


















Product Description

HED6045/D2 is a DALI-2 DT6 dimmable LED driver with maximum power output of 45W. It also comes with 1-10V dimming & Switch-Dim interfaces with adjustable output currents. Ideal for direct projects or new luminaire design for lighting manufactures.




Features

-  DALI-2 with DALI feedback
-  1-10V dimming control
-  Flicker free (1-100%)
-  Switch-Dim (Push switch)
-  Stand-by power < 0.5W
-  No-load power < 0.5W
-  Insulated terminal cover with cord restraint
-  Active PFC design
-  Logarithmic Dimming
-  Linear Dimming
-  Configurable constant current (CC) output via DIP switches
-  Permanent setting memory, protected against loss of power
-  Loop-in & loop-out terminal for efficient installation
-  Short-circuit Protection
-  Overload Protection
-  Open-circuit Protection
-  5-year warranty, designed for long lifetime up to 50,000 hours

Output Configuration

HED6045/D2,45W

1000mA	●●●●
900mA	○●●●
850mA	●●●○
800mA	●●●○
750mA	○●●●
700mA	○●●●
650mA	●●●○
600mA	●●●○
550mA	○●●○
500mA	○●●○
450mA	●●○○
350mA	○○○○
	1 2 3 4



⚠ Warning: Please make sure the correct current is selected before starting the driver!

Technical Specifications

Input	
Mains Voltage	220~240VAC 50/60Hz
Mains Current	0.24~0.22A
Power Factor	0.95
Max. Efficiency	88%

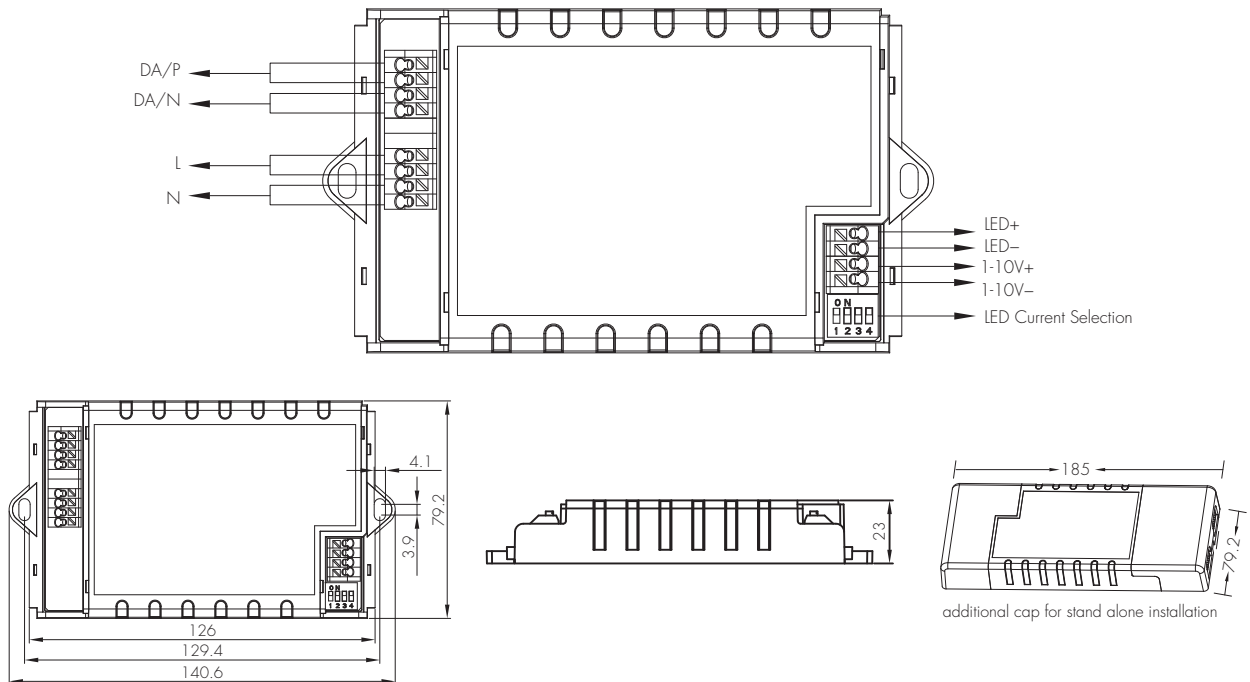
Output	
Output Current	350mA~1000mA
Output Voltage	10-54V
Uout Max.	75V
Psb/Pno	<0.5W
Dimming Interface	Switch-Dim/DALI/1-10V

