L2WCP060 Series

60W, 100-277Vac Input, Programmable Constant Power LED Driver

RoHS Compliant

*Near Field Communication controller

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

Features

- Power Rating: 60W
- Input Voltage: 100-277Vac
- Constant current and constant voltage hybrid output
- Output current (240mA-2500mA)
- Programmable with Near Field Communication controller
- Efficiency to 95%
- Compatible with 0-10V, PWM, Timer, Dim-to-off option, 12V/200mA AUX
- UL Class 2 options available, Type HL
- SCP, OTP, OCP, and OVP
- Tc=90˚C
- IP67
- 5-year warranty
- Surge Protection: Diff: 4kV, Common: 10kV

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 110V/220V	Certification
L2WCP060S250ST*-XYZ	100-277Vac	60W	24-36V	1000mA	2500mA	86%/87%	UL/cUL
L2WCP060S167ST*-XYZ	100-277Vac	60W	36-60V	670mA	1670mA	89%/90%	UL/cUL
L2WCP060S100ST-XYZ	100-277Vac	60W	60-102V	400mA	1000mA	90%/92%	UL/cUL
L2WCP060S059ST-XYZ	100-277Vac	60W	102-171V	240mA	590mA	91%/92%	UL/cUL

*Class 2 outputs

Ordering options	
XY= Programmable	**Z=Dimming**
FC=Near Field Communication	**D=**DALI Dimming
	B=BLE Dimming

Technical Data

Input voltage range	100-277Vac
Frequency	47-63Hz
Power factor	> 0.99 @115Vac & 80~100% Full load, > 0.95 @230Vac & 80~100% Full load
Output voltage	24-171V
Output power	60W
Ripple and Noise	3.0%Vo
Max input current	0.6A @115Vac, 0.3A@230Vac
Efficiency	86-92%

■ Technical Data(cont.)

Line Regulation	±5%
Load Regulation	±3%
Inrush Current	65A @230Vac cold start +25℃
Dimming	0~10V/ PWM/ Timer, Dim-to-off option
THD	< 20%
Current Programmable	Yes
Output Current Programmable Range	240-2500mA
Over Current Protection	Protection type: Constant current limiting, recovers automatically after fault condition is removed
Short Current 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
Over Temp. Protection	Hiccup mode, recovers automatically after fault condition is removed
Operating Temperature	-35~+70˚C
Max T-case Temp.	90˚C
Operating Humidity	10 ~ 100% RH non-condensing
Storage Temp. Humidity	-40 ~+85℃, 5 ~ 100% RH
Temp. Coefficient	±0.05%℃ (0~50℃)
Vibration	10~500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes
Dimensions	145x70x37mm
Packing	25pcs/carton
Weight	518.2

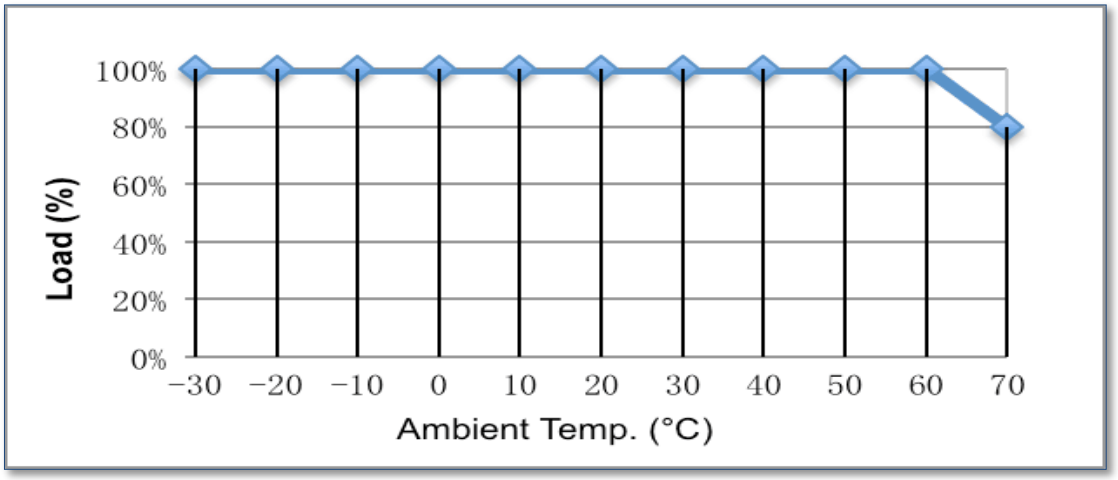
■ Safety Compliance

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℃ / 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

