



# HF-Regulator II for TL-D lamps

HF-R 236 TL-D EII 220-240V 50/60Hz

High-frequency electronic dimming ballast, using the analog protocol (1-10 V) for TL-D lamps

## Product data

### • General Information-

Application Code	EII
Type Version	mk2
Lamp Type	TL-D
Number Of Lamps	2 piece/unit
Number Of Products On MCB (16A Type B) (Nom)	12
Automatic Restart	Yes

### • Operating and Electrical

Input Voltage	220 to 240 V
Input Frequency	50/60 Hz
Operating Frequency (Max)	89 kHz
Operating Frequency (Min)	45 kHz
Ignition Method	Programmed Start
Crestfactor (Max)	1.7
Power Factor 100% Load (Nom)	0.98
Ignition Time (Max)	0.2 s
Mains Voltage Performance (AC)	-8%/+6%
Mains Voltage Safety (AC)	-10%/+10%
Earth Leakage Current (Max)	0.5 mA
Inrush Current Width	0.40 ms
Power Losses (Nom)	7.3 W
Inrush Current Peak (Max)	45 A

### • Wiring

Connector Type Input Terminals	WAGO 251 universal connector [ Suitable for both automatic wiring (ALF and ADS) and manual wiring]
Connector Type Output Terminals	WAGO 251 universal connector [ Suitable for both automatic wiring (ALF and ADS) and manual wiring]
Connector Type Control Input Terminals	WAGO 251 universal connector [ Suitable for both automatic wiring (ALF and ADS) and manual wiring]
Wire Striplength	8.0-9.0 mm
Dual Fixture Master/Slave	- [ not specified]
Control Input Terminal Cross Section	0.50-1.00 mm <sup>2</sup>
Input Terminal Cross Section	0.50-1.00 mm <sup>2</sup>
Output Terminal Cross Section	0.50-1.00 mm <sup>2</sup>
Auto Insert (ALF/ADS) Wire Cross Section	0.5 mm <sup>2</sup>

### • System characteristics

Rated Ballast-Lamp Power	36 W
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### • Temperature

T-Ambient (Max)	50 °C
T-Ambient (Min)	10 °C
T-Storage (Max)	80 °C
T-Storage (Min)	-25 °C
Stable Lamp Operation Temperature	Not specified

**PHILIPS**

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T-Ignition (Max) 50 °C  
 T-Ignition (Min) 0 °C

### • Controls and Dimming

Control Interface 1-10V  
 Regulating Level 1%-100%  
 Power  
 Control Input Yes (Basic insulation)  
 Protection

### • Mechanical and Housing

Housing L 360x30x21

### • Emergency Operation

Battery Voltage Lamp Ignition 196 V  
 Battery Voltage Lamp Operation 154-276

### • Approval and Application

Energy Efficiency Index A1  
 EMI 9 kHz ... 30 MHz EN55015  
 EMI 30 MHz ... 1000MHz Level = Class  
 Safety Standard IEC 61347-2-3  
 Performance Standard IEC 60929

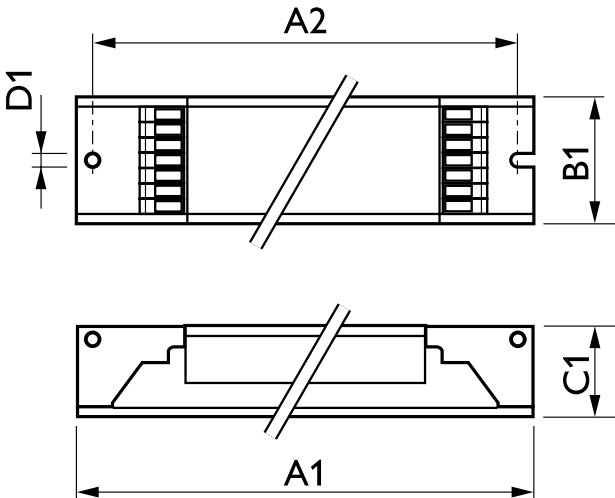
Quality Standard ISO 9000:2000  
 Environmental Standard ISO 14001  
 Harmonic Current Emission Standard IEC 61000-3-2  
 EMC Immunity Standard IEC 61547  
 Vibration Standard IEC 68-2-6 Fc  
 Bumps Standard IEC 68-2-29 Eb  
 Humidity Standard EN 61347-2-3 clause 11  
 Approval Marks CE marking  
 ENEC certificate  
 VDE-EMV certificate

Temperature Marking Yes  
 Emergency Standard IEC 60598-2-22  
 Hum And Noise Level Inaudible

### • Product Data

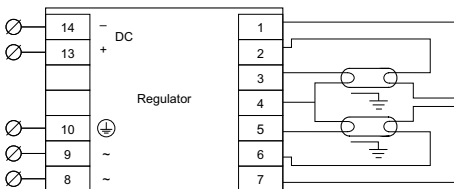
Full product code 871150091015830  
 Order product name HF-R 236 TL-D EII 220-240V 50/60Hz  
 EAN/UPC - Product 8711500910158  
 Order code 913700609366  
 Numerator - Quantity Per Pack 1  
 Numerator - Packs per outer box 12  
 Material Nr. (12NC) 913700609366  
 Net Weight (Piece) 0.295 kg

## Dimensional drawing



### HF-R 236 TL-D EII 220-240V 50/60Hz

Product	D1	C1	A1	A2	B1
HF-R 236 TL-D EII 220-240V 50/60Hz	4.2 mm	22 mm	360 mm	350 mm	30 mm



HF-R 2 lamps TL5/PL-L/TL-D



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2016, March 9  
data subject to change