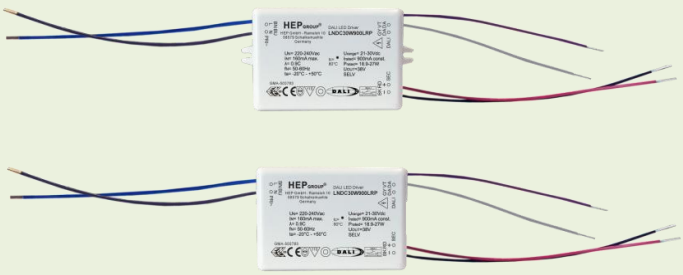
Electrical Specification for **LNDC30WxxxLRP**

DALI LED Driver



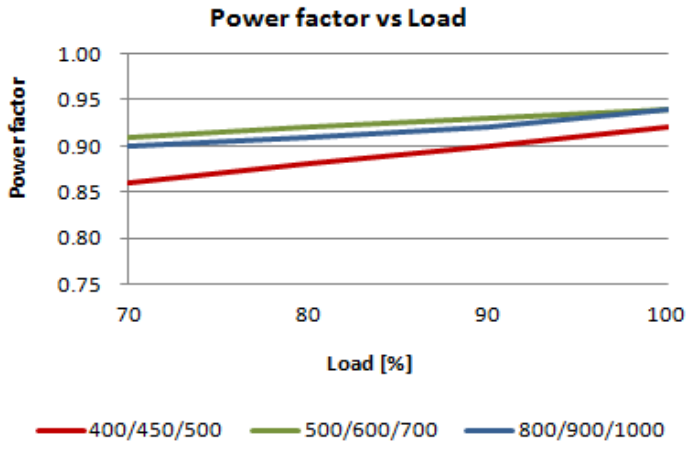
Approval Marks

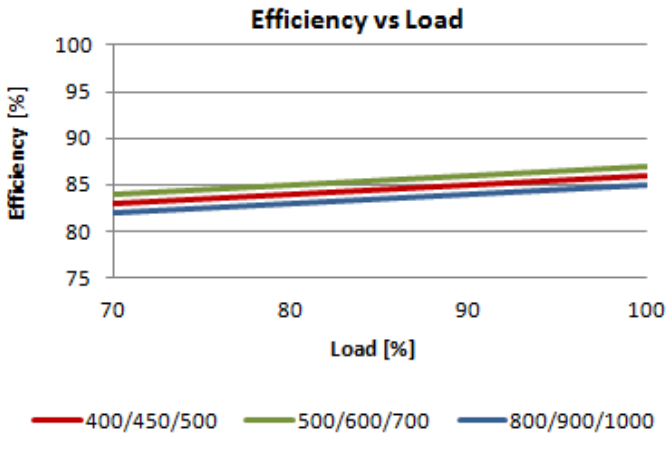
GMA-503783

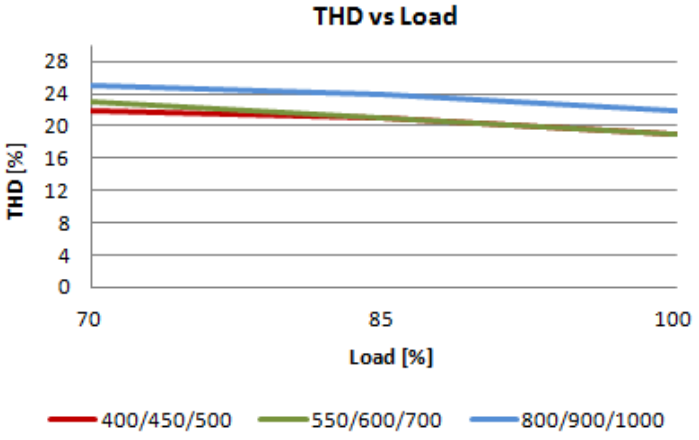
	Item	Value	Remark
Input	Nominal voltage	220–240V	
	Nominal frequency	50–60Hz	
	AC voltage range	198–264V	
	DC voltage range (start)	NA	
	DC voltage range (operation)	NA	
	Nominal current		
	LNDC30W400LRP	130mA	
	LNDC30W450LRP	145mA	
	LNDC30W500LRP	160mA	
	LNDC30W550LRP	140mA	
	LNDC30W600LRP	150mA	
	LNDC30W700LRP	175mA	
	LNDC30W800LRP	145mA	
	LNDC30W900LRP	160mA	
	LNDC30W1000LRP	180mA	
	Total Harmonic Distortion (THD)	< 25%	Full load @230VAC
	Power factor	0.9C	Full load @230VAC
	Efficiency	85%(Typ.)	Full load @230VAC
	No-load power	NA	
	Stand-by power	<0.5W	
	Protection class	NA	
	Inrush current	30 A / 2 µs	
	Earth leakage current	NA	
Output	Nominal voltage range		
	LNDC30W400/450/500LRP	36-54Vdc	
	LNDC30W550/600/700LRP	30-42Vdc	
	LNDC30W800/900/1000LRP	21-30Vdc	
	Maximum voltage		
	LNDC30W400/450/500LRP	63Vdc	
	LNDC30W550/600/700LRP	50Vdc	
	LNDC30W800/900/1000LRP	38Vdc	

