Tel: (86 757) 8625 6865, 8252 3552
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Features

- Input voltage range:176-264VAC
- High efficiency up to 90%
- Low THD,10%Max up to 230Vac
- Full Power at Wide Output Current Range (Constant Power)
- 3 In 1 Dimming Function(0-10V/0-100kΩ/PWM)
- All-Around Protection: OVP,SCP,OTP
- Waterproof(IP67) and UL Dry/Damp/Wet Location
- Input Surge Protection:6kV line-line,10kV line-earth
- High Reliability & Long Lifetime & 5 Years Warranty

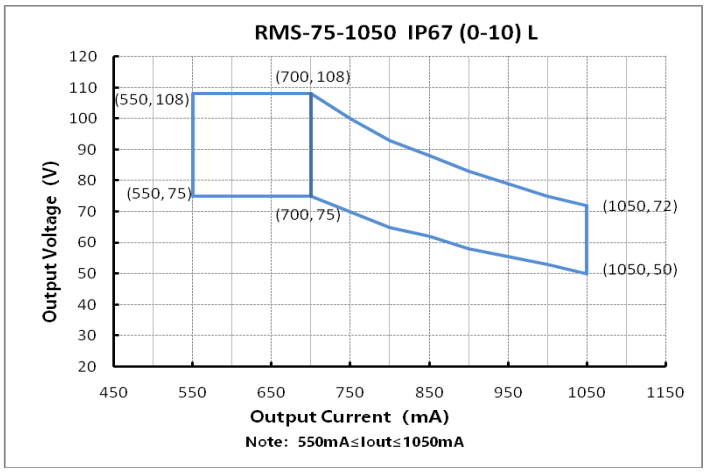
Description

The RMS-75-1050 IP67 (0-10) L series is a 75W, constant-current IP67 LED driver that operates from 176-264Vac input with excellent power factor and THD feature. It is created for high bay, tunnel and street lights. The high efficiency of these drivers and compact metal case enable them to run cooler, significantly improving reliability and extending product life. To ensure trouble-free operation, protection is provided against input surge, output over voltage, short circuit, and over temperature.

Models

Model	Input Voltage Range	Output Current Range	Full-power Current Range (2)	Output Voltage Range	Max output Power	Max Output Voltage	Power Factor	Typical Efficiency
RMS-75-1050 IP67 L	176~264Vac	550-1050mA	700-1050mA	50~108Vdc	75W	140V	0.95	90%
RMS-75-1050 IP67 0-10 L	176~264Vac	550-1050mA	700-1050mA	50~108Vdc	75W	140V	0.95	90%

I-V Operation Area



Note:

1. Test condition：230Vac/50Hz, at full Load；
2. Output current range with constant power at 75W.

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Input Specifications

Parameter	Min.	Typ.	Max	Notes
Rated Input Voltage	220V	-	240V	Can survive input over-voltage stress of 320VAC for 2 hour
Range of input voltage	176V	-	264V	
Input Frequency	47Hz	-	63Hz	
Leakage Current	-	-	0.7mA	240Vac
Input Current	-	-	0.55A	176Vac,at full load condition
Inrush Current	-	-	60A	230Vac/50Hz, 90˚degree phase, full load, cold start, 50%Ipk~50%Ipk, duration≈400μS
No Load Loss	-	-	3W	230Vac/50Hz, no load
Power Factor	0.9	0.95	-	230Vac/50Hz, at full load condition
THD	-	5%	10%	230Vac, 100%Load
Surge withstand capability	L-N: 6kV L- PE& N- PE: 10kV			L-N: IEC 61000-4-5 L/N–PE: acc. IEC 61547.

Output Specifications

Parameter	Min.	Typ.	Max.	Notes
Output Current RMS-75-1050 IP67 L RMS-75-1050 IP67 0-10 L	 550mA 550mA	 - -	 1050mA 1050mA	Full-Power Current Range : 700mA-1050mA See I-V Operation Area for the detail
Output Current Tolerance	-5%	-	5%	At full load condition
Total Output Current Ripple	-	-	5%	At full load condition, PK-PK
Startup Overshoot Current	-	-	10%	At full load condition
Load Regulation	-5%	-	5%	
Line Regulation	-5%	-	5%	220Vac~240Vac, full load
Startup times	-	0.5S	1S	

Note:

1) All parameters NOT specially mentioned are measured at 220Vac input and 25℃ of ambient temperature.

2) Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47 μF parallel capacitor.

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General Specifications

Parameter	Min.	Typ.	Max.	Notes
Efficiency at 230Vac input: RMS-75-1050 IP67 L Io=550mA Io=700mA Io=1050mA RMS-75-1050 IP67 0-10 L Io=550mA Io=700mA Io=1050mA	 87% 87% 88% 87% 87% 88%	 88% 89% 90% 88% 89% 90%	 - - - - 	Measured at full load and steady –state temperature in 25℃ ambient Efficiency will be about 1% lower if measured immediately after startup
MTBF	-	250,000 Hours	-	Measured at 230Vac input, 100% Load and 25 ℃ ambient temperature (MIL-HDBK-217F)
Ambient Temperature	-40℃	-	+60℃	Refer to derating curve for the details.
Operating Case Temperature for Safety Tc_s	-40℃	-	+85℃	
Operating Case Temperature for Warranty Tc_w	-40℃	-	+80℃	Case temperature for 5 years warranty. Humidity: 10% RH to 100% RH.
Lifetime	-	50,000 Hours	-	Measured at 230Vac input, 100%Load and 80℃ case temperature; See lifetime vs. Case Temperature curve for the details
Storage Temperature	-40℃	-	+85℃	Humidity: 5% RH to 100% RH.
Dimensions	159X60X34.6 mm			With mounting ear, See Mechanical Outline for the detail
Net Weight	-	580g	-	

Dimming Specifications

Parameter	Min.	Typ.	Max.	Notes
Absolute Maximum Voltage on the Vdim(+) Pin	-2	-	15V	
Source Current on Vdim(+)	90uA	100uA	110uA	Bias current (100uA) and not sink current ability
Dimming Output Range	10%	-	100%	See Dimming Cure for the detail
Recommended Dimming Input Range	0	-	10V	
PWM_in High Level	-	10V	-	10V PWM signal, See Dimming Cure for the detail
PWM_in Low Level	-0.3V	0V	0.6V	
PWM_in Frequency Range	200Hz	-	2KHz	
PWM_in Duty Cycle	2%	-	100%	

Note:

Dimming Specifications only for RMS-75-1050 IP67 0-10 L.

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Safety Standards

Safety Category	Country / Territory	Standards
CE,TUV	Europe	EN61347-1, EN61347-2-13
CCC	China	GB19510.1, GB19510.14

EMC Compliance

EMC Category	Country / Territory	Standards
CE	Europe	EN 55015, EN 61000-3-2, EN 61000-3-3
		EN61000-4-2,3,4,5,6,8,11
		EN 61547
CCC	China	GB 17743, GB 17625.1

Note：

1) This LED driver meets the EMI specifications above, but EMI performance of a lighting fixture also depends on the other devices on the fixture.

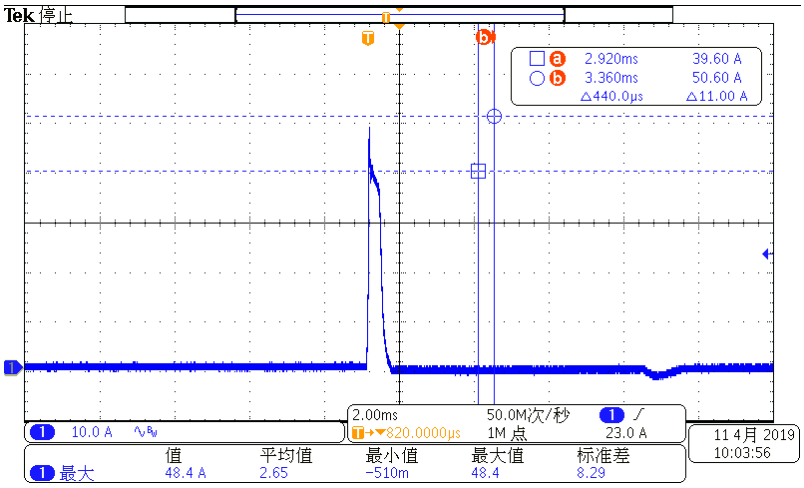
2) To perform electric strength (hi-pot) testing, the "GDT ground disconnect" (nut and metal lock sheet) on the driver end-cap should be removed temporarily to prevent the internal gas discharge tube from conducting (as allowed by IEC 60598-1 Clause 10.2). After testing is completed, these items must be reinstalled to restore line to earth surge protection and secure the end cap.