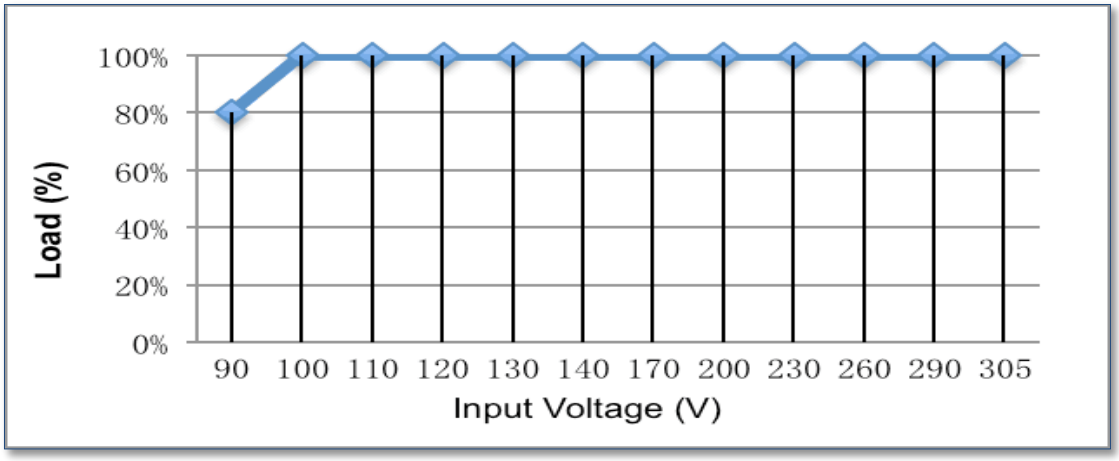
Disclaimer:

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.

