

Electrical Specification for LNDC10WxxxH/LLRP

DALI-2 LED Driver



Item	Value	Remark
Nominal voltage	220–240V	
Nominal frequency	50–60Hz	
AC voltage range	198–264V	
DC voltage range (start)	NA	
DC voltage range (operation)	NA	
Nominal current		
LNDC10W120HLRP	35mA	
LNDC10W150HLRP	40mA	
LNDC10W200HLRP	50mA	
LNDC10W250HLRP	60mA	
LNDC10W350LLRP	55mA	
Total Harmonic Distortion (THD)	< 25%	Full load @230VAC
Input	Power factor	Full load @230VAC
	LNDC10W120/150/200HLRP	0.85C
	LNDC10W250HLRP	0.9C
	LNDC10W350LLRP	0.85C
Displacement factor		Full load @230VAC
	LNDC10W120/150/200HLRP	0.85C
	LNDC10W250HLRP	0.9C
LNDC10W350LLRP	0.85C	
Efficiency	78% (Typ.)	Full load @230VAC
No-load power	NA	
Stand-by power	< 0.5W	
Networked standby power	< 0.5W	
Protection class	NA	
Inrush current	4A / 25 us	
Earth leakage current	NA	
Output	Nominal voltage range	
	LNDC10W120/150/200HLRP	30-42Vdc
	LNDC10W250HLRP	28-40Vdc
	LNDC10W350LLRP	13-21Vdc

	Item	Value	Remark
	Maximum voltage		
	LNDC10W120/150/200/250HLRP	50Vdc	
	LNDC10W350LLRP	30Vdc	
	Nominal current range		
	LNDC10W120HLRP	120mA	
	LNDC10W150HLRP	150mA	
	LNDC10W200HLRP	200mA	
	LNDC10W250HLRP	250mA	
	LNDC10W350LLRP	350mA	
Output	Current accuracy		Full load @ 230Vac
	LNDC10W200/150/120HLRP	± 8%	
	LNDC10W350LLRP	± 5%	
	Typical output LF current ripple	± 6%	Low Frequency < 120Hz Full load @230VAC
	Starting time	< 0.5 S	Full load @230VAC
	Nominal power range		
	LNDC10W120HLRP	3.6-5W	
	LNDC10W150HLRP	4.5-6.3W	
	LNDC10W200HLRP	6-8.4W	
	LNDC10W250HLRP	7-10W	
	LNDC10W350LLRP	4.6-7.3W	
	Maximum power	10W	
Dimming	Dimming control	DALI / Touch Dim	
	Dimming technique	Amplitude	
	PWM frequency	NA	
	Dimming range	5-100%	
	Lowest dimming current	1-8%	
	Galvanic isolation	Basic insulated to PRI and double insulated to SEC	
	Ambient temperature range t_a	-20°C - +50°C	
	Maximum case temperature t_c		
	LNDC10W120/150/200/250HLRP	75°C	
	LNDC10W350LLRP	70°C	
Environment	Max. case temp. in fault condition	110°C	When operating under fault conditions, the temperature of the enclosure at any location should not exceed 110 °C
	Storage temperature range	-40°C - +85°C	
	Relative humidity	10% - 95%	
	Surge transient protection	1 kV	L/N
	Environmental rating	Indoor	
	IP rating	IP20	
	Mains switching cycles	> 100,000	
	Expected lifetime		
Environment	LNDC10W120/150/200/250HLRP		
	Full load	> 50,000 h, t_c 75°C @ t_a 50°C	0.2 % / 1,000 h failure rate
	Output load \leq 75% Load	> 50,000 h, t_c 75°C @ t_a 60°C	0.2 % / 1,000 h failure rate
	LNDC10W350LLRP		
	Full load	> 50,000 h, t_c 70°C @ t_a 50°C	0.2 % / 1,000 h failure rate
	Output load \leq 75% Load	> 50,000 h, t_c 70°C @ t_a 60°C	0.2 % / 1,000 h failure rate

