



# HF-Essential for TL5/TL-D

## HF-E 128 TL5 220-240 50/60Hz

Essentially smart and reliable 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. 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 lightening surge or any other necessary electrical protection as deemed in such typical installation & application.

### Product data

General Information		Mains Voltage Safety (AC)	
Lamp Type	TL5	Earth Leakage Current (Max)	198...264V
Number of Lamps	1 piece/unit	Inrush Current Width	0.5 mA
Automatic Restart	Yes	Ballast Factor (Nom)	0.3 ms
Operating and Electrical		Power Losses (Nom)	1.04
Input Voltage	220 to 240 V	Inrush Current Peak (Max)	4.5 W
Input Frequency	50 to 60 Hz	Wiring	
Operating Frequency (Nom)	50 kHz	Connector Type Input Terminals	Insert
Crestfactor (Nom)	1.8	Cable Capacity Output Wires Mutual (Max)	120 pF
Power Factor 100% Load (Nom)	0.95	Connector Type Output Terminals	Insert
Mains Voltage Performance (AC)	184...253V	Cable Length Hot Wiring	0.75 m

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Wire Striplength	8.0-9.0 mm
Dual Fixture Master/Slave	Not applicable [ Master/Slave oper. not applicable]
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)	120 pF
Cable Capacity Hot Output Wires - Earth (Max)	120 pF

### System characteristics

Rated Ballast-Lamp Power	28 W
Rated Lamp Power on TL5	28 W
System Power on TL5	31.1/33.0/34.5 W
Lamp Power on TL5	27/28.3/29.8 W
Power Loss on TL5	4.1/4.7/4.7 W

### Temperature

T-Ambient (Max)	50 °C
T-Ambient (Min)	0 °C
T-Storage (Max)	80 °C
T-Storage (Min)	-20 °C
T-Case Lifetime (Nom)	75 °C
T-Case Maximum (Max)	75 °C

### Mechanical and Housing

Housing	L 275x19.6x21.3
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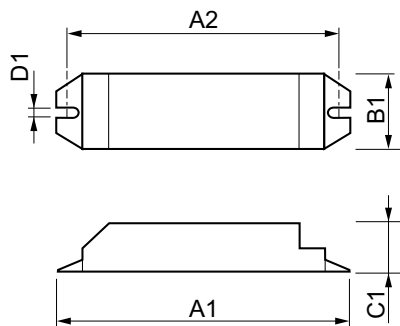
### Approval and Application

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 C-Tick certificate CB Certificate KEMA Keur certificate RoHS Compliant
Hum And Noise Level	< 30 dB(A)

### Product Data

Full product code	871829166883100
Order product name	HF-E 128 TL5 220-240 50/60Hz
EAN/UPC - Product	8718291668831
Order code	913713039566
Numerator - Quantity Per Pack	1
Numerator - Packs per outer box	50
Material Nr. (12NC)	913713039566
Net Weight (Piece)	0.050 kg

## Dimensional drawing



HF-E 128 TL5 220-240V 50/60Hz

Product	D1	C1	A1	A2	B1
HF-E 128 TL5 220-240 50/60Hz	4.2 mm	21.3 mm	275.0 mm	263.0 mm	19.6 mm

