



COLOSSUS[®]

Excellence inside

DATASHEET

US100IHIDT8244170F

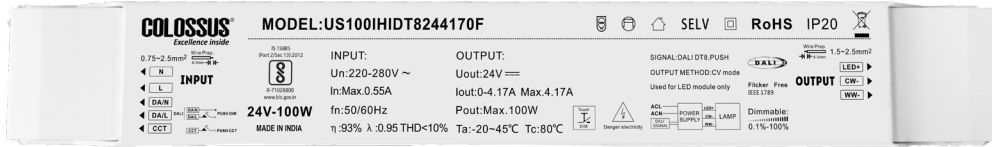
DALI- 2 DT8



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, PUSH CCT
- Nominal Life Time: 1,00,000 hours @ tc = 45°C

Functions

- Seamless Control via DALI-2
- CCT & 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 CCT & Intensity

Applications



Commercial Spaces



Industrial Spaces



Residential Spaces



Hospitality

Technical Data

Mains Voltage Supply	
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)

Output Data	
Constant current	
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)

Interface And Dimming Operation	
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%

Power Factor	
240V(@ Full Load)	>0.95

Efficiency(typ.)	
Full Load	>92%

Protections	
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 ² / 8-9mm
SEC Wire Cross Section / Length	1.5 - 2.5 ² / 8-9mm
DALI Wire Cross Section / Length	0.75 - 2.5 ² / 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)
US100IHIDT8244170F	-20°C... +50°C	Max + 85°C

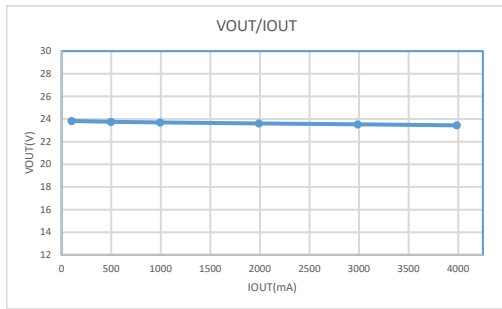
Product Specifications

Model No.	Input Current (max)	Input Power (max)	THD	Power Factor	Efficiency	Output Current	Output Voltage	Output Power (max)
US100IHIDT8244170F	500mA	110W	<10%	>0.95	>92%	0-4.17A	24V	100W

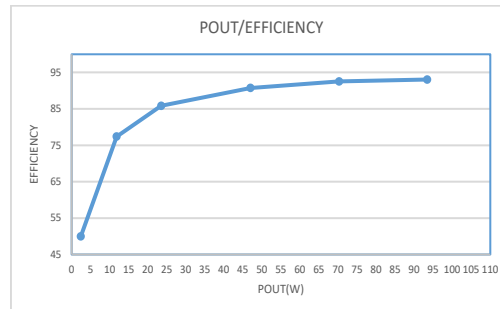
All specifications with 240 VAC are nominal operation and 100% load.