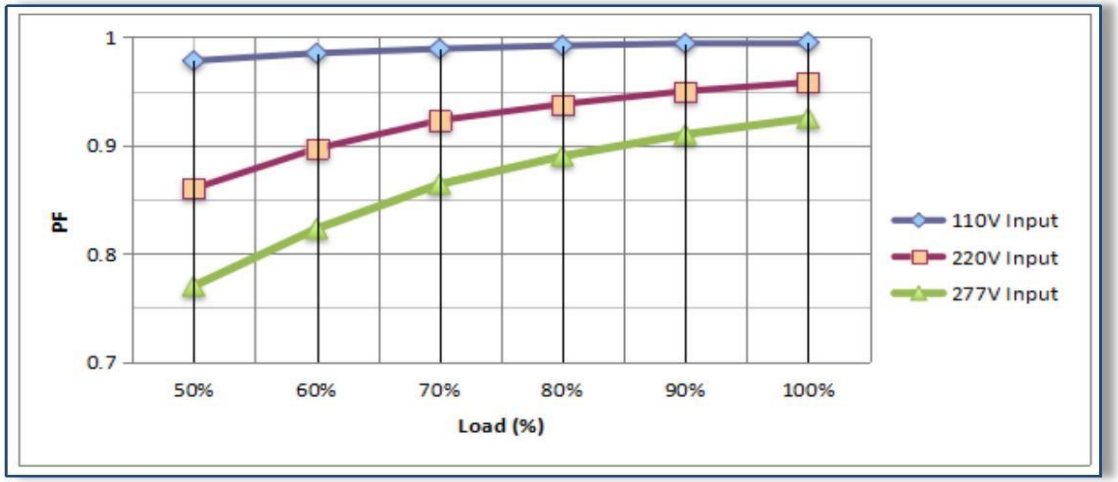
■ Derating curve



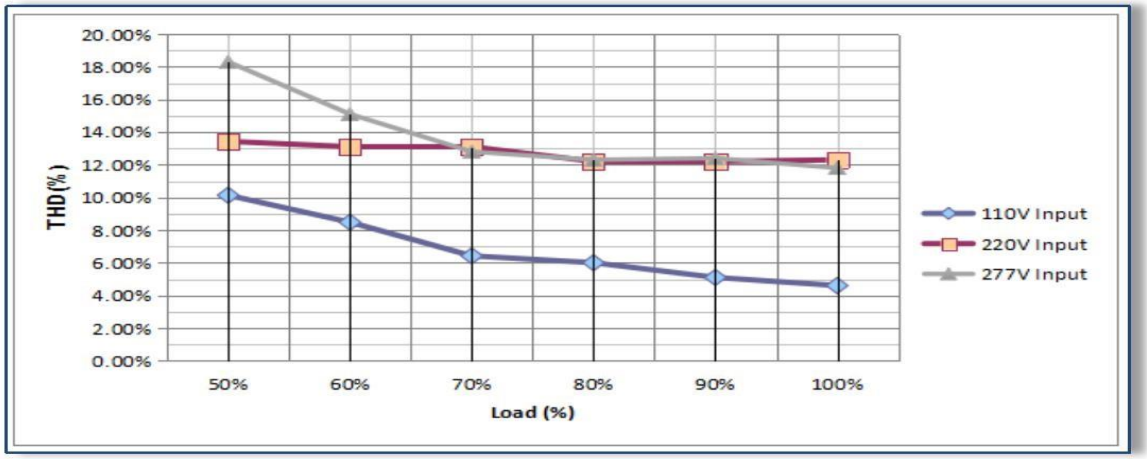
■ Static Characteristics



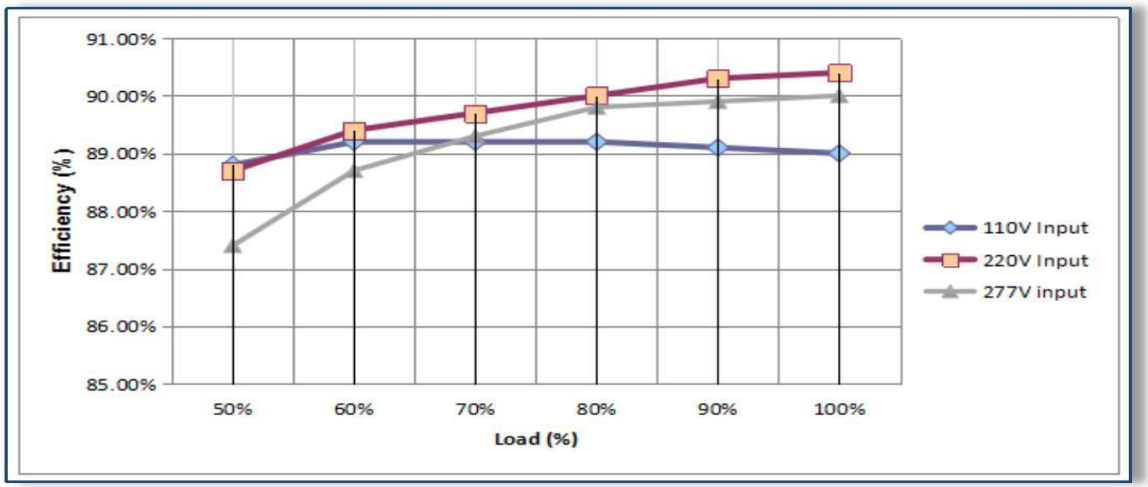
■ Power Factor vs. Output



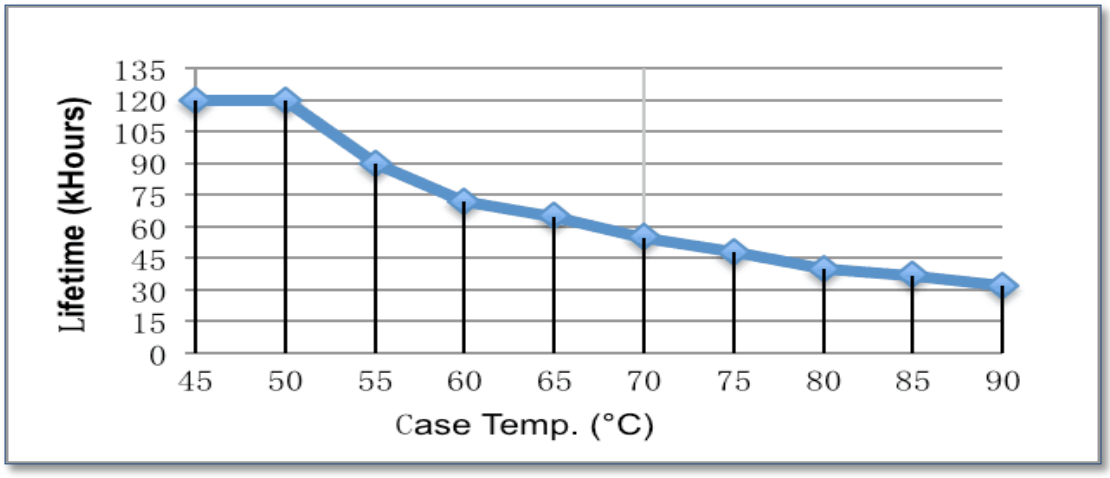
■ THD vs. Output



■ Efficiency vs Output



■ Lifetime vs Case Temp.



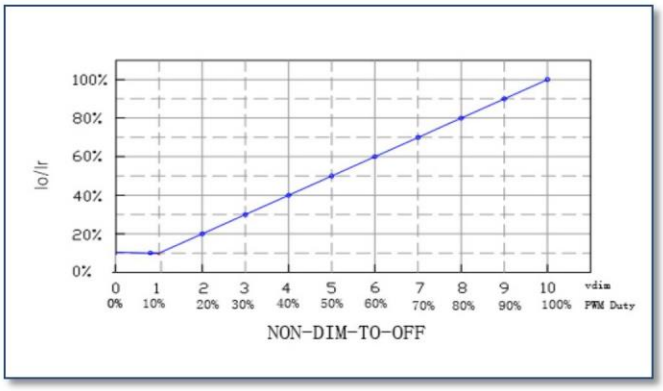
■ Near Field Communication Controller

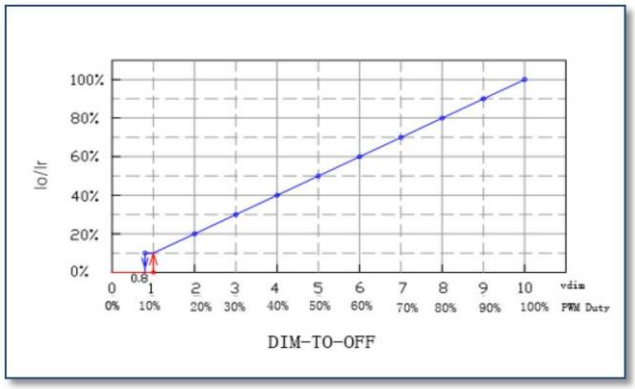
NOTE:

1. The Near Field Communication controller can program the output current, voltage and timer delays.
2. The Near Field Communication programming is a non-contact process, therefore much safer compared to traditional programming methods.
3. Power devices can be programmed without AC power applied to the driver.

■ Dimming

0-10V Analog Dimming &PWM Dimming



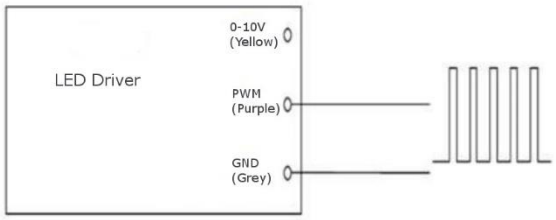


GND	Grey
Dimming wire 0-10V&PWM	Purple
12V AUX	Yellow
Input Dimming Voltage	0-10V
DIM+ Source Current	0-10mA
10V AUX Source Current	20mA
PWM Frequency Range	0.5-3KHZ
PWM high level	10V

NOTE:

1. Io is actual output current and Ir is rated current without dimming control.
2. For the driver to operate properly, the load voltage must be in the working voltage range.
3. We have DIM-TO-OFF option, which can be programmed by the programmer.
4. Maximum input voltage for the dimming wire is 12V.
5. AUX wire is only for source, can't connect to other voltage source.

