

HE4030-A / HE6030-A / HE2075-A / HE3075-A



SELV IP20

Applications

Suitable for mounting outside of the light fixture in applications which use slim fixtures such as LED light bar and LED tape designs.

- Office / Commercial Lighting
- Retail & Hotel
- Display / Domestic lighting

Use for retrofit upgrades & new luminaire designs.



Features

- Active PFC Design
 - Switch-Dim with Synchronization
 - 1-10V
 - Hybrid Flicker-free Dimming (HE2075-A only)
 - Logarithmic Dimming
 - Linear Dimming
 - 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

Technical Data

	Model No.	HE4030-A	HE6030-A	HE2075-A	HE3075-A
Input	Mains Voltage	220~240VAC 50/60Hz			
	Mains Current	0.175~0.16A	0.165~0.15A	0.39~0.36A	0.4~0.35A
	Power Factor	0.95	0.95	0.97	0.97
	Max. Efficiency	88%			
	Dielectric Strength	Input→Output : 3000VAC			
	Leakage Current	< 0.25mA			
Output	Power/Current (Max.)/ Voltage Range	30W / 2.5A / 12V	30W / 1.25A / 24V	75W / 6.25A / 12V	75W / 3.125A / 24V
	Turn-on Time	< 0.5s	< 0.5s	< 0.5s	< 0.5s
	Dimming Interface	Switch-Dim, 1-10V			
Environment	Operation Temp.	Ta: -20~+45°C	Ta: -20~+45°C	Ta: -20~+45°C	Ta: -20~+45°C
	Case Temp. (Max.)	80°C	75°C	85°C	85°C
	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	CE, EMC			

Loading and In-rush Current

Model	HE4030-A	HE6030-A	HE2075-A	HE3075-A
In-rush Current (I _{max.})	2A	2A	26.6A	25.8A
Pulse Time	60µs	60µs	360µs	400µs

Number of Drivers Based upon 16A Circuit Breaker

Cct Breaker Type	HE4030-A	HE6030-A	HE2075-A	HE3075-A
Type B	30	60	10	10

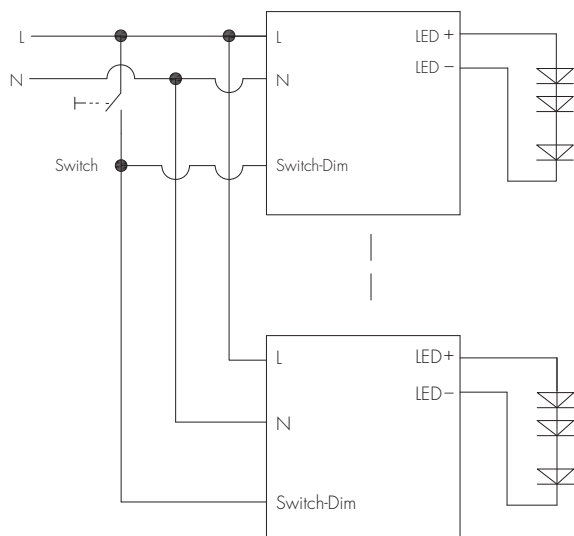
Conversion table for max. quantities of drivers on other types of Miniature Circuit Breaker

MCB Type	Rating	Relative number of drivers	MCB Type	Rating	Relative number of drivers
B	16A	100% (see table above)	C	10A	104%
B	10A	63%	C	13A	135%
B	13A	81%	C	16A	170%
B	20A	125%	C	20A	208%
B	25A	156%	C	25A	260%

