Specification for Approval

Product Name: 200W High Bay Driver

Product Model: G6H-200M260A12

Rev. A.1

Address: Xi Li Song bai Road 1061, Nanshan District, Shenzhen City, Guangdong Province, P.R. China

Post Code: 518108

TEL: 0755-27657000

FAX: 0755-27657908

E-mail: info@mosopower.com

Web site: http://www.mosopower.com

Prepared By	Checked By	Approved By

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CUSTOMER AUTHORIZED SIGNATURE		
Tested By	**Checked By**	**Approved By**
(Company seal) Return one copy to MOSO with approved signature and company seal		

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ECN History

A.1	First edition	2025-2-21

Description

G6H series is specially designed for industrial lighting applications. It is constant current LED driver that operates from 198-528Vac with 0-10V and PWM dimming function. Internal potentiometer and dip switch can adjust power and color temperature. Such round integrated structure enables the driver to have a better heat dissipation, significantly improving reliability and extending product lifetime. To ensure trouble-free operations, protection is provided against input surge, output over voltage, short circuit, and over temperature.

Product Features

- Universal input voltage: 198~528Vac;
- Non-isolated constant current design, Efficiency up to 94%;
- Dip switch adjustable power and color temperature;
- 12V/0.2A auxiliary power supply;
- 3 in 1 dimmable: 0-10Vdc/PWM/Resistor;
- Dim-to-off without afterglow (optional)
- Surge protection: DM: 6KV, CM: 6KV;
- Protection: SCP/OVP/OTP;
- Ingress protection rating: IP65;
- Warranty: 5 years.

Application

Suitable for industrial lighting.

Models

Model	Input Voltage (Vac)	MAX Output Power (W)	Output Voltage (Vdc)	Output Current Adjustable Range (A)	Default Current (A)	Eff. (Typ.)	PF(Typ.)	THD(Typ.)
G6H-200M260A12	200~480	200	180~260	0.50~0.93	0.83	94%	0.97	10%

Notes:
[1].All specifications are measured at 25℃ ambient temperature, input voltage 277Vac, and the typical value tested at full load, if no specific note.

Optional Model Features

Model	Dim to off 0-10V/PWM /Resistor	1-10V/PWM /Resistor	Adjustable power (single DIP)	Adjustable power/ color temperature (double DIP)	Without afterglow
G6H-200M260A12	√	-	-	√	√

Input Specifications

Parameter	Min.	Typ.	Max.	Notes
Input Voltage Range	198Vac	-	528Vac	
Rated Input Voltage	220Vac	-	480Vac	Refer to Output Power vs. Input Voltage Curve
Input Frequency AC	47Hz	50/60Hz	63Hz	
Max Input Current	-	-	1.4A	220Vac＆100% load
Max Input Power	-	-	240W	220Vac＆100% load
Leakage	-	-	0.75MIU	UL8750
Inrush Current			60A	220Vac, 100% load
Inrush Current			75A	277Vac, 100% load
Inrush Current	-	-	140A	480Vac, 100% load
Power Factor	0.90	0.97	-	220-480Vac, 50/60Hz, 70%-100% load
THD	-	10%	20%	220-480Vac, 50/60Hz, 70%-100% load
MCB(B16)	-	9	-	220Vac; 100% load

Output Specifications

Parameter	Min.	Typ.	Max.	Notes
Output Voltage Range	180Vdc	-	260Vdc	
Open Circuit Voltage	-	-	310Vdc	
Output Current Adjustable Range	0.50A	-	0.93A	
Full Power Current Range	0.77A	-	0.93A	215-260Vdc
Dip Switch Adjustable Power		0.83A		Max, 240Vdc, 100% load
		0.67A		Middle, 240Vdc, 80% load
		0.50A		Min, 240Vdc, 60% load
Current Accuracy	-8%	-	+8%	
Total Output Current Ripple (pk-pk)	-	10%	15%	20MHz BW full load＆LED load the LED load ripple is slightly different for different LEDs
Startup Overshoot Current	-	-	10%	220-480Vac full load condition, LED load
Auxiliary Source output voltage	10.8V	12V	13.8V	
Auxiliary Source output current	-	-	200mA	
Line Regulation	-5%	-	+5%	25℃±10℃ ambient temperature, input voltage changes from 220Vac to 480Vac
Load Regulation	-5%	-	+5%	25℃±10℃ambient temperature, 230Vacinput, load changes from 70% to 100%
Turn-on Delay Time	-	-	1.0s	220-480Vac, 100% load

