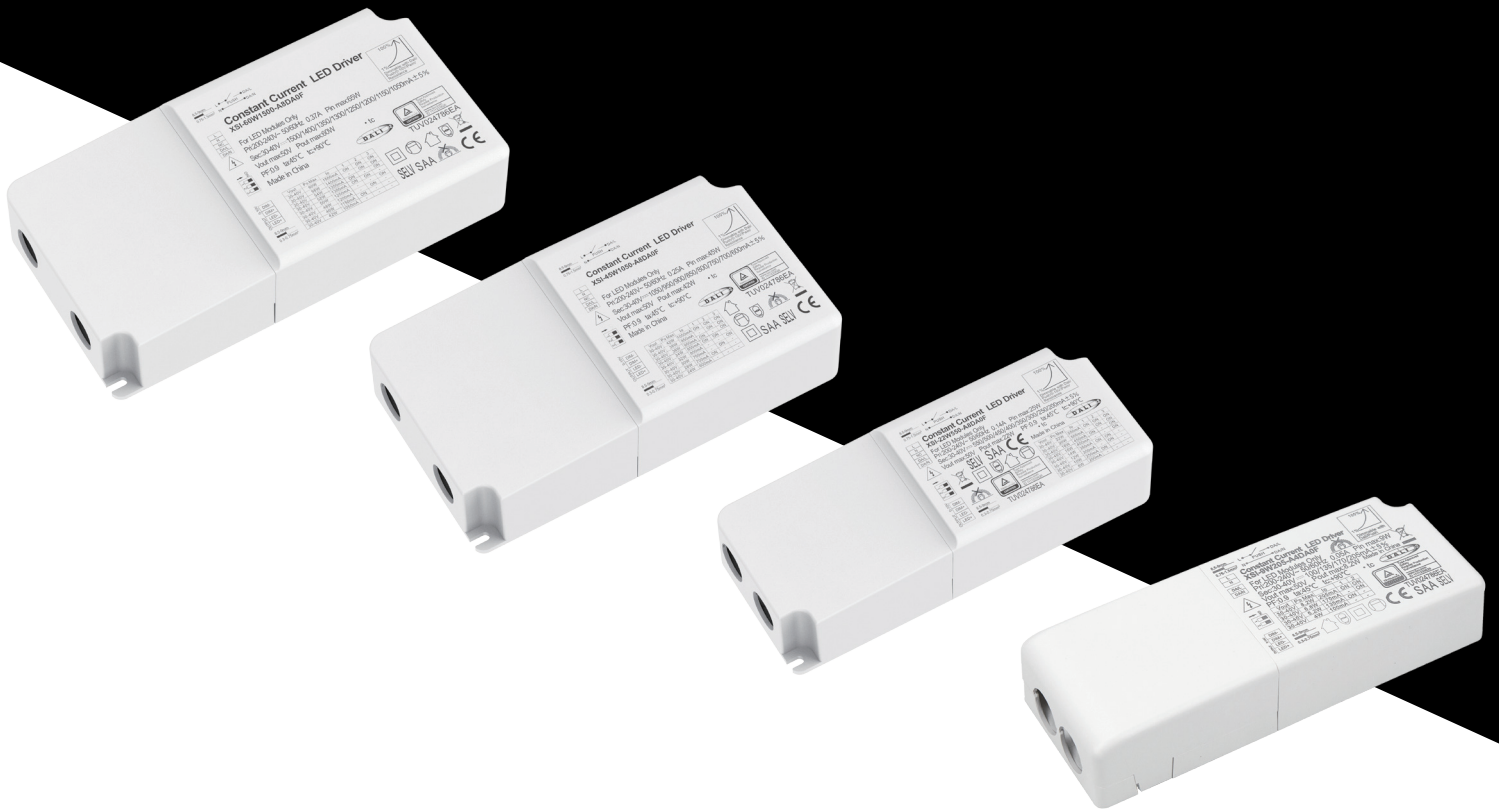


SPECIFICATION

# DALI DT6 Series LED Driver



# INTRODUCTION

The DALI series led driver provides the best compromise between an attractive price and qualified performance.

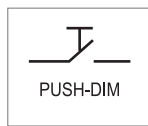
With a focus on application-related functions, the LED Driver range offers good quality and performance that ensures reliable operation of LED module.

