

DALI-2 DT8 LED Drivers

HED8025

Constant Current



Product Description

HED8025 is a DALI-2 DT8 dimmable & color tunable LED driver, with maximum power output of 25W. It comes with Switch-Dim interface by using Push switch (retractive switch). It is ideal for direct projects or new luminaire design for lighting manufactures.



Features

- DALI-2 with DALI feedback
- Switch-Dim (Push switch)
- PWM 1KHz (1-100%)
- 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
- Open-circuit Protection
- Overload Protection
- 5-year warranty

Output Configuration

HED8025, 1x25W

750mA	● ● ● ●
700mA	○ ● ● ●
600mA	○ ○ ● ●
500mA	● ○ ○ ●
350mA	○ ● ○ ○
300mA	● ○ ○ ○
250mA	○ ○ ○ ○
	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	0.135~0.12A
Mains Power	0.9
Max. Efficiency	88%

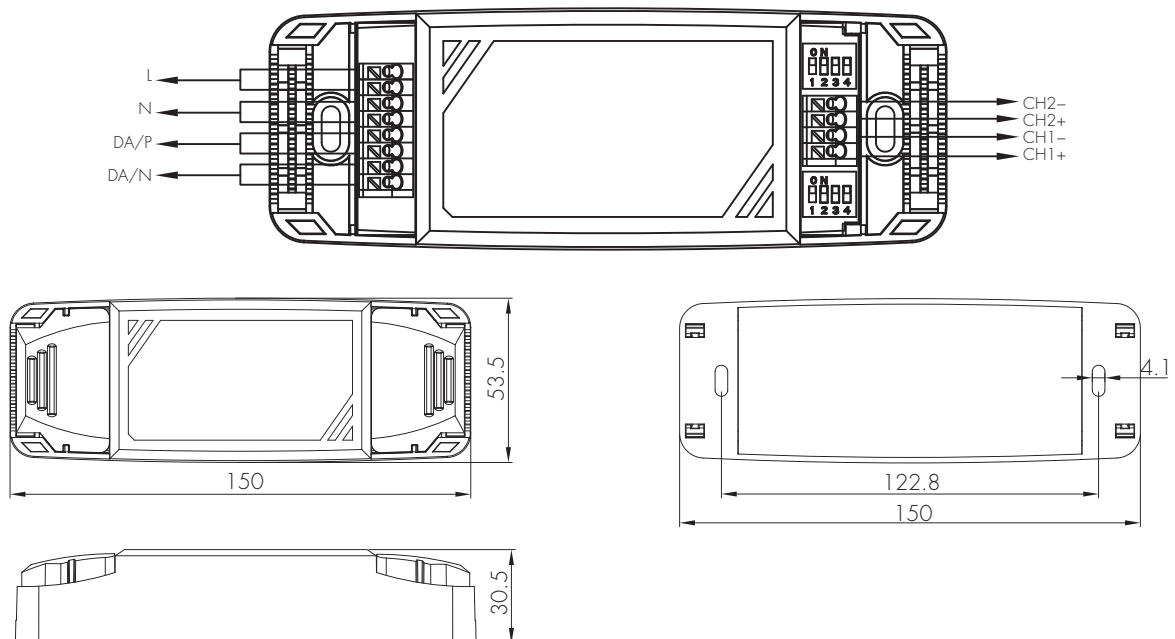
Output	
Ripple Current	<3%
Uout Max.	60V
Turn-on Time	<0.5s
Dimming Interface	Switch-Dim/DALI
Stand-by power	1W

Max. output power/current/voltage range	
HED8025	2-13W/ 250mA /10-52V
	3-16W/ 300mA /10-52V
	4-18W/ 350mA /10-52V
	5-25W/ 500mA /10-50V
	6-25W/ 600mA /10-42V
	7-25W/ 700mA /10-35V
	8-23W/ 750mA /10-30V

