



# COLOSSUS<sup>®</sup>

*Excellence inside*

**DATASHEET**

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**US100IHIDT6244170F**

**DALI- 2 DT6**



Engineered with 

Version: 01



\*Image is for viewing purpose. Technical Data not to be drawn from above image.

### Approval Markings:



### Product Description

- DALI-2 Dimmable Constant Voltage Driver For Led Modules
- Input Voltage 240VAC
- Output Ripple Current <5% (@ Full Load, <120 Hz) - Flicker Free
- High Efficiency >92% (@Full Load)
- Power Factor >0.95 THD<10%(@100%Load)
- For use in combination with Luminaries of Protection Class II.
- Protection against Abnormal Operating Conditions Like Short Circuit Protection, Open Voltage Protection, Overload Protection.
- Surge Protection 2KV
- Compatible with DALI-2 & PUSH Dimming
- Nominal Life Time: 1,00,000 hours @ tc = 45°C

### Functions

- Seamless Control via DALI-2
- Dimming Control
- Energy Efficiency
- Compatible with DALI-2 accessories
- Application oriented operation for maximum compatibility

### Benefits

- 0.1-100% Deep Dimming, Dim to Off
- Compatible with Sensors & PUSH Dim
- Low Standby Power
- Smooth Transition over wide range of Intensity

### Applications



Commercial Spaces



Industrial Spaces



Residential Spaces



Hospitality

## Technical Data

<b>Mains Voltage Supply</b>	
Rated Voltage Range	240VAC
Rated Frequency	50/60 Hz
Max. Admissible Input Voltage Range(AC)	175-265VAC
Total Harmonic Distortion (THD)	<10% (@Full Load)
Mains voltage withstanding capacity	300VAC for 8hrs (with overvoltage shutdown)

<b>Output Data</b>	
<b>Constant current</b>	
Output current tolerance	±5%
Max. Ripple output current(with LED Load)	<5% (@ Full Load, <120 Hz)
Max starting Time	<1s (@ Full Load by DALI System)

<b>Interface And Dimming Operation</b>	
Dimming Interface	DALI Dimming
PUSH Dimming	PUSH dimming (Max. lead wire length:20m, sameport of DALI, Max parallel connections qty for Push-dim 15 PCS)
DALI Function	DALI dimming (Max. lead wire length:300m) logarithm or linear dimming curve selectable 251,252,253,CLO
Dimming Range	DALI dimming: 0.1%-100%

<b>Power Factor</b>	
240V(@ Full Load)	>0.95

<b>Efficiency(typ.)</b>	
Full Load	>92%

<b>Protections</b>	
Open Circuit	<24VDC
Output Short Circuit Protection	YES
Overload Protection	YES

## Technical Data

Connection Terminals	
Type	Push Terminal
PRI Wire Cross Section / Length	0.75 - 2.5 <sup>2</sup> / 8-9mm
SEC Wire Cross Section / Length	1.5 - 2.5 <sup>2</sup> / 8-9mm
DALI Wire Cross Section / Length	0.75 - 2.5 <sup>2</sup> / 8-9mm

Wire Lengths	
Max. Wire Length To Led Module	<2m

## Protection

Surge	2kV
High Voltage	300V

## Temperatures (Operation)

Model No.	Ambient(ta)	Case (tc)
US100IHIDT6244170F	-20°C... +50°C	Max + 85°C

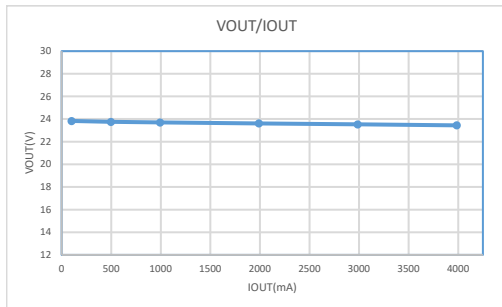
## Product Specifications

Model No.	Input Current (max)	Input Power (max)	THD	Power Factor	Efficiency	Output Current	Output Voltage	Output Power (max)
US100IHIDT6244170F	500mA	110W	<10%	>0.95	>92%	0-4.17A	24V	100W

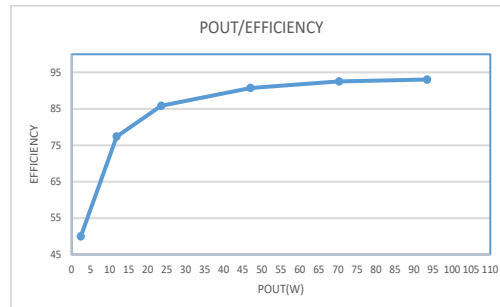
All specifications with 240 VAC are nominal operation and 100% load.

