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

HF-Ri TD 1 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.

Product data

General Information	
Application code	E+
Type version	mk2
Lamp type	TL5
Number of lamps	1 piece/unit
Number of products on MCB (16 A type B) (nom.)	30
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
Crest factor (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
Inrush current width	0.23 ms
Standby power consumption (max.)	0.25 W
Ballast factor (nom.)	1
Power losses (nom.)	3.4 W
Inrush current peak (max.)	16.5 A

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Efficiency at full load [%]	91.01 %

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 strip length	8.0-9.0 mm
Dual fixture master/slave	Yes [Master/Slave operation possible]
Control input terminal cross section	0.50-1.00 mm²
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	0.75 mm²
Cable capacity output wires to earth (max.)	200 pF

System characteristics

Rated ballast-lamp power	14/21/24/39 W
Rated lamp power on TL-D	36 W
System power on TL-D	35.7 W
Lamp power on TL-D	32 W
Power loss on TL-D	3.7 W
Rated lamp power on PL-L	24/36/40 W
System power on PL-L	25.9/33.7/41.9 W
Lamp power on PL-L	22.5/30.0/38.0 W
Power loss on PL-L	3.4/3.7/3.9 W
Rated lamp power on TL5	14/21/24/39 W
System power on TL5	16.6/23.9/26.5/40.3 W
Lamp power on TL5	13.7/20.7/23.0/36.5 W
Power loss on TL5	2.9/3.2/3.5/3.8 W
Rated lamp power on TL5 ECO	13/19/20/34 W
System power on TL5 ECO	15.4/22.2/23.2/36.7 W
Lamp Power on TL5 ECO	12.5/19.1/20.0/33.0 W
Power loss on TL5 ECO	2.9/3.1/3.2/3.7 W

Temperature

T-ambient (max.)	50 ℃
T-ambient (min.)	-25 ℃
T storage (max.)	80 ℃
T storage (min.)	-40 ℃
T case lifetime (max.)	75 ℃
T-Case maximum (max.)	75 ℃

Stable lamp operation temperature	15℃
T-Ignition (max.)	50 ℃
T-Ignition (min.)	-25 ℃

Controls and Dimming

Control interface	TD
Regulating level power	1%-100%
Control input protection	Yes (Basic insulation)

Mechanical and Housing

Housing	L 360x30x21

Emergency Operation

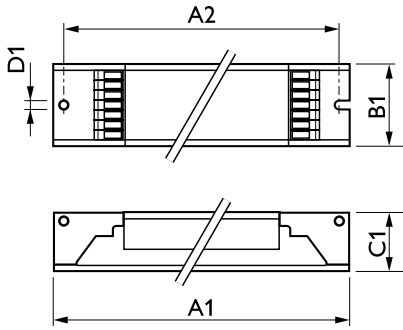|	
Battery voltage lamp ignition	198-254 V
Battery voltage lamp operation	176-254

Approval and Application

Energy efficiency index	A1 BAT
IP classification	IP 20 [Ingress Protection 20]
EMI 9 kHz ... 30 MHz	EN55015
EMI 30 MHz ... 1,000 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
Humming and noise level	Inaudible

Product Data

Full product code	871829169689600
Order product name	HF-Ri TD 1 14/21/24/39 E+
EAN/UPC – product	8718291696896
Order code	69689600
SAP numerator – quantity per pack	1
Numerator – packs per outer box	12
SAP material	913700698366
SAP net weight (piece)	0.261 kg

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Dimensional drawing

HF-Ri TD 1 14/21/24/39 TL5 E+ 195-240V

Product	D1	C1	A1	A2	B1
HF-Ri TD 1 14/21/24/39 E+	4.1 mm	21.0 mm	360.0 mm	350.0 mm	30.0 mm

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2021, August 30 – data subject to change