Graphs

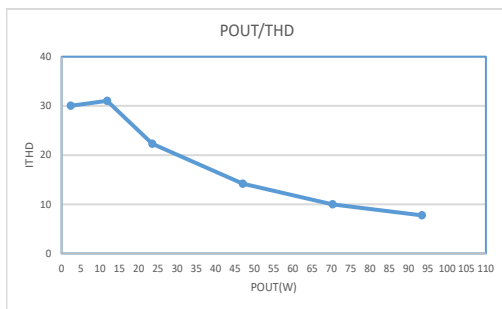
Operating Window



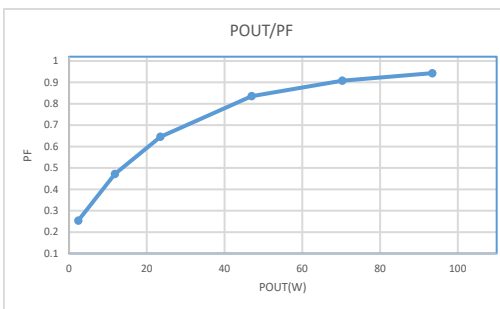
Efficiency Vs Output Power



THD Vs Output Power



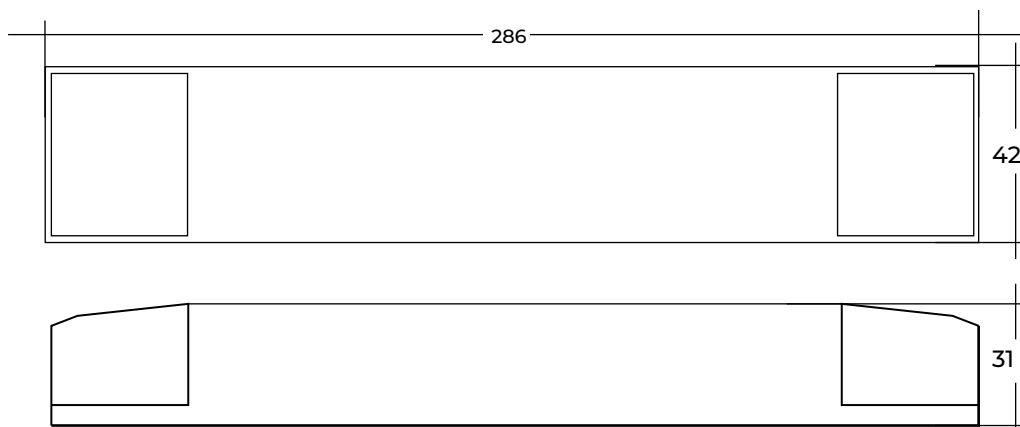
Power Factor Vs Output Power



Housing Properties

Degree of protection	IP20
Casing	Polycarbonate, White

Housing Dimensions



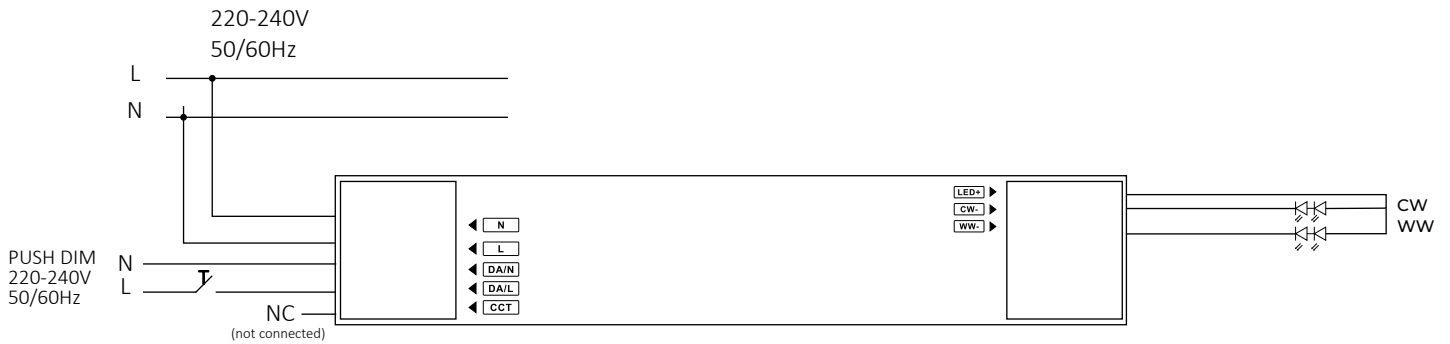
Dimensions (LxWxH)	286X42X31
Tolerance	± 1mm
Weight	310gm

Wiring Diagrams

• DALI Dimming



• PUSH Dimming



• PUSH CCT



Expected Lifetime

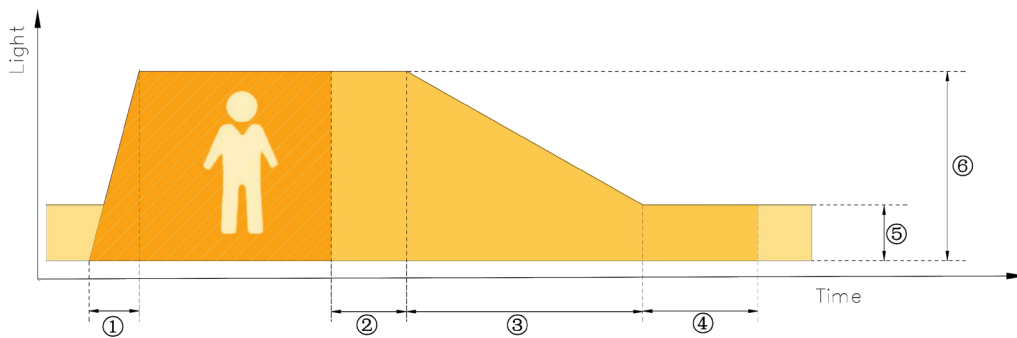
Lifetime	50,000 hours
Warranty	5 years

Logistics Data

Model No.	US100IHIDT8244170F
Weight (gm)	310gm

Capabilities

• **Compatible with DALI Sensors**



Adjustable Parameters:

- Fade-in Time: Time to ramp up to the presence value (default: 1s)
- Run-on Time: Duration the light stays at presence level after motion ends (default: 120s)
- Fade Time: Time to fade from presence to absence value (default: 32s)
- Switch-off Delay: Duration the absence value is held before turning off (configurable or disabled)
- Presence Value: Brightness when motion is detected (default: 100%)
- Absence Value: Brightness when no motion is detected (default: 10%)

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.