



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

## HF-Ri TD 1 28/35/49/54 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	mk2
Lamp Type	TL5
Number of Lamps	1 piece/unit
Number of Products on MCB (16A Type B)	39
(Nom)	
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%

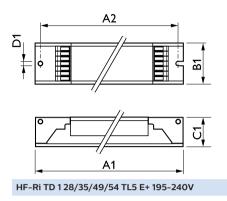
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Mains Voltage Safety (AC)	-10%-+10%		
Earth Leakage Current (Max)	0.5 mA		
Inrush Current Width	0.18 ms		
Standby Power Consumption (Max)	0.25 W		
Ballast Factor (Nom)	1		
Power Losses (Nom)	3.8 W		
Inrush Current Peak (Max)	20 A		
Wiring			
Connector Type Input Terminals	WAGO 251 universal connector [ Suitable		
	for both automatic wiring (ALF and ADS)		
	and manual wiring]		
Cable Capacity Output Wires Mutual (Max)	200 pF		
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	Yes [ Master/Slave operation possible]		
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	0.75 mm <sup>2</sup>		
Cable Capacity Output Wires to Earth (Max)	200 pF		
System characteristics			
System characteristics	28-35-49-54 W		
Rated Ballast-Lamp Power	58 W		
Rated Lamp Power on TL-D			
System Power on TL-D	55.5 W		
Lamp Power on TL-D	52.2 W		
Power Loss on TL-D	3.3 W		
Rated Lamp Power on PL-L	55 W		
System Power on PL-L	54.6 W		
Lamp Power on PL-L	51.2 W		
Power Loss on PL-L	3.4 W		
Rated Lamp Power on TL5	28/35/49/54 W		
System Power on TL5	32.1/39.1/55.1/57.7 W		
Lamp Power on TL5	29.4/36.4/51.6/54.8 W		
Power Loss on TL5	2.7/3.0/3.5 W		
Rated Lamp Power on TL5 ECO	25/32/45/50 W		
System Power on TL5 ECO	29.4/33.1/49.1/54.2/ W		
Lamp Power on TL5 ECO	26.3/30.2/45.7/50.4 W		
Rated Lamp Power on TL-D ECO	51 W		
System Power on TL-D ECO	45.8 W		
Power Loss on TL-D ECO	3.1 W		
Lamp Power on TL-D ECO	42.7 W		
Power Loss on TL5 ECO	3.1/2.9/3.4/3.8/ W		
Temperature			
T-Ambient (Max)	50 °C		
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T-Ambient (Min)	-25 ℃			
T-Storage (Max)	80 °C			
T-Storage (Min)	-40 °C			
T-Case Lifetime (Max)	75 °C			
T-Case Maximum (Max)	75 ℃			
Stable Lamp Operation Temperature	15°C			
T-Ignition (Max)	50 °C			
T-Ignition (Min)	-25 °C			
Controls and Dimming				
Control Interface	TD			
Regulating Level Power	1%-100%			
Control Input Protection	Yes (Basic insulation)			
Mechanical and Housing				
Housing	L 359x30x21			
Emergency Operation				
Battery Voltage Lamp Ignition	198-254 V			
Battery Voltage Lamp Operation	176-254			
Zatter y tottage Lump Operation				
Approval and Application				
Energy Efficiency Index	A1 BAT			
IP Classification	IP 20 [ Ingress Protection 20]			
EMI 9 kHz 30 MHz	EN55015			
EMI 30 MHz 1000 MHz	EN 55022 Class 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			
Hum And Noise Level	Inaudible			
Product Data				
Full product code	871829166205100			
Order product name	HF-Ri TD 1 28/35/49/54 TL5 E+			
	195-240V			
EAN/UPC - Product	8718291662051			
Order code	913700695666			
Numerator - Quantity Per Pack	1			
Numerator - Packs per outer box	12			
Material Nr. (12NC)	913700695666			
Net Weight (Piece)	0.261 kg			

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#### Dimensional drawing



Product	D1	C1	A1	A2	B1
HF-Ri TD 1 28/35/49/54 TL5	4.1 mm	22.0 mm	360.0 mm	350.0 mm	30.0 mm
E+ 195-240V					



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