## Features

- Independent fixed output LED Driver
- Specific, optimized output current and voltage
- Output power dim, 4-60W
- Whole range are featured with flicker free performance
- Idea circuit design overcome luminarie flickering with voltage fluctuation.
- For luminaires of protection class I and protection class II
- Temperature protection as per EN / IEC61347
- Small, super compact dimensions
- Nominal life-time up to 50,000h
- DALI signal:16 bit Manchester Code Speed 1 % to 100 %



DALI 2.0



PUSH DIM



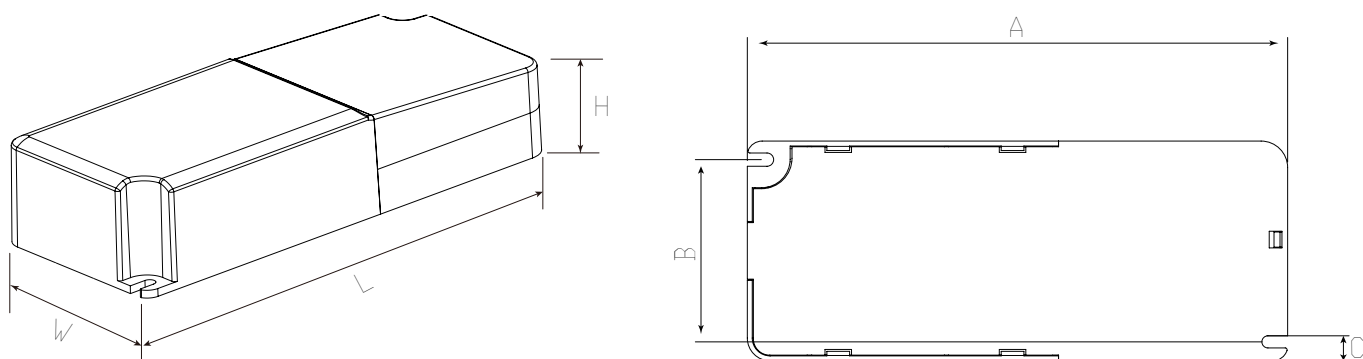
1-10V



# TECHNICAL DATASHEET

Driver Datasheet (Dali-dimmable)					
Code		XSI-9W205-A4DA0F	XSI-22W550-A8DA0F	XSI-45W1050-A8DA0F	XSI-60W1500-A8DA0F
Input	Input Power	4-9W	8-22W	24-45W	45-60W
	Input Voltage	180-265V			
	Rated Input Voltage(V)	200-240V			
	Frequency	50/60HZ			
	Input Current	≤0.05A	≤0.14A	≤0.28A	≤0.37A
	Rated Input Current	≤0.04A	≤0.13A	≤0.25A	≤0.34A
	Power Factor (typ)	0.9			
	Total Harmonic Distortion(THD)	<20% @230V			
	Efficiency (typ)	≥78%	≥86%	≥88%	≥90%
	Inrush Current (Typ.)	18.8A/34.8uS	15.1A/113uS	16A/214uS	24.2A/326uS
	Max Circuit Breaker	Please refer to" Circuit breaker Specification"			
	Leakage Current	<0.5mA/240V			
	No Load Wattage	<0.5W @230V			
Output	Output Voltage Range	30-40V			
	Rated Output Current	100-205mA	200-550mA	600-1050mA	1050-1500mA
	Line Regulation	±5%			
	Open Circuit Voltage (max)	50V			
	Setup time(note1)	<1S @230V			
	Flickering Index(IEEESTd 1789)	3%(NO RISK)		6%(NO RISK)	6%(NO RISK)
Protection	Short Circuit Protection	Constant current limiting, recovers automatically after fault condition is removed			
	Over Voltage Protection	Shut down o/p voltage			
	Over Temperature Protection	Shut down o/p voltage, recovers automatically after temperature goes down			
Safety & EMC	Safety Standards	IEC/EN61347-1, IEC/EN61347-2-13, IEC/EN62384 independent,GB19510.14,GB19510.1 approved			
	Withstand Voltage	I/P-O/P:3.75KVac,<5mA 60S; I/P-FG:1.6KVac,<5mA 60S; O/P-FG:0.5KVac,<5mA 60S			
	Isolation Resistance	I/P-O/P: 500VDC, ≥100M Ω			
	Surge	IEC/EN61000-4-5(L-N:0.5KV, )		IEC/EN61000-4-5(L-N:1KV, )	
	EMC Emission	IEC/EN55015, IEC/EN61000-3-2			
	EMC Immunity	IEC/EN61000-4-2,3,4,5,6,8,11; IEC/EN61547			
Other	Dimension(L*W*H)	131.0*50.0*26.0mm	143.0*58.0*30.0mm	144.0*80.0*32.0mm	156.0*80.0*32.0mm
	Weight	0.09Kg	0.13Kg	0.20Kg	0.25Kg

