



## Dimmable LED Driver 1...10 V & PUSH Technical Data Sheet

### 1. Product Characteristics

- 0~100%Dimming by push function or 1~10V
- Constant current output
- Active power factor correction (Up to 0.95)
- All-round protection



### 2. Description

Direct current dimmable electronic driver .

Article	W	Vout/ Vdc	Iout	TA/°C	TC/°C	φ
D-MA320 DIN DP	20	15~58V	350mA	-20 +50	85	0,9

Notes: (1) Measured in 230 Vac input at full load,without dimmer.

Input Specifications		Output Specifications	
Voltage	220 - 240 V	Current Tolerance	-5%~5%, full load condition at 230Vac
Frequency	50/60Hz	Startup Overshoot Current	10%, full load condition
Leakage Current	0.5 mA at 220Vac, 50Hz input.	Line Regulation	5%, Input voltage from 176 Vac to 264Vac
AC Current	0.15A Max	Load Regulation	5%, Input voltage from 176 Vac to 264Vac
Inrush Current -	20A at 220Vac input Ta=25°C cold start, duration = 10us	Dimming Range	5%Io - 100%Io

Note:All specifications are typical at 25 °C unless otherwise stated.

### Protection Functions

Protections: Overheat(130°C), Short circuit, Over voltage, Overload,

Parameter	Min	Type	Max	Notes
No Load Voltage	65V	74V	79V	Vomax is the maximum operation output Voltage.
Short circuit Protection	Auto recovery mode. The power supply shall return to normal operation after the fault condition is removed.			

### Work Environmental Specification



Parameter	Min.	Typ.	Max.	Notes
Operating Temperature	-20°C	-	+50°C	Humidity: 10% RH to 90% RH.
Storage Temperature	-20°C	-	+85°C	Humidity: 5% RH to 90%

### General Specifications

Parameter	Min	Typ	Max	Notes
Efficiency	80%	82%	-85%	Measured at full load and 220 Vac input with full conduction angle.
Power Factor	0.90	0.93	-0.95	Measured at maximum output voltage and 220 Vac input with full conduction.
No Load Power Consumption	-	-	0.5W	
MTBF 200,000 hours	-	-		Measured at 220Vac input, 80% load and 25°C ambient temperature.
Lifetime 40,000hours				(MIL-HDBK-217F)

### Product Information

Product Dimension (L*W*H)	87*36*62mm	Package Qty.	50pcs/Ctn
Net Weight/Pc	132g	Package Dimension(L*W*H)	53x26x17cm

Note: All specifications are typical at 25°C unless otherwise stated.

### 3. Certification and Standard

LED Driver	CE	EN 61347-1	EN61347-2-13	
		EN 62493	EN61547	EN55015
		EN61000-3-2	EN61000-3-3	EN61000-4-5

### 4. Implementation: Dimming (0-10V or PUSH)

Parameter	Min.	Typ.	Max.	Notes
Dimming Range	5%lo	-	100%lo	Measured at 220 Vac input
Voltage DC	1V	-	10V	Measured at 220 Vac input

### 5. Instruction for connect

Light regulation 0-100% by means of PUSH function, or 1~10V interface.

• **PUSH function** connect push button between the terminal of PRI-L and Push-L, refer to follow left diagram.

- a short push to turn on and off.



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- a longer push to increase or decrease light intensity
- regulation automatically stops at minimum and maximum values
- for another on, or off command, release the push button and give the desired command again.
- **1~10V Potentiometer dimming.** Connect potentiometer with the terminal of 1—10V
  - turn the potentiometer to increase or decrease light intensity.
  - regulation automatically stops at minimum and maximum values.
- **No dimmer using:** If there is no dimmer connecting, short connect push L with PRI L.
  - regulation automatically increase from minimum to maximum, and keep it at maximum situation.

## 6. RoHS Compliance

Our products comply with the European Directive 2002/95/EC, calling for the elimination of lead and other hazardous substances from electronic products.

## 7. Certification and Standard

Certification	Standard		
	EN 61347-1	EN61347-2-13	EN55015
	EN61000-3-2	EN61000-3-3	EN61000-4-5
	EN61547	EN 62493	

## 8. Main safety test item

### 8.1 Dielectric Strength(Hi-pot)

Primary to secondary: 3750Vac 10mA max./ 60second (3second for production)  
<Finished goods>.

### 8.2 Leakage current

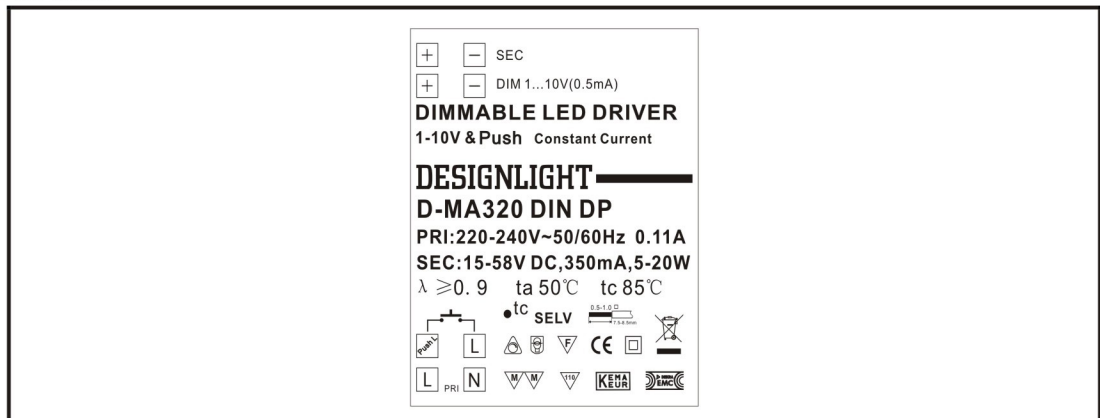
0.5mA max. @230Vac/50Hz input

### 8.3 Insulation resistance

1min later by applying 500VDC, IR shall be at least 5M  $\Omega$  between primary and secondary.

## 9.Mark

follow up the mark.





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## 10. Dimension:

