

HE8008-A / HE1008-A / HE8030-A / HE8050-A



Applications

Smooth, flicker free dimming and low stand-by power consumption feature in a range which make them the ideal choice from low wattage downlights to LED Panel Lighting. The multiple current selectors make driver upgrades very simple and a few models can cover a wide variety of fixtures.

- Office / Commercial Lighting
- Hotels
- Retail & Display
- Domestic Lighting

Use for retrofit upgrades & new luminaire designs.

Features

- <0.5W Stand-by Power
 - Active PFC Design
 - 1-10V
 - Switch-Dim with Synchronization
 - Logarithmic Dimming
 - Analogue Flicker-free Dimming
 - Configurable Constant Current (CC) Output via Dip-Switch
 - Thermal Cut-out Protection
 - Short Circuit Protection
 - Over-load Protection
 - Permanent Settings Memory, Protected against Loss of Power
 - 5 Year, 50,000hr Warranty
- } All with Auto-restart

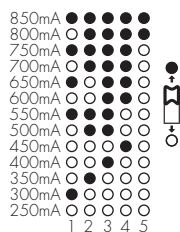


Output Configuration

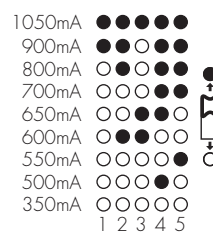
HE8008-A / HE1008-A, 1x8W



HE8030-A, 1x30W



HE8050-A, 1x50W

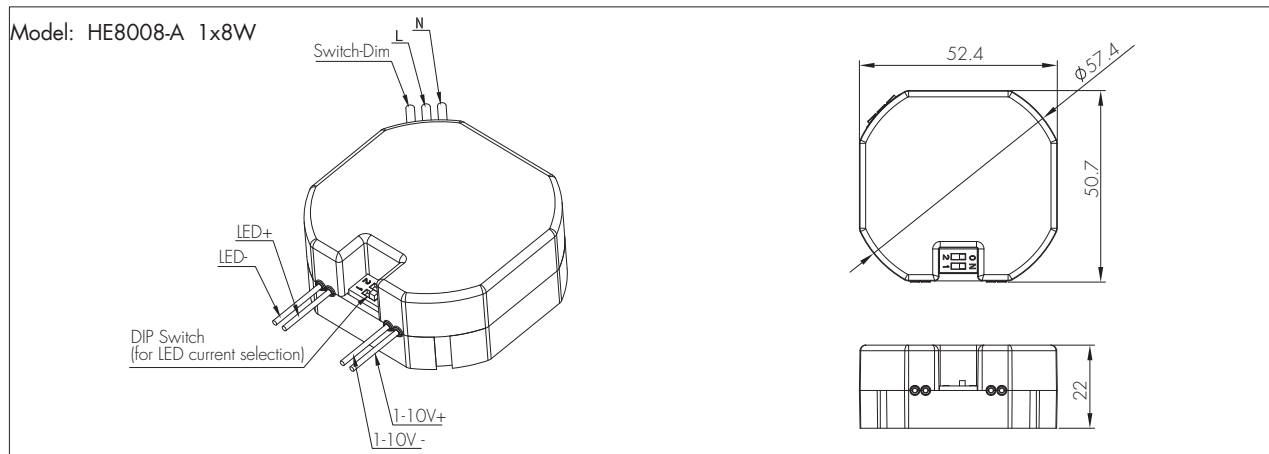


Warning: Please make sure the correct current is selected before starting the driver!

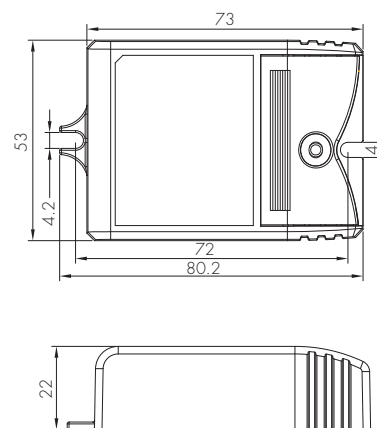
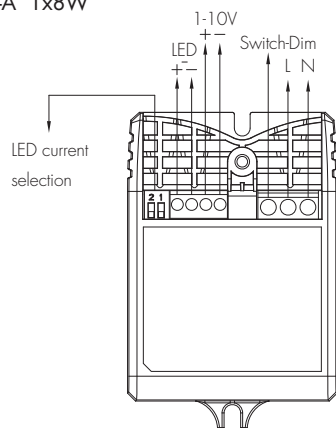
Technical Data

Model No.		HE8008-A	HE1008-A	HE8030-A	HE8050-A
Input	Mains Voltage	220~240VAC 50/60Hz			
	Mains Current	0.22~0.24A	0.22~0.24A	0.164~0.15A	0.29~0.27A
	Power Factor	0.9	0.9	0.9	0.9
	Max. Efficiency	88%			
	Dielectric Strength	Input→Output : 3000VAC			
	Leakage Current	< 0.25mA			
Output	Power/Current/ Voltage Range	2-8W /350mA /6~24V 3-8W /500mA /6~16V 3-8W /550mA /6~15V	2-8W /350mA /6~24V 3-8W /500mA /6~16V 3-8W /550mA /6~15V	2-13W /250mA /6~52V 2-16W /300mA /6~52V 2-18W /350mA /6~52V 3-21W /400mA /6~52V 3-23W /450mA /6~52V 3-26W /500mA /6~52V 3-29W /550mA /6~52V 4-30W /600mA /6~50V 4-30W /650mA /6~46V 4-30W /700mA /6~43V 4-30W /750mA /6~40V 5-30W /800mA /6~37V 5-30W /850mA /6~35V	25W /350mA /15~72V 36W /500mA /15~72V 40W /550mA /15~72V 43W /600mA /15~72V 47W /650mA /15~72V 50W /700mA /15~72V 50W /800mA /15~63V 50W /900mA /15~56V 50W /1050mA /15~48V
	Ripple Current	<3%	<3%	<3%	<3%
	U _{out} Max.	38V	38V	60V	100V
	Turn-on Time	< 0.5s	< 0.5s	< 0.5s	< 0.5s
	Dimming Interface	Switch-Dim, 1-10V			
Environment	Operation Temp.	Ta: -20~+50℃	Ta: -20~+45℃	Ta: -20~+50℃	Ta: -20~+45℃
	Case Temp. (Max.)	80℃	80℃	85℃	80℃
	IP Rating	IP20	IP20	IP20	IP20
Safety and EMC	EMC Standard	EN55015, EN61547, EN61000-3-2, EN61000-3-3			
	Safety Standard	EN61347-1, EN62493, EN61347-2-13			
	Certifications	Semko, CB, SAA, CE, EMC			

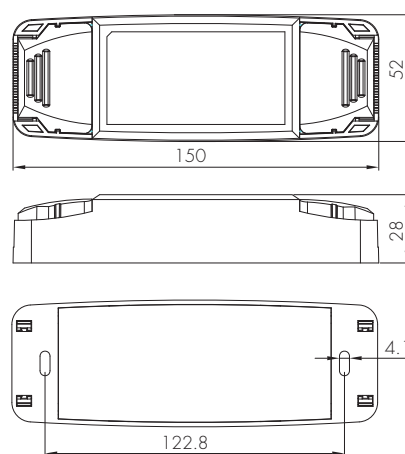
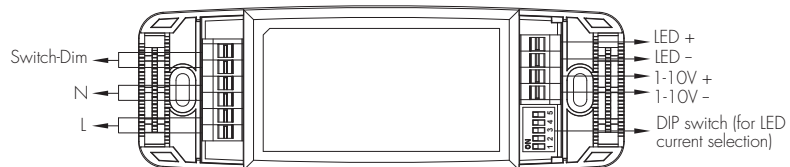
Dimensions and Terminals



