



# HF-Regulator Intelligent Touch DALI for TL5/TL-D/PL-L lamps

## HF-Ri TD 4 14/24 TL5 E+ 195-240V

This intelligent high-frequency electronic dimming ballast utilizes the DALI or Touch and Dim push-button protocol for fluorescent lamps. It meets A1BAT requirements, thereby pre-empting upcoming legislation. With a special command you can retrieve the system's mains power consumption, and with another you can find out which lamp wattage is connected. Combined with controls, additional energy savings can be achieved. 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	E+		
Type Version	mk4		
Lamp Type	TL5		
Number of Lamps	4 piece/unit		
Number of Products on MCB (16A Type B) (Nom) 16			
Automatic Restart	Yes		
Operating and electrical			
Input Voltage	195-240 V		

Input Frequency	50 to 60 Hz
Operating Frequency (Max)	110 kHz
Operating Frequency (Min)	45 kHz
Ignition Method	Warm Start
Crestfactor (Max)	1.7
Power Factor 100% Load (Nom)	0.95
Ignition Time (Max)	1 s
Mains Voltage Performance (AC)	-8%-+6%
Mains Voltage Safety (AC)	-10%-+10%
Earth Leakage Current (Max)	0.5 mA

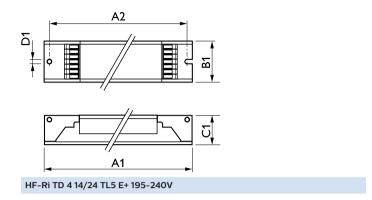
Datasheet, 2022, December 17 data subject to change

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Inrush Current Width	0.26 ms	T-Storage (Min)	-40 °C
Standby Power Consumption (Max)	0.25 W	T-Case Lifetime (Max)	75 °C
Ballast Factor (Nom)	1.0	T-Case Maximum (Max)	75 ℃
Inrush Current Peak (Max)	31 A	Stable Lamp Operation Temperature	15°C
Efficiency at full load [%]	90.6 %	T-Ignition (Max)	50 °C
		T-Ignition (Min)	-25 °C
Wiring			
Connector Type Input Terminals	WAGO 251 universal connector	Controls and dimming	
	[ Suitable for both automatic wiring	Control Interface	TD
	(ALF and ADS) and manual wiring]	Regulating Level Power	1%-100%
Cable Capacity Output Wires Mutual (Max)	200 pF	Control Input Protection	Yes (Basic insulation)
Connector Type Output Terminals	WAGO 251 universal connector		
	[ Suitable for both automatic wiring	Mechanical and housing	
	(ALF and ADS) and manual wiring]	Housing	L 360x39x22
Connector Type Control Input Terminals	WAGO 251 universal connector		
	[ Suitable for both automatic wiring	Emergency operation	
	(ALF and ADS) and manual wiring]	Battery Voltage Lamp Ignition	198-254 V
Wire Striplength	8.0-9.0 mm	Battery Voltage Lamp Operation	176-254
Dual Fixture Master/Slave	Yes [ Master/Slave operation possible]		
Control Input Terminal Cross Section	0.50-1.00 mm <sup>2</sup>	Approval and application	
Input Terminal Cross Section	0.50-1.00 mm <sup>2</sup>	Energy Efficiency Index	A1 BAT
Output Terminal Cross Section	0.50-1.00 mm <sup>2</sup>	IP Classification	IP 20 [ Ingress Protection 20]
Auto Insert (ALF/ADS) Wire Cross Section	0.75 mm²	EMI 9 kHz 30 MHz	EN55015
Cable Capacity Output Wires to Earth (Max)	200 pF	EMI 30 MHz 1000 MHz	EN 55022 Class B
		Safety Standard	IEC 61347-2-3
System characteristics		Performance Standard	IEC 60929
Rated Ballast-Lamp Power	14/24 W	Quality Standard	ISO 9000:2000
Rated Lamp Power on TL-D	18 W	Environmental Standard	ISO 14001
System Power on TL-D	75 W	Harmonic Current Emission Standard	IEC 61000-3-2
Lamp Power on TL-D	16.6 W	EMC Immunity Standard	IEC 61547
Power Loss on TL-D	8.6 W	Vibration Standard	IEC68-2-6 F c
Rated Lamp Power on PL-L	18/24 W	Bumps Standard	IEC 68-2-29 Eb
System Power on PL-L	70.6/100.3 W	Humidity Standard	EN 61347-2-3 clause 11
Lamp Power on PL-L	15.8/22.9 W	Approval Marks	CE marking ENEC certificate VDE-EMV
Power Loss on PL-L	7.4/8.7 W		certificate
Rated Lamp Power on TL5	14/24 W	Temperature Marking	Yes
System Power on TL5	63.3/103.3 W	Emergency Standard	IEC 60598-2-22
Lamp Power on TL5	14.5/23.4 W	Hum And Noise Level	Inaudible
Power Loss on TL5	5.3/9.7 W		
Rated Lamp Power on TL5 ECO	13/20 W	Product data	
System Power on TL5 ECO	55/86.9 W	Full product code	871829115678900
Lamp Power on TL5 ECO	12.9/19.7 W	Order product name	HF-Ri TD 4 14/24 TL5 E+ 195-240V
Rated Lamp Power on TL-D ECO	16 W	EAN/UPC - Product	8718291156789
System Power on TL-D ECO	64.3 W	Order code	913700679166
Power Loss on TL-D ECO	7.5 W	Numerator - Quantity Per Pack	1
Lamp Power on TL-D ECO	14.2 W	Local code description	REATOR ELETRONICO FLUOR HF-Ri
Power Loss on TL5 ECO	3.4/8.1 W		TD414E+
		Numerator - Packs per outer box	10
Temperature		Material Nr. (12NC)	913700679166
T-Ambient (Max)	50 °C	Net Weight (Piece)	0.392 kg
T-Ambient (Min)	-25 ℃		
T-Storage (Max)	80 °C		

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### Dimensional drawing



Product	D1	C1	A1	A2	B1
HF-Ri TD 4 14/24 TL5 E+	4.2 mm	22.0 mm	360.0 mm	350.0 mm	39.0 mm
195-240V					



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