Max. output power/current/voltage range	
HED6045/D2	3.5-19W/350mA /10-54V
	4.5-24W/450mA /10-54V
	5-27W/ 500mA /10-54V
	5.5-30W/ 550mA /10-54V
	6-32W/ 600mA /10-54V
	6.5-35W/ 650mA /10-54V
	7-38W/ 700mA /10-54V
	7.5-39W/ 750mA /10-52V
	8-42W/800mA /10-52V
	8.5-43W/850mA /10-50V
9-45W/900mA /10-50V	
10-45W/ 1000mA /10-45V	

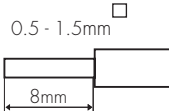
Environment	
Operation Temp.	50°C
Case Temp. (Max.)	80°C
IP Rating	IP20

Safety and EMC	
EMC Standard	EN55015, EN61547, EN61000-3-2/-3-3, EN62479
Safety Standard	EN61347-1, EN61347-2-13
Dielectric strength	Input→output: 3000VAC / 5mA / 1min
Abnormal protection	Output short-circuit protection Overload Protection Open-circuit Protection
DALI Standard	IEC62386-101, IEC62386-102, IEC62386-207

Mechanical Structure & Dimensions



Wire Preparation

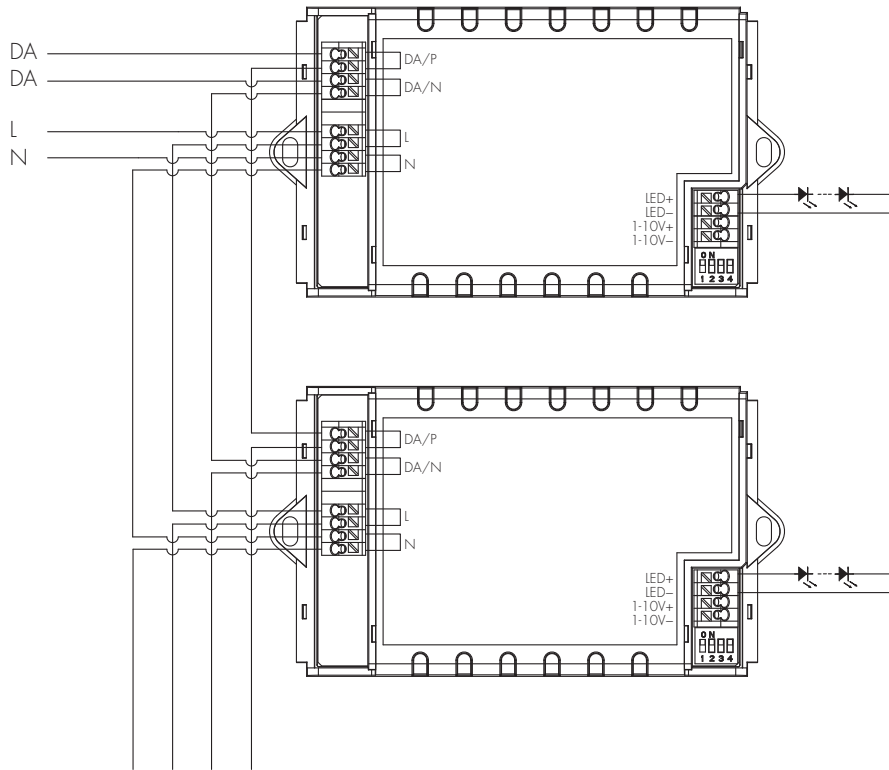


To make or release the wire from the terminal, use a screwdriver to push down the button.