Protection Functions

Parameter	Min.	Typ.	Max.	Note
Short Circuit Protection	-	-	-	Hiccup, Auto Recovery
Over Voltage Protection	-	-	-	Hiccup, Auto Recovery
Over Temperature Protection	-	-	-	Hiccup, Auto Recovery

Curve

▲Inrush Current Waveform



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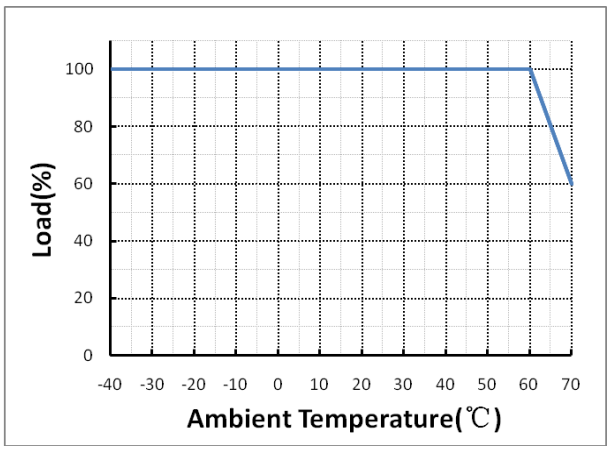
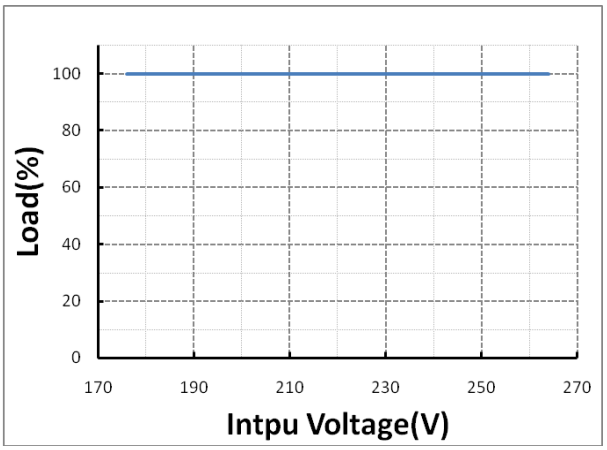
▲Derating

