



HF-Regulator II for TL5 lamps

HF-R 414 TL5 EII 220-240V 50/60Hz

High-frequency electronic dimming ballast, using the analog protocol (1-10 V) for TL5 HE/HO and TL5 Eco lamps; The ballast is primarily designed for Indoor application. For outdoor application, the luminaire should be minimum Classland 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				
Application Code	EII			
Type Version	mk1			
Lamp Type	TL5			
Number of Lamps	4 piece/unit			
Number of Products on MCB (16A Type B)	28			
(Nom)				
Automatic Restart	Yes			
Operating and electrical				
Input Voltage	220 to 240 V			
Input Frequency	50 to 60 Hz			
Operating Frequency (Max)	85 kHz			
Operating Frequency (Min)	46 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	0.25 ms			
Power Losses (Nom)	9.9 W			
Inrush Current Peak (Max)	27 A			
Efficiency at full load [%]	91.64 %			
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]			

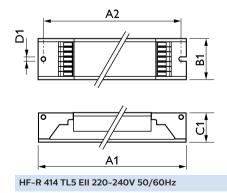
Datasheet, 2022, July 29 data subject to change

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Control Input Terminal Cross Section	0.50-1.00 mm ²			
Input Terminal Cross Section	0.50-1.00 mm²			
Output Terminal Cross Section	0.50-1.00 mm²			
Auto Insert (ALF/ADS) Wire Cross Section	0.5 mm²			
System characteristics				
Rated Ballast-Lamp Power	14 W			
Temperature				
T-Ambient (Max)	50 °C			
T-Ambient (Min)	-20 ℃			
T-Storage (Max)	80 °C			
T-Storage (Min)	-25 ℃			
Stable Lamp Operation Temperature	Not Specified			
T-Ignition (Max)	50 °C			
T-Ignition (Min)	0 °C			
Controls and dimming				
Control Interface	1-10V			
Regulating Level Power	1%-100%			
Control Input Protection	Yes (Basic insulation)			
Mechanical and housing				
Housing	L 359x39x22			
Emergency operation				
Battery Voltage Lamp Ignition	196 V			
	154-276			
Battery Voltage Lamp Operation	104-270			
Approval and application				
Energy Efficiency Index	A1 BAT			

EMI 9 kHz 30 MHz	EN55015			
EMI 30 MHz 1000 MHz	EN55022 level B			
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	IEC68-2-6 F c			
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			
Emergency Standard Hum And Noise Level	IEC 60598-2-22 Inaudible			
Hum And Noise Level				
Hum And Noise Level Product data	Inaudible			
Hum And Noise Level Product data Full product code	Inaudible 871150091364730			
Product data Full product code Order product name	871150091364730 HF-R 414 TL5 EII 220-240V 50/60Hz			
Hum And Noise Level Product data Full product code Order product name EAN/UPC - Product	871150091364730 HF-R 414 TL5 Ell 220-240V 50/60Hz 8711500913647			
Hum And Noise Level Product data Full product code Order product name EAN/UPC - Product Order code	871150091364730 HF-R 414 TL5 EII 220-240V 50/60Hz 8711500913647 913700614466			
Hum And Noise Level Product data Full product code Order product name EAN/UPC - Product Order code Numerator - Quantity Per Pack	871150091364730 HF-R 414 TL5 EII 220-240V 50/60Hz 8711500913647 913700614466			

Dimensional drawing



Product	D1	C1	A1	A2	B1
HF-R 414 TL5 EII 220-240V	4.2 mm	22 mm	359 mm	350 mm	39 mm
50/60Hz					

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