



HF-Essential for TL5/TL-D

HF-E 418 TL-D 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 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		Earth Leakage Current (Max)	
Lamp Type	TL-D		0.5 mA
Number of Lamps	4 piece/unit	Inrush Current Width	0.37 ms
Automatic Restart	Yes	Ballast Factor (Nom)	1.02
		Power Losses (Nom)	12 W
		Inrush Current Peak (Max)	20 A
		Efficiency at full load [%]	85.6 %
Operating and electrical		Wiring	
Input Voltage	220 to 240 V	Connector Type Input Terminals	Insert
Input Frequency	50 to 60 Hz	Cable Capacity Output Wires Mutual (Max)	150 pF
Operating Frequency (Nom)	51 kHz	Connector Type Output Terminals	Insert
Crestfactor (Nom)	1.8	Cable Length Hot Wiring	0.75 m
Power Factor 100% Load (Nom)	0.95	Wire Striplength	8.0-9.0 mm
Mains Voltage Performance (AC)	184...253V		
Mains Voltage Safety (AC)	198...264V		

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Dual Fixture Master/Slave	Not applicable [Master/Slave oper. not applicable]
Input Terminal Cross Section	0.50-1.50 mm ²
Output Terminal Cross Section	0.50-1.50 mm ²
Cable Capacity Cold Output Wires - Earth (Max)	150 pF
Cable Capacity Hot Output Wires - Earth (Max)	150 pF

System characteristics

Rated Ballast-Lamp Power	18 W
Rated Lamp Power on TL-D	18 W
System Power on TL-D	23.6/23.7/26.0 W
Lamp Power on TL-D	15.1/15.7/15.7 W
Power Loss on TL-D	8.5/8.0/10.3 W

Temperature

T-Ambient (Max)	50 °C
T-Ambient (Min)	-10 °C
T-Storage (Max)	50 °C
T-Storage (Min)	-20 °C
T-Case Lifetime (Nom)	75 °C
T-Case Maximum (Max)	75 °C

Mechanical and housing

Housing	L211x40x30
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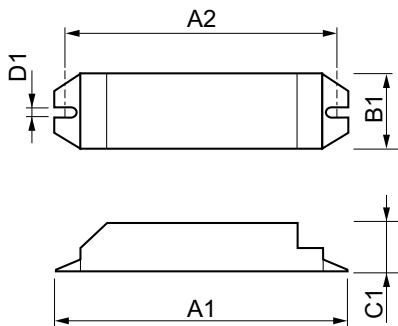
Approval and application

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	871829166877000
Order product name	HF-E 418 TL-D 220-240 50/60Hz
EAN/UPC - Product	8718291668770
Order code	913713039266
Numerator - Quantity Per Pack	1
Numerator - Packs per outer box	20
Material Nr. (12NC)	913713039266
Copy Net Weight (Piece)	0.108 kg

Dimensional drawing



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Product	D1	C1	A1	A2	B1
HF-E 418 TL-D 220-240 50/60Hz	4.2 mm	30.0 mm	211.0 mm	197.0 mm	40.0 mm