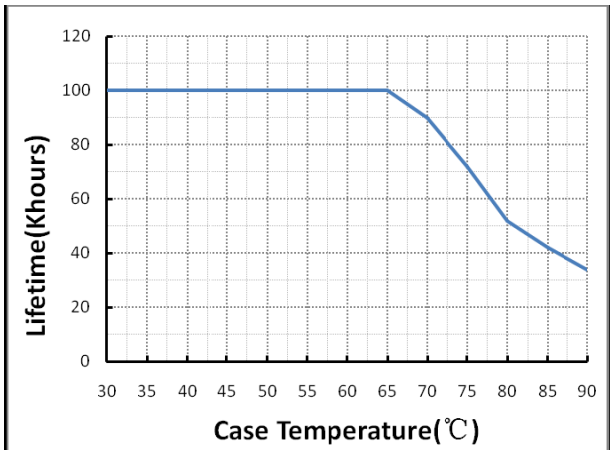
Output Power-Temperature



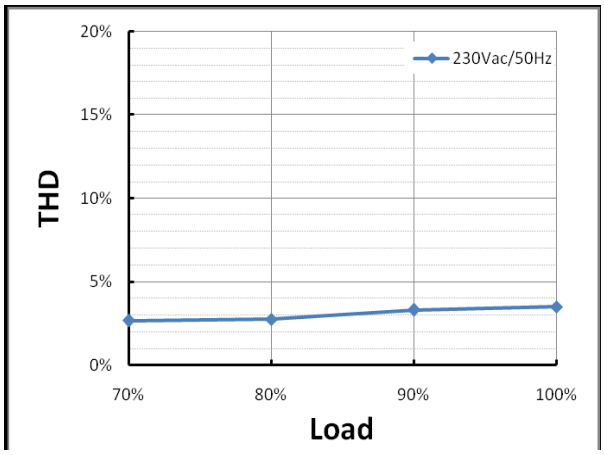
Output Power-Input Voltage



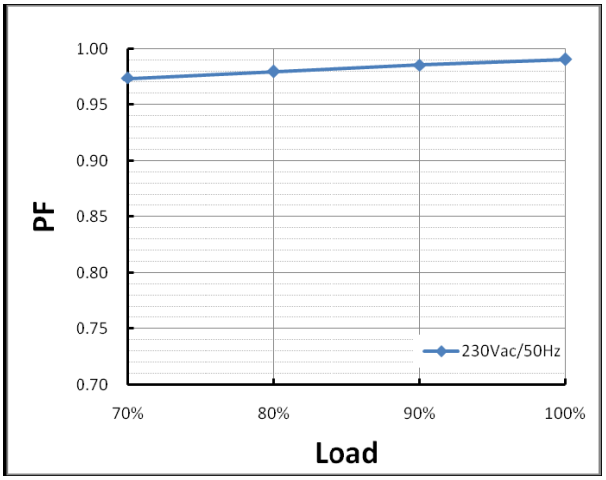
▲Lifetime



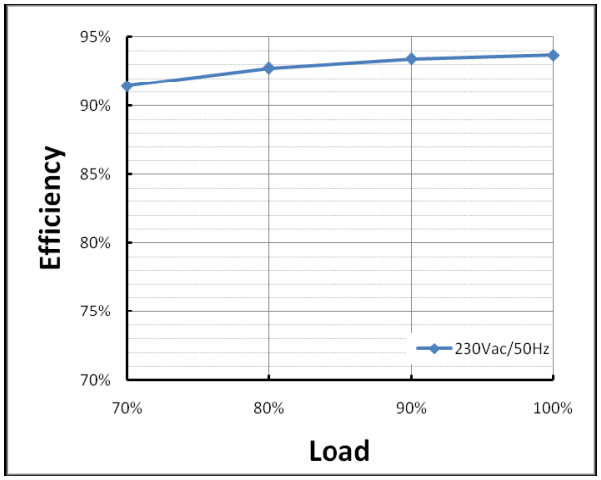
▲Total Harmonic Distortion



▲Power Factor

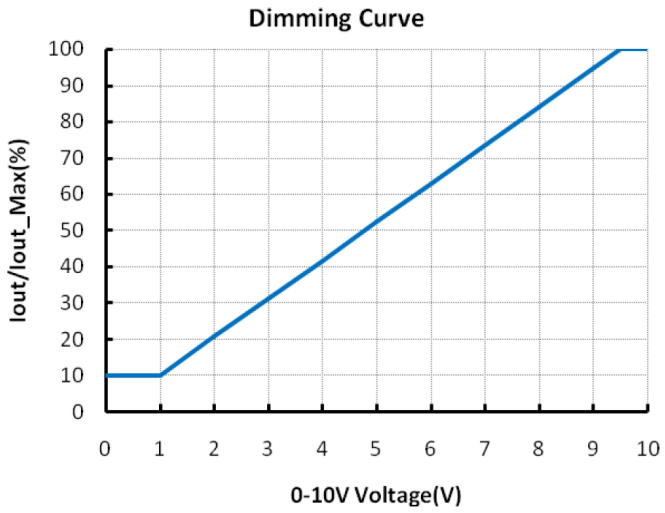


▲Efficiency

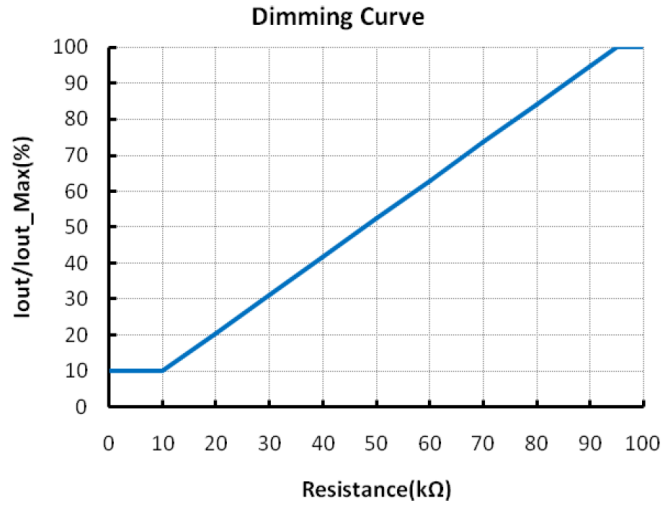


Dimming

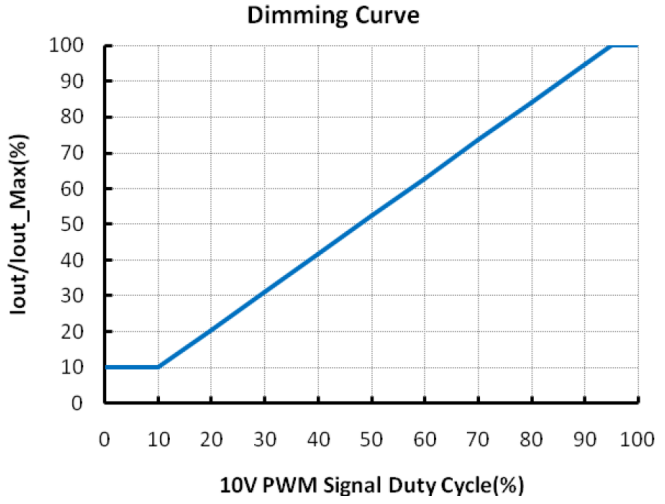
- **0-10V Dimming**



- **100K External Resistor**



- **10V PWM Signal**



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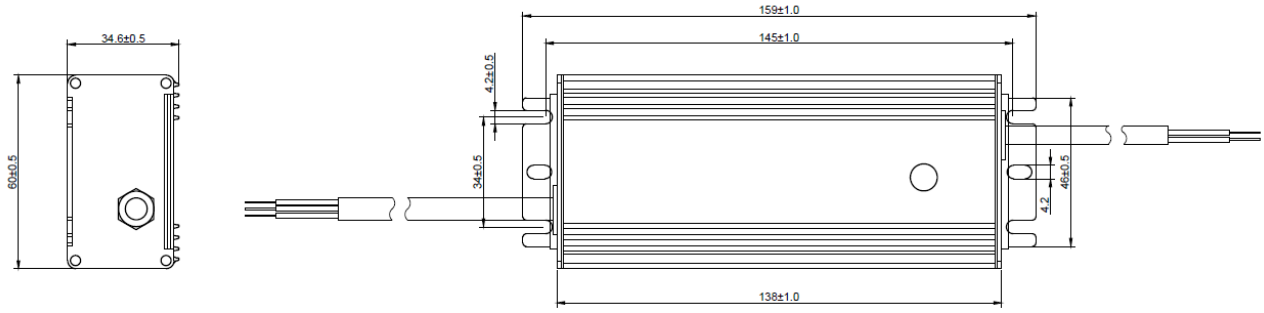
Notes:

1. It can use 0-10V voltage source or passive component (100KΩ adjustable resistance) instead of dimmer

2. Please do not connect the dimming GND wire to output, it will fail to work.

3. Please disconnected the dimmable positive cable when not using the dimming function.

Mechanical Outline



Note：Wire length of input and output can be changed as customer's requirement

TYPE	Total Length	Outside Color	Inside Wires Color	Wire Model/Diameter
Input wire	0.65M	Black	Brown/Blue/(Yellow/Green)	H05RN-F.3X1.0mm^2
Output wire	0.30M	Black	Brown/Blue	H05RN-F.2X1.0mm^2
Dimming wire	0.30M	Black	Brown/Blue	H05RN-F.2X1.0mm^2