### Graphs

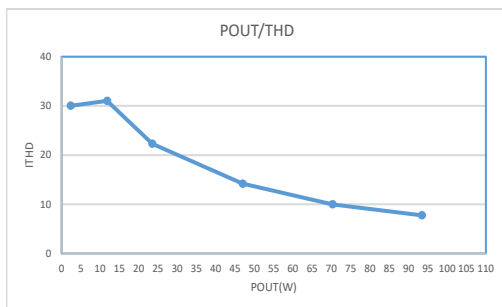
**Operating Window**



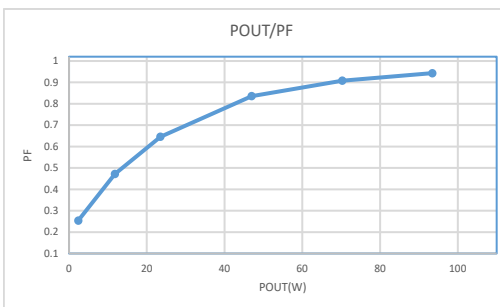
**Efficiency Vs Output Power**



**THD Vs Output Power**



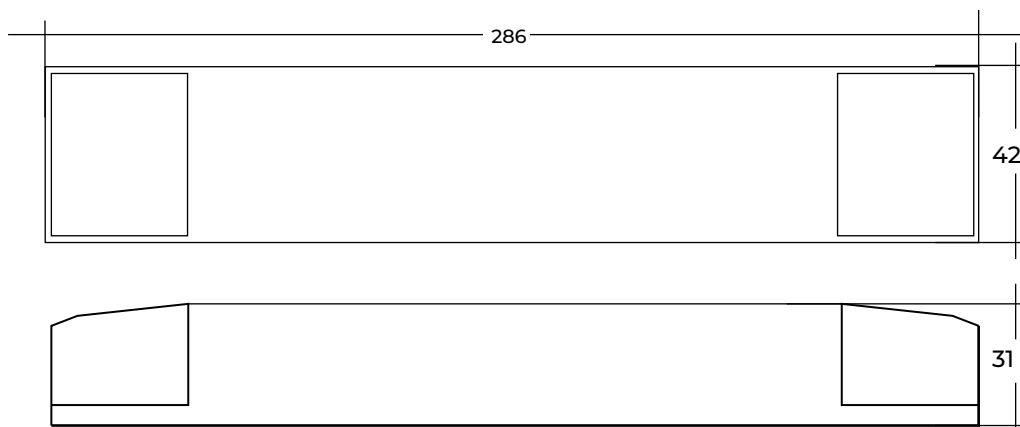
**Power Factor Vs Output Power**



### Housing Properties

Degree of protection	IP20
Casing	Polycarbonate, White

### Housing Dimensions



<b>Dimensions (LxWxH)</b>	286X42X31
<b>Tolerance</b>	± 1mm
<b>Weight</b>	310gm

**Wiring Diagrams**

**• DALI Dimming**



**• PUSH Dimming**



**Expected Lifetime**

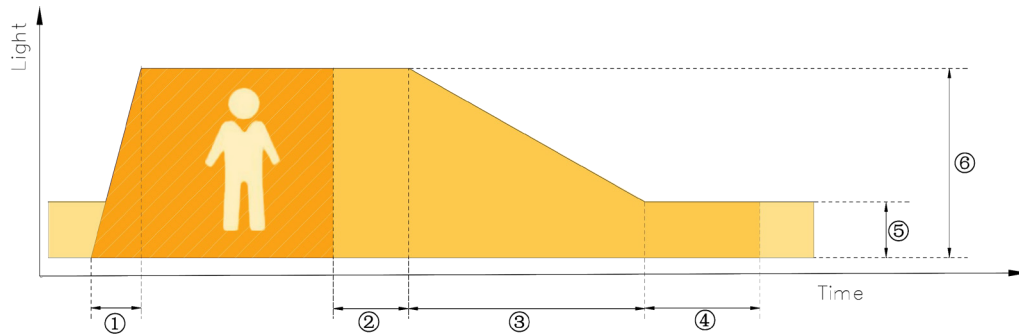
<b>Lifetime</b>	50,000 hours
<b>Warranty</b>	5 years

**Logistics Data**

<b>Model No.</b>	US100IHIDT6244170F
<b>Weight (gm)</b>	310gm

### Capabilities

- **Compatible with DALI Sensors**



### Adjustable Parameters:

- **Fade-in Time:** Time to ramp up to the presence value
- **Run-on Time:** Duration the light stays at presence level after motion ends
- **Fade Time:** Time to fade from presence to absence value
- **Switch-off Delay:** Duration the absence value is held before turning off (configurable or disabled)
- **Presence Value:** Brightness when motion is detected
- **Absence Value:** Brightness when no motion is detected

This function offers flexible configuration to match specific usage scenarios and optimize lighting behavior in corridors and similar spaces.

- **Dimming curve**

The DALI interface supports two dimming curves: logarithmic (default) and linear.

Users can select the desired dimming behavior based on application requirements, Settings can be changed.