

EUP20D-1HMC-0 (Product No.:102100172101)



Summary

EUP20D-1HMC-0 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-0 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 temperature
- Suitable for indoor LED lighting application, such as down light, panel light, and so on



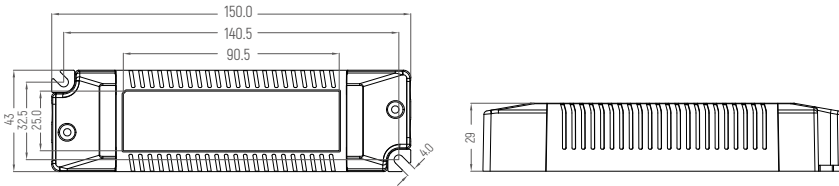
Application



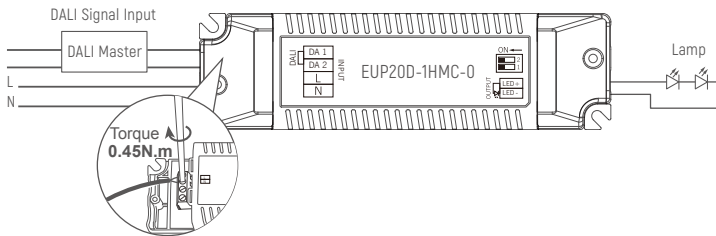
Technical Parameters

| Model | EUP20D-1HMC-0 | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------|--|---|-------|-------|-------|---|--|--|--|--|--|--|-------|-------|-------|-------|--|--|--|--|-------|-------|-------|-------|--|
| 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 | | | | | | | | | | | | | | | | | | | | | | | |
| | Standby power | <0.5W | | | | | | | | | | | | | | | | | | | | | | | |
| | Inrush Current(max) | Cold start,18A(twidth=14us measured at 50% Ipeak)@230VAC | | | | | | | | | | | | | | | | | | | | | | | |
| Output | Current(mA)/Voltage (VDC) Power(W) | 350mA/9-40VDC/14W 500mA/9-40VDC/20W 550mA/9-36VDC/19.8W 700mA/9-28VDC/19.6W | | | | | | | | | | | | | | | | | | | | | | | |
| | Ripple Current | <3% | | | | | | | | | | | | | | | | | | | | | | | |
| | Channel | 1 | | | | | | | | | | | | | | | | | | | | | | | |
| | Current Tolerance | ±5% | | | | | | | | | | | | | | | | | | | | | | | |
| | No load output voltage | 50V Max | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <caption>Current Selection Table</caption> <tr> <td>ON</td> <td>OFF</td> <td>1</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>350mA</td> <td>500mA</td> <td>550mA</td> <td>700mA</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>9-40V</td> <td>9-40V</td> <td>9-36V</td> <td>9-28V</td> <td></td> <td></td> </tr> </table> <p>Remark: Function default setting is: 350mA (@switch are all OFF state)</p> | | ON | OFF | 1 | 2 | | | | | | | 350mA | 500mA | 550mA | 700mA | | | | | 9-40V | 9-40V | 9-36V | 9-28V | |
| ON | OFF | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | |
| | | 350mA | 500mA | 550mA | 700mA | | | | | | | | | | | | | | | | | | | | |
| | | 9-40V | 9-40V | 9-36V | 9-28V | | | | | | | | | | | | | | | | | | | | |
| Function | Dimming Type | DALI /Touch DIM | | | | | | | | | | | | | | | | | | | | | | | |
| | Dimming Range | 0.1%-100% Dimming to off | | | | | | | | | | | | | | | | | | | | | | | |
| Protection | Short Circuit | Close output, recovers automatically after fault removed | | | | | | | | | | | | | | | | | | | | | | | |
| | Over Voltage | Hiccup, recovers after fault condition is removed | | | | | | | | | | | | | | | | | | | | | | | |
| | Over Load | When the output voltage is exceeded, the output current decreases and, recovers automatically when the load is reduced. | | | | | | | | | | | | | | | | | | | | | | | |
| | Over Temperature | Shut down the output, recovers automatically when temp. back to normal. | | | | | | | | | | | | | | | | | | | | | | | |
| Safety & EMC | Surge | L-N:1kV | | | | | | | | | | | | | | | | | | | | | | | |
| | Withstand Voltage | I/P-O/P: 3000VAC/1min/5mA | | | | | | | | | | | | | | | | | | | | | | | |
| | DALI Standard | IEC 62386-101: 2014, IEC 62386-102: 2014; IEC62386-207 Ed2.0 | | | | | | | | | | | | | | | | | | | | | | | |
| | Safety Standards | IEC/EN61347-1,IEC/EN61347-2-13,GB19510.1,GB19510.14, | | | | | | | | | | | | | | | | | | | | | | | |
| | EMC Eission | EN50515,EN61000-3-2 Class C,IEC61000-3-3,GB/T17743 | | | | | | | | | | | | | | | | | | | | | | | |
| | EMC Immunity | EN61000-4-2,3,4,5,6,8,11 EN61547,GB17625.1 | | | | | | | | | | | | | | | | | | | | | | | |
| Others | Working Temp. | -20°C-50°C | | | | | | | | | | | | | | | | | | | | | | | |
| | Storage Temp., Humidity | -40°C-85°C, 20-90%RH | | | | | | | | | | | | | | | | | | | | | | | |
| | tc | 90°C | | | | | | | | | | | | | | | | | | | | | | | |
| | Material | ABS | | | | | | | | | | | | | | | | | | | | | | | |
| | IP Rating | IP20 | | | | | | | | | | | | | | | | | | | | | | | |
| | Lifetime | 50,000h@tc:70°C | | | | | | | | | | | | | | | | | | | | | | | |
| | Warranty Condition | 5 Years | | | | | | | | | | | | | | | | | | | | | | | |
| | Switch Cycle | >100,000 times | | | | | | | | | | | | | | | | | | | | | | | |
| | Packing(weight) | Net weight: 125g±5%/PCS; 50PCS/Carton; 6.65kg±5%/Carton; Carton Size: 319*254*136mm(L*W*H) | | | | | | | | | | | | | | | | | | | | | | | |
| | Dimension | 150*43*29mm (L*W*H) | | | | | | | | | | | | | | | | | | | | | | | |

