

■ Features

- Power Rating: 120W
- Input Voltage: 90-305Vac
- Constant current design
- Output current(1200mA-3750mA)
- Selectable output through POT switch
- Efficiency up to 91%
- 3-1 Dimming, 0-10V/PWM Resistor
- Major World Safeties all in one Driver: UL/CCC/TUV/BIS/SAA/CE
- Protections: SCP, OTP, OVP
- IP65
- 5-year warranty
- Surge Protection: L/N-PE: 4KV, L-N: 4KV



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

■ Application

- High bay light
- Dry, damp and wet locations

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

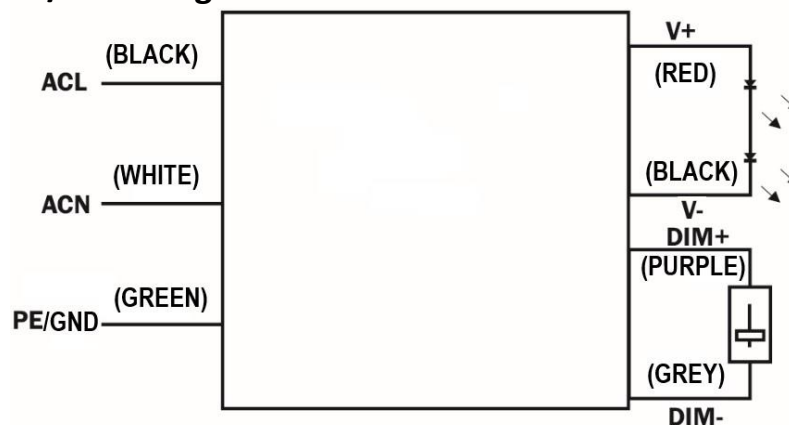
Model Number	Input Voltage Range	Output Power	Output Voltage	Output Current Min.	Output Current Max.	Efficiency	Certification
L3WCD120S375ST	90-305Vac	120W	24-40V	2000mA	3750mA	90%	UL/CCC/TUV BIS/SAA/CE
L3WCD120S285ST	90-305Vac	120W	27-54V	1500mA	2850mA	91%	UL/CCC/TUV BIS/SAA/CE
L3WCD120S215ST	90-305Vac	120W	40-68V	1200A	2150mA	91%	UL/CCC/TUV BIS/SAA/CE

*Timer dimming option available, contact Autec Sales.

Notes:

1. Output current selectable by POT switch
2. Torque: 0.98 to 19.6mN·m (10 to 200gf·cm) max.
3. Stop strength: 49.0mN·m (500gf·cm) min

■ Wiring Diagram / Dimming



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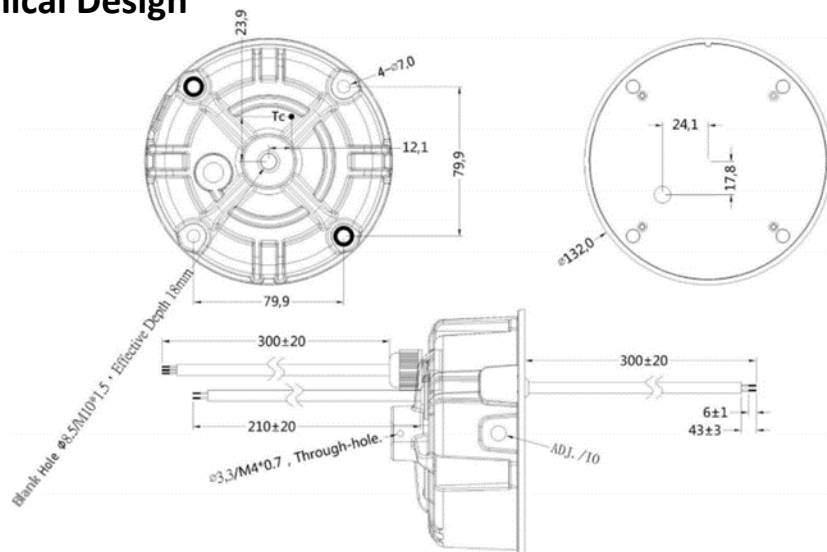
■ Input Characteristics

