

■ Features

- Power Rating: 600W
- Input Voltage: 120-277Vac
- Constant voltage design
- Output current (0mA-54200mA)
- Efficiency to 95%
- Optional External Thermal Protection NTC
- OVP, SCP, OTP, & Over Current Protection
- UL recognized Type HL/Type TL
- IP67
- 5-year warranty
- Surge: Diff:6kV, Common 10kV



*Product images are for illustrative purposes only and may vary from actual design.

■ Application

- Indoor and outdoor applications

■ Model List*(See part number scheme for model number details)

Model Number	Input Voltage Range	Output Power	Output Voltage	Output Current Min.	Output Current Max.	Efficiency	Certification
L2WV-650S012ST	120-277Vac	650W	12V	0mA	54200mA	95%	UL/cUL
L2WV-650S024ST	120-277Vac	650W	24V	0mA	27100mA	95%	UL/cUL

*36V and 48V models under development. Add -THR for optional external thermal protection NTC

■ Technical Data

Input voltage range	120-277Vac
Frequency	47-63Hz
Power factor	> 0.95
Output voltage	12-48V
Output power	650W
Max input current	2.4A @ 277Vac
Max input Power	650W
Efficiency	95%(Typ.)
Line Regulation	± 1%
Load Regulation	± 1%
Inrush Current	65A @230Vac cold start +25°C
THD	< 20% 50-100% Load
Over Current Protection	Protection type: Constant current limiting, recovers automatically after fault condition is removed
Short Circuit Protection	Hiccup mode, recovers automatically after fault condition is removed
Over Voltage Protection	1.3Vo, Protection type: Hiccup mode, recovers automatically after fault condition is removed

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■ Technical Data(cont.)

Over Temp. Protection	Hiccup mode, recovers automatically after fault condition is removed
Operating Temperature	-35 to +50°C
Max T-case Temp.	92°C
Operating Humidity	10 ~ 100% RH non-condensing
Storage Temp., Humidity	-40 to +85°C, 5 ~ 100% RH
Vibration	10~500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes
MTBF	> 200kHrs to MIL-HDBK-217 at 25°C, GB
Dimensions	246x84x48mm
Packing	4pcs/carton
Weight	2.4kg

