



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

HF-Ri TD 2 14/21/24/39 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.

## Product data

### • General Characteristics

Interface	TD
Application code	E+
Rated Lamptype	TL5
Rated Number of Lamps	2 piece
Rated Ballast-Lamp Power	14/21/24/39
Line Voltage	195-240 V
Line Frequency	50/60 Hz
Housing	L 360x30x21
Energy Efficiency Index	A1 BAT
Lifetime 90% surv.@Tcaselife	50000 hr
Ignition Method	Warm Start

### • Operating Characteristics

Automatic restart	Yes
Ignition time	1 (max) s
Operating frequency	45 (min), 110 (max) kHz
Mains voltage safety (AC)	-10%/+10%
Mains voltage performance (AC)	-8%/+6%
Inrush current Peak	27 (max) A
Inrush current Width	0.26 ms
Earth leakage current	0.5 (max) mA
Power losses gear	5.0 W
Standby power consumption	0.25 (max) W
Regulating level power	1%-100%
Ballast Lumen Factor	1 -
PowerFactor 100% output power	0.95 -

Battery voltage lamp ignition	198-254 V
Battery voltage running lamps	176-254
Overvoltage protection 320Vac	48 hr
Overvoltage protection 350Vac	2 hr
Control input protection	Yes (Basic insulation)
Max ballast on MCB(16A type B)	16 x
Stable lamp operation temp.	> 15°C
Crestfactor	1.7 (max) -
Hum and Noise level	Inaudible
Total Harmonic Distortion EUR	10 %

### • Wiring Characteristics

Cable-Cap output-wires to earth	200 (max) pF
Cable-Cap output-wires mutual	200 (max) pF
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	Yes [Master/Slave operation possible]

**PHILIPS**

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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>
Wcs auto insertion (ALF/ADS)	0.75 mm <sup>2</sup>

Fixing Hole Distance	350.0 mm
Length A2	
Width B1	30.0 mm
Height C1	21.0 mm
Fixing Hole Diameter D1	4.1 mm

### • System Chars on driver level

Rated Lamp Power on TL-D	36
System Power on TL-D	69.6
Lamp Power on TL-D	64.0
Power Loss on TL-D	5.6
Rated Lamp Power on PL-L	24/36/40
System Power on PL-L	50.0/65.6/82.2
Lamp Power on PL-L	45.0/60.0/76.0
Power Loss on PL-L	5.0/5.6/6.2
Rated Lamp Power on TL5	14/21/24/39
System Power on TL5	31.2/45.7/51.1/79.1
Lamp Power on TL5	27.4/41.4/46.0/73.0
Power Loss on TL5	3.8/4.3/5.1/6.1
Rated Lamp Power on TL5 ECO	13/19/20/34
System Power on TL5 ECO	28.7/42.8/44.9/71.7
Lamp Power on TL5 ECO	25.0/38.2/40.0/66.0
Power Loss on TL5 ECO	3.7/4.6/4.9/5.7

### • Temperature Characteristics

T-case life	75 (max) C
T-case maximum	75 (max) C
T-ignition	-25 (min), 50 (max) C
T-ambient	-25 (min), 50 (max) C
T-storage	-40 (min), 80 (max) C

### • Product Dimensions

Length A1	360.0 mm
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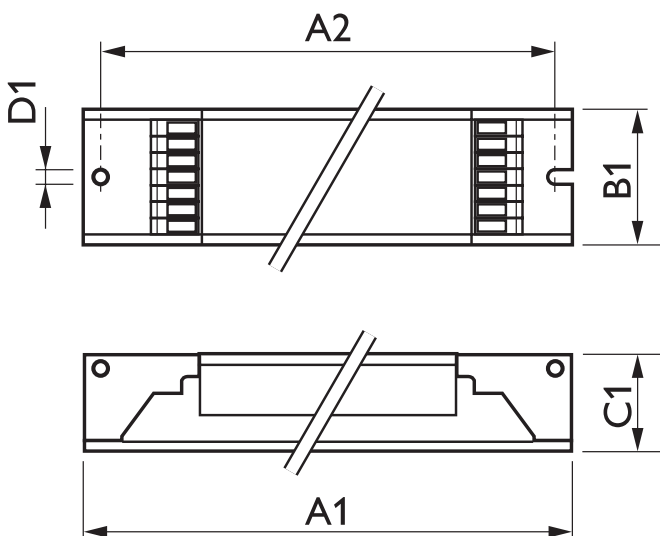
### • Approval & Application Chars

EMI 9kHz .. 30 MHz	EN 55015
EMI 30 MHz .. 1000MHz	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 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	913700698466
Full product code	913700698466
Full product name	HF-Ri TD 2 14/21/24/39 TL5 E+ 195-240V
Order product name	HF-Ri TD 2 14/21/24/39 TL5 E+ 195-240V
Pieces per pack	1
Packing configuration	12
Packs per outerbox	12
Bar code on pack - EAN1	8718291696919
Bar code on outerbox - EAN3	8718291696926
Logistic code(s) - 12NC	913700698466
Net weight per piece	0.316 kg

### Dimensional drawing

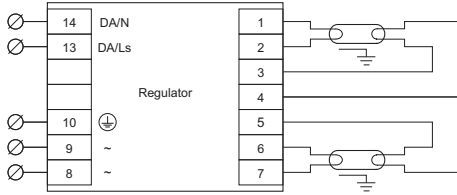


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## Dimensional drawing

### HF-Ri TD 2 14/21/24/39 TL5 E+ 195-240V

Product	A1 (Norm)	A2 (Norm)	B1 (Norm)	B2 (Norm)	C1 (Norm)	D1 (Norm)
HF-Ri TD 2 14/21/24/39 TL5 E+ 195-240V	360.0	350.0	30.0	-	21.0	4.1



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data subject to change