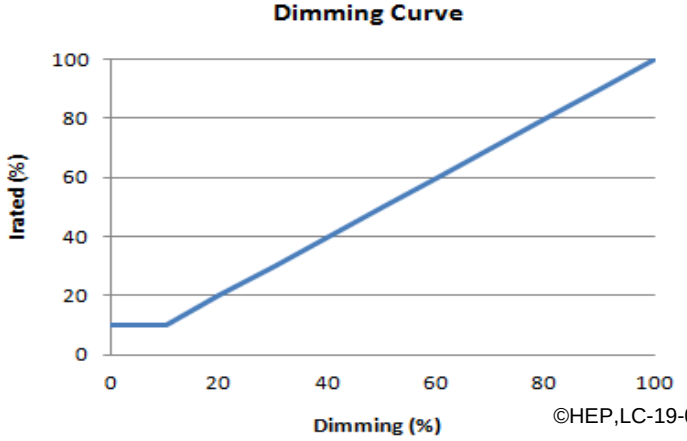
	Item	Value	Remark
Output	Nominal current range		
	LNDC30W400LRP	400mA	
	LNDC30W450LRP	450mA	
	LNDC30W500LRP	500mA	
	LNDC30W550LRP	550mA	
	LNDC30W600LRP	600mA	
	LNDC30W700LRP	700mA	
	LNDC30W800LRP	800mA	
	LNDC30W900LRP	900mA	
	LNDC30W1000LRP	1000mA	
	Current accuracy	± 5%	
	Typical output LF current ripple	± 5%	Low Frequency<120Hz
	Nominal power range		
	LNDC30W400LRP	14.4-21.6W	
	LNDC30W450LRP	16.2-24.3W	
	LNDC30W500LRP	18-27W	
	LNDC30W550LRP	16.5-23.1W	
	LNDC30W600LRP	18-25.2W	
	LNDC30W700LRP	21-29.4W	
	LNDC30W800LRP	16.8-24W	
	LNDC30W900LRP	18.9-27W	
	LNDC30W1000LRP	21-30W	
	Maximum power	30W	
Dimming	Dimming control	DALI/Touch Dim	
	Dimming technique	Amplitude	
	PWM frequency	NA	
	Dimming range	5-100%	
	Lowest dimming current	3-5%	
	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		
	LNDC30W400/450/500LRP	75°C	
	LNDC30W550/600/700LRP	80°C	
	LNDC30W800/900/1000LRP	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	L/N
	Environmental rating	Indoor	
	IP rating	IP20	
	Mains switching cycles	> 100,000	
	Expected lifetime	> 50,000 h, tc 75 °C @ ta 50 °C > 100000 h, tc 65 °C @ ta 40 °C	> 50,000 h, tc 80 °C @ ta 50 °C 0.2 % / 1,000 h failure rate > 100000 h, tc 70 °C @ ta 40 °C 0.1 % / 1,000 h failure rate
Packing	Gross weight/Carton	12.9 Kg	
	Net weight/Carton	11.9 Kg	
	Pcs/Carton	56 PCS	
	Dimension/Carton	490(L)*270(W)*225(H)mm	Clear Type
		490(L)*270(W)*225(H)mm	Screw Clip Type

Protections		
Short- & open circuit proof, Auto. overheat regulation or cut off, Overload protection		
Conformity & Standards		
Safety standard:	EN 61347-1, EN 61347-2-13, EN 62493	
Performance:	EN 62384	
SAA standard:	AS/NZS 61347.1, AS/NZS IEC 61347.2.13	
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	128mm	128mm
Stripping	6mm	6mm
Sec Connection	+	-
Color	Red	Black
Wire type	1332	1332
Wire diameter	AWG20	AWG20
Wire length	149mm	149mm
Stripping	10mm	10mm
DALI/Touch Dim Connection	DA	DA
Color	Purple	Gray
Wire type	7022	7022
Wire diameter	AWG20	AWG20
Wire length	135mm	135mm
Stripping	10mm	10mm





