Constant Current Dimmable Driver

Model:L75C900-1800D-D

Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency	Output Voltage	No load Voltage
L75C900-1800D-D	900mA	0.28A	52.0W	18-45W	0.92	87%	20-50V	59V Max.
	1000mA	0.29A	58.0W	20-50W	0.93	88%		
	1100mA	0.31A	63.0W	22-55W	0.93	89%		
	1200mA	0.33A	69.0W	24-60W	0.94	89%		
	1300mA	0.35A	74.0W	26-65W	0.94	90%		
	1400mA	0.37A	79.0W	28-70W	0.95	90%		
	1500mA	0.39A	85.0W	30-75W	0.95	90%		
	1600mA	0.41A	77.0W	32-67.2W	0.94	90%	20-42V	
	1700mA	0.43A	81.0W	34-71.4W	0.95	90%		
	1800mA	0.45A	85.0W	36-75.6W	0.95	90%		

* Test result @230V, 50Hz, Full Load.

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	DALI-2
	Output Features	Isolation
	IP Grade	IP20
	Insulation Class	Class Ⅰ
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	198-264VAC
	Range of DC Input Voltage	180-280VDC
	Frequency	0/50/60Hz, Range:0/47-63Hz
	Input Current	≤0.45A(230VAC，full load)
	Input Power	≤85W (230VAC，full load)
	Power Factor	≥0.95 (230VAC，full load)
	THD	≤10% (230VAC，full load)
	Standby Power Consumption	≤0.5W Dim to off, 230VAC
	Inrush Current	≤55A (230VAC，full load)
Output	Output Voltage Range	20-50VDC@900-1500mA 20-42VDC@1600-1800mA
	No Load Voltage	59VDC Max.
	Output Current	900-1800mA

	Max. Output Power	75.6W
	Efficiency	≥90% 230VAC，full load@max current
	Current Ripple（≤120HZ）	<3% (Imax-Imin)/(Imax+Imin)
	Current Accuracy	±5%
	PSTLM	≤1
	SVM	≤0.4
Control Method	Secondary PUSH dimming	Secondary PUSH dimming (Max. lead wire length：20m,same port of DALI）
	PUSH dimming terminal	PUSH dimming terminal (Max. lead wire length：20m,same port of DALI）
	DALI function	DALI dimming (Max. lead wire length：300m） Logarithmic or linear dimming curves are available DALI-2 certified incl. Parts 251, 252, 253,CLO
	Dimming range	DALI dimming: 1%-100%， Dim to off .
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	No-load Protection	Auto Recovery
	Insulation voltage	3000V 5mA 60S between P-S
	Insulation resistance	>100M ohm @ 500VDC
	Leakage current	< 700μA, I/P to O/P @230V input
Environment	Ta/Operation Temperature	-25….+50℃@900-1800mA
	Ts/Storage Temperature	-25….+85℃
	Tc/Enclosure Temperature	85℃
	Humidity	10%-90%RH
	Atmosphere	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Built-in
	PRI Wire preparation	0.5 -1.5□
	SEC Wire preparation	0.5-1.5□
	Dimension	280*30*21mm (L*W*H)
Standards	Certification	CE
	Safety Standards	EN61347-1,EN61347-2-13
	EMC Standards	EN55015,EN61000-3-2,EN61000-3-3,EN61547
	Performance	EN62384
	DALI performance	EN62386-101,102,207,251,252,253
	Surge	L-N/1KV （L/N)-PE/2KV
Others	RoHS	complied to 2011/65/EU
	Life Time	50000h @Ta

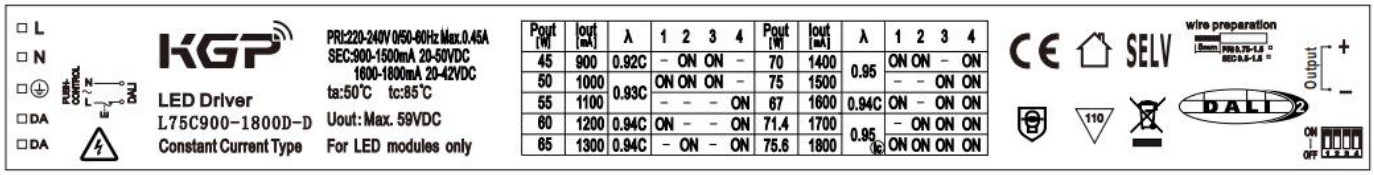
Remark:

1. All Parameters, if not specified, are measured at 230VAC/50Hz and 25℃ ambient temperature.
2. LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the