Parameter	Min	Typ.	Max	Remarks
Rated AC input range	100Vac		277Vac	
AC input range	90Vac		305Vac	
Input frequency range	47Hz		63Hz	
Max input current			1.6A	90Vac, full load
Inrush current			60A	230Vac/50Hz, cold start
No load power		1W	2W	277Vac/50Hz, No load
Power factor	0.95	0.98		230Vac/50Hz, full load
	0.90			100-277Vac/50Hz, 70-100% Load
THD		7%	10%	230Vac/50Hz, full load
			20%	100-277Vac/50Hz, 70-100% Load

■ Output Characteristics

Parameter	Min	Typ.	Max.	Remarks
Output voltage range	L3WCP120S375ST	24V	40V	Power derated@24-32Vdc
	L3WCP120S285ST	27V	54V	Power derated@27-42Vdc
	L3WCP120S215ST	40V	68V	Power derated@40-56Vdc
Rated Output Voltage	L3WCP120S375ST	32V	40V	$P_o = V_o \cdot I_o = 120W$, full load
	L3WCP120S285ST	42V	54V	
	L3WCP120S215ST	56V	68V	
Rated Output Current	L3WCP120S375ST	3A	3.75A	3A for 40V, 3.75A for 32V
	L3WCP120S285ST	2.25A	2.85A	2.25A for 54V, 2.85A for 42V
	L3WCP120S215ST	1.75A	2.15A	2.25A for 54V, 2.85A for 42V
Current Adjustable range	L3WCP120S375ST	2A	3.75A	Rated I_o 70%-100% adjustable
	L3WCP120S285ST	1.5A	2.85A	
	L3WCP120S215ST	1.2A	2.15A	
No load Voltage	L3WCP120S375ST	40.5V	42V	43.5V
	L3WCP120S285ST	54.5V	56V	57.5V
	L3WCP120S215ST	68.5V	70V	71.5V
Efficiency@230Vac	L3WCP120S375ST	88%	90%	Output 40V/3A
	L3WCP120S285ST	89%	91%	Output 54V/2.25A
	L3WCP120S215ST	89%	91%	Output 68V/1.75A
Output current tolerance	-5%		+5%	
Output Voltage Ripple (pk-pk)		1%	2%	Full load
Output Current Ripple (pk-pk)		5%	10%	Full load
Start-up Current Overshoot			10%	
Start-up Time		1S	2S	230Vac
Line Regulation	-1%		+1%	Full load
Load Regulation	-2%		+2%	