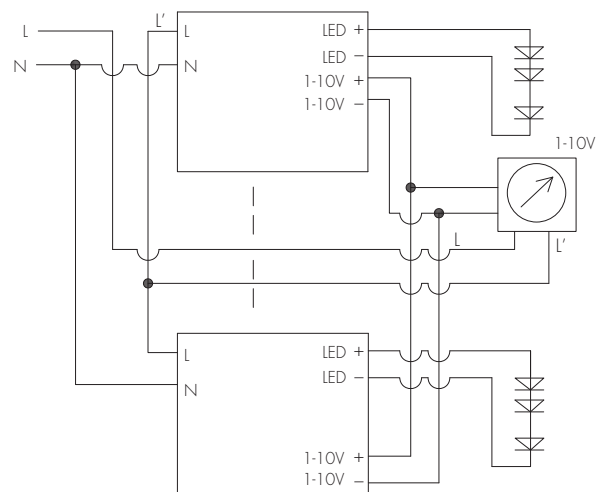
* Environmental factors (such as temperature) will also influence the maximum number of the drivers. Please refer to the MCB manufactures datasheet for loading and derating factors.

Wiring Diagrams

Switch-Dim Connections



1-10V Connections

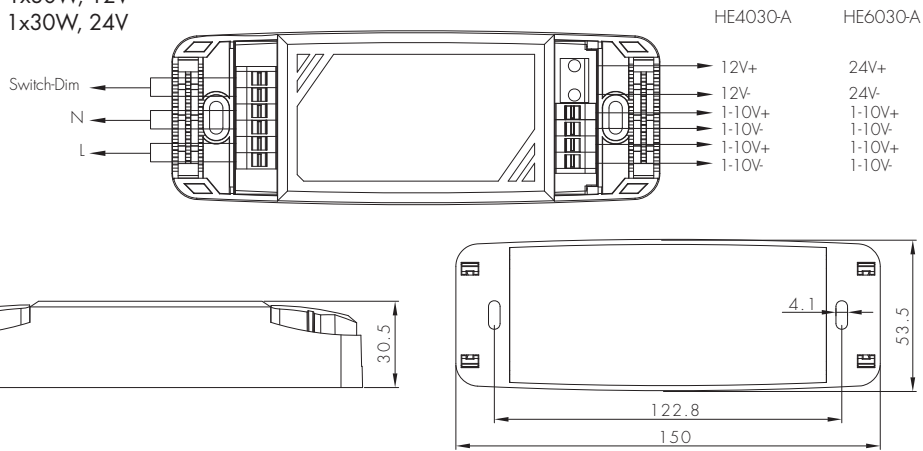


* Unused terminals have been omitted for clarity.

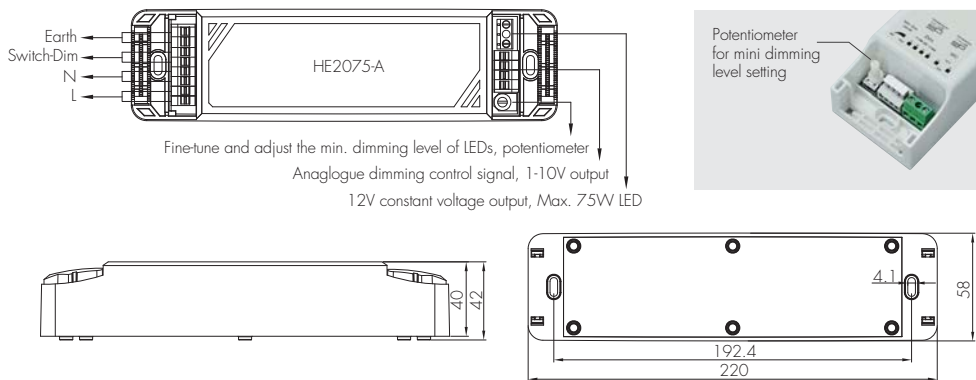
For further details of the dimming interfaces, please refer to the last section of this datasheet