2. Connected quantities of different current Breaker

TYPE	Connected quantities of different current Breaker						Input Voltage	Inrush Current	Time
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		11	14	17	22	27	@230VAC	55	300us
TYPE C		17	23	28	35	44			
TYPE D		28	36	45	56	70			

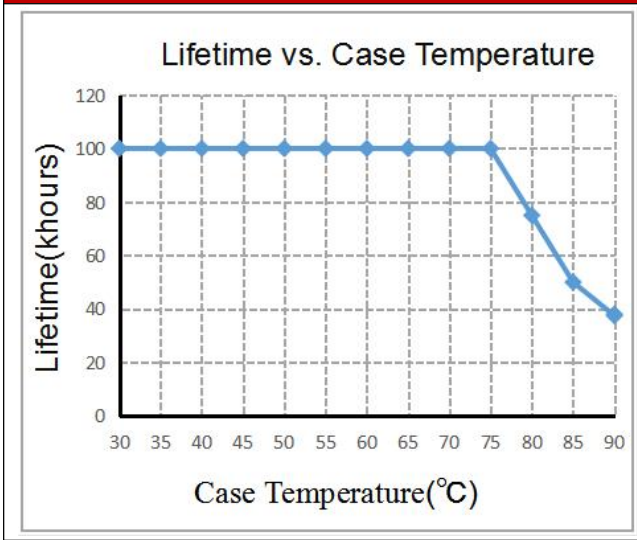
3. Label



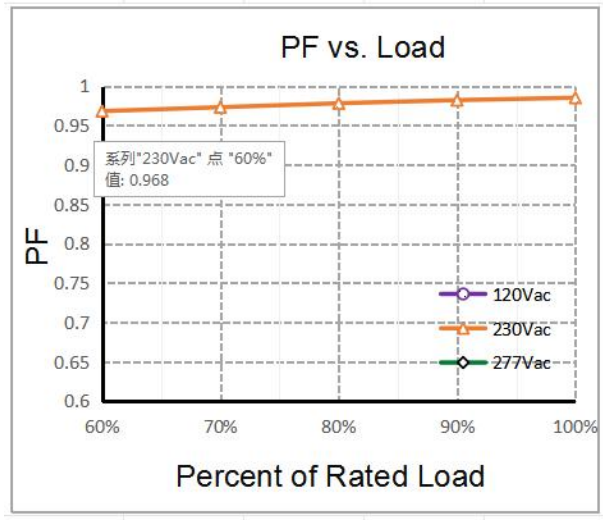
Pout [W]	Iout [mA]	λ	1	2	3	4	Pout [W]	Iout [mA]	λ	1	2	3	4
45	900	0.92C	-	ON	ON	-	70	1400	0.95	ON	ON	-	ON
50	1000	0.93C	ON	ON	ON	-	75	1500		-	-	ON	ON
55	1100		-	-	-	ON	67	1600	0.94C	ON	-	ON	ON
60	1200	0.94C	ON	-	-	ON	71.4	1700	0.95	-	ON	ON	ON
65	1300	0.94C	-	ON	-	ON	75.6	1800		ON	ON	ON	ON

