## **PHILIPS** Lighting



# Essentially smart and reliable

### HF-Essential for TL5/TL-D

HF-Essential is the most cost-effective, slim and affordable ballast to reliably operate a fluorescent lamp. It is also the ideal entry-level product for EM system users who want to enjoy the benefits offered by electronic ballasts. The cost-saving and reliable HF-Essential has an energy efficiency class A2, and its robust design meets all relevant international safety and performance standards. HF- Essential is intended for use with indoor lighting fixtures such as recessed luminaires, which are largely used in office, industrial, hotel, restaurant and other applications.

#### **Benefits**

- Automatic restart (after voltage dip or lamp replacement) ensures easy operation and hassle-free re-lamping.
- DC emergency operation and EMC compliant to EN 55015 2006 + A1 2007
- · Suitable for luminaires in protection class I and, after testing, class II

#### Features

- · Complies with CE and Kema
- Robust design for 45,000 hours lifetime at Ta=50 °C and over 6,000 on/off switching operations on one lamp
- Energy efficiency class: A2
- Failure rate of 0.3% per 1,000 hours at Tc max = 75 °C
- · Igniter and capacitor not required; flicker-free and noiseless

#### Application

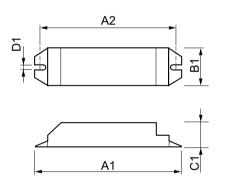
- Ideal for applications where there is a need to reduce the wattage per square meter or to reduce operating costs
- Indoor applications such as office buildings, hospitals, supermarkets, department stores, homes and schools

#### HF-Essential for TL5/TL-D

Versions



#### **Dimensional drawing**



Approval and Application	
Energy Efficiency Index	A2
Operating and Electrical	
Input Frequency	50 to 60 Hz
Input Voltage	220 to 240 V
General Information	
Lamp Type	TL-D

#### **General Information**

Order Code	Full Product Name	Number Of Lamps	Order Code	Full Product Name	Number Of Lamps
913713038866	HF-E 136 TL-D 220-240 50/60Hz	1 piece/unit	913713039166	HF-E 236 TL-D 220-240 50/60Hz	2 piece/unit
913713039066	HF-E 218 TL-D 220-240 50/60Hz	2 piece/unit			

#### Mechanical and Housing

Order Code	Full Product Name	Housing	Order Code	Full Product Name	Housing
913713038866	HF-E 136 TL-D 220-240 50/60Hz	L 150x40x28	913713039166	HF-E 236 TL-D 220-240 50/60Hz	L211x40x30
913713039066	HF-E 218 TL-D 220-240 50/60Hz	L 150x40x28			

#### System characteristics

Product	D1	C1	A1	A2	B1
HF-E 218 TL-D 220-240 50/60Hz	4.2 mm	28.0 mm	150.0 mm	136.0 mm	40.0 mm
HF-E 136 TL-D 220-240 50/60Hz	4.2 mm	28.0 mm	150.0 mm	136.0 mm	40.0 mm
HF-E 236 TL-D 220-240 50/60Hz	4.2 mm	30.0 mm	211.0 mm	197.0 mm	40.0 mm

#### Product family leaflet, 2018, March 1

#### HF-Essential for TL5/TL-D

			Rated Ballast-Lamp
Order Code	Full Product Name	Lamp Power On TL-D	Power
913713038866	HF-E 136 TL-D 220-240 50/60Hz	30.7/32.7/35.1 W	36 W
913713039066	HF-E 218 TL-D 220-240 50/60Hz	14.6/15.6/17 W	18 W

			Rated Ballast-Lamp
Order Code	Full Product Name	Lamp Power On TL-D	Power
913713039166	HF-E 236 TL-D 220-240 50/60Hz	28/29.8/31.6 W	36 W



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www.lighting.philips.com 2018, March 1 - data subject to change