

## EUP20D-2HMC-0

### Summary

EUP20D-2HMC-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 62386-209. EUP20D-2HMC-0 can be connected to DALI main controller or Touch DIM to achieve a smooth dimming effect.

### Product Features

- Two channel output, output current level selectable by DIP S.W.
- Meet DALI Protocol IEC 62386-209
- Support Touch-DIM function
- High efficiency up to 86 %
- 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



Tunable White(DT8)



### Application

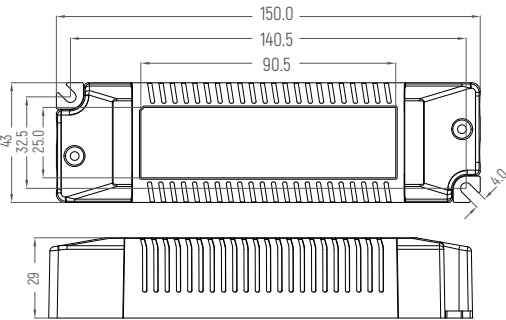


### Technical Parameters

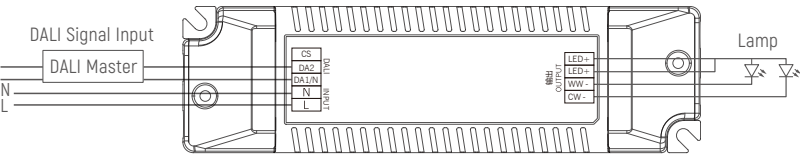
| Model       | EUP20D-2HMC-0             |                                                                                                                         |
|-------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Input       | Efficiency                | >86%@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, 15A(twidth=14us measured at 50% Ipeak)@230VAC                                                               |
| 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/9-31VDC/20.15W      700mA/9-28VDC/19.6W                         |
|             | Ripple Current            | <3%                                                                                                                     |
|             | Channel                   | 2                                                                                                                       |
|             | Current Tolerance         | ±5%                                                                                                                     |
|             | No load output voltage    | 60V Max                                                                                                                 |
| Function    | Turn on delay Time        | <1s, at 230Vac                                                                                                          |
|             | Dimming Type              | DALI /Touch DIM                                                                                                         |
|             | Dimming Range             | 2%-100% Dimming to off                                                                                                  |
| Protection  | color temperature         | 2700k-6500k                                                                                                             |
|             | Short Circuit             | Close output, recovers automatically after fault removed                                                                |
|             | Over Load                 | When the output voltage is exceeded, the output current decreases and, recovers automatically when the load is reduced. |
| Safety& EMC | over Voltage              | Close output, recovers automatically after fault removed                                                                |
|             | Surge                     | L-N:1KV                                                                                                                 |
|             | Withstand Voltage         | I/P-O/P: 3000VAC/1min/5mA                                                                                               |
| Others      | DALI Standard             | IEC 62386-101: 2014, IEC 62386-102: 2014; IEC 62386-209: 2009, DALI 2.0                                                 |
|             | Safety Standards          | IEC/EN61347-1, IEC/EN61347-2-13, GB19510.1, GB19510.14,                                                                 |
|             | EMC Emission              | EN50515, EN61000-3-2 Class C, IEC61000-3-3, GB/T17743                                                                   |
| Others      | EMC Immunity              | EN61000-4-2, 3, 4, 5, 6, 8, 11 EN61547, GB17625.1                                                                       |
|             | Working Temp.             | -20°C~50°C                                                                                                              |
|             | Storage Temp., Humidity   | -40°C~85°C, 20-90%RH                                                                                                    |
| Others      | tc                        | 80°C                                                                                                                    |
|             | Material                  | PC                                                                                                                      |
|             | IP Rating                 | IP20                                                                                                                    |
| Others      | Lifetime                  | 50,000h@tc:70°C                                                                                                         |
|             | Warranty Condition        | 5 Years                                                                                                                 |
|             | Switch Cycle              | >25,000 times                                                                                                           |
| Others      | 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)                                                                                                     |

\*Current Tolerance : 350mA ±8%, 400mA ±8%, 450mA ±7%, 500mA ±7%.