Performance Characteristics

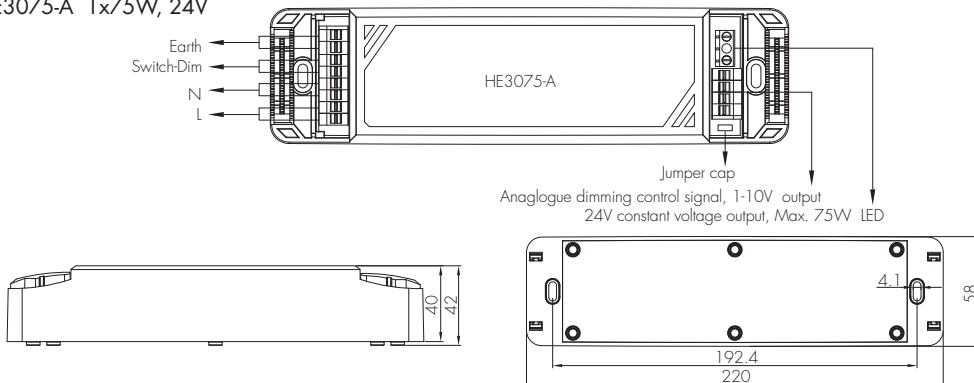
Model: HE4030-A 1x30W, 12V
HE6030-A 1x30W, 24V



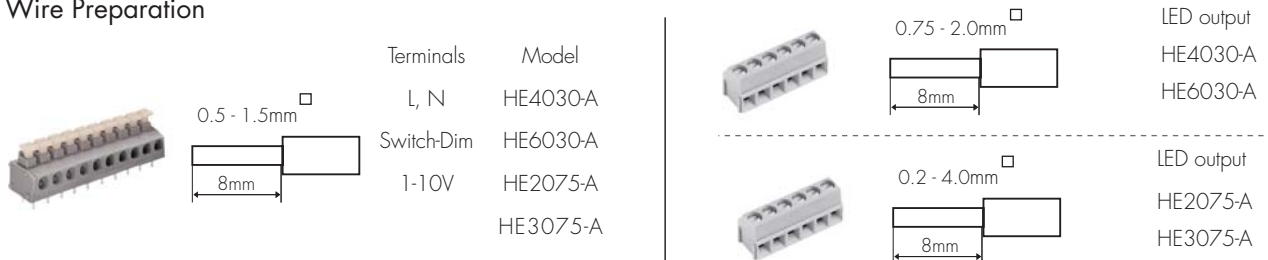
Model: HE2075-A 1x75W, 12V



Model: HE3075-A 1x75W, 24V



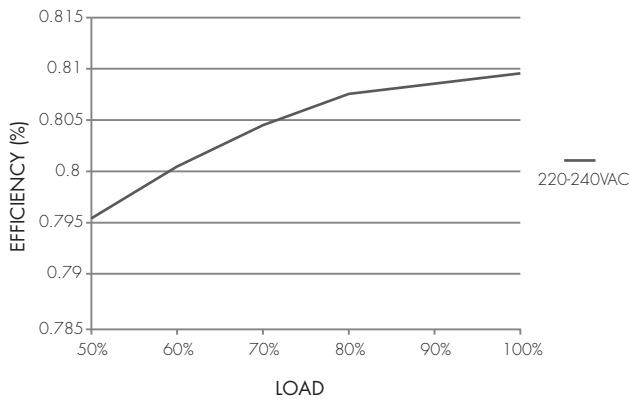
Wire Preparation



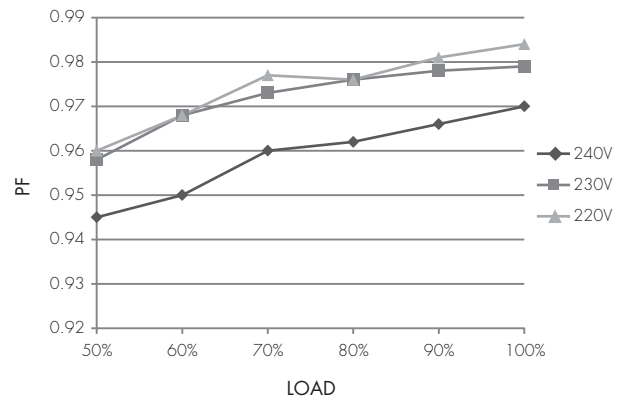
To make or release the wire from the terminal, use a screwdriver to push down the button.