## DIMENSION



Code	Dimension(mm)						Product Weight (Kg)		Package weight (Kg)		Carton Size(cm)	Qty/CTN
	L	W	H	A	B	C	N.W/PC	G.W/PC	N.W/CTN	G.W/CTN		
XSI-9W205-A4DA0F	131.0	50.0	26.0	121.8	41.2	3.5	0.09	0.1	8.4	8.8	46.5*34.5*24.5	90PCS
XSI-22W550-A8DA0F	143.0	58.0	30.0	132.2	48.1	3.2	0.13	0.14	12.78	13.40	46.5*34.5*24.5	90pcs
XSI-45W1050-A8DA0F	144.0	80.0	32.0	133.4	69.4	3.2	0.20	0.21	18.63	19.25	46.5*34.5*24.5	90pcs
XSI-60W1500-A8DA0F	156.0	80.0	32.0	145.7	68.3	3.2	0.25	0.26	15.84	16.46	46.5*34.5*24.5	60pcs

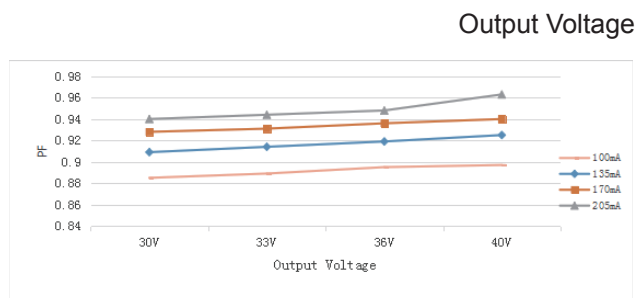
## CIRCUIT BREAKER SPECIFICATION

Circuit Breaker Specification								
Code	B10	B13	B16	B20	C10	C13	C16	C20
	10	13	16	20	10	13	16	20
XSI-9W205-A4DA0F	87	114	140	175	133	173	213	266
XSI-22W550-A8DA0F	21	27	33	41	34	44	55	68
XSI-45W1050-A8DA0F	21	27	33	41	21	35	43	53
XSI-60W1500-A8DA0F	19	24	30	38	20	25	31	39

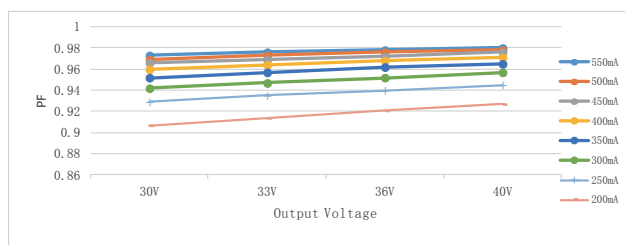
# DIP SWITCH TABLE

# POWER FACTOR CHARACTERISTIC

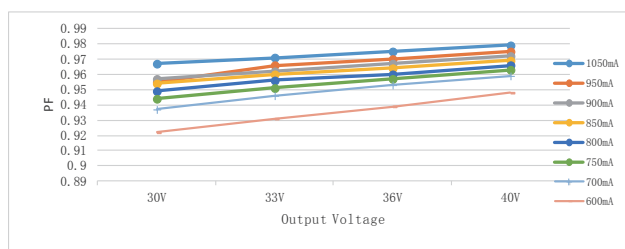
Code	Vout	Po Max	Io	1	2
XSI-9W205-A4DA0F	30-40V	8.2W	205mA	ON	ON
	30-40V	6.8W	170mA	-	ON
	30-40V	5.2W	135mA	ON	-
	30-40V	4W	100mA	-	-