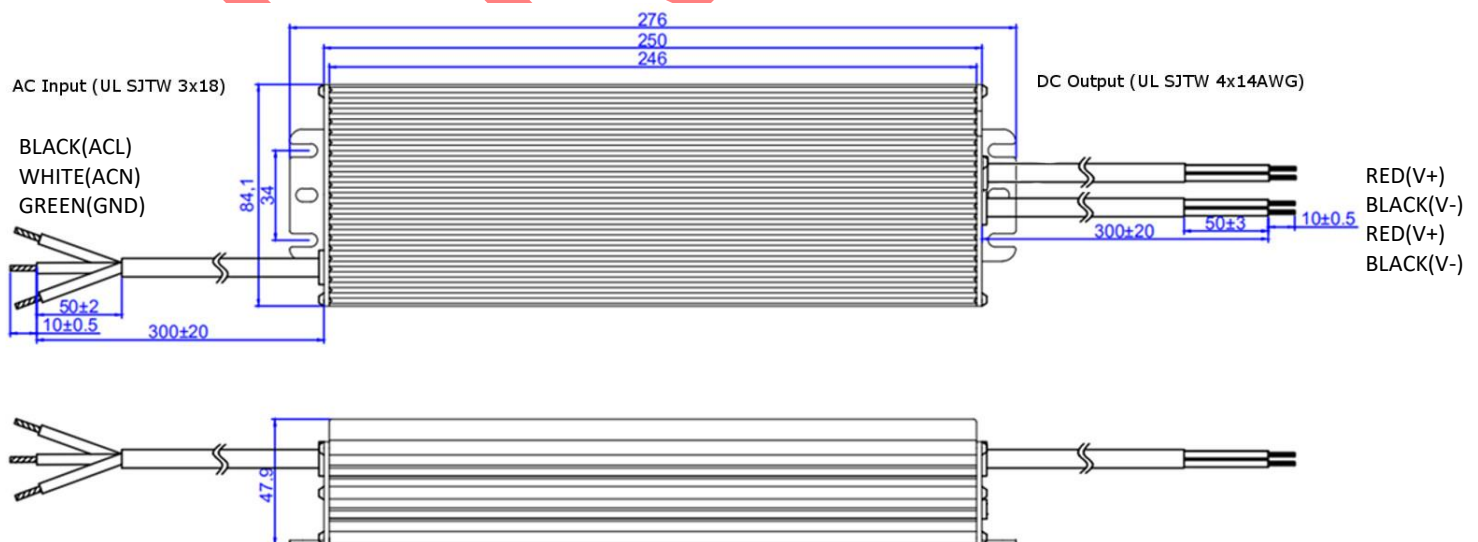
■ Safety Compliance

Safety Standards	UL8750, UL935, UL1012, CSA-C22.2 No.107.1, EN61347-1, EN61347-2-13
Withstand Voltage	I/P – O/P: 3.75kVAC
Isolation Resistance	I/P – O/P: 100M Ohms / 500VDC / 25°C / 70% RH
EMC Emission	Compliance to EN55015, EN61000-3-2 Class C (≥60% load); EN61000-3-3
EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, EN55024

Disclaimer:

Autec Power Systems' (Autec) LED Drivers are Hi-Pot tested during the manufacturing process. Autec assumes no responsibility for secondary Hi-Pot testing at customer location or designated production line(s). Should customer require further Hi-Pot testing, at their own production line, following assembly of the LED Driver into the customer's assembled fixture, Autec requests advance notice. This request must be communicated to Autec in a timely manner and is recommended to be requested at time of issuing each purchase order.

■ Mechanical Design

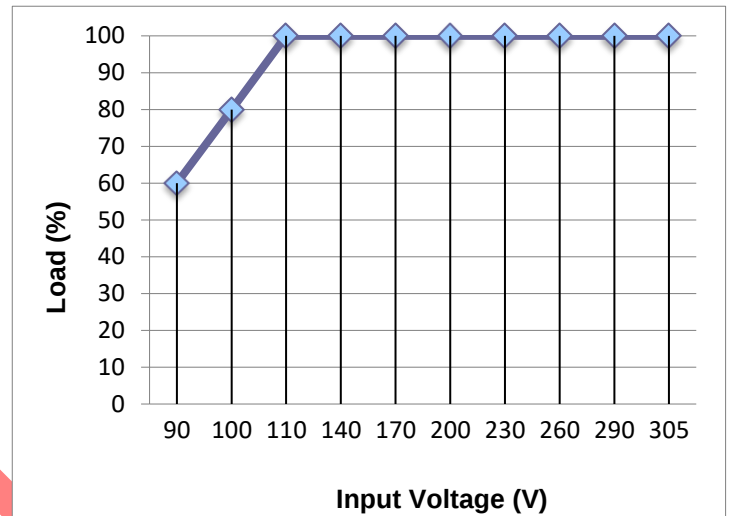
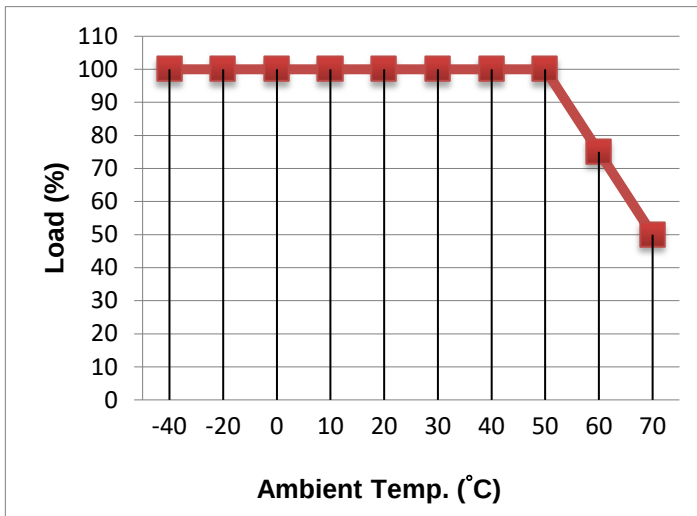


