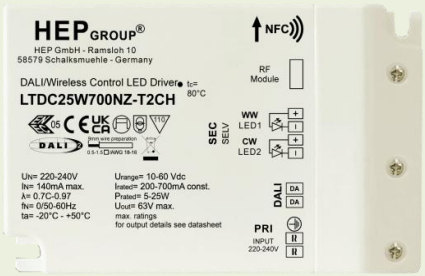
Electrical Specification for **LTDC25W700NZ-T2CH**

Tunable White DALI LED driver with NFC



Approval Marks

Item		Value	Remark
Input			
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		140mA	
Total Harmonic Distortion (THD)		< 10%	Full load @230VAC
Power factor		0.7C-0.97	Full load @230VAC
Displacement factor		0.7C-0.97	Full load @230VAC
Efficiency		85%(Typ.)	Full load @230VAC
No-load power		NA	
Networked standby power		< 0.3W	
Protection class		I	Suitable for class I and II luminaires
Inrush current		35 A / 80 us	
Max.units per circuit breaker	Type B , 10A MCB	29	
	Type B , 16A MCB	46	
	Type C , 10A MCB	36	
	Type C , 16A MCB	57	
Earth leakage current		NA	
Output			
Nominal voltage range			
200mA		25-60 Vdc	
250mA		20-60 Vdc	
300mA		17-60 Vdc	
350mA		14-60 Vdc	
450mA		11-56 Vdc	
500mA		10-50 Vdc	
550mA		10-45 Vdc	
600mA		10-42 Vdc	
650mA		10-39 Vdc	
700mA		10-36 Vdc	
Maximum voltage		63 Vdc	
Output channels		2	

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	Item	Value	Remark
Output	Nominal current range	200-700mA	DC Output with adjustable constant current from 200 to 700 mA via NFC in 1mA steps Factory default 200mA
	Current accuracy	± 5%	Full load @ 230Vac
	Typical output LF current ripple	± 5%	Low Frequency< 120Hz Full load @230VAC
	Starting time	< 1 S	Full load @230VAC
	SVM	≦0.4	Full load @230VAC
	$P_{st}LM$	≦1	Full load @230VAC
	Nominal power range	5-25W	
	Maximum power	26W	
	Color tuning range	1500K-10000K	Adjusted via NFC program Factory default 2000K-10000K
Dimming	Dimming control	DALI / Touch Dim	
	Dimming range	1-100% / 10-100%	
	Lowest dimming current	0.5%-2% / 7%-13%	
	Dimming technique	Hybrid Dimming	O/P current ≥ 70 mA operated @ amplitude mode O/P current < 70 mA operated @ PWM mode
	PWM frequency	2KHz	
	Galvanic isolation	Basic insulated to PRI and double insulated to SEC	
Environment	Ambient temperature range t_a	-20°C - +50°C	
	Maximum case temperature t_c	80°C	
	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,2 kV	L/N , L-PE/N-PE
	Environmental rating	Indoor	
	IP rating	IP20	
	Mains switching cycles	>100,000	
	Expected lifetime	> 50,000 h, tc 80 °C @ ta 50 °C > 100000 h, tc 70 °C @ ta 40 °C	0.2 % / 1,000 h failure rate 0.1 % / 1,000 h failure rate
Packing	Gross weight/box	5.6 kg	
	Net weight/box	4.6 kg	
	Pcs/box	30PCS	
	Dimension/box	385(L)*310(W)*230(H)mm	

Protections	
Short-circuit Protection	Auto recovery
Open-circuit Protection	Auto recovery
Overload Protection	Auto recovery

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/DT6 EN 62386-209/DT8

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Cable information	
PRI	
Cable cross-section	0.5-1.5□/AWG 18-16
Stripping	9mm
Pull test cable type	H03VV(H2)-F 2x0,75-1,0 mm²
SEC	
Cable cross-section	0.5-1.5□/AWG 18-16
Stripping	9mm
DALI	
Cable cross-section	0.5-1.5□/AWG 18-16
Stripping	9mm
Terminal information	
PRI-Push button/Angled Entry	
SEC-Push button/Angled Entry	
DALI-Push button/Angled Entry	

* 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

■Optional product accessories

WBDA：

Wiring diagram：

BR-4K：

APP(HEPxIDEA)

Working via WBDA freely control lights to dim up or down, tune warm or cool color by just using a smart phone.