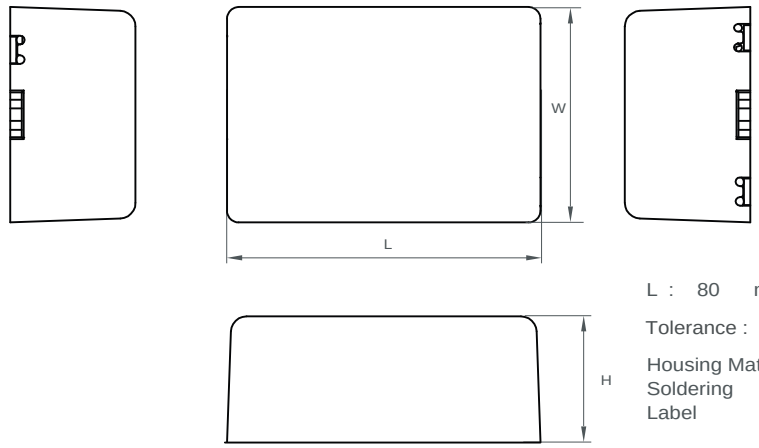




Physical

Parameter

Clear type

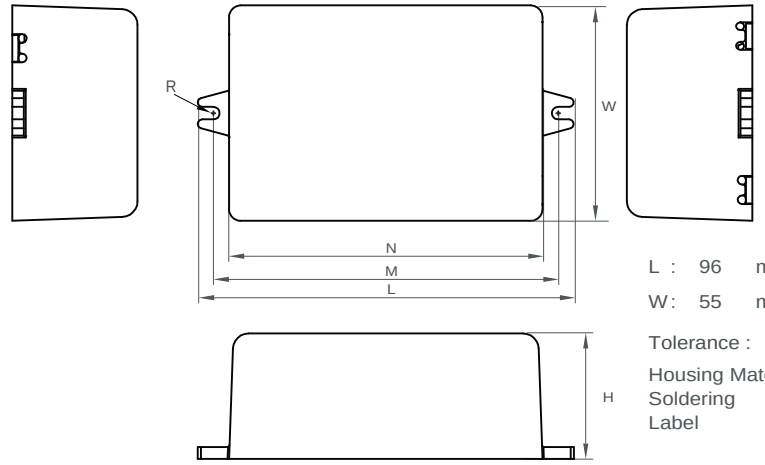


L : 80 mm W: 55 mm H : 32 mm

Tolerance : +/-1 mm

Housing Material	:	Polycarbonate / Potting
Soldering	:	Lead-Free, Comply With RoHS
Label	:	Surface Print

Screw clip type



L : 96 mm M : 88.2 mm N : 80 mm

W: 55 mm H : 32 mm R : 1.6 mm

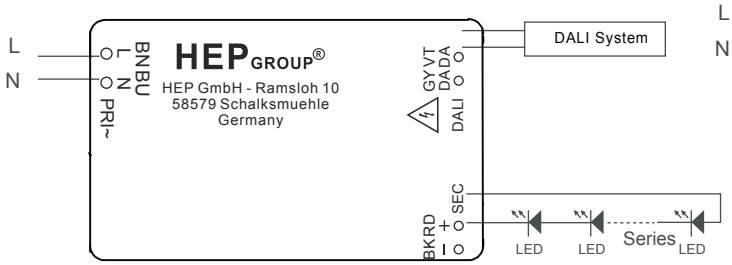
Tolerance : +/-1 mm , R : +/-0.5 mm

Housing Material	:	Polycarbonate
Soldering	:	Lead-Free, Comply With RoHS
Label	:	Surface Print

Wiring Diagram

DALI system

Clear type



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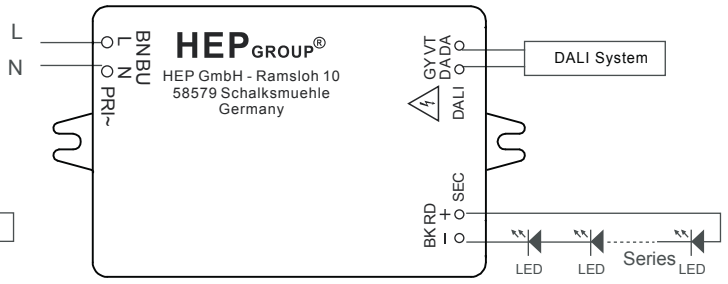
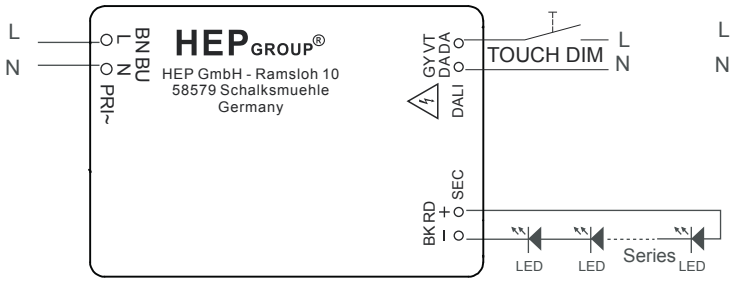


TOUCH DIM

Clear type



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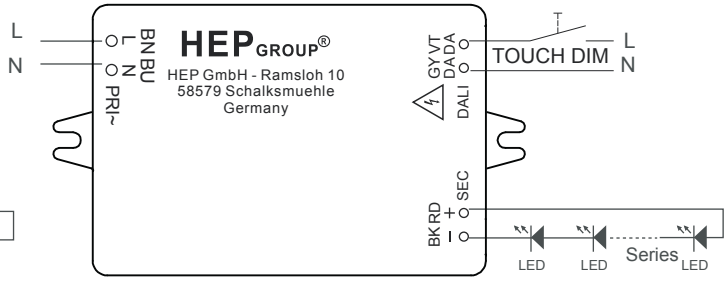

* Touch Dim

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