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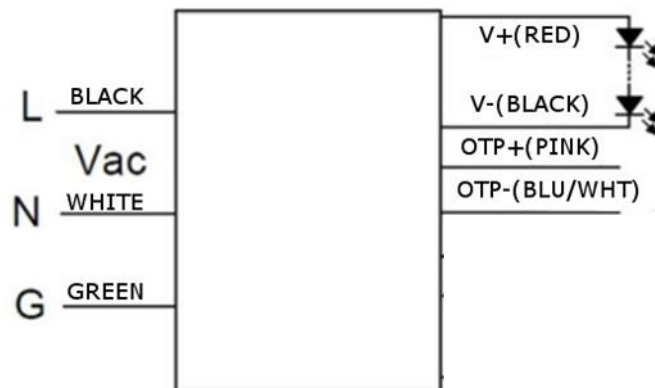
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■ Derating Curve



Note: The Ta vs Load curve is tested @220vac input and without any extra heatsink. The driver can work at a higher Ta if extra heatsink is mounted, as long as the Tc is below Maximum Tc, the driver will work properly.

■ Wiring Diagram/Optional External Thermal Protection



■ **External Thermal Protection Table(optional)**

Parameter		Min.	Typ.	Max.	Notes
External Thermal Protection NTC	R1	-	7.81 kOhm	-	When R_NTC falls below R1, External Thermal Protection is triggered, reducing output current until R2 is reached.
	R2	-	4.16 kOhm	-	When R_NTC is less than R2, output current is reduced to the programmed "Protection Current Floor."
	Protection Current Floor	10%loset	60%loset	100%loset	10%loset>lomin (default setting is 60%)
		lomin	60%loset	100%loset	10%loset≤lomin (default setting is 60%)

Part Number Scheme

L 2 W V - 650 S XXXX S T

L2=LED Driver Series

W=Input Voltage 120-277Vac

V=Constant Voltage

"- "=Non-dimming

650=Output Power(Watts)

T=Class I, 3 Wire Input

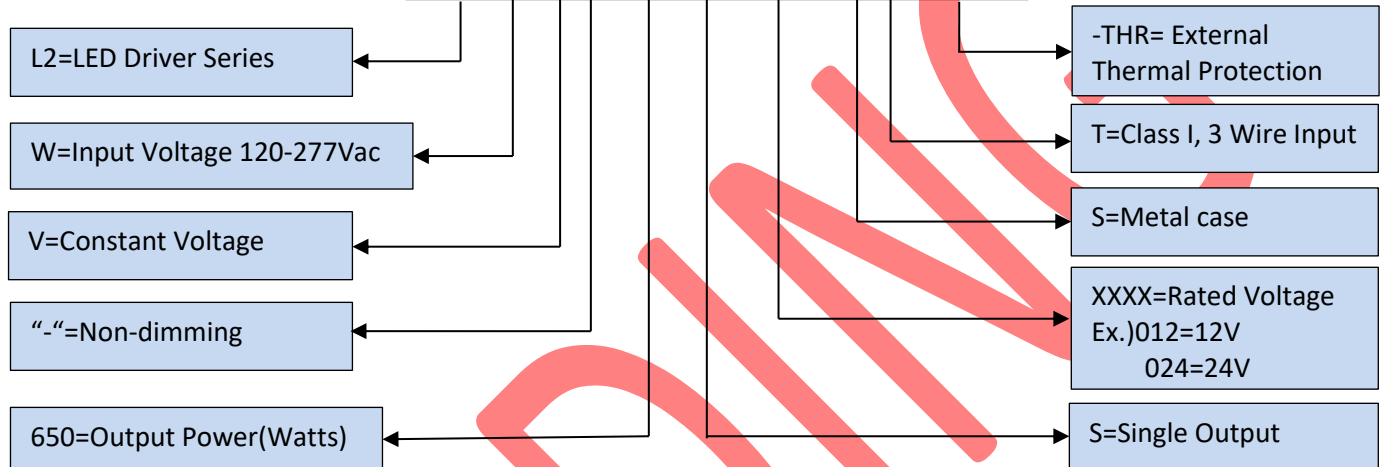
S=Metal case

XXXX=Rated Voltage
Ex.)012=12V
024=24V

S=Single Output

Part Number Scheme

L 2 W V - 650 S XXXX S T-THR



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***Specifications are subject to change without notice. Autec is not responsible for issues arising from errors or omissions.**