General Specification

Parameter	Min.	Typ.	Max.	Notes
Efficiency @220Vac	92%	93%	-	0.83A, 240Vdc; 25℃ ambient temperature, no load of auxiliary source
Efficiency @277Vac	93%	94%	-	0.83A, 240Vdc; 25℃ ambient temperature, no load of auxiliary source
Efficiency @480Vac	92%	93%	-	0.83A, 240Vdc; 25℃ ambient temperature, no load of auxiliary source
MTBF	-	200Khours	-	25℃±10 ambient temperature, 230Vac, 80% load (MIL-HDBK-217/SR-332)
Lifetime	-	50Khours	-	230Vac&100% load, Tc 75℃, refer to lifetime vs. case temperature curve
Operating Temperature Ta	-40℃	-	+50℃	
Operating Case Temperature for Safety Tc_s	-40℃	-	+90℃	
Operating Case Temperature for Warranty Tc_w	-40℃	-	+75℃	5 years warranty shell temperature Humidity: 10%-90% RH
Storage Temperature Ta	-40℃	-	+85℃	Humidity: 5%-95% RH
Altitude	-60m	-	4000m	
Over Temperature Protection Tc	90℃	95℃	100℃	Decreases output current, returning to normal after over temperature is removed
Short Circuit Protection	-	-	15W	Constant current mode. The output shall return to normal when the fault condition is removed.
Output Over Voltage Protection	-	-	5W	When the output voltage of the product exceeds the limit range, it will enter the protection state. When the fault is removed, the product will automatically return to normal.
Dimensions (Φ*H)mm	Φ127*H59			
Net Weight	700±50g/PCS			
Package (L*W*H)	490*370*169 mm; 10PCS/Ctn., GW:8.2Kg			

Dimming

Parameter	Min.	Typ.	Max.	Notes
Absolute Maximum Voltage	-	10V	15V	On the Vdim (+) Pin
Source Current on Vdim (+)Pin	-	100uA	200uA	
Dimming Range	10% $I_{o\,max}$	-	100% I_{set}	I_{set}=0.093-0.93A
Suggest Dimming Input 0-10V	0V	-	10V	
Turn-on voltage	0.8V	-	1.1V	
Turn-off voltage	0.6V	-	0.9V	
PWM in High Level	9.7V	-	10.3V	
PWM in Low Level	0V	-	0.3V	
PWM in Frequency Range	1KHz	-	2KHz	
PWM in Duty Cycle	1%	-	99%	
Turn-on duty cycle	8%	-	11%	
Turn-off duty cycle	6%	-	9%	
Resistor Range	0	-	100KΩ	

Safety Specifications

Parameter	UL	Note
Dielectric Strength (Input-Ground)	1960Vac	60s, Current not exceeding 5mA
Dielectric Strength (Input-Dimming)	1960Vac	60s, Current not exceeding 5mA
Grounding Resistance	≤0.1Ω	25℃±10℃ Ambient Temperature, pass 30A Current, 60s.
Insulation Resistance	≥10MΩ	Input-PE, 500Vdc/60s/25℃

Notes: The voltage resistance requirement of aluminum substrate is greater than 2KVac.

Safety Compliance

Safety Category	Safety normative standards	Certification	Notes
CCC	GB19510.1, GB19510.14		
CE	EN61347-1, EN61347-2-13, EN62493		
ENEC	EN61347-1, EN61347-2-13, EN62384		
CB	IEC61347-1, IEC61347-2-13		
BIS	IS 15885(PART 2/SEC 13)		
UL	UL 8750	√	
CUL	CSA C22.2 No.250.13	√	
KC	K61347-1, K61347-2-13		
PSE	J61347-1, J61347-2-13		
SAA	AS/NZS IEC 61347.2.13		
SAA	AS/NZS 61347.1		