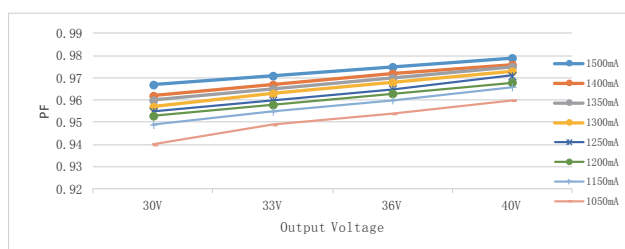
Code	Vout	Po Max	Io	1	2	3
XSI-22W550-A8DA0F	30-40V	22W	550mA	ON	ON	ON
	30-40V	20W	500mA	-	ON	ON
	30-40V	18W	450mA	ON	-	ON
	30-40V	16W	400mA	-	-	ON
	30-40V	14W	350mA	ON	ON	-
	30-40V	12W	300mA	-	ON	-
	30-40V	10W	250mA	ON	-	-
	30-40V	8W	200mA	-	-	-



Code	Vout	Po Max	Io	1	2	3
XSI-45W1050-A8DA0F	30-40V	42W	1050mA	ON	ON	ON
	30-40V	38W	950mA	-	ON	ON
	30-40V	36W	900mA	ON	-	ON
	30-40V	34W	850mA	ON	ON	-
	30-40V	32W	800mA	-	-	ON
	30-40V	30W	750mA	-	ON	-
	30-40V	28W	700mA	ON	-	-
	30-40V	24W	600mA	-	-	-



Code	Vout	Po Max	Io	1	2	3
XSI-60W1500-A8DA0F	30-40V	60W	1500mA	ON	ON	ON
	30-40V	56W	1400mA	-	ON	ON
	30-40V	54W	1350mA	ON	-	ON
	30-40V	52W	1300mA	ON	ON	-
	30-40V	50W	1250mA	-	-	ON
	30-40V	48W	1200mA	-	ON	-
	30-40V	46W	1150mA	ON	-	-
	30-40V	42W	1050mA	-	-	-



## 0-10V FUNCTION

### 1. 1-10V Mode Option

Under driver not in the 1-10V mode, it can achieve and keep 1-10V mode within 10 seconds by changing the voltage of the 1-10V interface, "High level-low level-high level-low level" or "Low level-high level-low level-high level" (high level is 8V-10V, low level is 0V-2V). When the DALI signal or Push Dimming signal is received, it will automatically switch to DALI or PushDim mode.

### 2. 1-10V Dimming Function

The 1-10V dimming function uses a linear output, and it has a smooth fade effect. When 1-10V interface voltage is less than 1.3V, output is 0%; when 1-10V interface voltage is over 9.5V, output is 100%; when 1-10V interface voltage is 1.3V-9.5V, linear output is 1%-100%.

# PUSH DIMMING FUNCTION

## 1. Combines DALI and SwitchDim functions

The DALI and SwitchDim functions are automatically selected according to the voltage connected to DALI dimming interface. If the connected voltage is 9.5-22.5V DALI signal, it will be automatically selected as the DALI function. If the connected voltage is 100V~300V AC at 50Hz or 60Hz, it will be automatically selected as the PUSH dimming function.

## 2. Switch Dim Way

**Short press:** Press the reset button quickly and let go, the button will automatically restore the disconnected state, press button duration is 50ms-600ms.

**Long press:** Press the reset button quickly and keep it for more than 1000ms.

**Dimming signal:** Connect 50Hz or 60Hz AC100 ~ 300V voltage through a reset switch to connect the L and N terminals to the DALI interface.

