



# HF-Essential II for TL5 and TL-D

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

Essentially smart and reliable HF-Essential II is the most cost-effective solution for reliably operation of a fluorescent lamp. It is also the ideal entry-level product for electromagnetic system users who want to take advantage of the benefits provided by electronic ballasts. The cost-saving and reliable HF-Essential II is energy efficiency class A2, and its robust design meets all relevant international safety and performance standards. HF-Essential II is the ideal choice for a broad range of new construction and retrofit applications within the commercial sector, including general surface mounting and office lighting, parking garages, warehouses and other applications. The ballast is primarily designed for Indoor application. For outdoor application, the luminaire should be minimum Class II and need to be sufficiently protected against water & dust. The installation should also be guard against any lightning surge or any other necessary electrical protection as deemed in such typical installation & application.

### Benefits

- Average nominal service lifetime over 45,000 hours (at Ta 50 °C)
- Optimized lamp preheating for min. 25,000 on/off switch operations without replacement of lamps
- Has CE, KEMA, CCC marks of conformity

### Features

- Multi-power technology for precision operation of multiple lamp types of various wattages
- Mono/Dual function: operation with 1 or 2 lamps
- Maximum reliability in system operation

# HF-Essential II for TL5/TL-D

## Application

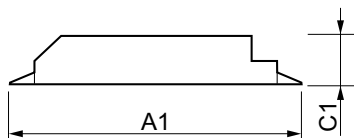
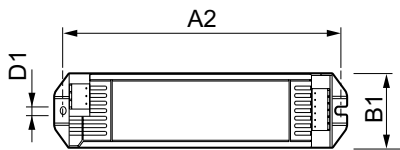
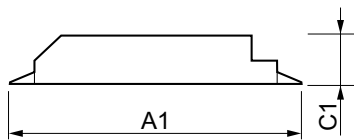
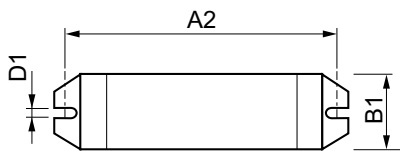
- Suitable for DC operation and emergency lighting installations
- Extended lamp life in frequent- switching applications without replacement of lamps, e.g. where occupancy sensors or motion detectors are used with 15 switches per day
- For luminaires of protection class I and protection class II used in office buildings, hospitals, supermarkets, department stores, and schools

## Versions



HF-E 1/2 49 TL5 II 220-240V 50/60Hz

## Dimensional drawing



Product	D1	C1	A1	A2	B1
HF-E 1/2 49 TL5 II 220-240V 50/60Hz	4.2 mm	22.7 mm	280.0 mm	270.0 mm	30.0 mm
HF-E 1/2 54 TL5 II 220-240V 50/60Hz	4.2 mm	22.7 mm	280.0 mm	270.0 mm	30.0 mm
HF-E II 136 TL-D 220-240V 50/60Hz	4.2 mm	28.0 mm	150.0 mm	138.0 mm	39.6 mm
HF-E II 236 TL-D 220-240V 50/60Hz	4.2 mm	28.7 mm	211.0 mm	198.0 mm	39.6 mm
HF-E II 418 TL-D 220-240V 50/60Hz	4.2 mm	28.7 mm	211.0 mm	198.0 mm	39.6 mm

Product	D1	C1	A1	A2	B1
HF-E 1/2 58 TL-D II 220-240V 50/60Hz	4.2 mm	28.7 mm	211.0 mm	198.0 mm	40.0 mm
HF-E 3/4 14 TL5 II 220-240V 50/60Hz	4.2 mm	26.0 mm	211.0 mm	198.0 mm	39.6 mm
HF-E 1/2 28-35 TL5 II 220-240 50/60Hz	211 mm	40 mm	28.7 mm	4.2 mm	198 mm

# HF-Essential II for TL5/TL-D

## Operating and Electrical

Input Frequency	50 to 60 Hz
Input Voltage	220 to 240 V

## Emergency Operation

Emergency Ballast Lumen Factor (EBLF) (Nom)	100 %
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## Approval and Application

Order Code	Full Product Name	Energy Efficiency Index
913713040766	HF-E 1/2 49 TL5 II 220-240V 50/60Hz	A2
913713040866	HF-E 1/2 54 TL5 II 220-240V 50/60Hz	A2
913713040966	HF-E 1/2 58 TL-D II 220-240V 50/60Hz	A2
913713041066	HF-E II 136 TL-D 220-240V 50/60Hz	A2