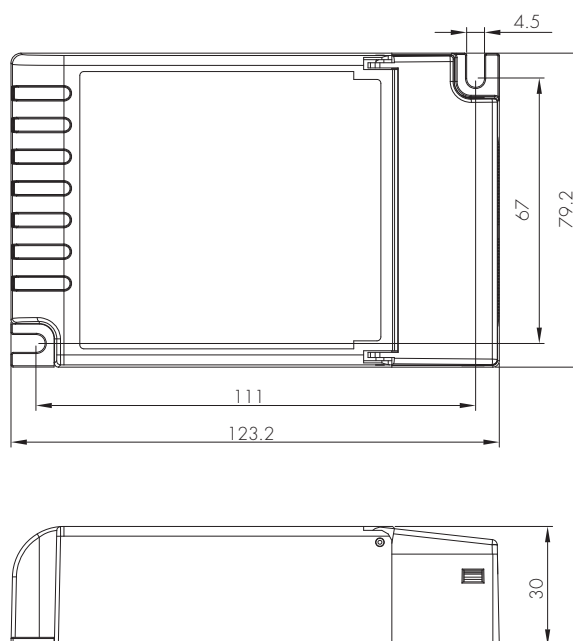
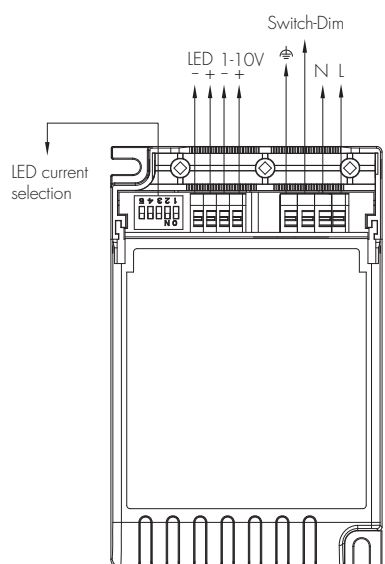
Model: HE1008-A 1x8W