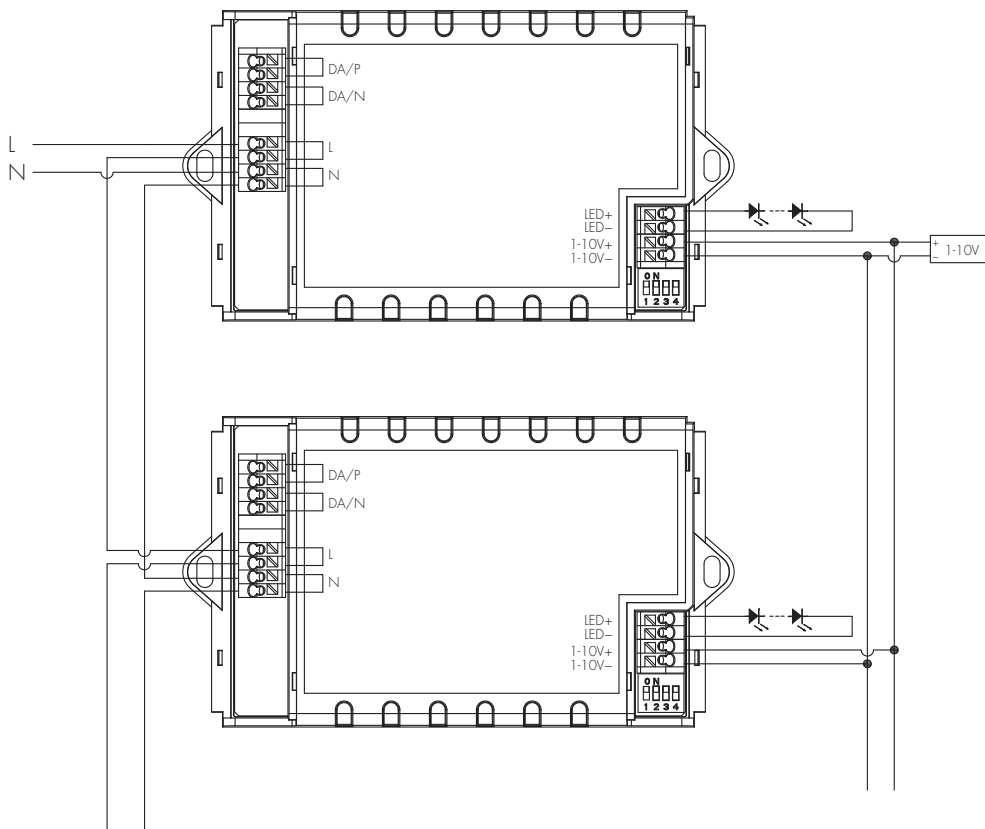
1. 200 metres (total) max. for 1mm² CSA (Ta = 50°C)
2. 300 metres (total) max. for 1.5mm² CSA (Ta = 50°C)

Wiring Diagram

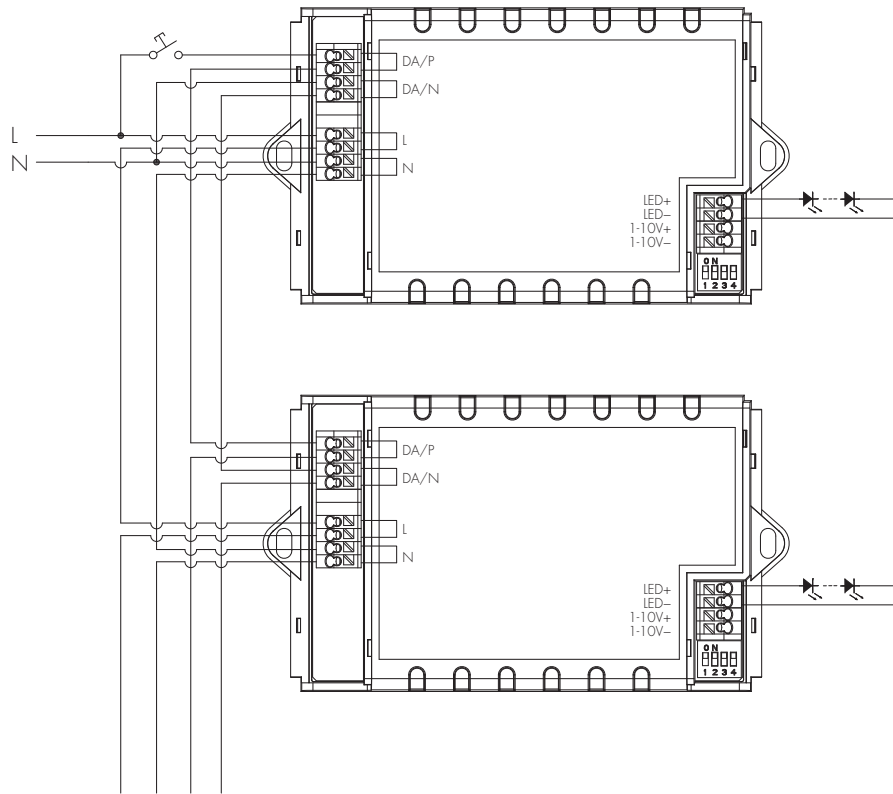
Wiring Diagram For DALI



Wiring Diagram For 1-10V



Wiring Diagram For Switch-Dim



Loading and In-rush Current

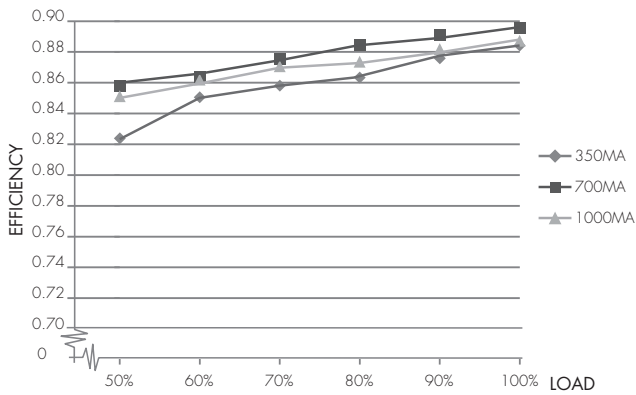
Model	HED6045/D2
In-rush Current (I _{max.})	46A
Pulse Time	86μs