Performance Characteristics

HE4030-A

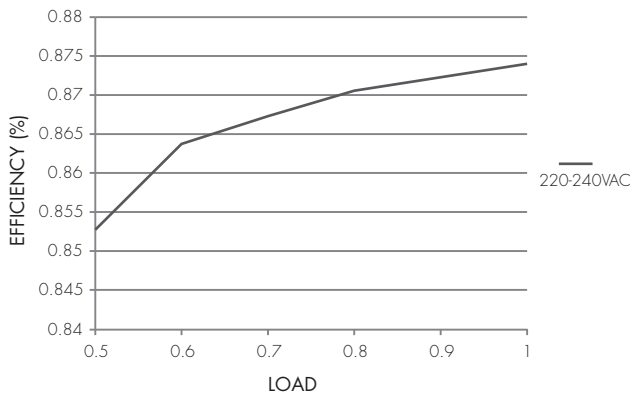


* Typical Efficiency vs Load

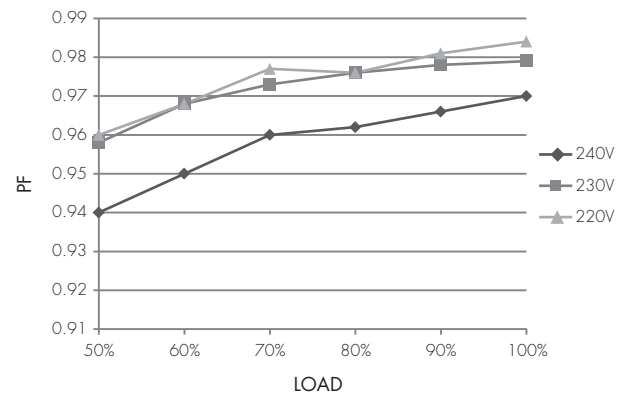


* Typical Power Factor vs Load

HE6030-A

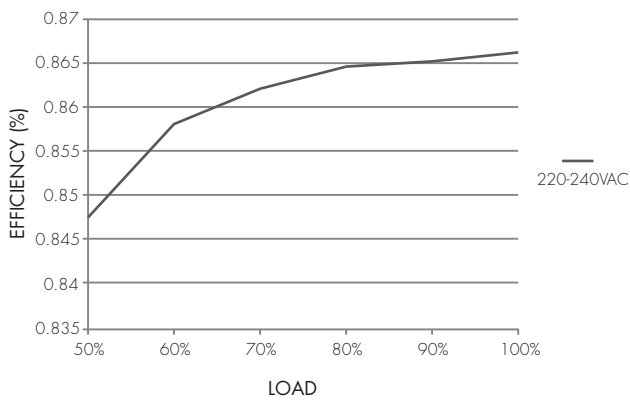


* Typical Efficiency vs Load

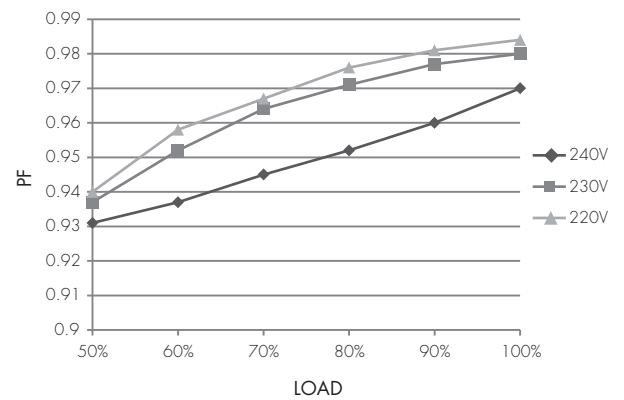


* Typical Power Factor vs Load

HE2075-A

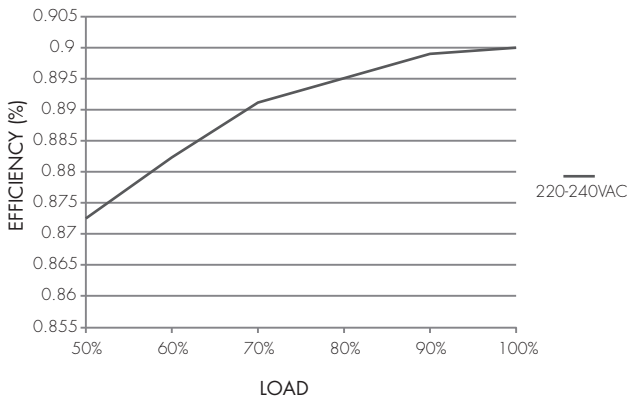


* Typical Efficiency vs Load

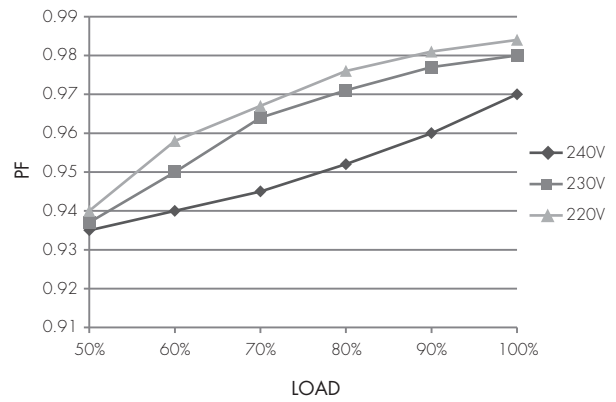


* Typical Power Factor vs Load

HE3075-A



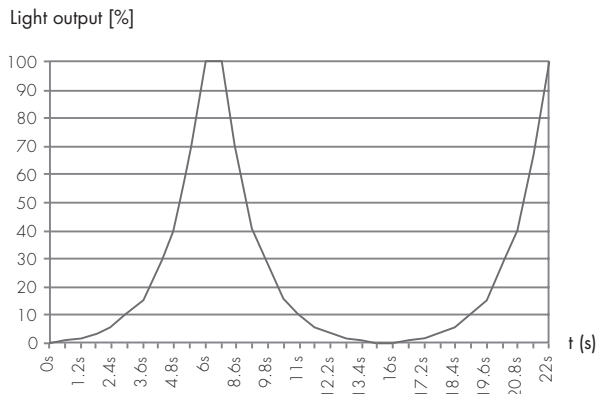
* Typical Efficiency vs Load



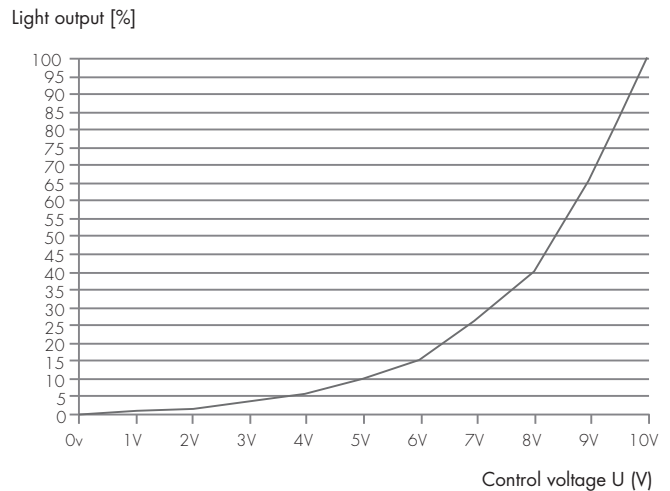
* Typical Power Factor vs Load

Dimming Characteristics

Switch-Dim Dimming Curve



1-10V Dimming Curve



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	Response
Short press (<0.4 second)	Toggle light on / off
Note: short press has to be longer than 0.1s, or it will be invalid.	
Long press (>0.4 second)	Toggle dim light / increase brightness

Synchronization

Switch Action	Response
Long press (>15 seconds)	All lights will dim down to minimum then return to 50% brightness

* 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.

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 or 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).