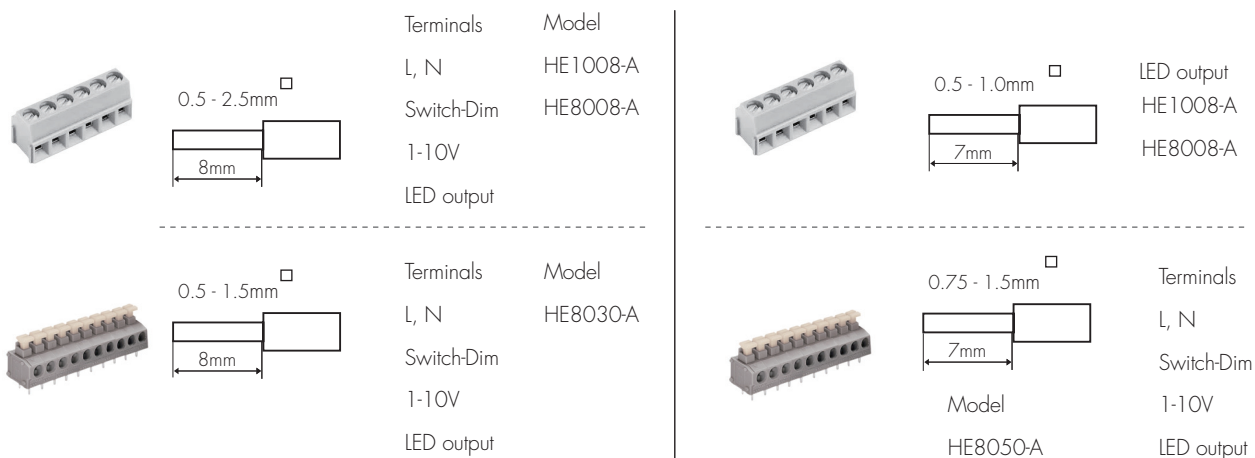
Model: HE8030-A 1x30W



Model: HE8050-A 1x50W



Wire Preparation



Loading and In-rush Current

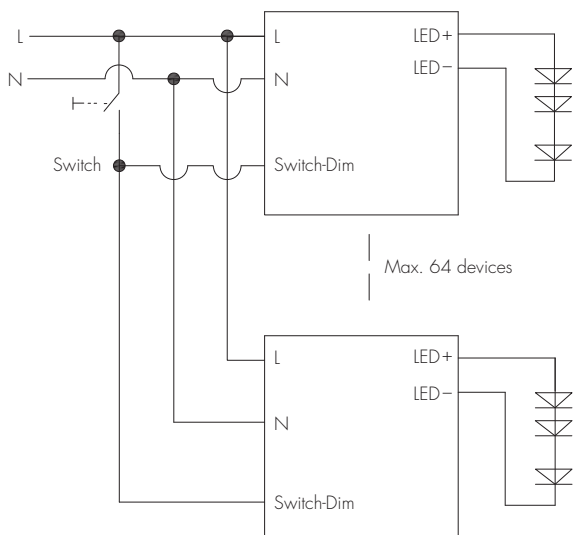
Model	HE8008-A / HE1008-A	HE8030-A	HE8050-A
In-rush Current (I _{max} .)	1.2A	2.8A	5.6A
Pulse Time	60μs	60μs	60μs

Number of Drivers Based upon 16A Circuit Breaker

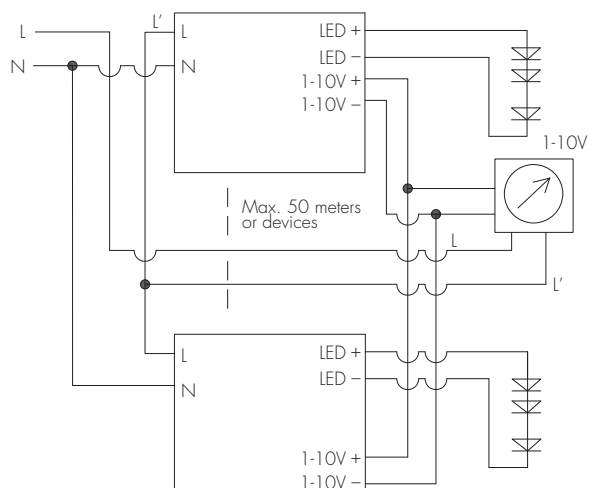
Cct Breaker Type	HE8008-A / HE1008-A	HE8030-A	HE8050-A
Type B	105	60	30
Type C	210	100	50

Wiring Diagrams

Switch-Dim Connection



1-10V Connection

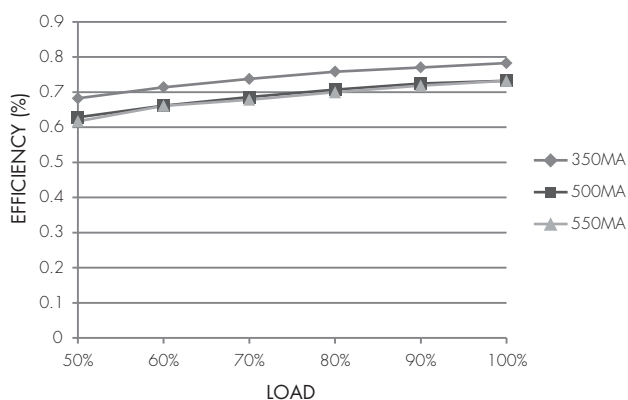


* Unused terminals have been omitted for clarity.