4. Electrical values

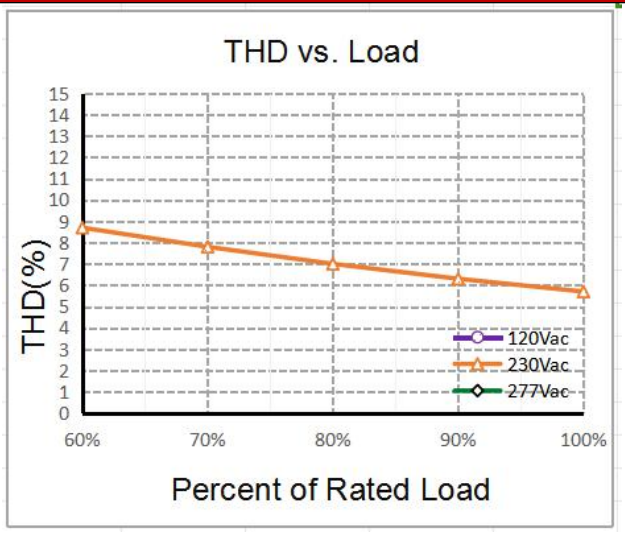
Lifetime vs. Case Temperature



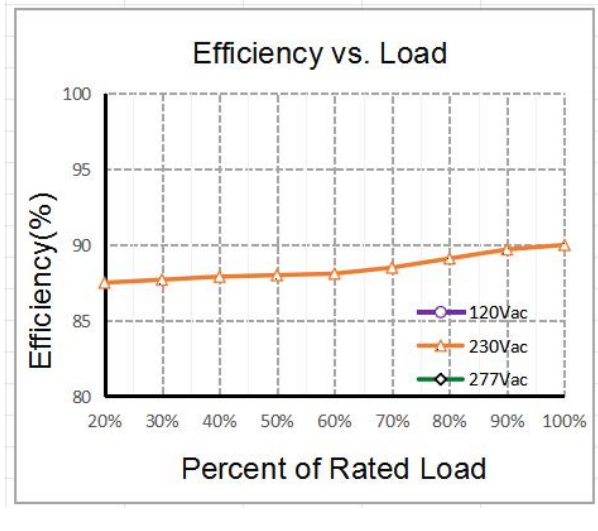
PF vs. Load



THD vs. Load



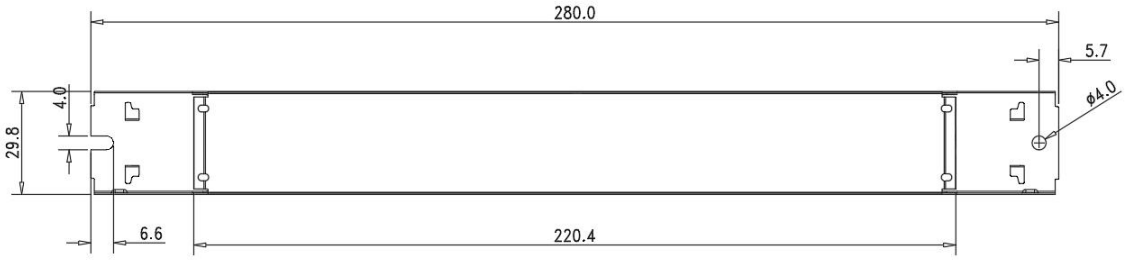
Efficiency vs. Load

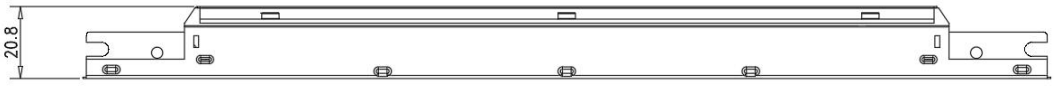


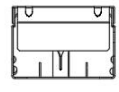
5. Output Current Setting

Output Current	1	2	3	4
900mA	--	--	--	--
900mA	ON	--	--	--
900mA	--	ON	--	--
900mA	ON	ON	--	--
900mA	--	--	ON	--
900mA	ON	--	ON	--
900mA	--	ON	ON	--
1000mA	ON	ON	ON	--
1100mA	--	--	--	ON
1200mA	ON	--	--	ON
1300mA	--	ON	--	ON
1400mA	ON	ON	--	ON
1500mA	--	--	ON	ON
1600mA	ON	--	ON	ON
1700mA	--	ON	ON	ON
1800mA	ON	ON	ON	ON

6. Dimension







7. Wiring Diagram

Fig. A:Dali Dimming

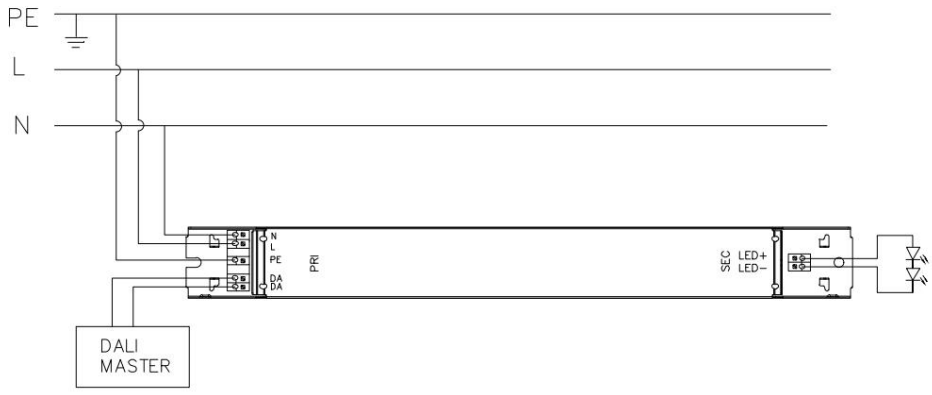
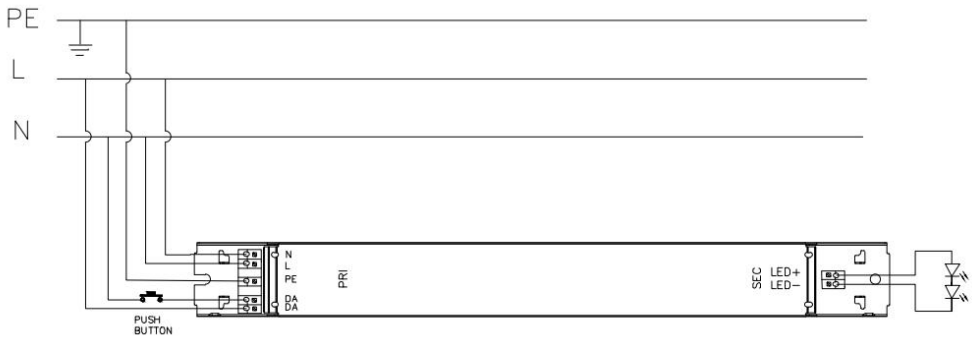