ICON

Main

QR Code

Android iOS

iOS Version :Android 5.0 Up, iOS 10.3 up 6.2

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Features:

1.Mesh Network totally connecting up to 250 devices

2.All devices grouping to 16 groups maximumly

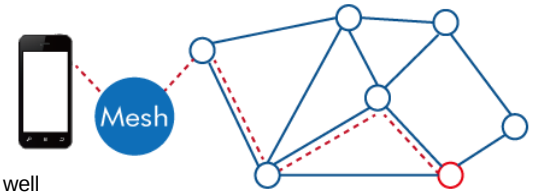
3.A group added in total of 30 devices

4.A device joined to 8 different groups overall

5.Timer preset 4 types of schedule onto individual device and groups as well

6. Maximum 5 scenes available to be determined

Mesh function:



Current adjustable

NFC Reader (optional)

Feature:

Easily on-line read a output current from a driver or write a new current data to a driver throughout HEP NFC reader within few seconds.

APP NFC

Feature:

Quickly check output current of a LED driver simply via Android smart phone, as well as, correct or setup a new current data immediately with no extra equipment at any job site.

ICON

Main

QR Code

Google play APK

Android 6.0 Up

Smart phone with a NFC function

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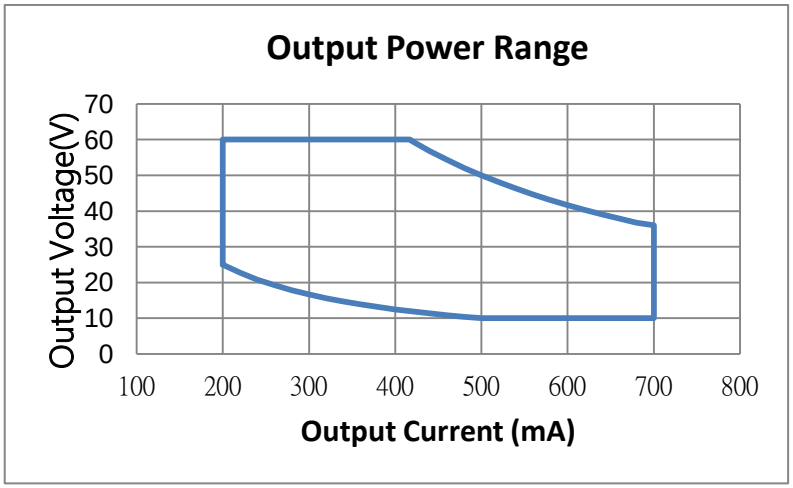
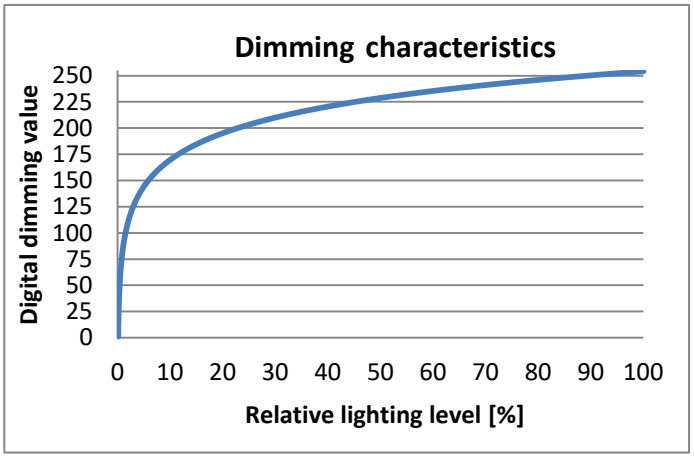
■Electrical Values



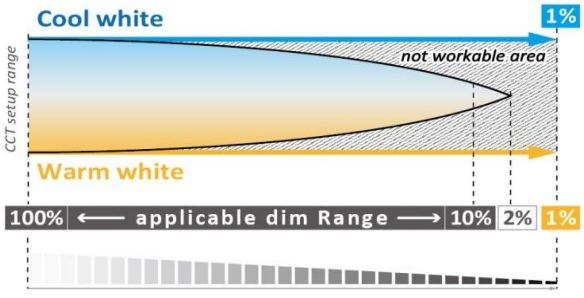
Output Current (mA)	Output Voltage Range (V)	Output Power Range (W)
700	10-36	7.0-25.0
650	10-39	6.5-25.0
600	10-42	6.0-25.0
550	10-45	5.5-24.7
500	10-50	5.0-25.0
450	11-56	5.0-25.0
400	13-60	5.2-24.0
350	14-60	5.0-21.0
300	17-60	5.0-18.0
250	20-60	5.0-15.0
200	25-60	5.0-12.0

* Upon client's special demand, customized current range in between 350 mA and 1050 mA could be specified as factory default from shipment. This default current range availably revised again via NFC reader program at client's site, if necessary.