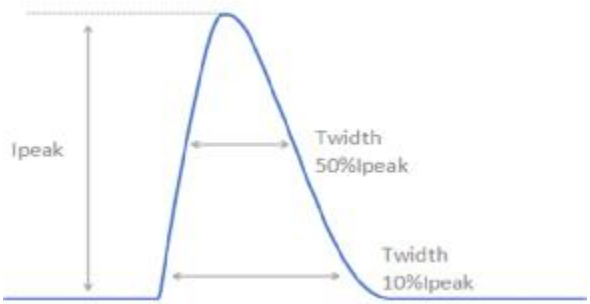
EMC Compliance

EMC Category	Standards	Approved	Notes
CCC	GB/T 17743, GB 17625.1		
CE	EN 55015		
CE	EN 61000-3-2, EN 61000-3-3		
CE	EN61000-4-2,3,4,5,6,11		
CE	EN 61547		
KC	K61547		
KC	K00015		
PSE	J55015		
FCC	FCC part 15	√	Class A
Surge Shock Immunity	ANSI/C82.77-5-2017	√	
	IEC/EN 61000-4-5		
Ringing Wave	IEC/EN 61000-4-12		
	ANSI/IEEE C62.41.2		

RoHS

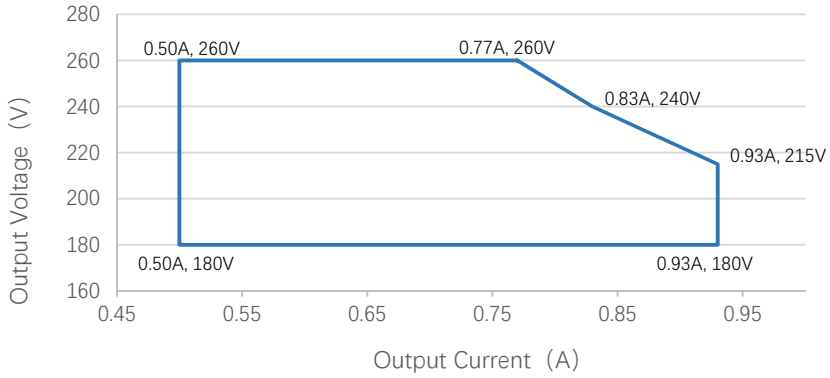
Our products comply with reference to RoHS Directive (EU) 2015/863 amending 2011/65/EU.

