



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

HF-Ri TD 2 14/21/24/39 E+

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	2 piece/unit
Number of Products on MCB (16A Type B)	16
(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%

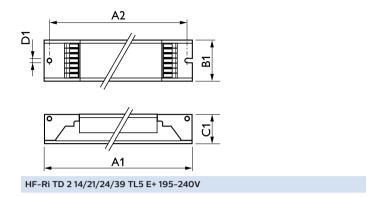
Datasheet, 2020, March 19 data subject to change

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Mains Voltage Safety (AC)	-10%-+10%	T-Storage (Min)	-40 °C
Earth Leakage Current (Max)	0.5 mA	T-Case Lifetime (Max)	75 ℃
Inrush Current Width	0.26 ms	T-Case Maximum (Max)	75 ℃
Standby Power Consumption (Max)	0.25 W	Stable Lamp Operation Temperature	15°C
Ballast Factor (Nom)	1	T-Ignition (Max)	50 ℃
Power Losses (Nom)	5.0 W	T-Ignition (Min)	-25 °C
Inrush Current Peak (Max)	27 A		
		Controls and Dimming	
Wiring		Control Interface	TD
Connector Type Input Terminals	WAGO 251 universal connector [Suitable	Regulating Level Power	1%-100%
	for both automatic wiring (ALF and ADS)	Control Input Protection	Yes (Basic insulation)
	and manual wiring]		
Cable Capacity Output Wires Mutual (Max)	200 pF	Mechanical and Housing	
Connector Type Output Terminals	WAGO 251 universal connector [Suitable	Housing	L 360x30x21
	for both automatic wiring (ALF and ADS)		
	and manual wiring]	Emergency Operation	
Connector Type Control Input Terminals	WAGO 251 universal connector [Suitable	Battery Voltage Lamp Ignition	198-254 V
	for both automatic wiring (ALF and ADS)	Battery Voltage Lamp Operation	176-254
	and manual wiring]		
Wire Striplength	8.0-9.0 mm	Approval and Application	
Dual Fixture Master/Slave	Yes [Master/Slave operation possible]	Energy Efficiency Index	A1 BAT
Control Input Terminal Cross Section	0.50-1.00 mm²	IP Classification	IP 20 [Ingress Protection 20]
Input Terminal Cross Section	0.50-1.00 mm²	EMI 9 kHz 30 MHz	EN55015
Output Terminal Cross Section	0.50-1.00 mm²	EMI 30 MHz 1000 MHz	EN 55022 Class B
Auto Insert (ALF/ADS) Wire Cross Section	0.75 mm²	Safety Standard	IEC 61347-2-3
Cable Capacity Output Wires to Earth (Max) 200 pF	Performance Standard	IEC 60929
		Quality Standard	ISO 9000:2000
System characteristics	44/24/24/20 14	Environmental Standard	ISO 14001
Rated Ballast-Lamp Power	14/21/24/39 W	Harmonic Current Emission Standard	IEC 61000-3-2
Rated Lamp Power on TL-D	36 W	EMC Immunity Standard	IEC 61547
System Power on TL-D	69.6 W	Vibration Standard	IEC68-2-6 F c
Lamp Power on TL-D	64.0 W	Bumps Standard	IEC 68-2-29 Eb
Power Loss on TL-D	5.6 W	Humidity Standard	EN 61347-2-3 clause 11
Rated Lamp Power on PL-L	24/36/40 W	Approval Marks	CE marking ENEC certificate VDE-EMV
System Power on PL-L	50.0/65.6/82.2 W		certificate
Lamp Power on PL-L	45.0/60.0/76.0 W	Temperature Marking	Yes
Power Loss on PL-L Rated Lamp Power on TL5	5.0/5.6/6.2 W 14/21/24/39 W	Emergency Standard	IEC 60598-2-22
System Power on TL5	31.2/45.7/51.1/79.1 W	Hum And Noise Level	Inaudible
Lamp Power on TL5	27.4/41.4/46.0/73.0 W		
Power Loss on TL5	3.8/4.3/5.1/6.1 W	Product Data	
Rated Lamp Power on TL5 ECO	13/19/20/34 W	Full product code	871829169691900
System Power on TL5 ECO	28.7/42.8/44.9/71.7 W	Order product name	HF-Ri TD 2 14/21/24/39 E+
Lamp Power on TL5 ECO	25.0/38.2/40.0/66.0 W	EAN/UPC - Product	8718291696919
Power Loss on TL5 ECO	3.7/4.6/4.9/5.7 W	Order code	913700698466
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Temperature		Numerator - Packs per outer box	012700609466
T-Ambient (Max)	50 °C	Material Nr. (12NC)	913700698466
T-Ambient (Min)	-25 ℃	Net Weight (Piece)	0.316 kg
T-Storage (Max)	80 °C		
. Storage (Max)			

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Dimensional drawing



Product	D1	C1	A1	A2	B1
HF-Ri TD 2 14/21/24/39 F+	4.1 mm	21.0 mm	360.0 mm	350.0 mm	30.0 mm



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