

EUP20D-1HMC

Summary

EUP20D-1HMC is a 20W AC/DC constant current mode output LED driver featuring the multiple levels selectable by DIP switch and complies with DALI standard protocol IEC 62386. EUP20D-1HMC can be connected to DALI main controller or Touch DIM to achieve a smooth dimming effect.

Product Features

- Single channel output, output current level selectable by DIP S.W.
- Meet DALI Protocol IEC 62386-207 Ed2.0
- Support Touch-DIM function
- High efficiency up to 85 %
- Built-in active PFC function
- Dimming effect smooth, no flicker
- Protections: Short circuit, over load, over voltage
- Suitable for indoor LED lighting application, such as down light, panel light, and so on



Application



Downlight



Panel Light



Spotlight



Ceiling Light



Decorative Light



Floor Light

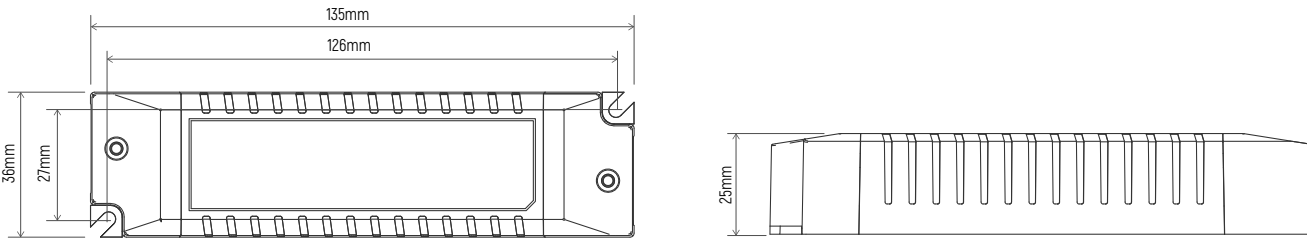


Flood Light

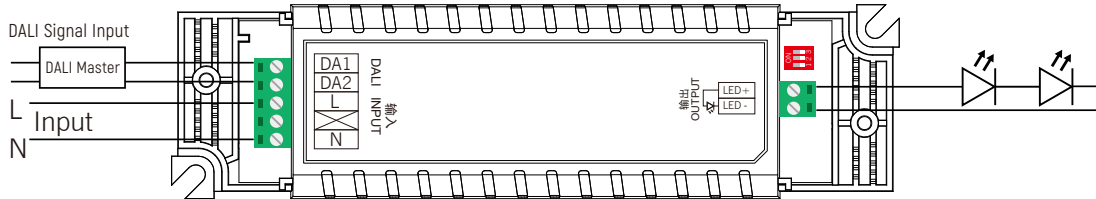
Technical Parameters

Model	EUP20D-1HMC																																																																					
Input	Efficiency	85%@230VAC, Full load																																																																				
	Voltage	220VAC-240VAC																																																																				
	Frequency Range(Hz)	50/60Hz																																																																				
	Power Factor	≥0.95@230VAC, Full load																																																																				
	THD(full load)	<10%@230VAC, Full load																																																																				
	AC Current(max)	0.12Amax@230VAC																																																																				
	Inrush Current(max)	Cold start, 20A@230VAC 100us																																																																				
Output	Current(mA)/Voltage (VDC)	350mA/9-42VDC/14.7W 400mA/9-42VDC/16.8W 450mA/9-42VDC/18.9W 500mA/9-40VDC/20W																																																																				
	Power(W)	550mA/9-36VDC/19.8W 600mA/9-33VDC/19.8W 650mA/9-30VDC/19.5W 700mA/9-28VDC/19.6W																																																																				
	Ripple Current	<3%																																																																				
	Channel	1																																																																				
	Current Tolerance	±7%																																																																				
	Standby Power	<0.5W																																																																				
	No load output voltage	55VDC Max																																																																				
<table border="1"> <caption>Current Selection Table</caption> <tr> <td>ON</td> <td>OFF</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> </tr> <tr> <td></td> <td></td> <td>350mA</td> <td>400mA</td> <td>450mA</td> <td>500mA</td> <td>550mA</td> <td>600mA</td> <td>650mA</td> <td>700mA</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>9-42V</td> <td>9-42V</td> <td>9-42V</td> <td>9-40V</td> <td>9-36V</td> <td>9-33V</td> <td>9-30V</td> <td>9-28V</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>Remark: Function default setting is: 350mA (@switch are all OFF state)</p>			ON	OFF	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			350mA	400mA	450mA	500mA	550mA	600mA	650mA	700mA																9-42V	9-42V	9-42V	9-40V	9-36V	9-33V	9-30V	9-28V													
ON	OFF	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20																																																	
		350mA	400mA	450mA	500mA	550mA	600mA	650mA	700mA																																																													
		9-42V	9-42V	9-42V	9-40V	9-36V	9-33V	9-30V	9-28V																																																													
Function	Dimming Type	DALI																																																																				
	Dimming Range	0.3%-100%																																																																				
Protection	Short Circuit	after fault removed Close output ,the output current recovers automatically																																																																				
	Over Load	Hiccup , recovers after fault condition is removed																																																																				
	Over Voltage	Hiccup , recovers after fault condition is removed																																																																				
Safety& EMC	Surge	L-N:1KV																																																																				
	Withstand Voltage	I/P-O/P: 3000VAC/1min/5mA																																																																				
	Safety Standards	EN61347, GB19510																																																																				
	EMC Emission	EN55015, EN61000-3-2																																																																				
	EMC Immunity	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547																																																																				
Others	Working Temp.	-20°C~50°C																																																																				
	Storage Temp., Humidity	-40°C~85°C, 20-90%RH																																																																				
	tc	70°C																																																																				
	Material	PC																																																																				
	IP Rating	IP20																																																																				
	Lifetime	50,000h@tc:70°C																																																																				
	Warranty Condition	5 years																																																																				
	Switch Cycle	>25,000 times																																																																				
	Packing(weight)	Net weight: 110 g±5%/PCS; 80 PCS/Carton; 9.3 kg±5%/Carton; Carton Size: 456*342*162mm(L*W*H)																																																																				
	Dimension	135*36*25mm (L*W*H)																																																																				