■ Mechanical Design



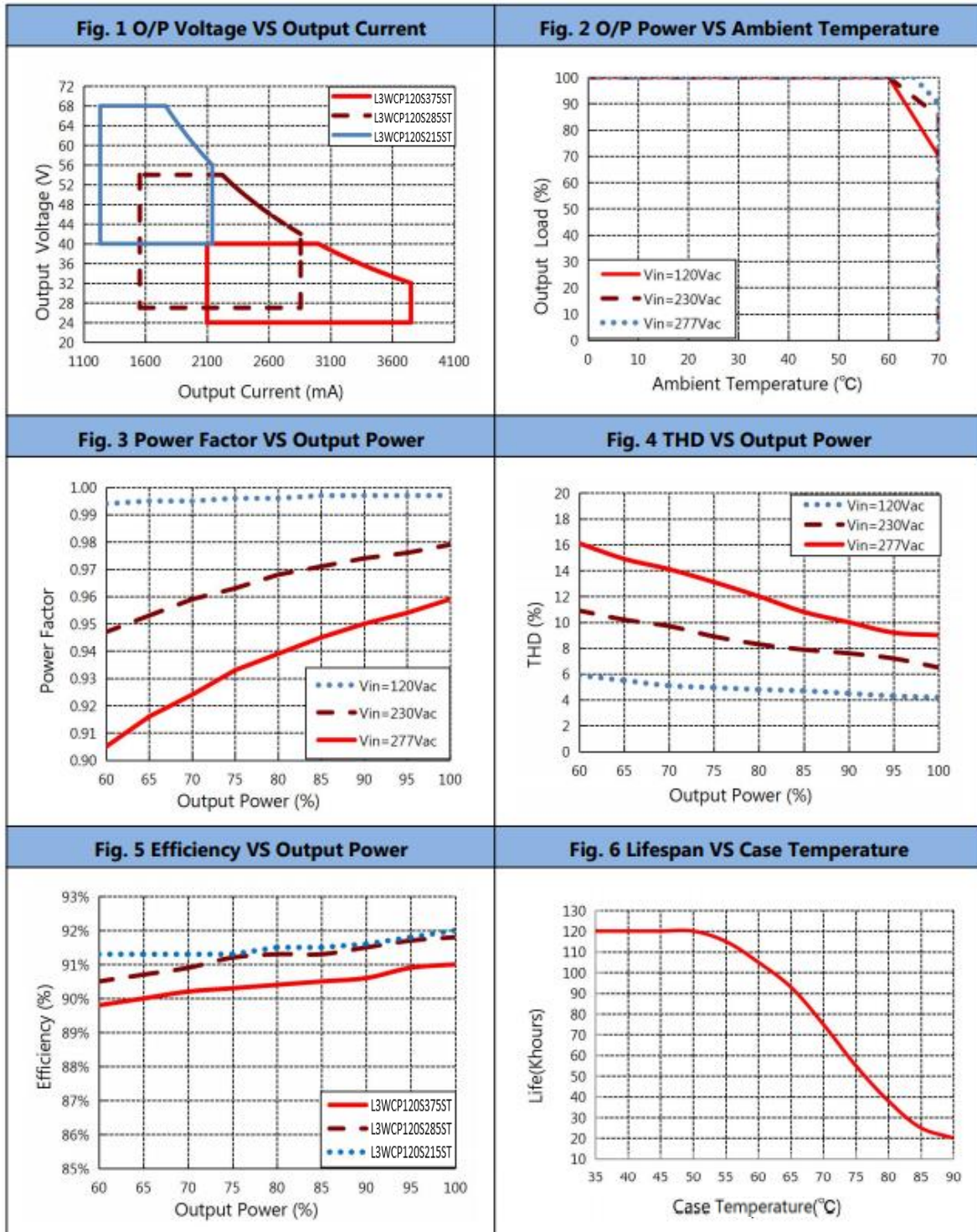
Input Wire: UL STW #18AWG, 3 X 0.824mm², O.D. 7.8mm, GREEN: PE, BLACK: L, WHITE: N
 Output Wire: UL SJTW #14AWG 2X0.824mm², O.D. 7.6mm, RED: V+, BLACK: V-
 Dim Wire: STYLE 2733, #22AWG O.D. 5.8mm, PURPLE: DIM+, GREY: DIM-

■ Safety Compliance

Certification		Standard	Status	Remark
UL/cUL		UL8750	✓	
CE		EN 61347-2-13:2014 EN61347-1:2008+A1:2011+A2:2013 EN62493:2015	✓	
SAA		AS/NZS61347.2.13	✓	
CCC		GB 19510.14-2009	✓	
BIS		IS15885:2012 Part 2 Sec 13	✓	Only for 3-in-1 Dimming
CE		EN61347-2-13:2014 EN61347-1:2008+A1:2011+A2:2013	✓	
Item		Standard	Remark	
Insulation Strength	Input-output	3200Vac/5mA Max/60s	Reinforced insulation	
	Primary-Earth	1600Vac/5mA Max/60s	Basic insulation	
	Sec.- Earth	1000Vac/5mA Max/60s	Function insulation	
Insulation Resistance	Input-output	≥10 MΩ	Testing Voltage: 500Vdc	
Ground Resistor		≤0.1Ω	25A/1min	
Leakage Current		≤0.75mA	277Vac	
Item		Criterion	Remark	
Conduction Emission		EN55015:2013+A1:2015		
Radiation Emission		EN55015:2013+A1:2015		
Harmonic Current Emissions		IEC/EN 61000-3-2	Class C	
Surge		IEC/EN61000-4-5	Difference mode 4kV, Common mode 4kV Criterion B	