Environment	
Operation Temp.	-20 C ~ 50 C
Case Temp. (Max.)	80 C
IP Rating	IP20

Safety and EMC	
EMC Standard	EN55015, EM61547, EN6100-2/3,
	EN300328, EN301489-1/-17, EN62479
Safety Standard	EN61347-1, EN61347-2-13
Dielectric strength	Input→output: 3000VAC / 5mA /1min
Abnormal protection	Output short-circuit protection
	Open-circuit protection
	Overload protection

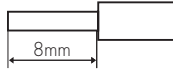
Mechanical Structure & Dimensions



Wire Preparation



0.5 - 1.5mm²

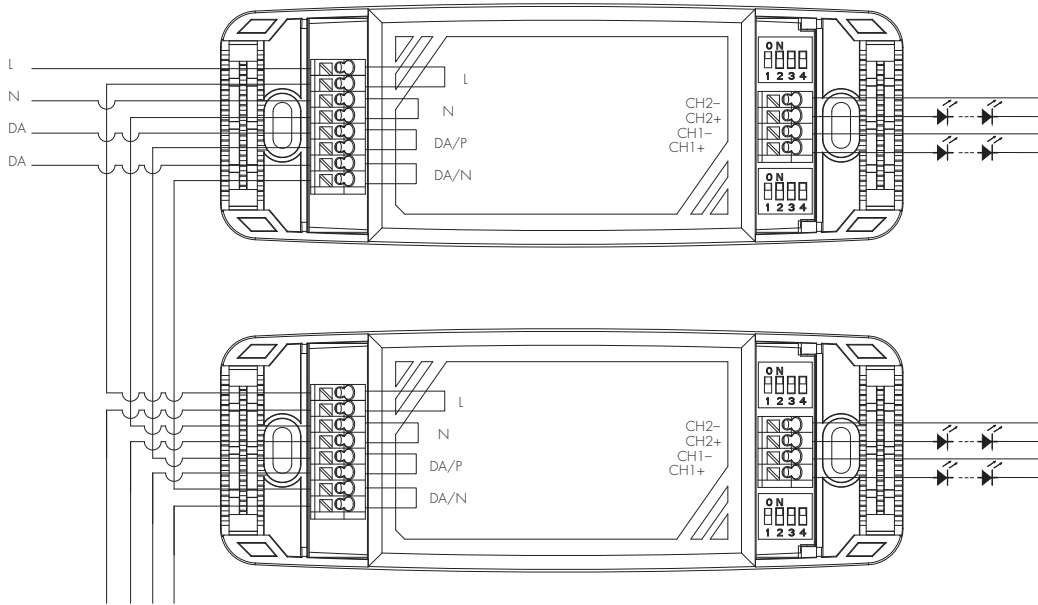


To make or release the wire from the terminal, use a screwdriver to push down the button.