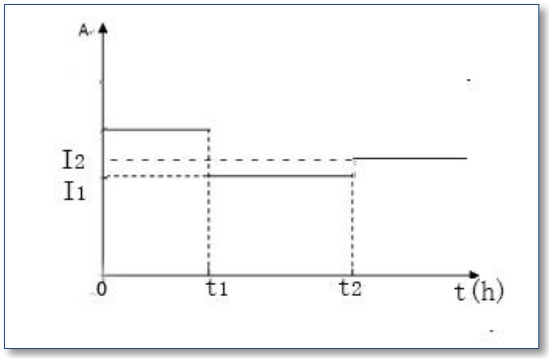
PWM Dimming



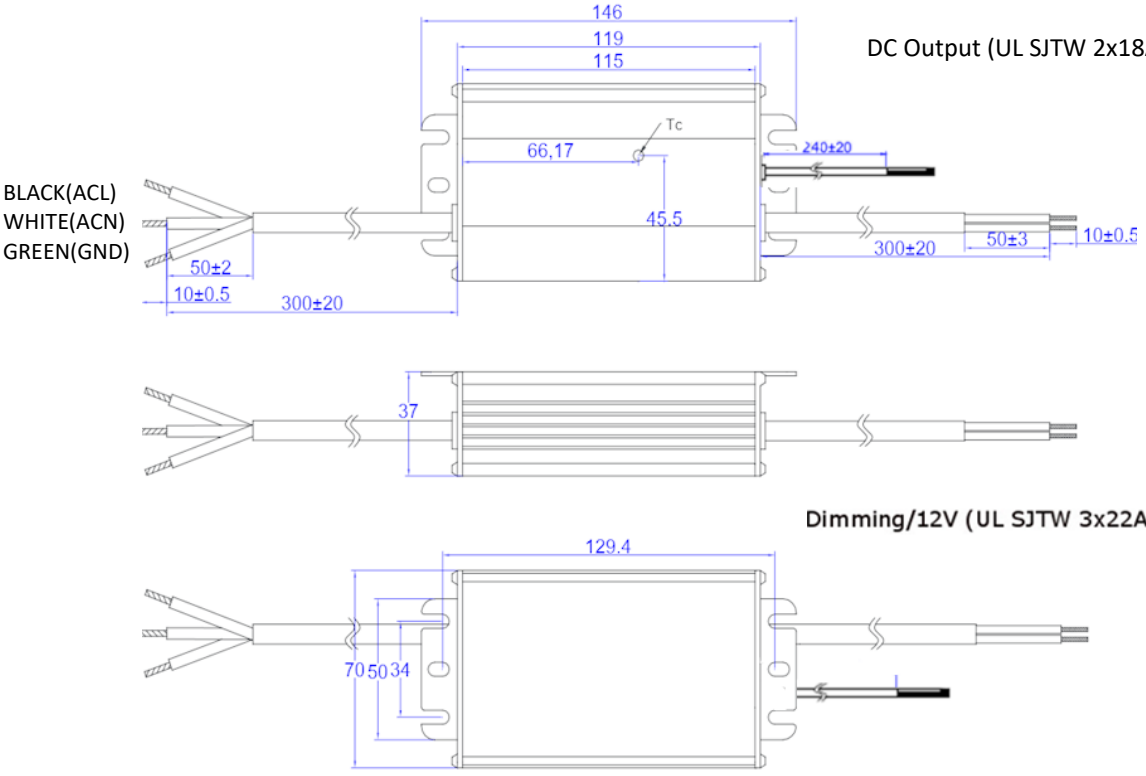
TIMER Dimming

NOTE:

1. The dimming time can be programmed by the programmer.
2. The time of t1 and t2 can be set by the programmer.(0.5h step)
3. The value of I1 and I2 can be set by the programmer.
4. Changing the current from I1 to I2 may take a few min.