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■ Performance Curve



■ Other Characteristics

Parameter		Min	Typ.	Max	Remarks
0-10V Dimming (optional)	Dim Vmax	-20V		14V	3 in 1 Dimming; 0-5V Dimming optional; Negative Logic Dim Optional
	Dim Range	10% Io max		100% Io set	
	Voltage	1V		10V	
	OFF	0.3V	0.5V	0.7V	Dim-off value
	On	0.5V	0.7V	0.9V	
PWM Dimming (Optional)	High	5V		10V	
	Low	-0.3V		-0.6V	
	Frequency	200Hz		2KHz	
	PWM Duty	1%		99%	
Resistor Dimming (optional)	Resistance	10K Ohm		100K Ohm	
	Dimming	10% Io max		100% Io Set	
Timing Curve (optional)	IC Control	By Programming			Typically, 3-4 sections
	Timing	5H/6H/7H/8H per section			DefaultMode:24 Hour/Circle with 50% load
Protection	OTP	80°C	85°C	90°C	Shut down o/p voltage, re-power on to recovery
	Short Circuit Protection	Driver will not be damage with Short-circuit power <10W			Hiccup mode
Life Time		55,000hrs			230Vac full load, Tc 75°C
MTBF		200,000hrs			230Vac full load, Ta=25°C, (MIL-HDBK-217F)
Temperature Coefficient		-0.03%/°C			+0.03%/°C
Tc					85°C
Warranty		5 years			Tc75°C
Net Weight		1200g			
Dimension		φ132mm*71mm			D x H

■ Environmental Data

Parameter	Min	Typ.	Max	Remarks
Operating Temperature	-40°C	25°C	+60°C	
Storage Temperature	-40°C	25°C	+85°C	
Operation Humidity	10%RH		90%RH	
Storage Humidity	5%RH		95%RH	
Altitude	-65m		4,000m	
Cooling Method	Air Cooling			
Packing	10pcs/carton, Carton Dimensions: 500mmx390mmx170mm			

■ Dimming

0-10V Dimming (Typ.)

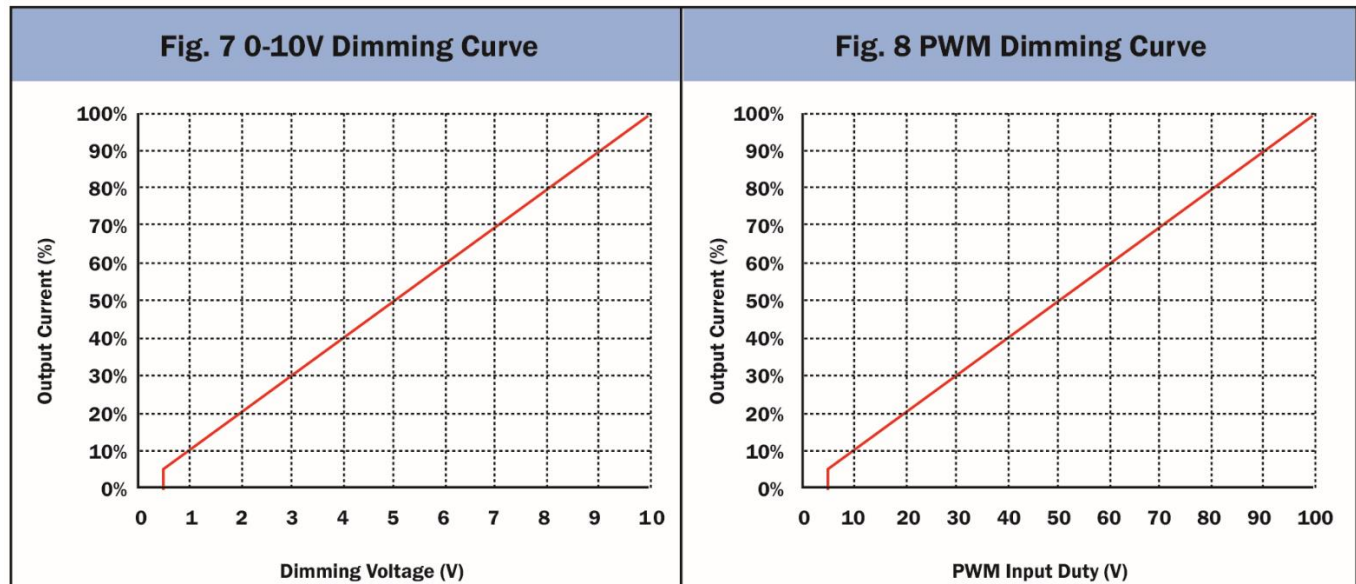
Voltage Range	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	Open
Rated Current Percentage	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95-108%

