



# HF-Essential II for TL5/TL-D

## HF-E 121 TL5 II 220-240V 50/60Hz

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.

### Product data

General Information	
Lamp Type	TL5 II
Number of Lamps	1 piece/unit
Number of Products on MCB (16A Type B) (Nom)	60
Automatic Restart	Yes
Operating and Electrical	
Input Voltage	220 to 240 V
Input Frequency	50 to 60 Hz
Operating Frequency (Nom)	45.9 kHz
Crestfactor (Nom)	1.8

Power Factor 100% Load (Nom)	0.97
Mains Voltage Performance (AC)	202-254V-8%+6%
Mains Voltage Safety (AC)	198-264V-10%-+10%
Earth Leakage Current (Max)	0.5 mA
Inrush Current Width	0.132 ms
Ballast Factor (Nom)	1.02
Power Losses (Nom)	3.69 W
Inrush Current Peak (Max)	12.5 A
Wiring	
Connector Type Input Terminals	Insert

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Cable Capacity Output Wires Mutual (Max)	200 pF
Connector Type Output Terminals	Insert
Cable Length Hot Wiring	0.75 m
Wire Striplength	8.0-9.0 mm
Dual Fixture Master/Slave	Possible, lamp wires 0.75m max. length [ Master/Slave operation possible]
Input Terminal Cross Section	0.50-1.50 mm <sup>2</sup>
Output Terminal Cross Section	0.50-1.50 mm <sup>2</sup>
Cable Capacity Cold Output Wires - Earth (Max)	200 pF
Cable Capacity Hot Output Wires - Earth (Max)	200 pF

### System characteristics

Rated Ballast-Lamp Power	21 W
Rated Lamp Power on TL5	21 W

### Temperature

T-Ambient (Max)	50 °C
T-Ambient (Min)	0 °C
T-Storage (Max)	80 °C
T-Storage (Min)	-40 °C
T-Case Lifetime (Nom)	75 °C
T-Case Maximum (Max)	75 °C

### Mechanical and Housing

Housing	L 280x29.3x22.7
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### Emergency Operation

Nominal Light Output After 60 Seconds	100% of EBLF
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Normal Operating Voltage (DC)	220-240 V
Battery Voltage Guaranteed Operation	176-275 V
Battery Voltage Guaranteed Ignition	186-275 V
Emergency Ballast Lumen Factor (EBLF) (Nom)	0.7 %
Nominal Light Output After 5 Seconds	50% of EBLF

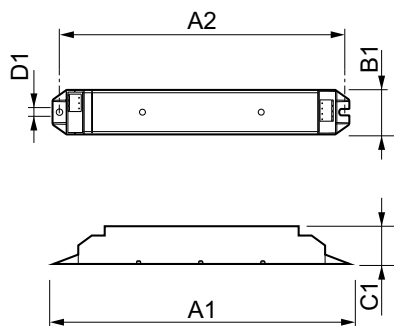
### Approval and Application

Energy Efficiency Index	A2
IP Classification	IP 20 [ Ingress Protection 20]
EMI 9 kHz ... 30 MHz	EN55015
Vibration Standard	IEC60068-2-6_2007-Fc
Bumps Standard	IEC 60068-2-29:1993-Eb
Approval Marks	CE marking KEMA Keur certificate RoHS Compliant
Hum And Noise Level	< 30 dB(A)

### Product Data

Full product code	871869641701000
Order product name	HF-E 121 TL5 II 220-240V 50/60Hz
EAN/UPC - Product	8718696417010
Order code	913713041666
Numerator - Quantity Per Pack	1
Numerator - Packs per outer box	50
Material Nr. (12NC)	913713041666
Net Weight (Piece)	0.084 kg

## Dimensional drawing



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Product	D1	C1	A1	A2	B1
HF-E 121 TL5 II 220-240V 50/60Hz	1.2 mm	22.7 mm	280.0 mm	270.0 mm	29.3 mm

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