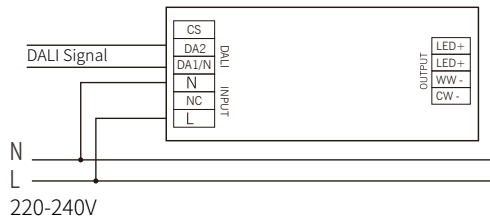
Dimension(mm)



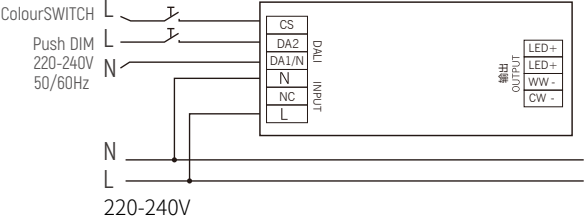
DALI Wiring



DALI Diagram



Push DIM(Touch DIM) Diagram



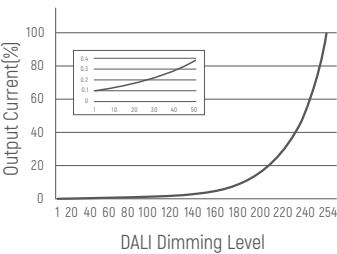
Remark: Only use open push button without indicator light. Maximum cable length between each Unit: 20 meters.

Push DIM/Coloeer Switch

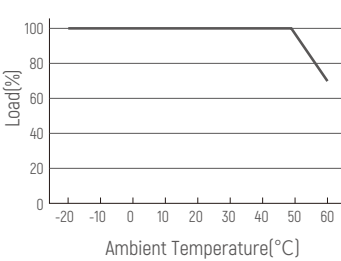
1. Press and hold the push DIM switch for 8s or more to enter the push dimming mode.
2. Press the push DIM switch briefly to turn on or off the lamp and return to the last memory state.
3. Press and hold the push DIM switch for dimming, stop at the current brightness when releasing, and adjust in the opposite direction every time, with the dimming range of 5% - 100%
4. Double click the push DIM switch to turn on the lamp to the brightest and cool light (this function is also used to adjust the consistency of multiple power supplies in the same circuit)
5. Colour switch is valid only after entering push DIM mode.
6. Press colour SWITCH briefly to set the color temperature mode, with 9 values between 2,700 and 6,500K.
7. Long press Colour SWITCH can continuously adjust the color temperature. Every long press, the color temperature will be adjusted in the opposite direction, with the color temperature range of 2700-6500K.
8. Double click colour switch, turn on the lamp to the brightest, cold light (this function is also used to adjust the consistency of multiple power supplies in the same circuit)



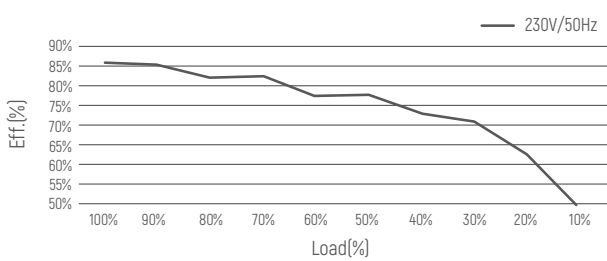
Dimming Curve



Derating Curve



Efficiency 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- 1.5mm<sup>2</sup> 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 .

EUP20D-2HMC-0

概述

EUP20D-2HMC-0 是一款可以提供350/400/450/500/550/600/650/700mA 8档电流的LED驱动器。输出电流可以通过DIP拨码开关简易设置，用DALI主控/Touch DIM开关调光，曲线平滑、无闪烁。

产品特点

- 双道恒流输出，多级电流可选
- 遵循DALI协议标准 IEC62386-209
- 支持Touch-DIM功能
- 高电压输入：220VAC ~ 240VAC
- 效率高达 86%
- 内建主动式PFC功能
- 短路保护，过载保护，过压保护
- 适用于LED室内灯具,比如筒灯，面板灯等