DALI-2 DT8 Control

Dimming up/down and CCT tuning are performed independently via DALI-2 DT8 dimmer.



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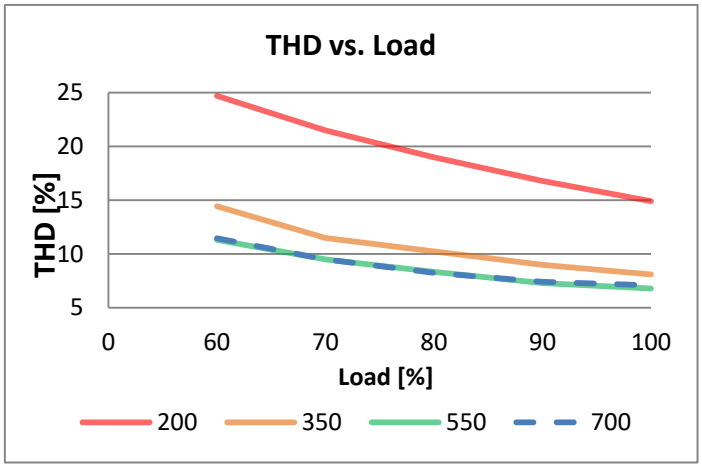

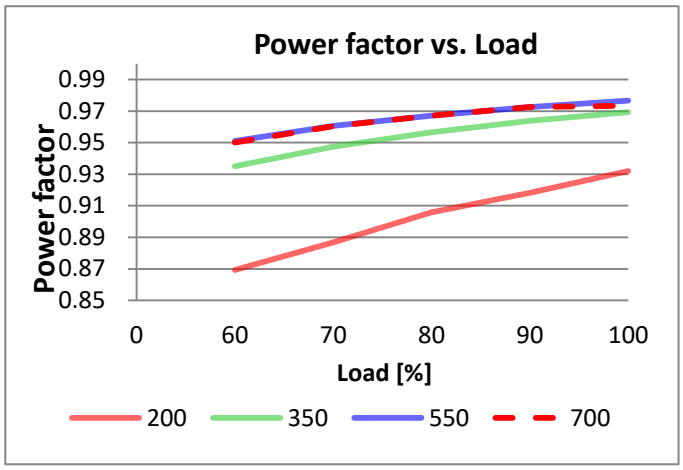

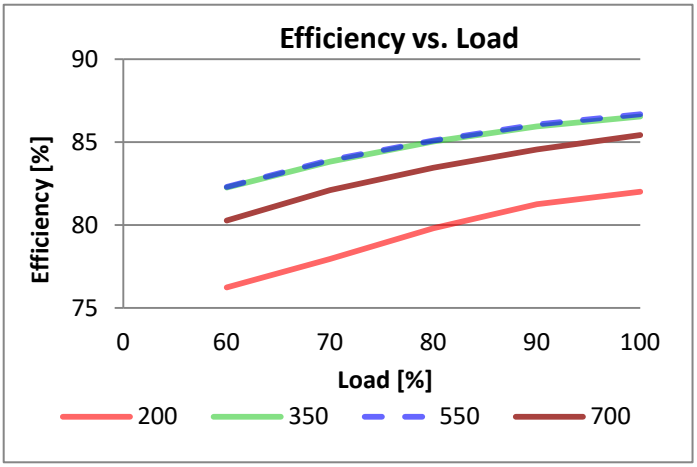

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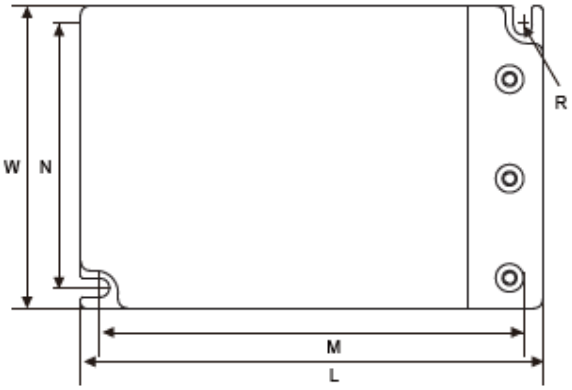
Physical