Inrush Current Waveform

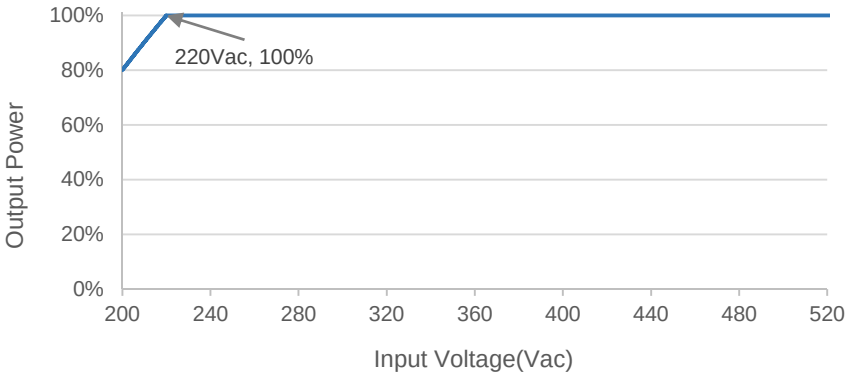


Vin	Ipeak	T(@10% of Ipeak)	T(@50% of Ipeak)
220Vac	55A	404μs	136μs

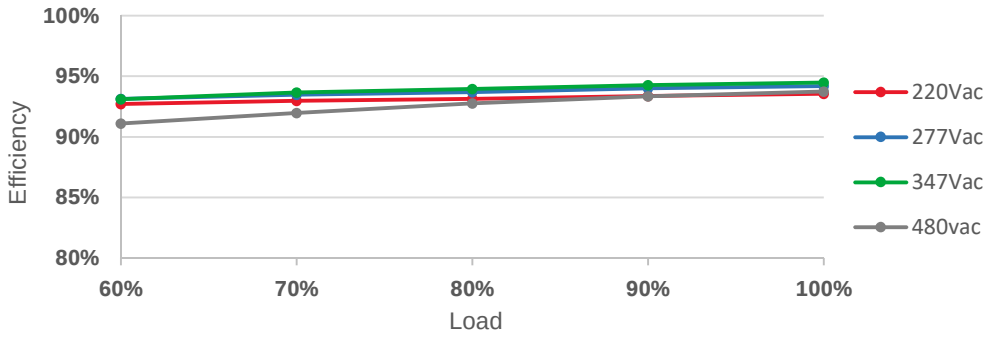
Output Voltage vs. Output Current



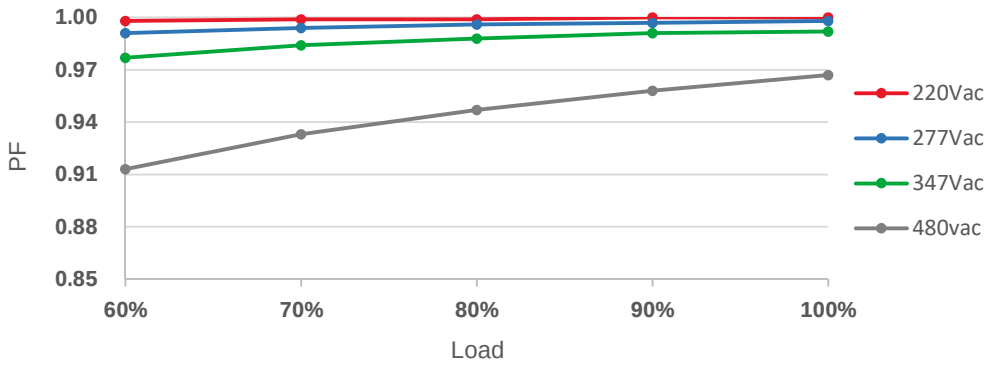
Output Power vs. Input Voltage



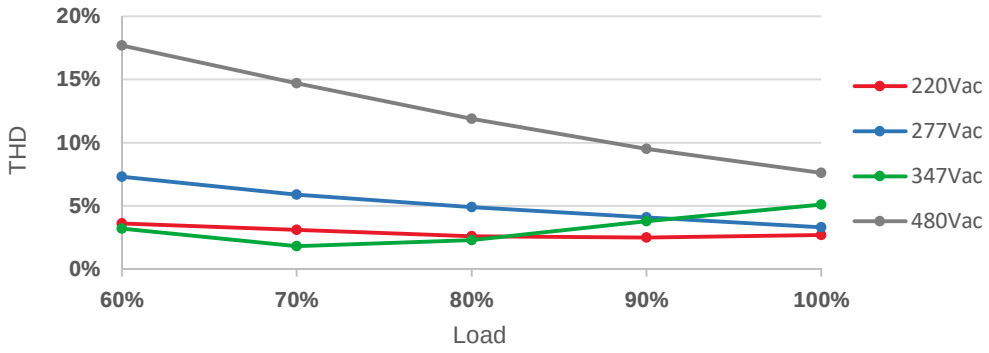
Efficiency vs. Load