## 3. Switch Dim Function

No	Function	Operation	Illustration
1	Memory	Power on	When the LED driver is powered on, it will restore the status before the LED driver was powered off; If the lamp is turned off before power off, it will still be off status after power on; If the lamp is 50% brightness before power off, then it will automatically restore to 50% brightness.
2	Turn on/off	Short press (< 0.6 s)	Brief push (< 0.6 s) switches to turn LED Driver ON and OFF; The dim level is saved at power-down and restored at power-up.
3	Dimming	Pushbutton held 1s-3s	When pushbutton is held, the LED lamps are dimmed; After repush, the LED lamps are dimmed in the opposite direction; Stop dimming when pushbutton released, dimming range 1-100%.
4	Synchronization	Long press 10s	In the same Switchdim system, 10s push to synchronize LED lamps to 50% dimming level; if LED lamps are in different dimming levels or opposite dimming directions (e.g. after a system extension)
5	Adjustable fade time	Long press 20s	The fade time decides dimming speed. The shorter the fade time, the faster the dimming speed; Fade time defaults 3s, long press 20s for fade time 6s and 100% brightness; Long press 10s, all lamps will be synchronized and turn into 50% brightness; Long press 20s again, the fade time go back to default setting; The brightness will remain 100% for long tim push butoon held.
6	Reset to factory settings	Long press 10s for 4 times	Factory default settings are restored by 4 times of 10s long press (the interval does not exceed 2s) Restore fade time, switch status, brightness, control mode, etc. to factory settings.

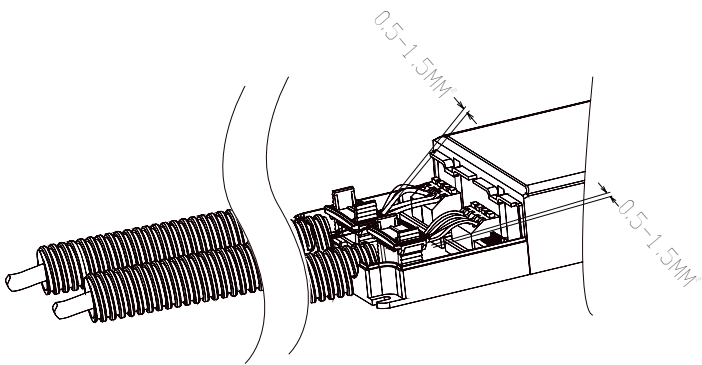
# CIRCUIT DIAGRAM

## No-load operation

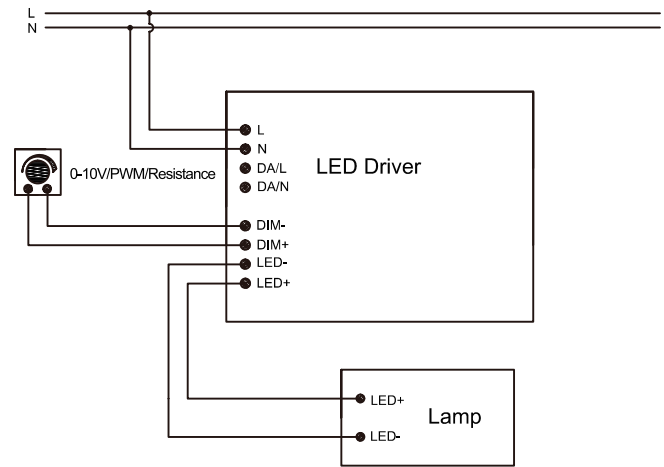
In case of open circuit, protection will be activated, there will be 50V output voltage.

## Glow wire test

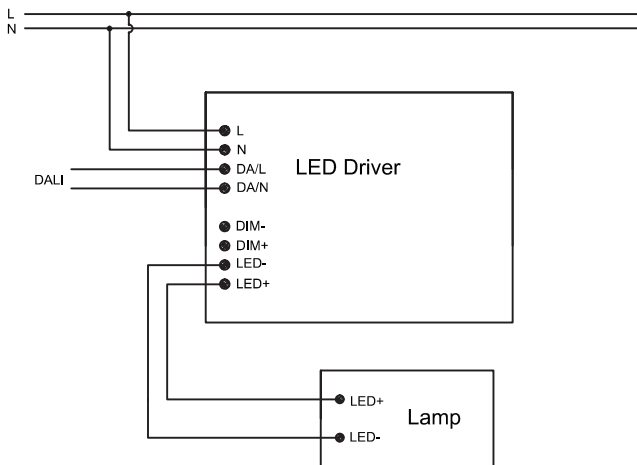
According to EN 61347-1 with increased temperature of 960°C passed.



## 0-10V Dimming Connection



## Dali Dimming Connection



## Push Dimming Connection