Fig. B:Push Dimming



Remark：Push Dim function

Action	Action duration	Function
Short push	<0.5s	Turn on/off
Short push twice	<0.5s	LED on：Save current brightness level LED off： Delete saved level and turn on at 100% brightness
Short push five times	<0.5s	Quit Corridor mode
Long push	0.5-14s	Dimming up or down
Long push	15s-2mins	Sync all LEDs to be 100% brightness
Long push	>2mins	Enter Corridor mode - LED keep 100% brightness for 2mins. Then brightness will turn to be 10% within 32s if no action during 2mins 100% brightness.

1.The factory default brightness is at 100%.

2.Up to 30 drivers can perform the PUSH dimming at the same time when utilizing one common push button

3.The maximum length of the cable from the push button to the last driver is 200 met

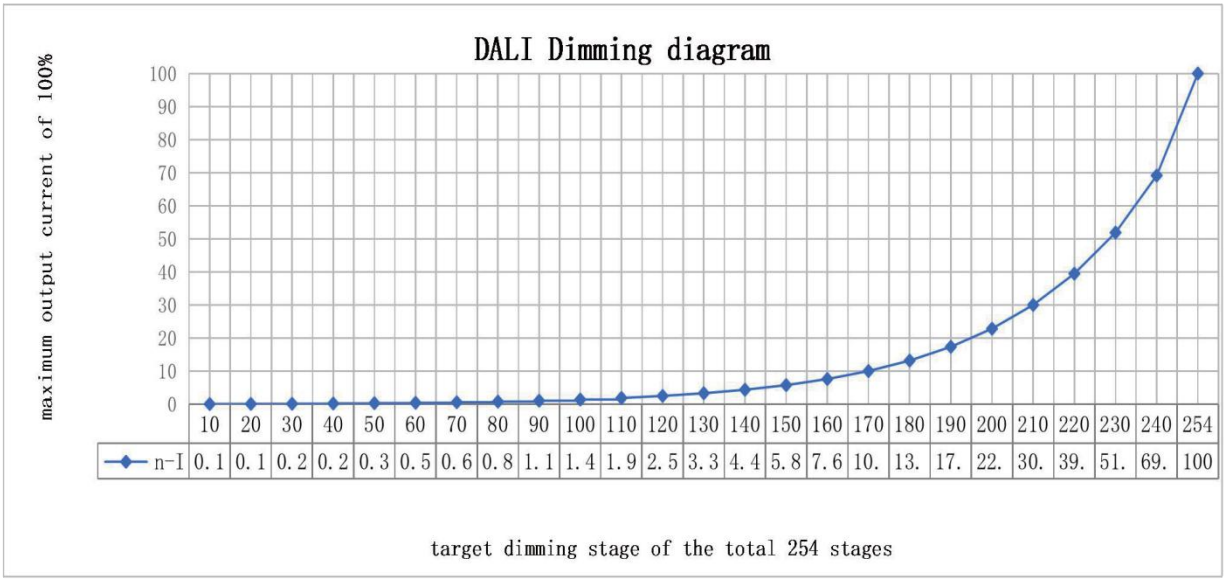
8. DALI dimming curve

formula for DALI dimming.

X(n)=10^{[(n-1)/(253/3)]-1},

Here,n means the target dimming stage of the total 254 stages.

X(n) means the percent of the maximum output current



9. Packing information

Packing way	Model	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
industrial	L75C900-1800D-D	335*300*138 MM	50PCS	0.21	10.5	12.2

10. Revision History

Date	Revision	Remark
2024-4-2	V1.0	Initial release.