Circuit Breaker Information

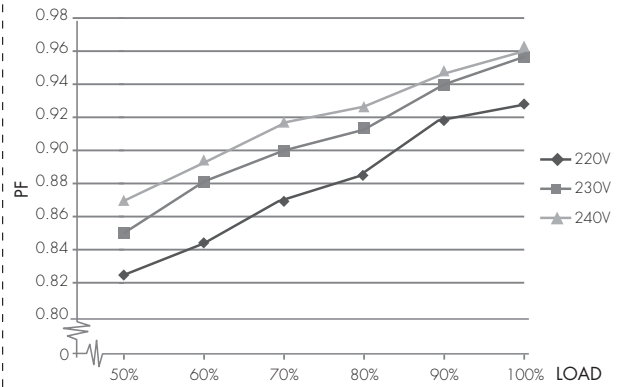
Automatic circuit breaker type	B16A	B10A	B13A	B20A	B25A
HED6045/D2	43	27	35	54	67

The data above is calculated according to the formula: Maximum Amount = $16 / (P_n / 230)$. In order to provide a more reliable reference in real application, the data have been revised to take 60% of the number calculated, i.e. $16 / (P_n / 230) \times 60\%$. Please kindly take note that the calculation is based on ABB circuit breaker series S200. Actual values may differ due to different types of circuit breaker used and installation environment.

Performance Characteristics

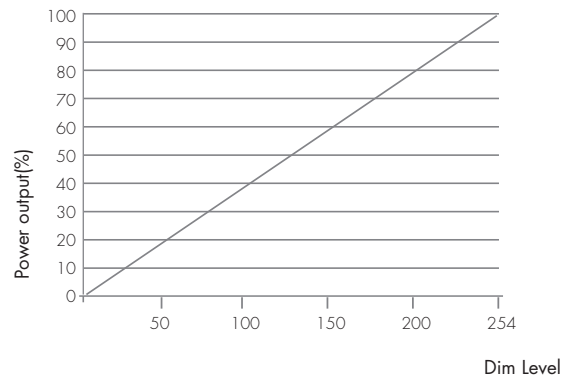
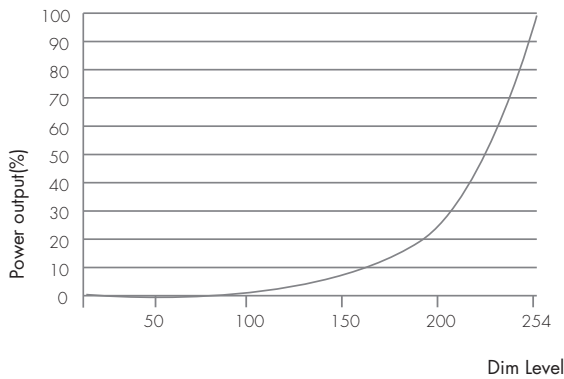


* Typical Efficiency vs Load



* Typical Power Factor vs Load

Dimming Characteristics



Dimming Interface Operation Notes

DALI

This series of products are supplied as 'plug n'play DALI' or 'independent DALI' system ready. These models are also fully DALI addressable and may be assigned to groups within the limits specified by the DALI protocol or supporting DALI controllers by using a DALI programming tool.

Switch-Dim

The provided Switch-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches. Up to 64 LED drivers may be connected to one switch.

Switch Action

Short press (<0.4 second)

Note: short press has to be longer than 0.1s, or it will be invalid.

Long press (>0.4 second)

Response

Toggle light on / off

Toggle dim light / increase brightness

Synchronization

Switch Action

Long press (>1.5 seconds)

Response

All lights will dim down to minimum then return to 50% brightness

* The maximum length of the wires from push to driver should be no more than 20 meters.

Additional Information / Documents

1. Regarding precautions for LED driver installation and operation, please kindly refer to www.hytronik.com/download ->knowledge ->LED Drivers - Precautions for Product Installation and Operation
2. Data sheet is subject to change without notice. Please always refer to the most recent release on [www.hytronik.com/products/bluetooth technology](http://www.hytronik.com/products/bluetooth%20technology) ->LED Drivers
3. Regarding Hytronik standard guarantee policy, please refer to www.hytronik.com/download ->knowledge ->Hytronik Standard Guarantee Policy