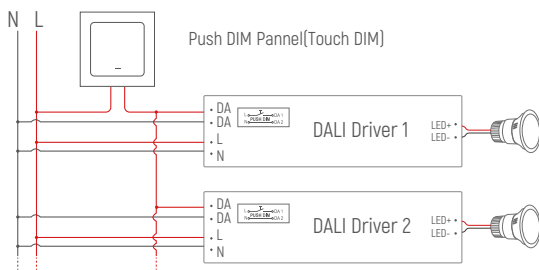
Dimension(mm)



DALI Wiring



Push DIM(Touch DIM) Diagram

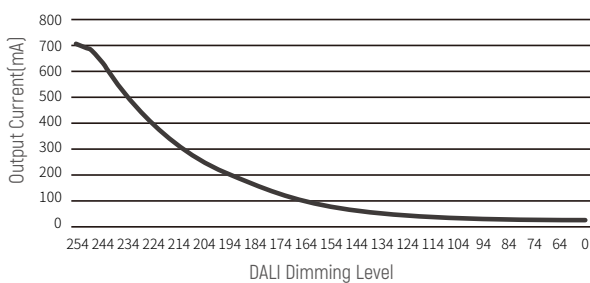


Remarks: use only open push switch (without indicator light). When using synchronous connection, the line length between each device and equipment shall not exceed 20 meters.

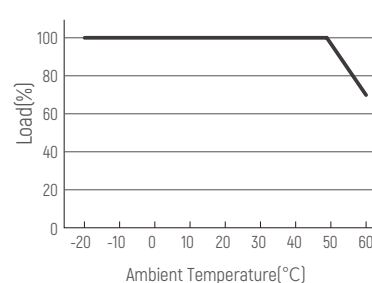
Push DIM Function

1. Press the Touch DIM switch for 8s or more, the driver can be controlled via Touch DIM switch.
2. Short press the Touch DIM switch (<0.5s) to control the lamp on or off.
3. Long press the Touch DIM switch (>0.5s) to dim the brightness of light. The dimming direction will change every time after pressing switch.
4. Double-click the Touch DIM switch (<0.3s), then all lamps connected on the device will be set maximum brightness.
5. The brightness adjustment range is 1%-100%, and the light can be turned off through short pressing when doing the adjustment with long pressing Touch DIM switch.
6. With the Power off memory function, the power-down state will be recovered when power on again.

Dimming Curve



Derating Curve



Cautions

1. This product should be installed by qualified personnel.
2. This product is non waterproof, need to avoid sun and rain. In case of outdoor use, please ensure it is mounted in a water proof enclosure.
3. Good heat dissipation conditions extend product life. Please install the product in a well-ventilated environment.
4. Please make sure LED power supply output voltage, current is used to meet the product requirements.
5. Please ensure that adequate sized cable is used from the controller to the LED lights to carry the current. Please also ensure that the cable is secured tightly in the connector.
6. Due to safety concerns, PVC or rubber cord of 0.75- 1.5mm² is recommended for input and output terminal(s) (excluding signal terminals). Flat power cord is not suitable. Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
7. In case of malfunction, do not repair it yourself.

※ The contents of this manual are updated without prior notice. If the function of the product you are using is inconsistent with the instructions, the function of the product shall prevail. Please contact us if you have any questions.