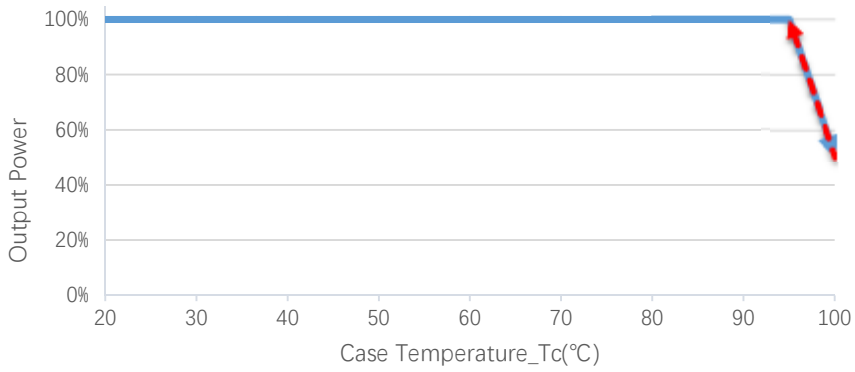
PF vs. Load



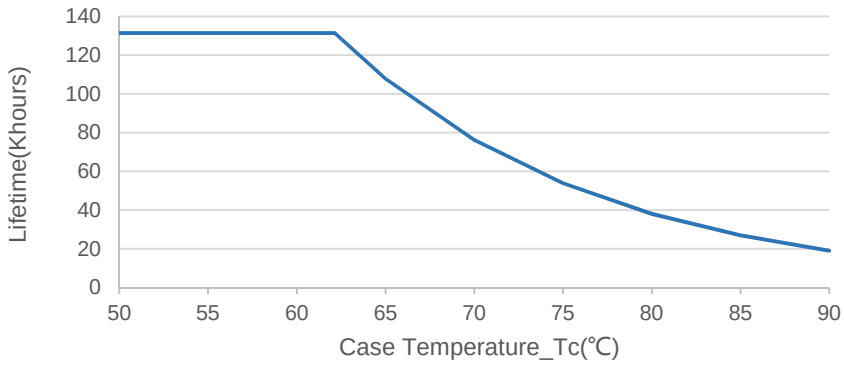
THD vs. Load



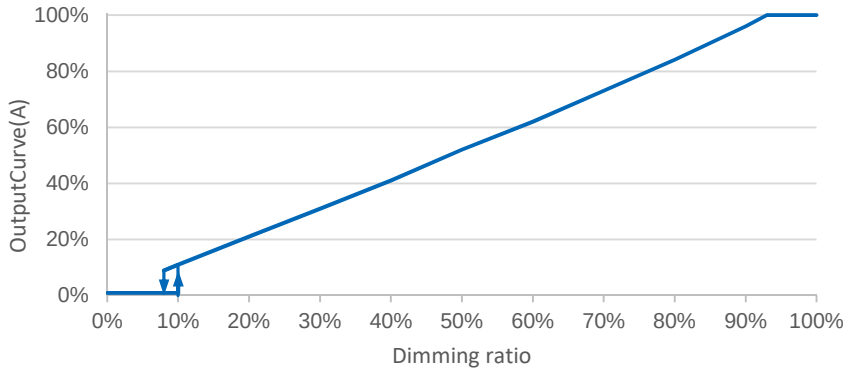
Output Power vs. Case Temperature



Lifetime vs. Case Temperature

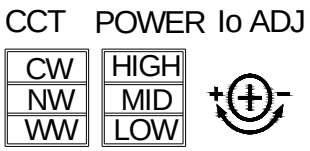


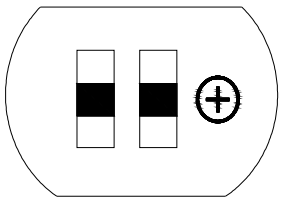
0-10V/PWM/ Resistor Dimming



Notes: A12 version default dim to off.