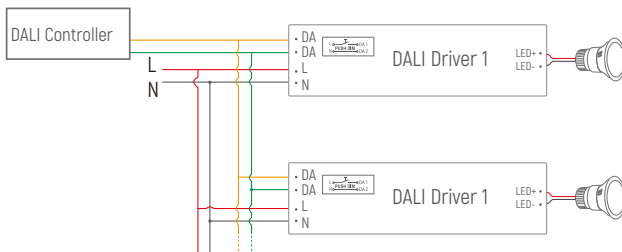
Dimension(mm)



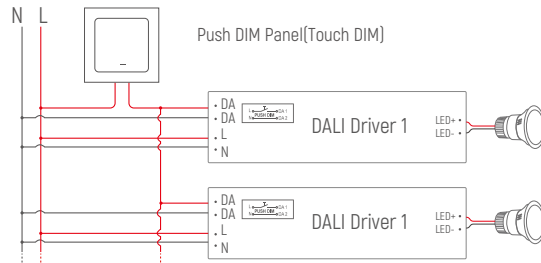
DALI Wiring



DALI Diagram



Push DIM(Touch DIM) Diagram

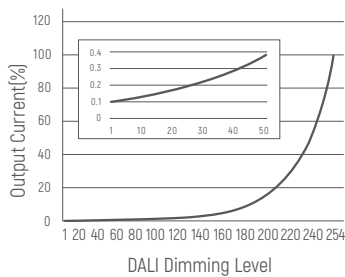


Remark: Only use open push button without indicator light. Maximum cable length between each Unit: 20 meters.

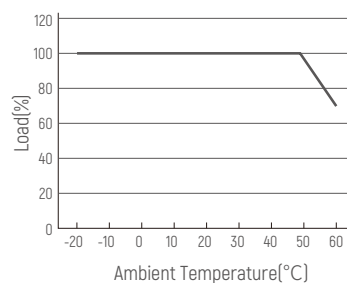
Push DIM Function

1. Press the Push DIM (Touch DIM) switch for 8s or more, the driver can be controlled via Push DIM switch.
2. Short press the Push DIM (Touch DIM) switch (<0.5s) to control the lamp on or off.
3. Long press the Push DIM (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 Push DIM (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 Push DIM (Touch DIM) switch.
6. With the Power off memory function, the power-down state will be recovered when power on again.

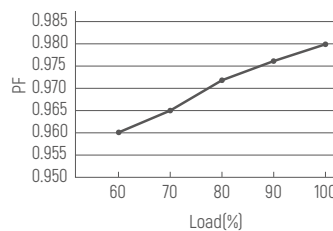
Dimming Curve



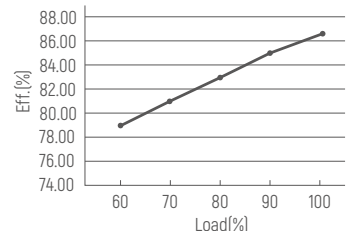
Derating Curve



PF vs Load



Eff. vs Load



Max. quantity of drivers per miniature circuit breaker

| | | |
|--------------|--------------------|--------------------|
| MCB type | B16 | C16 |
| Installation | 1.5mm ² | 1.5mm ² |
| Quantity | 36 | 45 |

Max. distance between independent use LED driver and LED modules

| | | | | |
|---------------|---------------------------|---------------------------|-------------------------|---------------------------|
| Distance | 5m/16ft | 10m/32ft | 20m/65ft | 30m/98ft |
| Cable Section | 0.5mm ² /AWG20 | 0.5mm ² /AWG20 | 1mm ² /AWG17 | 2.5mm ² /AWG13 |

※ 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.