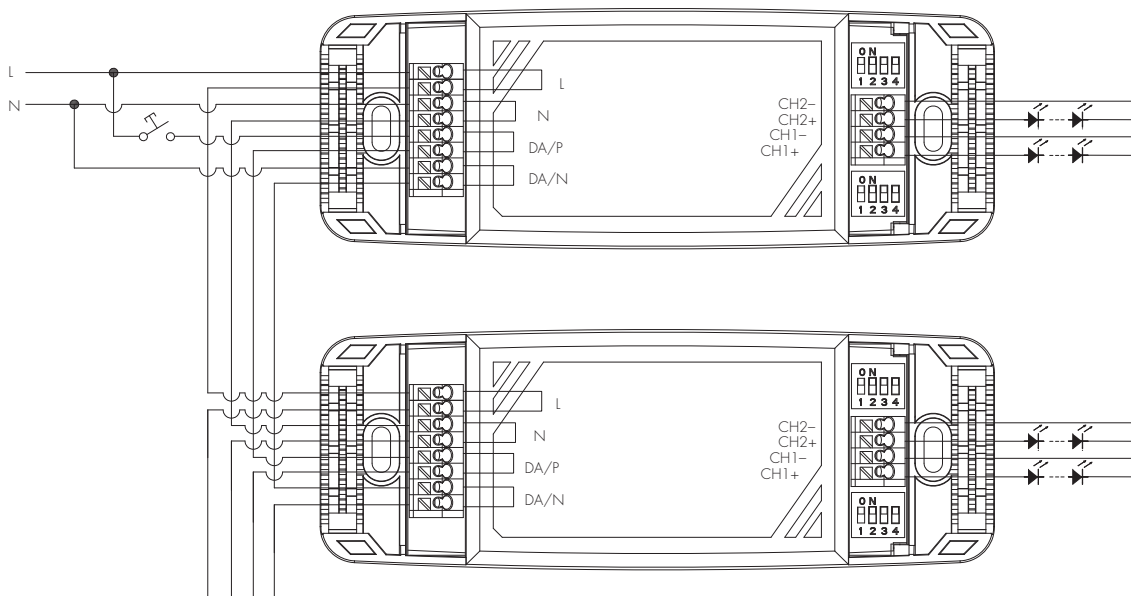
1. 200 metres (total) max. for 1mm² CSA (Ta = 50°C)
2. 300 metres (total) max. for 1.5mm² CSA (Ta = 50°C)

Wiring Diagram

Wiring Diagram For DALI



Wiring Diagram For Switch-Dim



Loading and In-rush Current

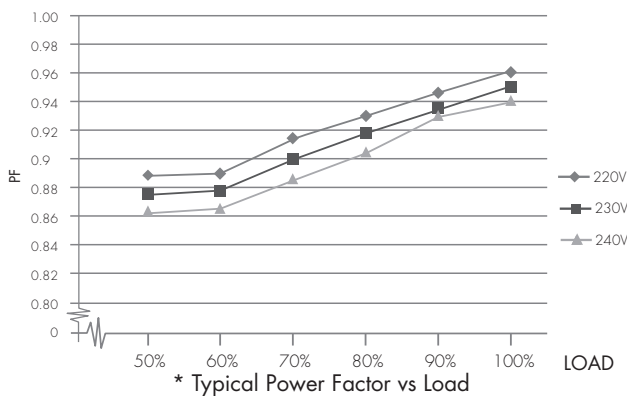
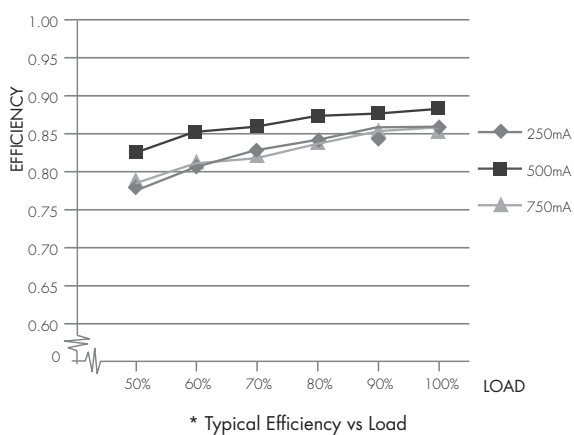
Model	HED8025
In-rush Current (I _{max.})	25.8A
Pulse Time	70 μs

