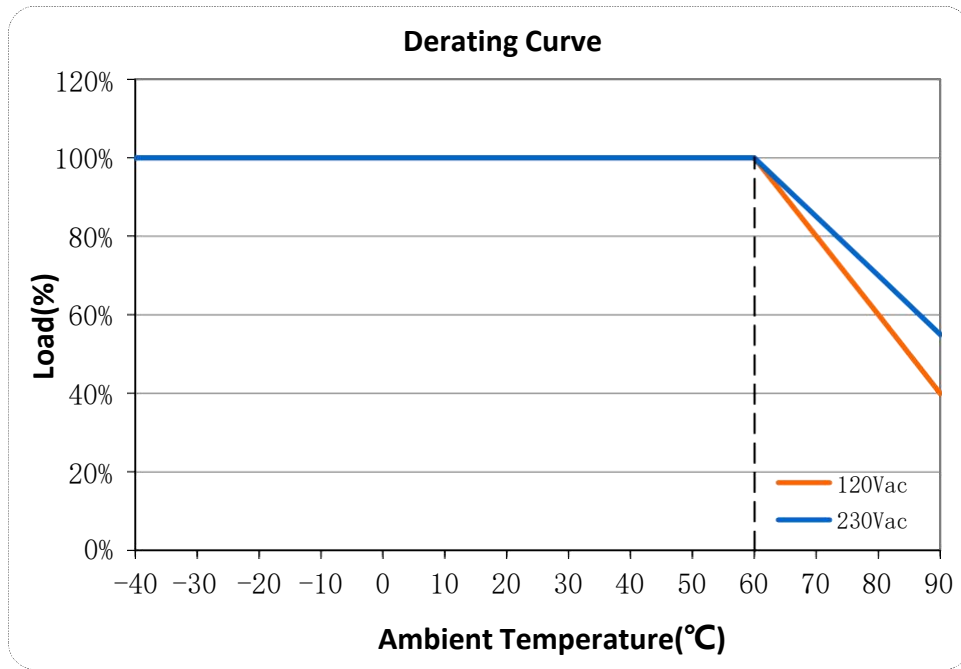
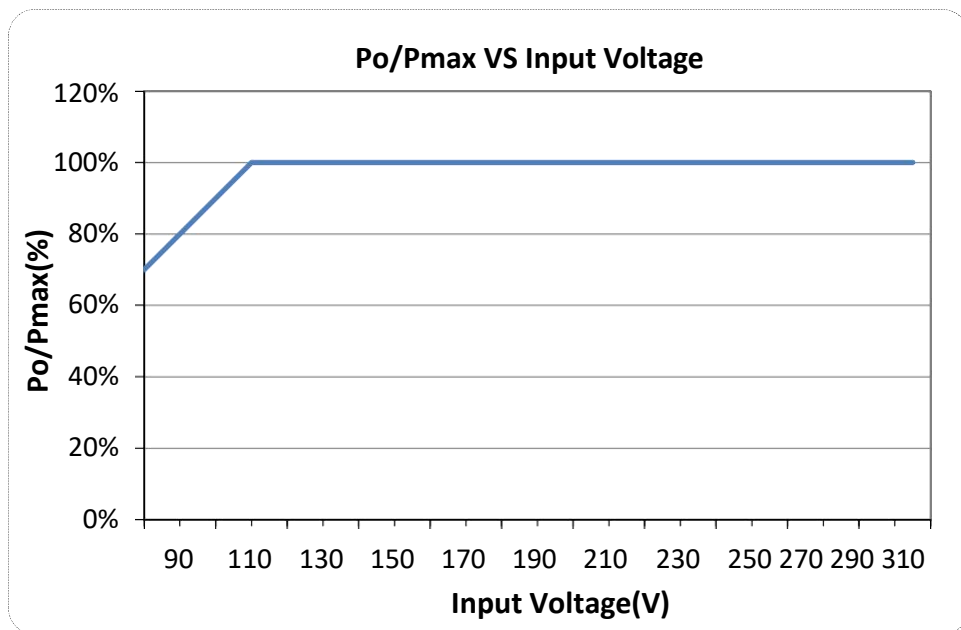
Specification					
Model		041	048	100	150
LGS-105-XXXP					
Input	Efficiency (230Vac)(Typ.)	90%	91%	91%	92%
	Voltage Range (V) Note1	90~305Vac, OR 127~ 430Vdc			
	Rated Voltage (V)	100~277Vac			
	Frequency Range (Hz)	47~63			
	Power Factor	PF>0.97/120VAC, PF>0.95/230VAC, PF>0.92/277VAC at full load			
	THD	THD<10% when output loading ≧ 50% at 120VAC/230VAC THD<15% when output loading ≧ 50% at 277VAC (Take refer to THD vs. Load Curve for details)			
	AC Current (Max.)	1.5A MAX at 120Vac, 0.7A MAX at 230Vac			
	Inrush Current (Max.)	COLD START 75A(twidth=316μs measured at 50% Ipeak) at 230VAC, Per NEMA410			
	Leakage Current (Max.)	0.75mA at 277Vac/60Hz			
	MAX. No. of PSUs on 16A Circuit Breaker	3 units (circuit breaker of type B) / 6 units (circuit breaker of type C) at 230VAC			
	No Load / Standby Power Consumption	No load power consumption<6W/ Standby Power Consumption<0.5W(P version); Consumption>0.5W(P12 version)			
Output	Rated Output Voltage (V)	30-41	33-48	75-100	100-150
	Output Voltage Range (V)	20-41	33-48	50-100	75-150
	Rated Current (A)	2.56-3.50	2.1	1.05-1.40	0.70-1.05
	Rated Power (W)	105	100	105	105
	Output Current Setting Range/ Dimming Range (A)	0.35-3.50	0.21-2.10	0.14-1.40	0.11-1.05
	Initial current (A)	2.8	2.1	1.4	1.05
	Ripple Current (Typ.)	5% of Io_max. ((PK-AV) /AV) with LED loading mode and full load)			
	Current Tolerance	<5%			
	Line Regulation	<1%			
	Load Regulation	<3%			
	Setup Time	<2s, at 120Vac; <0.5s, at 230Vac			
	DC AUX Power (P12 Type)	12V/24V Selectable; Output Voltage Tolerance: ±10%; Max Output Power: 0.5W, The instantaneous maximum current is 50mA			
	Dim to Off	18V Max	25V Max	45V Max	60V Max
		Yes, but need to take refer to the above turn-off voltage			