Packing	Gross weight/Carton	11.4 kg
	Net weight/Carton	10.3 kg
	Pcs/Carton	108 PCS
	Dimension/Carton	490(L)*270(W)*225(H)mm

Protections

Short- & open circuit proof, Auto. Overload protection

Conformity & Standards

Safety standard:	EN 61347-1, EN 61347-2-13, EN 62493
Performance:	EN 62384
EMC standard:	EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61547
DALI protocol standard:	EN 62386-101, EN 62386-102, EN 62386-207

Cable information

PRI Connection	L	N
Color	Brown	Blue
Wire type	7022	7022
Wire diameter	AWG18	AWG18
Wire length	138mm	141mm
Stripping	6mm	6mm
tolerance	±5mm	±5mm

Sec Connection	+	-
Color	Red	Black
Wire type	1332	1332
Wire diameter	AWG22	AWG22
Wire length	140mm	141mm
Strip length	6mm	6mm
tolerance	±5mm	±5mm

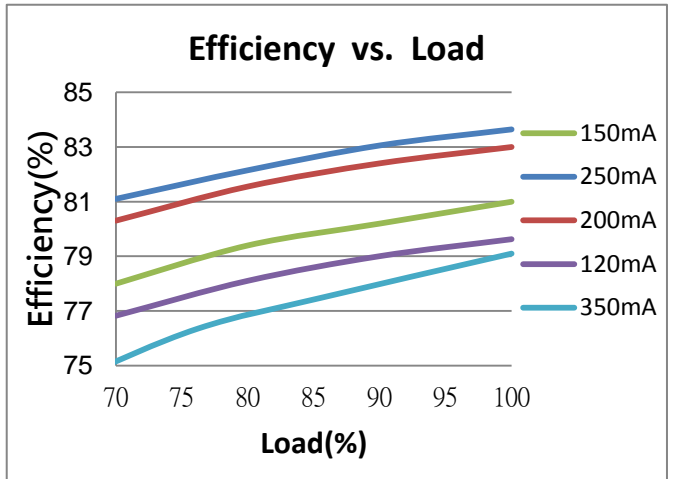
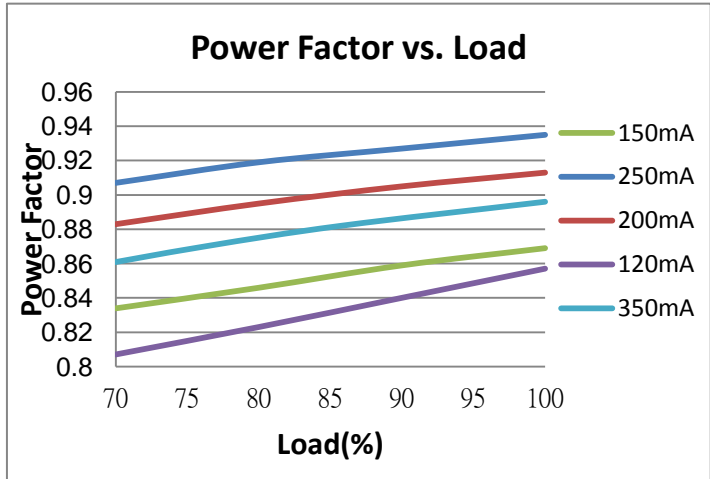
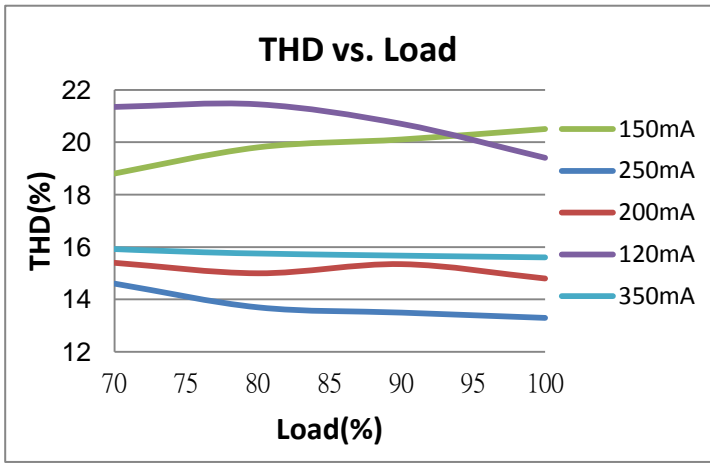
DALI/Touch Dim