Circuit Breaker Information

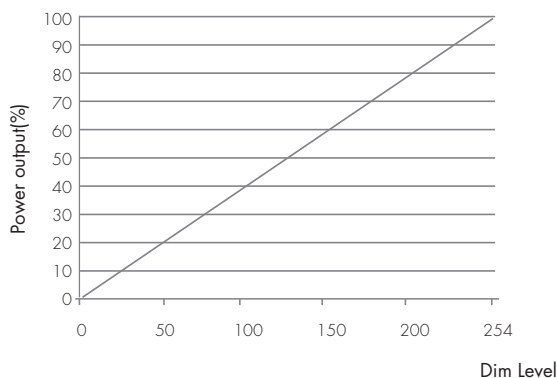
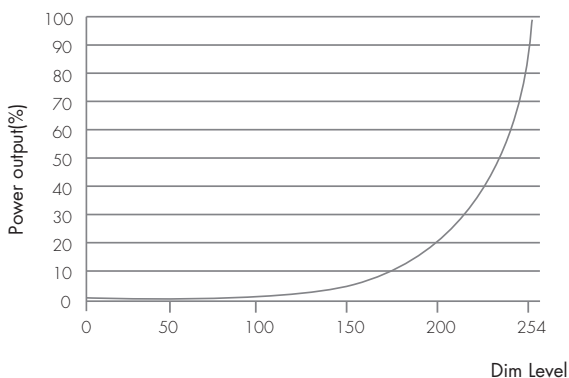
Automatic circuit breaker type	B16A	B10A	B13A	B20A	B25A
HED8025	73	46	59	92	115

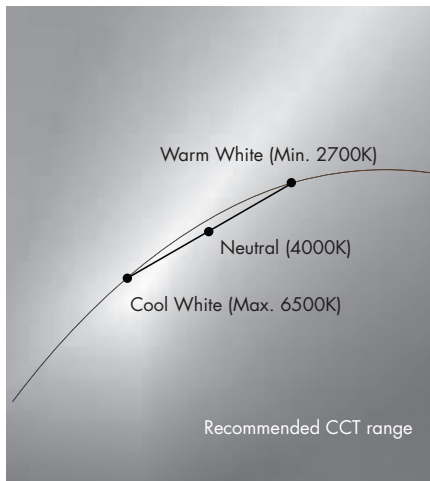
The data above is calculated according to the formula: Maximum Amount = $16 / (P_n / 230)$. In order to provide a more reliable reference in real application, the data have been revised to take 60% of the number calculated, i.e. $16 / (P_n / 230) \times 60\%$. Please kindly take note that the calculation 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



Dimming Characteristics





Manual Control via Push-DIM

* Colour Tuning

Switch Action

Step 1: Short press (3 times within 3 seconds)

Step 2: Short press (<1 second)

Response

Light starts tuning

Set the desired colour

* On/off control and brightness adjustment

Switch Action

Short press (<1 second)

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

Long press (>1 second)

Response

Toggle light on / off

Toggle dim light / increase/decrease brightness

Synchronization

Switch Action

Long press (>15 seconds)

Response

All lights will dim down to minimum level and CCT is neutral colour.

* We recommend the number of drivers connected to a switch does not exceed 25 pieces. The maximum length of the wires from push to driver should be no more than 20 meters.

Commissioning Instructions and Precautions

A. Installation Preparations

1. This product should be installed by a qualified electrician.

B. DALI-2 Compliance

2. This product has been tested in accordance with IEC 62386 and complies with the relevant DALI-2 application parts.

DALI-2 testing was performed using the official DALI test sequence software (version 2.1.1.0), covering the applicable IEC 62386 parts (e.g. Part 101, Part 102, Part 207, Part 209). DALI-2 certification verifies compliance within the defined test scope. However, certification does not eliminate the possibility of system-level compatibility issues arising from differences in device implementation or system design among manufacturers. Therefore, functional verification and on-site testing are required as part of the final system commissioning to ensure proper operation and compliance with project requirements.

Warning: For additional important documents, including installation precautions, product guidelines, and guarantee conditions, please refer to <https://hytronik.com/service/downloads>

Additional Information / Documents

1. To learn more about detailed product features/functions, please kindly refer to <https://hytronik.com/product/hed8025>
2. Regarding precautions for LED Drivers installation and operation, please kindly refer to: <https://hytronik.com/service/downloads> (LED Drivers Precautions for Product Installation and Operation)
3. Data sheet is subject to change without notice. Please always refer to the most recent release on <https://hytronik.com/products/led-drivers>
4. Regarding Hytronik standard guarantee policy, please kindly refer to <https://hytronik.com/service/downloads> (Guarantee Conditions document)