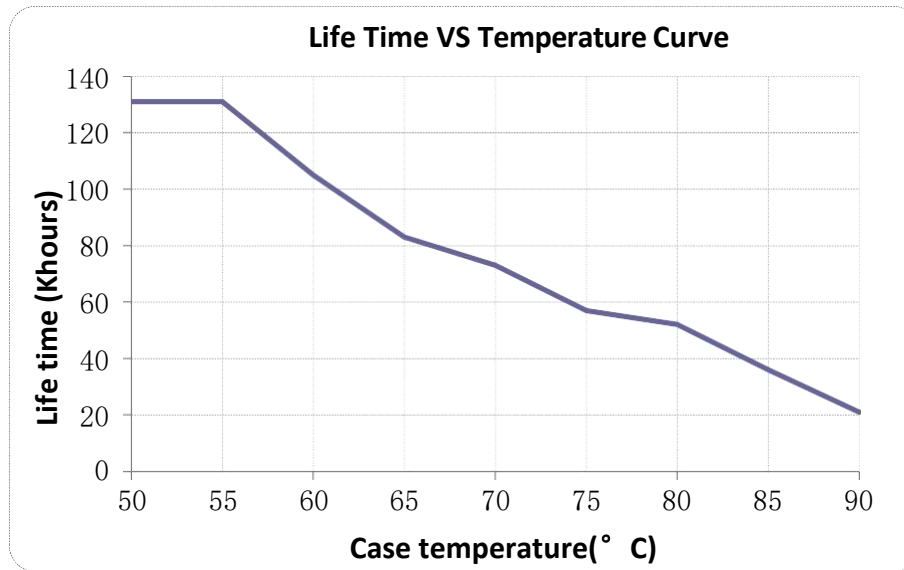
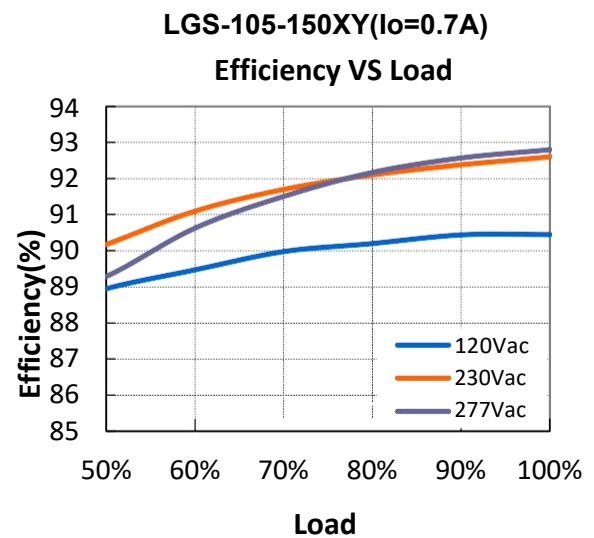
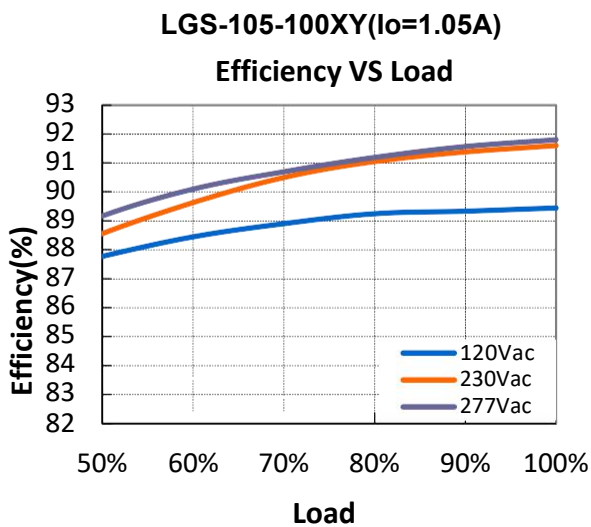
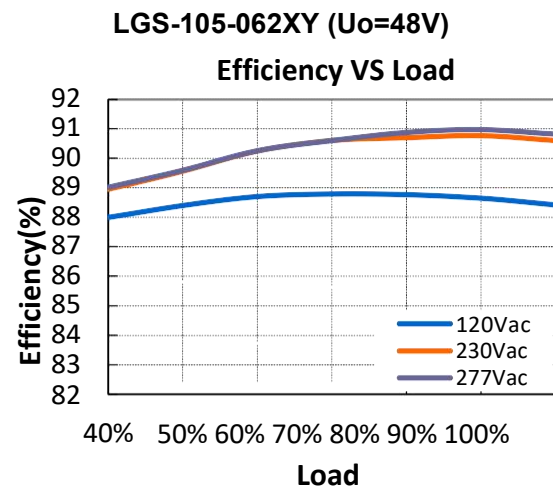
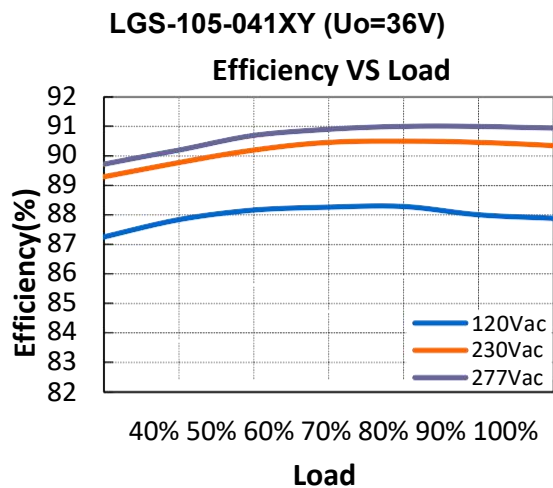
	DIM+ Short/Source Current	150uA~350uA
Protection	Short Circuit Protect (SCP)	Hiccup mode, recover automatically with short circuit removed.
	Over Voltage Protect (OVP)	Voltage limiting. Output current is decreased if the required loading voltage is higher than MAX. output voltage.
	Over Temperature Protect (OTP)	Decrease the output current, but not less than 20% of rated output current, recover automatically once the fault condition is removed.
Environmental	Working Temperature	-40~+60°C(Refer to 'Derating Curve')
	Max. Case Temperature (Tc)	90°C max
	Working Humidity	20~95%RH
	Storage Temp., Humidity	-40~+85°C, 10-95%RH
	Vibration	10-500Hz, 5G 12min/cycle, period for 72min each along X、Y、Z axes
Safety & EMC	Safety Standard	UL8750, CSA C22.2 No. 250.13-12; ENEC EN61347-1, EN61347-2-13 independent, EN62384; GB19510.1,GB19510.14
	Withstand Voltage	I/P-O/P: 3.75kVac, I/P-FG:1.65kVac, O/P-FG:1.5kVac
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms (500VDC / 25°C/ 70% RH)
	EMC Emission	FCC Part 15 Class B/ EN55015, EN61000-3-2 Class C, EN61000-3-3
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547 (Surge: L-N: ±6kV, L,N-FG: ±10kV)
Others	MTBF	200000Hrs @25°C±10°C ambient temperature, 230Vac,80% load (MIL-HDBK-217F)
	Lifetime	50000Hrs@80°C case temperature (Refer to 'Lifetime Curve')
	Dimension	L154*W66.2*H36.8mm
	Weight (Typ.)	700±50g/PCS
Reliability	Screen test (1)	336Hrs aging test @95°C & full load without temperature protection
Notes: 1. The test results are based on 14 samples with OTP moved 2. All the data are measured under room temperature if not specified.		