Dip Switch Diagram

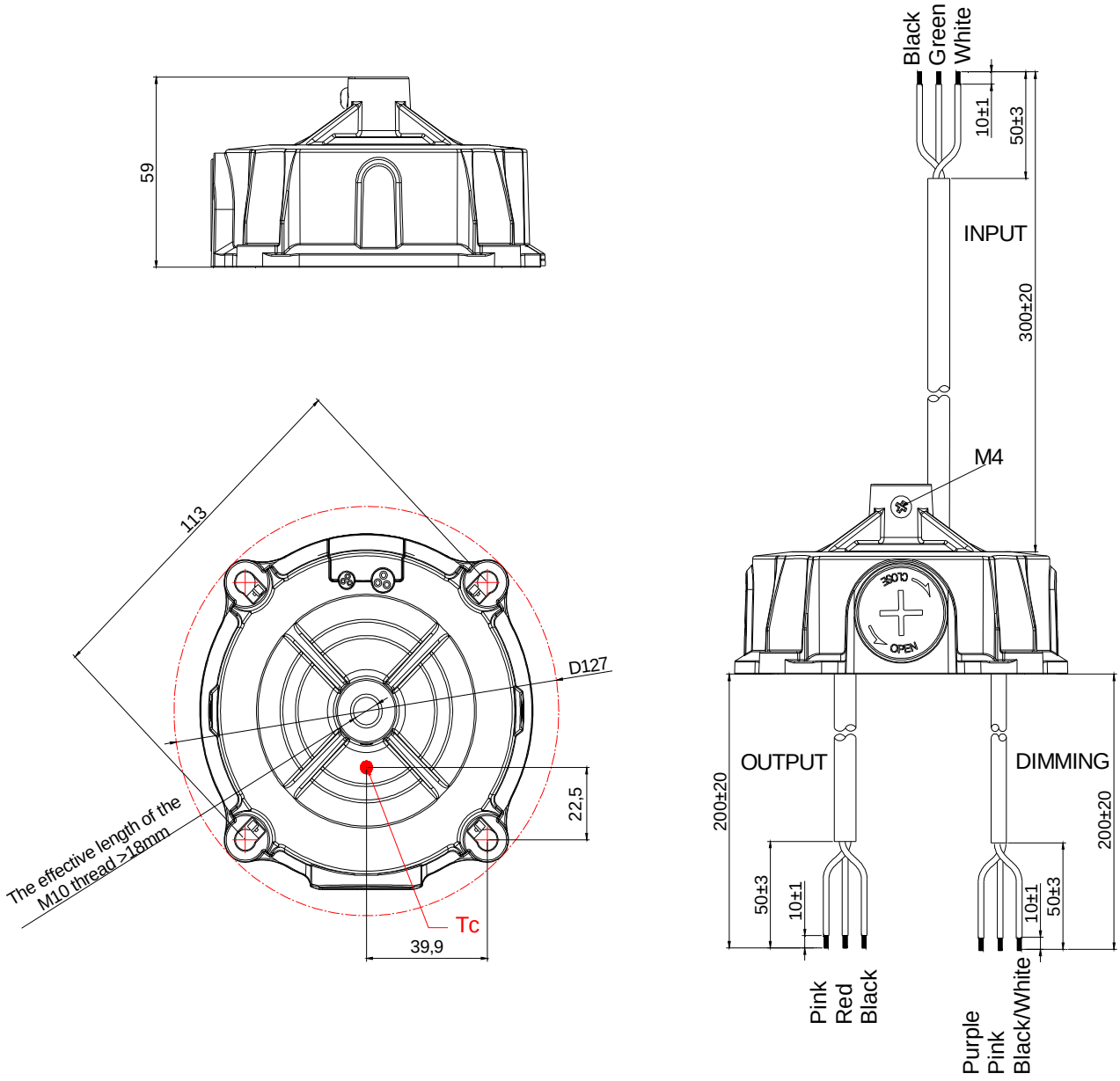




Function	Description		
Color Temperature	Cool colors(CW)	Mixed colors(NW)	Warm colors(WW)
Power	HIGH（100%）: 0.83A(200W)	MID（80%）: 0.67A(160W)	LOW（60%）: 0.50A(120W)

Notes: Using the dip switch when adjusting the color temperature or power, please operate it after the input is powered off.

Mechanical Outline



Specifications

Input	UL STW 18AWG*3C L=300±20mm	UL
Output	UL SJTW 18AWG*3C L=200±20mm	UL
Dimming	UL21996 22AWG*3C L=200±20mm	UL

Label


79.50 mm
29.50 mm
Input
L Black
N White
G Green
MOSO®
G6H-200M260A12
LED Driver, CC mode
Integrated SPD
Uout(No Load):310V
Input
200-480V~ 50/60Hz, 1.4A Max. PF:0.9C.240W
Output
Output voltage:180-260V ; Irated:0.5-0.93A, Prated:200W Max.
tc:90°C ta:50°C ; Dimming Range 10%-100%
Output
Red
Black
Pink
Purple
Pink
Black/White
For LED module only
MADE IN CHINA
Class P
IP65
RoHS
Suitable for use in Dry, Damp and Wet locations
For Connections Use Wire Rated for at Least 90°C (194°F) or equivalent