技术参数

| 型号        | EUP20D-2HMC-0 |                                                                         |                                             |                                              |                                           |
|-----------|---------------|-------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------|-------------------------------------------|
| 输入        | 效率            | >86%@230VAC, 满载                                                         |                                             |                                              |                                           |
|           | 电压            | 220VAC-240VAC                                                           |                                             |                                              |                                           |
|           | 频率            | 50/60Hz                                                                 |                                             |                                              |                                           |
|           | 功率因素          | ≥0.95@230VAC, 满载                                                        |                                             |                                              |                                           |
|           | THD           | <10%@230VAC, 满载                                                         |                                             |                                              |                                           |
|           | 电流            | 0.12Amax@230VAC                                                         |                                             |                                              |                                           |
|           | 待机功耗          | <0.5W                                                                   |                                             |                                              |                                           |
|           | 浪涌电流          | 冷启动,15A[在 50%Ipeak 下测twidth=14us]@230VAC                                |                                             |                                              |                                           |
| 输出        | 电流/电压/功率      | *350mA/9-42VDC/14.7W<br>550mA/9-36VDC/19.8W                             | *400mA/9-42VDC/16.8W<br>600mA/9-33VDC/19.8W | *450mA/9-42VDC/18.9W<br>650mA/9-31VDC/20.15W | *500mA/9-40VDC/20W<br>700mA/9-28VDC/19.6W |
|           | 波纹电流          | <3%                                                                     |                                             |                                              |                                           |
|           | 通道            | 2                                                                       |                                             |                                              |                                           |
|           | 电流精度          | ±5%                                                                     |                                             |                                              |                                           |
|           | 空载输出电压        | 60V Max                                                                 |                                             |                                              |                                           |
|           | 启动延时          | <1s, at230Vac                                                           |                                             |                                              |                                           |
| 功能        | 调光方式          | DALI/Touch DIM                                                          |                                             |                                              |                                           |
|           | 调光范围          | 2%-100% 变暗直至关闭                                                          |                                             |                                              |                                           |
|           | 色温值           | 2700k-6500k                                                             |                                             |                                              |                                           |
| 保护        | 短路            | 关闭输出，排除故障后自恢复                                                           |                                             |                                              |                                           |
|           | 过载            | 打嗝，移除故障后自恢复                                                             |                                             |                                              |                                           |
|           | 过压            | 打嗝，移除故障后自恢复                                                             |                                             |                                              |                                           |
| 安全 & 电磁兼容 | 浪涌            | L-N:1KV                                                                 |                                             |                                              |                                           |
|           | 耐压标准          | I/P-O/P: 3000VAC/1min/5mA                                               |                                             |                                              |                                           |
|           | DALI标准        | IEC 62386-101: 2014, IEC 62386-102: 2014; IEC 62386-207: 2009, DALI 2.0 |                                             |                                              |                                           |
|           | 安全标准          | IEC/EN61347-1,IEC/EN61347-2-13,GB19510.1,GB19510.14,                    |                                             |                                              |                                           |
|           | 电磁兼容          | EN50515,EN61000-3-2 Class C,IEC61000-3-3,GB/T17743                      |                                             |                                              |                                           |
|           | EMC抗扰度        | EN61000-4-2,3,4,5,6,8,11 EN61547,GB17625.1                              |                                             |                                              |                                           |
| 其它        | 工作温度          | -20°C~50°C                                                              |                                             |                                              |                                           |
|           | 储存温度、湿度       | -40°C~85°C, 20-90%RH                                                    |                                             |                                              |                                           |
|           | tc            | 80°C                                                                    |                                             |                                              |                                           |
|           | 材质            | PC                                                                      |                                             |                                              |                                           |
|           | 防水等级          | IP20                                                                    |                                             |                                              |                                           |
|           | 寿命            | 50,000小时@tc:70°C                                                        |                                             |                                              |                                           |
|           | 质保            | 5年                                                                      |                                             |                                              |                                           |
|           | 开关周期          | >25,000次                                                                |                                             |                                              |                                           |
|           | 包装尺寸(重量)      | 净重: 125g±5%/PCS; 50PCS/Carton; 6.65kg±5%/箱; 外箱尺寸: 319*254*136cm[长*宽*高]  |                                             |                                              |                                           |
|           | 尺寸            | 150*43*29mm (长*宽*高)                                                     |                                             |                                              |                                           |

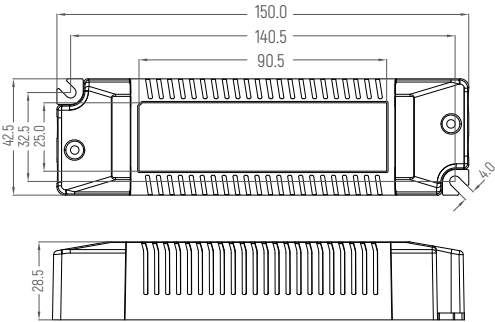
\*电流精度 :350mA ±8%，400mA ±8%，450mA ±7%，500mA ±7%。