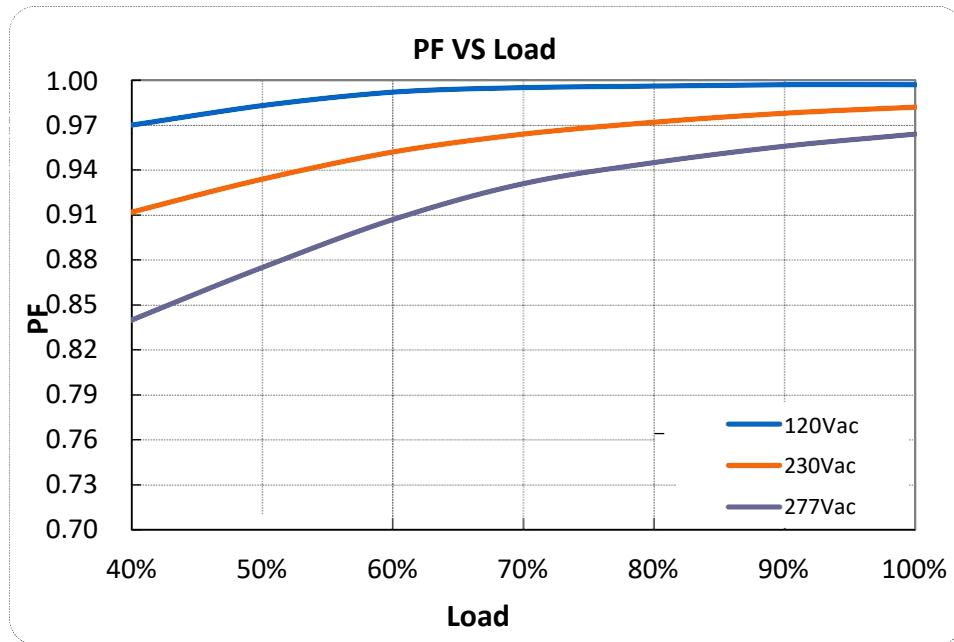
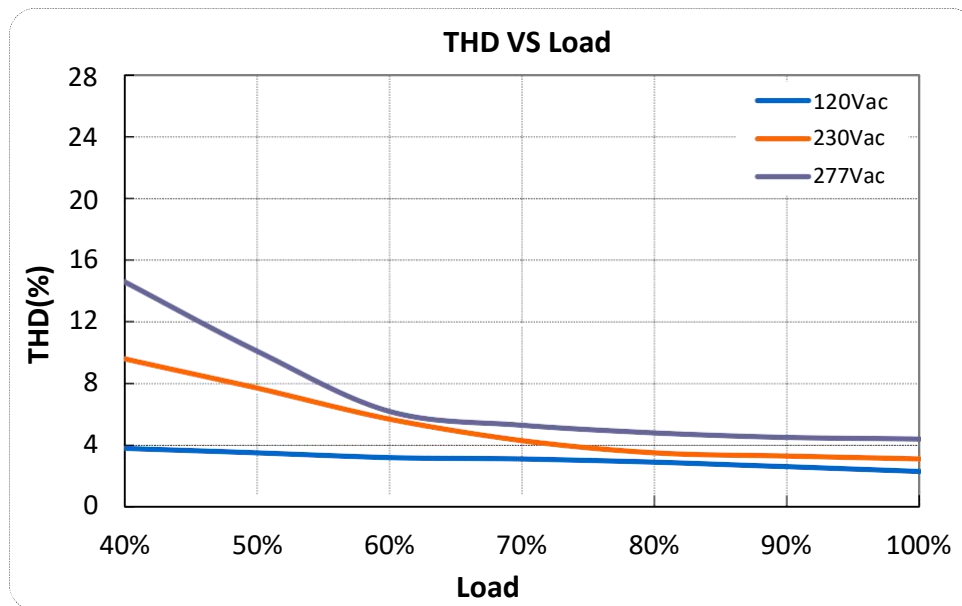
OPERATING AREA I-V