Order Code	Full Product Name	Energy Efficiency Index
913713041166	HF-E II 236 TL-D 220-240V 50/60Hz	A2
913713041266	HF-E II 418 TL-D 220-240V 50/60Hz	A2
913713041366	HF-E 3/4 14 TL5 II 220-240V 50/60Hz	A2 BAT
913713042866	HF-E 1/2 28-35 TL5 II 220-240 50/60Hz	A2

## General Information

Order Code	Full Product Name	Number Of Products On MCB (16A Type B)		
		(Nom)	Number Of Lamps	Lamp Type
913713040766	HF-E 1/2 49 TL5 II 220-240V 50/60Hz	20	1/2 piece/unit	TL5 II
913713040866	HF-E 1/2 54 TL5 II 220-240V 50/60Hz	20	1/2 piece/unit	TL5 II
913713040966	HF-E 1/2 58 TL-D II 220-240V 50/60Hz	20	1/2 piece/unit	TL-D II
913713041066	HF-E II 136 TL-D 220-240V 50/60Hz	20	1/2 piece/unit	TL-D II

Order Code	Full Product Name	Number Of Products On MCB (16A Type B)		
		(Nom)	Number Of Lamps	Lamp Type
913713041166	HF-E II 236 TL-D 220-240V 50/60Hz	16	2 piece/unit	TL-D II
913713041266	HF-E II 418 TL-D 220-240V 50/60Hz	16	4 piece/unit	TL-D II
913713041366	HF-E 3/4 14 TL5 II 220-240V 50/60Hz	28	3/4 piece/unit	TL5 II
913713042866	HF-E 1/2 28-35 TL5 II 220-240 50/60Hz	25	1/2 piece/unit	TL5 HE

## Mechanical and Housing

Order Code	Full Product Name	Housing
913713040766	HF-E 1/2 49 TL5 II 220-240V 50/60Hz	L280x30x22.7
913713040866	HF-E 1/2 54 TL5 II 220-240V 50/60Hz	L280x30x22.7
913713040966	HF-E 1/2 58 TL-D II 220-240V 50/60Hz	L 211x40x28.7
913713041066	HF-E II 136 TL-D 220-240V 50/60Hz	L 150x40x28

Order Code	Full Product Name	Housing
913713041166	HF-E II 236 TL-D 220-240V 50/60Hz	L 211x40x28.7
913713041266	HF-E II 418 TL-D 220-240V 50/60Hz	L 211x40x28.7
913713041366	HF-E 3/4 14 TL5 II 220-240V 50/60Hz	L 211x40x26
913713042866	HF-E 1/2 28-35 TL5 II 220-240 50/60Hz	L 211x40x28.7

## System characteristics

Order Code	Full Product Name	Lamp Power On TL5	Lamp Power On		Rated Ballast-Lamp Power
			TL5 HE	TL-D	
913713040766	HF-E 1/2 49 TL5 II 220-240V 50/60Hz	50.74-50.11-49.52 W	-	-	49 W

Order Code	Full Product Name	Lamp Power On TL5	Lamp Power On		Rated Ballast-Lamp Power
			TL5 HE	TL-D	
913713040866	HF-E 1/2 54 TL5 II 220-240V 50/60Hz	53.3-47.75-47.91 W	-	-	54/55/58 W

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

Order Code	Full Product Name	Lamp Power On TL5	Lamp Power On		Rated Ballast-Lamp Power
			TL5 HE	TL-D	
913713040966	HF-E 1/2 58 TL-D II 220-240V 50/60Hz	-	-	49.1-48.42-54.42 W	58/55 W
913713041066	HF-E II 136 TL-D 220-240V 50/60Hz	-	-	29.84 W	36/18 W
913713041166	HF-E II 236 TL-D 220-240V 50/60Hz	-	-	30.07/29.95 W	36 W

Order Code	Full Product Name	Lamp Power On TL5	Lamp Power On		Rated Ballast-Lamp Power
			TL5 HE	TL-D	
913713041266	HF-E II 418 TL-D 220-240V 50/60Hz	-	-	14.5/14.6/14.5/14.4 W	18 W
913713041366	HF-E 3/4 14 TL5 II 220-240V 50/60Hz	41.5/56.0 W	-	-	14 W
913713042866	HF-E 1/2 28-35 TL5 II 220-240V 50/60Hz	-	28-35 W	-	-