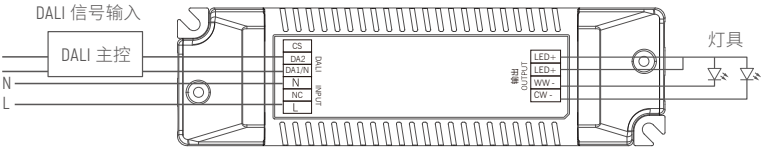
应用



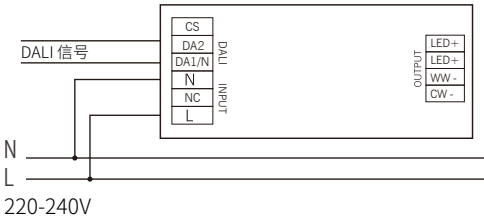
尺寸(mm)



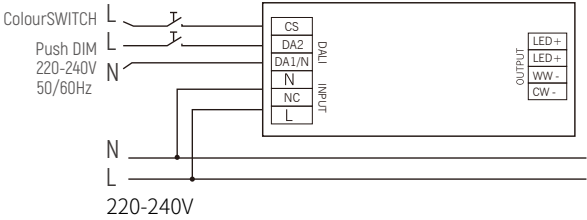
接线图



DALI应用图



Push DIM (Touch DIM)应用图

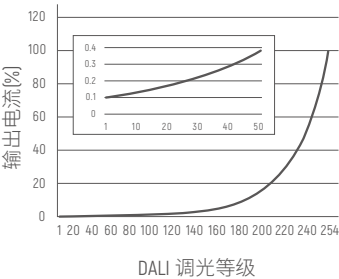


备注: 只能使用开路的按压式开关(不带指示灯). 采用同步连线时每个设备和设备之间的线长不超过20米.

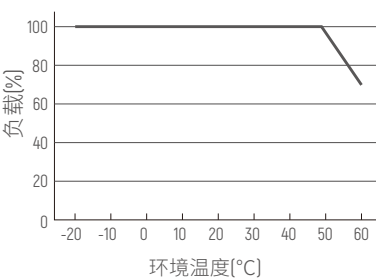
Push DIM/Coloer Switch 功能

- 1. 长按Push DIM开关8s及以上进入PUSH调光模式
- 2. 短按Push DIM开关打开或关灭灯具，回到上次记忆状态
- 3. 长按Push DIM开关进行调光，释放时停在当前亮度，每次都往相反的方向调，调光范围为5%-100%
- 4. 双击Push DIM开关，灯具开到最亮，冷光（此功能也用于调整同一回路里多台电源的一致性）
- 5. 只有进入Push DIM模式后，Colour switch才有效，
- 6. 短按Colour SWITCH 可以在9个不同色温场景中进行选择，范围在2700到6500K之间。
- 7. 长按Colour SWITCH 可以对色温进行连续调节，每隔一次长按，色温会向相反方向调整，色温范围2700-6500k。
- 8. 双击colour switch，灯具开到最亮，冷光（此功能也用于调整同一回路里多台电源的一致性）

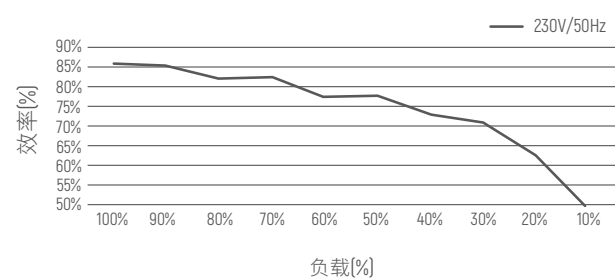
调光曲线



降额曲线



效率曲线



注意事项:

- 1、本产品请由具有专业资格的人员进行调试安装。
- 2、本产品不能防水，需避免日晒雨淋，如安装在户外，请用防水箱。
- 3、良好的散热条件会延长产品的使用寿命，请把产品安装在通风良好的环境。
- 4、请检查使用的LED电源输出电压电流，是否符合产品要求。
- 5、出于安全考虑，推荐输入和输出（信号端除外）用0.75-1.5mm<sup>2</sup> PVC或橡胶线缆，并确保接线牢固，以免电线过热或接触不良触发事故。扁平电源线不适用。
- 6、通电调试前，应确保所有接线正确，以避免因接线错误而导致灯具损坏。
- 7、如果发生故障，请勿私自维修；如果有疑问，请联系供应商。

※ 本说明书内容如有更新，恕不另行通知。若您使用的产品功能与说明书不一致时，请以产品为准。如有疑问请与我们联系。