Color	Purple	Gray
Wire type	7022	7022
Wire diameter	AWG20	AWG20
Wire length	131mm	134mm
Stripping	10mm	10mm
tolerance	±5mm	±5mm

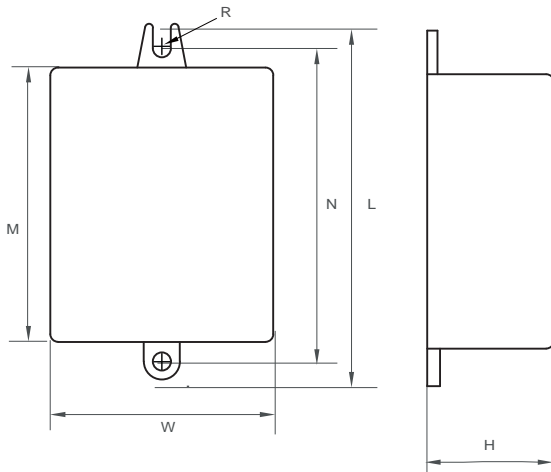
* If not mentioned, all the test conditions are based on full load at 230VAC input (for 220-240 VAC input).

Subject to change without notice, HEP guarantees all products perform functionally well

Electrical Values



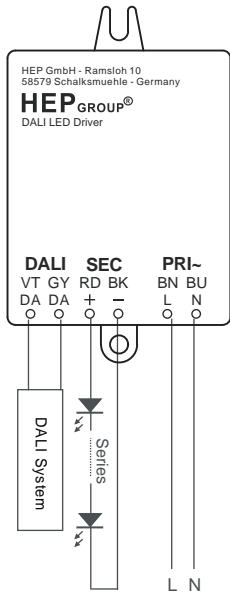
Physical Parameter



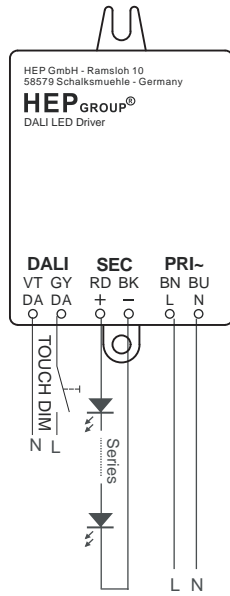
L : 69.3 mm W: 43.5 mm
M : 53.5 mm H : 24.6 mm
N : 61 mm R : 1.75 mm
Tolerance : +/-1 mm , R : +/-0.5 mm
Housing Material : Polycarbonate
Soldering : Lead-Free, Comply With RoHS
Label : Surface Print

Wiring Diagram

DALI



TOUCH DIM



*** Touch Dim**

Short push (<0.6sec.) Push to turn ON-OFF
Long push (>0.6sec.) Dimming up or down

Synchronization of Touch DIM

If a large number of driver with Touch Dim is operated in a system there is a chance that an driver will operate out of synchronization with the others(= different dimming level setting or different switching state).

Synchronism can be restored as follows:

- 1.Step: Long push all the lamps are switched on
- 2.Step: Short push all the lamps are switched off
- 3.Step: Long push all the lamps are switched on the minimum dimming setting of the drivers and continuously fade up to the desired dimming level, then release push bottom.

Max. lead length : 20 M
Max. parallel units : 15 pcs