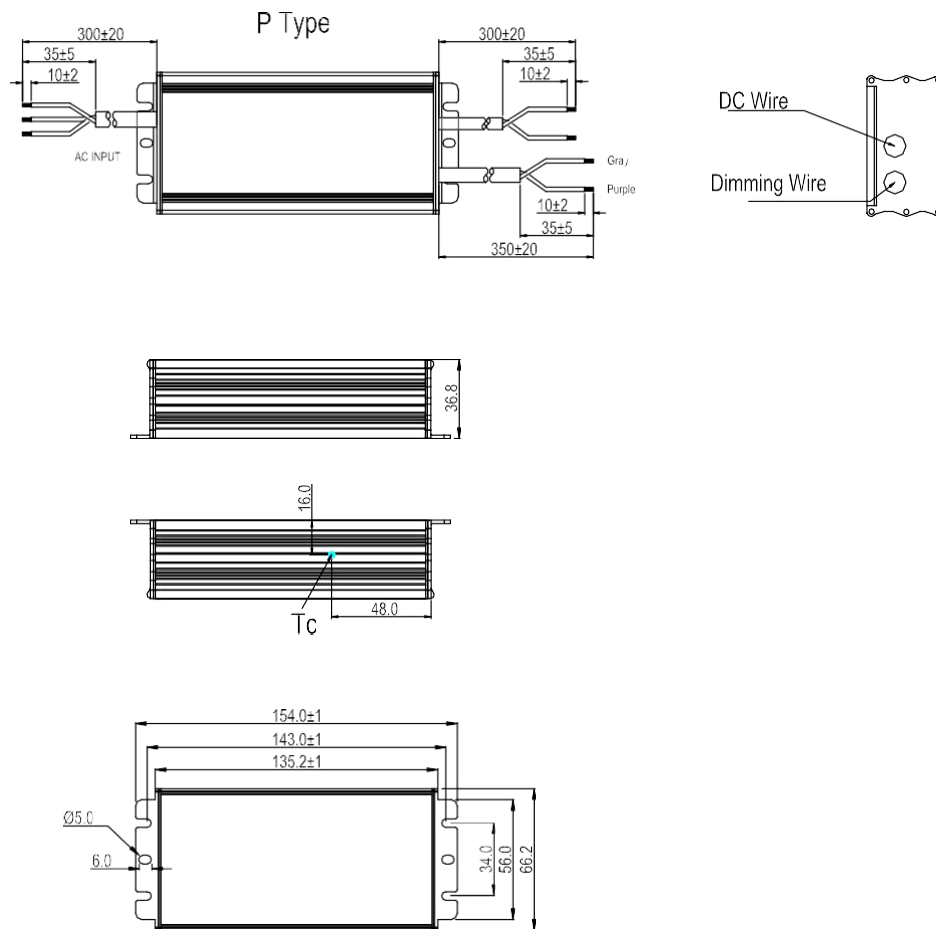
Notes: X=N is suitable for the right area of the dotted line; X=P is suitable for the solid line contain area.

INRUSH CURRENT WAVEFORM


DERATING CURVE

OUTPUT POWER VS INPUT VOLTAGE


LIFETIME VS CASE TEMPERATURE

EFFICIENCY VS LOAD


POWER FACTOR VS LOAD

TOTAL HARMONIC DISTORTION


Mechanical Outline
LGS-105W


Wire	Specification	Note
Input	CCC+VDE H05RN-F 3*1.0mm ² L=300mm	for CE
	L (BROWN) N (BLUE) G (Y/G)	
	18AWG*3C SJOW L=300mm	for UL
	L (BLACK) N (WHITE) G (GREEN)	
Output	CCC+VDE H05RN-F 2*1.0mm ² L=300mm	for CE

	+ (BROWN) - (BLUE)	for UL
	18AWG*2C SJOW L=300mm	
	+ (RED) - (BLACK)	
Dimming	22AWG*2C UL2733 L=350mm	for P
	DIM+ (PURPLE) DIM- (GRAY)	