



# HF-Regulator II for TL-D lamps

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

Flat, lightweight high-frequency electronic regulating ballast, using 1-10V protocol for TL-D fluorescent lamps

## Product data

### • General Characteristics

Interface	1-10V
Application code	EII
Rated Lamptype	TL-D
Rated Number of Lamps	2 piece
Rated Ballast-Lamp Power	36
Line Voltage	220-240 V
Line Frequency	50/60 Hz
Housing	L 360x30x21
Energy Efficiency Index	A1
Lifetime 90% surv.@Tcaselife	50000 hr
Ignition Method	Programmed Start

Battery voltage running lamps	154-276
Overvoltage protection 320Vac	48 hr
Overvoltage protection 350Vac	2 hr
Control input protection	Yes (Basic insulation)
Max ballast on MCB(16A type B)	12 x
Stable lamp operation temp.	- [Not specified]
Crestfactor	1.7 (max) -
Hum and Noise level	Inaudible
Total Harmonic Distortion EUR	5 %

### • Operating Characteristics

Automatic restart	Yes
Ignition time	0.2 (max) s
Operating frequency	45 (min), 89 (max) kHz
Mains voltage safety (AC)	-10%/+10%
Mains voltage performance (AC)	-8%/+6%
Inrush current Peak	45 (max) A
Inrush current Width	0.40 ms
Earth leakage current	0.5 (max) mA
Power losses gear	7.3 W
Regulating level power	1%-100%
PowerFactor 100% output power	0.98 -
Battery voltage lamp ignition	196 V

### • Wiring Characteristics

Conn.type input terminals	WAGO 251 universal connector [Suitable for both automatic wiring (ALF and ADS) and manual wiring]
Conn.type output terminals	WAGO 251 universal connector [Suitable for both automatic wiring (ALF and ADS) and manual wiring]
Conn.type ctrl input terminals	WAGO 251 universal connector [Suitable for both automatic wiring (ALF and ADS) and manual wiring]
Striplength	8.0-9.0 mm
Dual fixture Master/Slave	- [not specified]
Wcs Control input terminals	0.50-1.00 mm <sup>2</sup>
Wcs Input terminals	0.50-1.00 mm <sup>2</sup>
Wcs Output terminals	0.50-1.00 mm <sup>2</sup>

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Wcs auto insertion (ALF/ADS) 0.5 mm<sup>2</sup>

### • Temperature Characteristics

T-ignition 0 (min), 50 (max) C  
 T-ambient 10 (min), 50 (max) C  
 T-storage -25 (min), 80 (max) C

### • Product Dimensions

Length A1 360 mm  
 Fixing Hole Distance 350 mm  
 Length A2  
 Width B1 30 mm  
 Height C1 22 mm  
 Fixing Hole Diameter 4.2 mm  
 D1

### • Approval & Application Chars

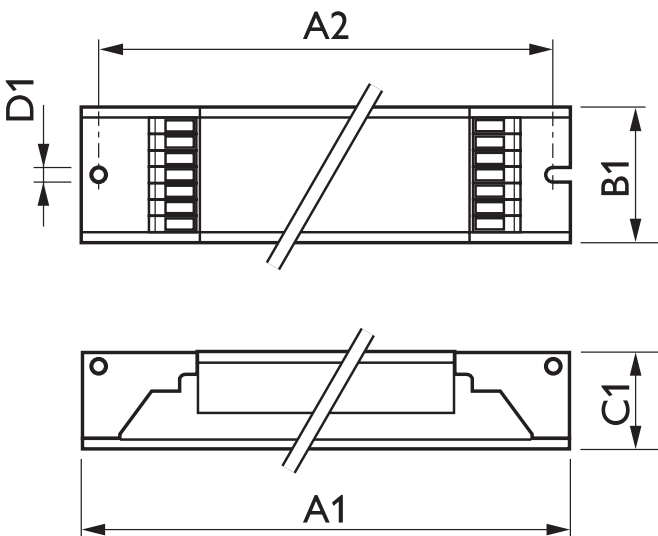
EMI 9kHz .. 30 MHz EN 55015  
 EMI 30 MHz .. 1000MHz EN 55022 level B [Level = Class]  
 Safety Standard IEC 61347-2-3  
 Performance Standard IEC 60929  
 Quality Standard ISO 9000:2000  
 Environmental Standard ISO 14001

Harmonic current emissions IEC 61000-3-2  
 EMC Immunity IEC 61547  
 Vibrations IEC 68-2-6 Fc  
 Bumps IEC 68-2-29 Eb  
 Humidity EN 61347-2-3 clause 11  
 Approval marks ENEC / VDE-EMV  
 CE marking Yes  
 Temperature marking 110 [Yes]  
 Emergency standard IEC 60598-2-22

### • Product Data

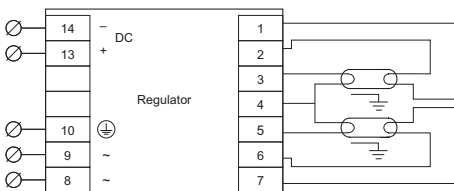
Order code 910158 30  
 Full product code 871150091015830  
 Full product name HF-R 236 TL-D EII 220-240V 50/60Hz  
 Order product name HF-R 236 TL-D EII 220-240V 50/60Hz  
 Pieces per pack 1  
 Packing configuration 12  
 Packs per outerbox 12  
 Bar code on pack - EAN1 8711500910158  
 Bar code on outerbox - EAN3 8711500910165  
 Logistic code(s) - 12NC 913700609366  
 Net weight per piece 0.295 kg

## Dimensional drawing



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

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



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



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data subject to change