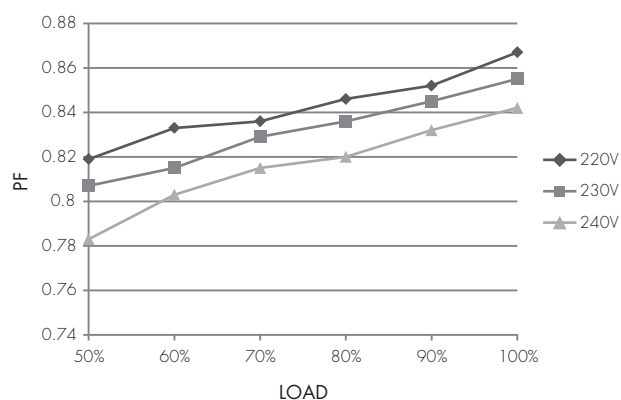
For further details of the dimming interfaces, please refer to the last section of this datasheet

Performance Characteristics

HE8008-A / HE1008-A

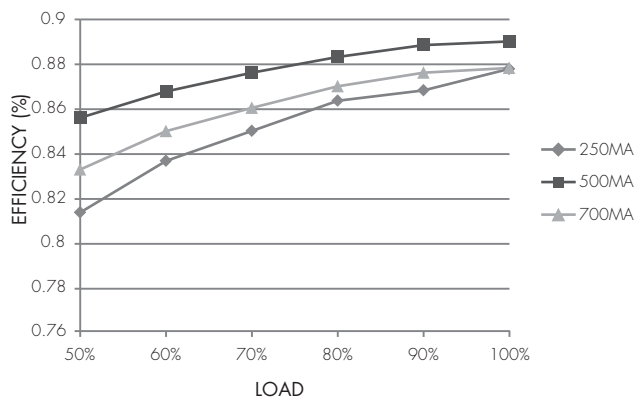


* Typical Efficiency vs Load

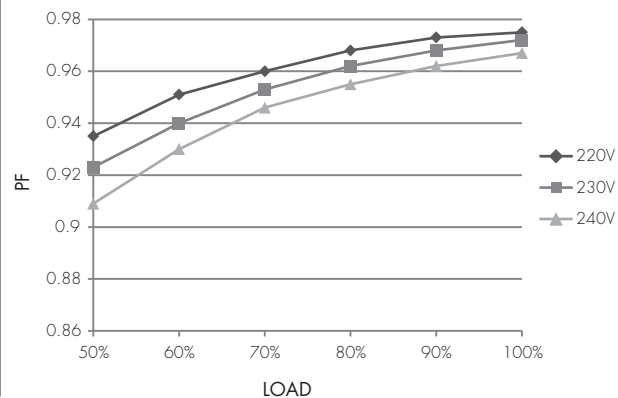


* Typical Power Factor vs Load

HE8030-A

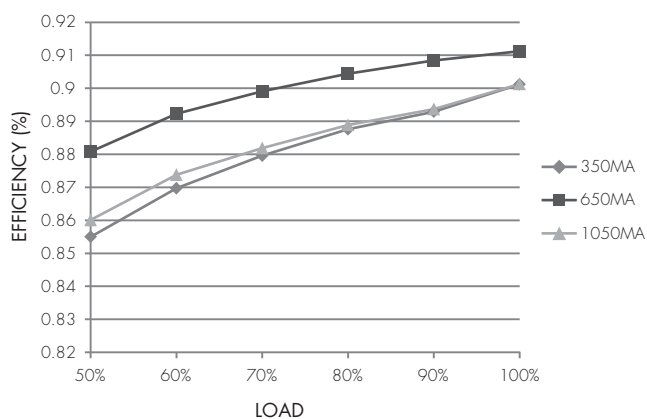


* Typical Efficiency vs Load

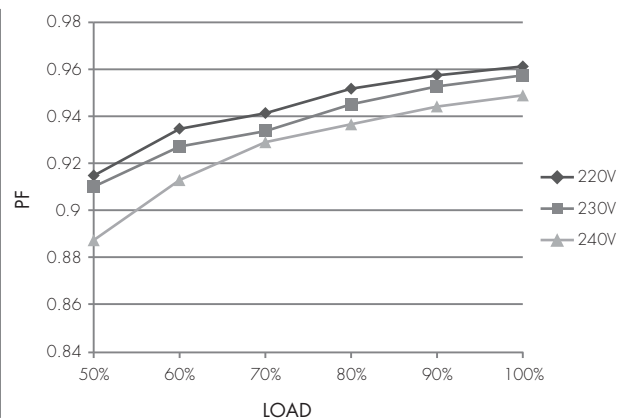


* Typical Power Factor vs Load

HE8050-A



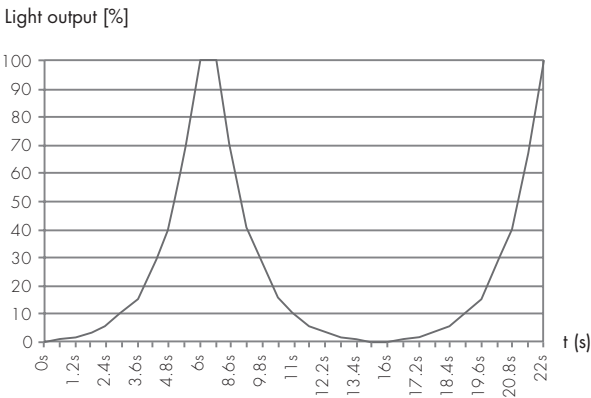
* Typical Efficiency vs Load



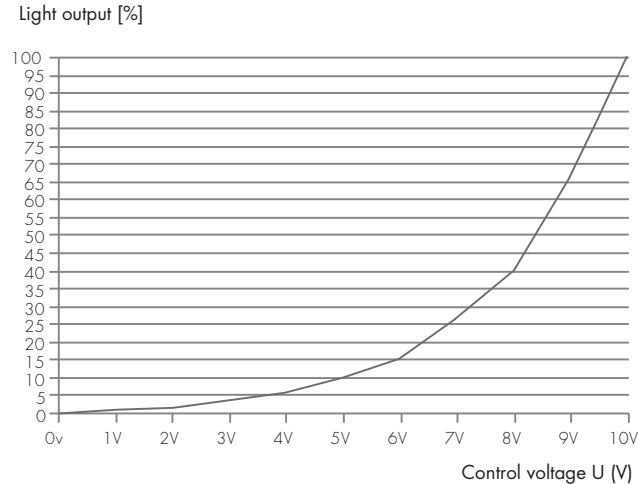
* Typical Power Factor vs Load

Dimming Characteristics

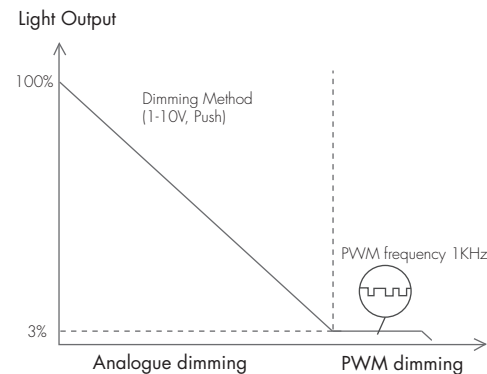
Switch-Dim Dimming Curve



1-10V Dimming Curve



Dimming Profile



Dimming range	Dimming technique
3%-100%	Analogue
1-3%	PWM

Dimming Interface Operation Notes

Switch-Dim

The provided Switch-Dim interface allows a simple dimming method using commercially available non-latching (momentary) wall switches. Up to 50 LED drivers may be connected to one switch.

Switch Action
Short press (<1 second)
Long press (>1 second)

Response
Toggle light on / off
Toggle dim light / increase brightness

Synchronization
Switch Action
Long press (>15 seconds)

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

1-10V

The 1-10V input is operable via commercially available simple rotary wall switches designed for 1-10V dimming equipment or from dedicated system central dimming controllers. The 1-10V output is fully isolated and is SELV compliant.

Note: In the unlikely event that the LED driver be used with the Switch-Dim interface prior to using the 1-10V interface, the 1-10V interface may need to be re-set. This is achieved by placing a short circuit across the 1-10V terminals until the light returns to full brightness (approx. 3-5 seconds).