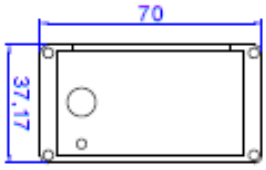


■ Mechanical Design



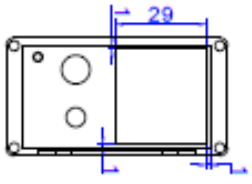
BLACK(ACL)
WHITE(ACN)
GREEN(GND)

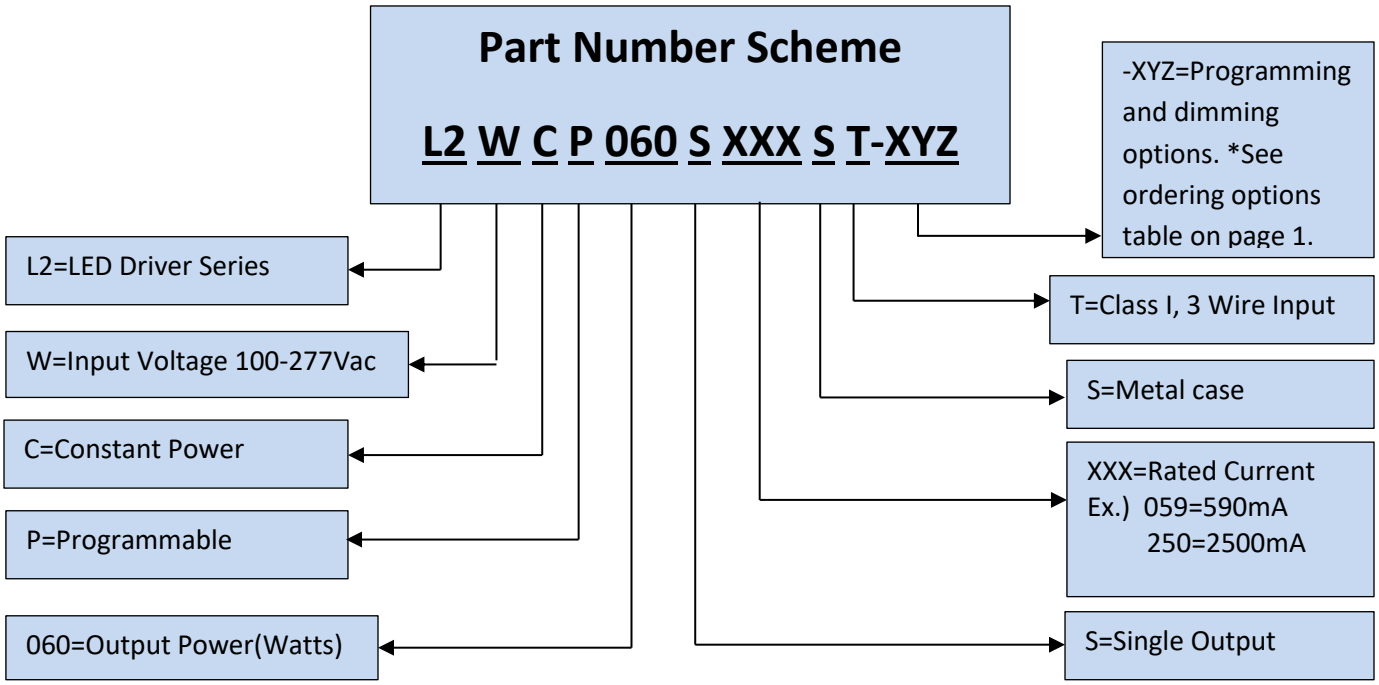
DC Output (UL SJTW 2x18AWG)



RED(V+)
BLACK(V-)
PURPLE(Dim+)
GREY(Dim-)
YELLOW(12V Aux)

Dimming/12V (UL SJTW 3x22AWG)





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