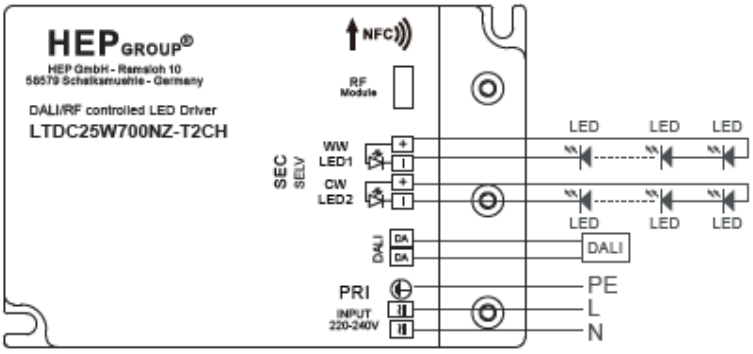
Parameter



L :	123	mm	W:	79	mm	H :	24 mm
M :	110.8	mm	N :	66.8	mm	R :	2.05 mm

Tolerance : +/-1 mm ; R : +/-0.5 mm
Cable Cross Section : 0.75-1.5□/ AWG 18-16
Stripping : 9 mm

Wiring Diagram



" Dimming Warm" via push switch performs dimming up/down and CCT tuning in synchronization, i.e., dimming from max. 100% of cool color continuously down to min. 10% of warm color.

* Remark :
1.Single push switch made parallel connection of maximum 10 pcs of DALI LED drivers in one time.

Touch Dim

Step 1: Long push (> 0.6 s) until all lamps are switched on the lowest dimming setting level of LED driver.

Step 2: Continuously long push to dim all lights up synchronizely until the desired level, then release push bottom to stop at present light level.

Step 3: Or make long push again for dimming all lights down synchronizely to the desired level, then stop pushing bottom.

(1)→(2)

Step 4: Short push (< 0.6 s) to make all lamps are switched off.
Step 5: Short push (< 0.6 s) - Push to turn ON/OFF all lamps at the latest setting light level.

Remark: Maximum 10m of cable length from LED driver connecting to light source for DALI/Touch Dim
Maximum cable lenght of Touch Dim from push switch to LED drivers is 20m.
Single push switch makes parallel connection of max. 10 pieces of LED drivers in one time.

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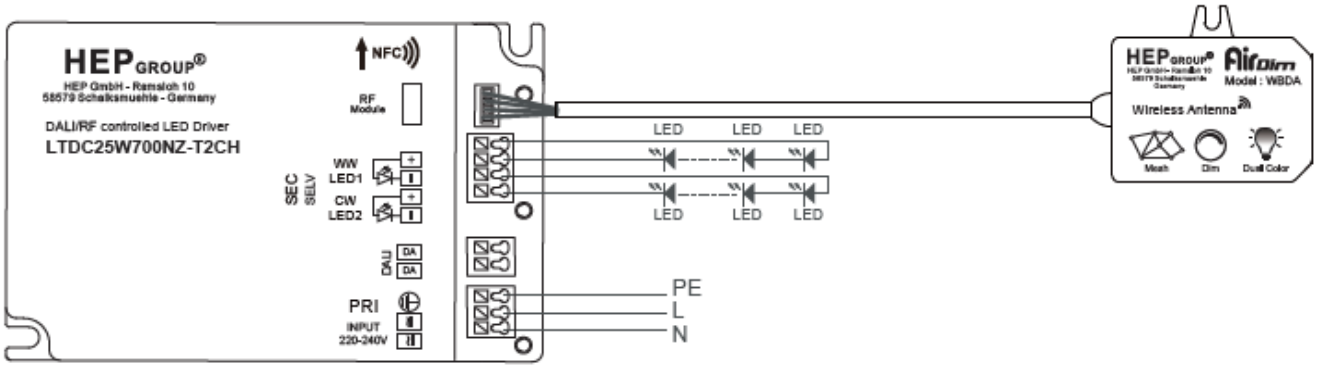
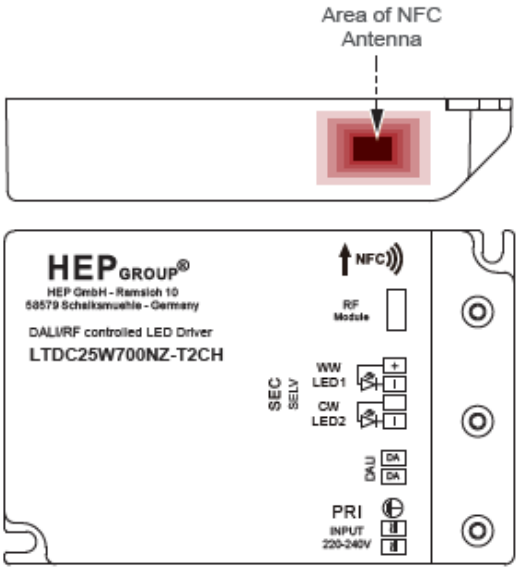
Wiring Diagram with wireless module (optional)



NFC Antenna Location



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