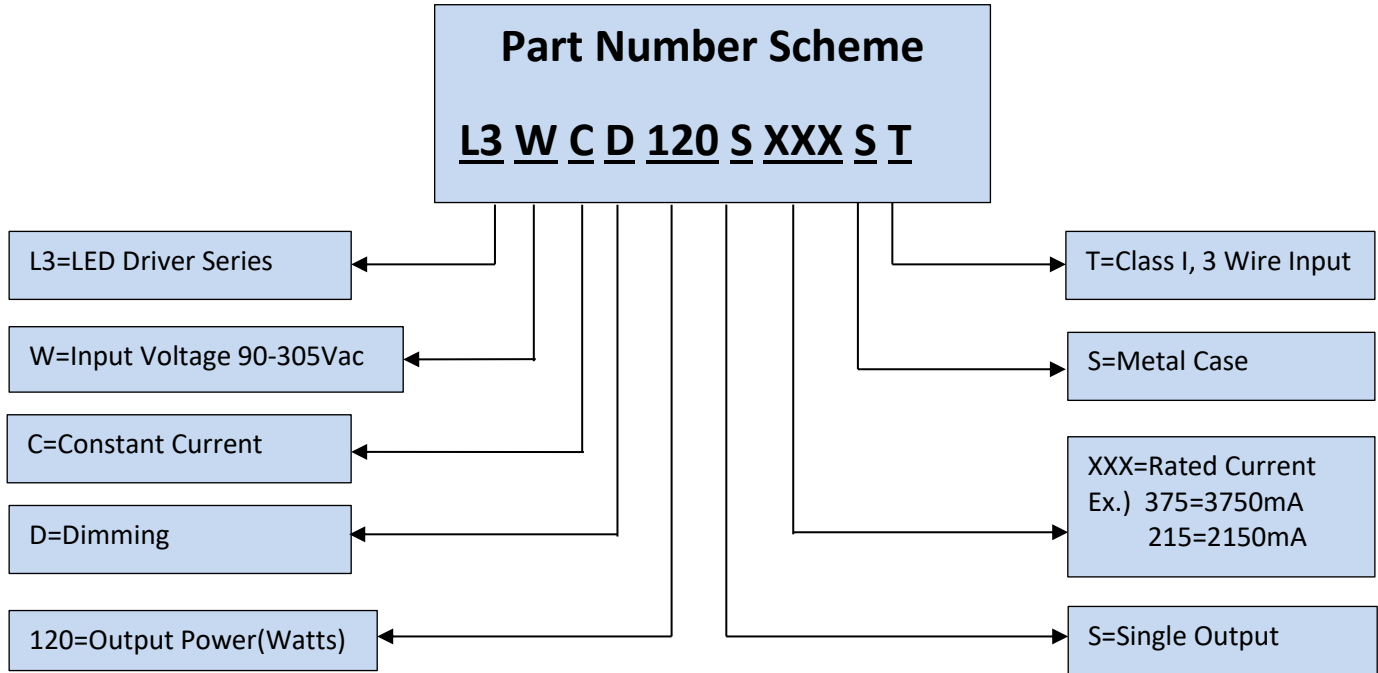
PWM Duty	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	Open
Rated Current Percentage	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95-108%

Resistor(Typ.)

Resistor	10K Ω	20K Ω	30K Ω	40K Ω	50K Ω	60K Ω	70K Ω	80K Ω	90K Ω	100 K Ω	Open
Rated Current Percentage	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95-108%

■ Dimming Curve





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

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