PRODUCT NUMBER:

LW-DT8-100~277VAC-24V-96W-2C-IP67-JBX

PROJECT: _____ **TYPE:** _____ **QTY:** _____

Features

- Constant Voltage output
- UL, cULus listed, Class2 unit, Type HL rated, FCC
- Universal AC input: 100-277VAC
- Built-in active power factor correction (PFC)
- ≤0.47W standby power consumption
- Up to 89.5% efficiency
- Protected from Short Circuits, Overload and Overheat
- Logarithmic dimming curve
- DALI-2 CCT dimming
- DALI-2 DT8 colour control features
- IP67 protection for dry, damp and wet locations
- NFC function
- Flicker-free, 4KHz stroboscopic exemption
- 0 to 100% dimming range, 0.1% LED start available
- Suitable for LED lighting
- Cooling by free air convection

5 year warranty · cULus · RoHS · FC · IP67 RATED · Class2

Specifications

OUTPUT	
DC Voltage	24V
Rated Current	2 X 2A
Rated Power	96W
Voltage Tolerance	±0.5V
Voltage Regulation	±0.5%
Load Regulation	±1%

INPUT		
Voltage Range	100-277VAC	
Frequency Range	47-63Hz	
Power Factor (Typ.) @Full Load	≥0.98 @120VAC	≥0.95 @277VAC
THD (Typ.) @Full Load	≤10% @120VAC	≤15% @277VAC
Efficiency (Typ.) @Full Load	87.5% @120VAC	89.5% @277VAC
Inrush Current (Typ.)	23.2A, 50%, 360μs @120VAC	54A, 50%, 280μs @277VAC
Leakage Current	<0.5mA	
Standby Power Consumption	0.25W @120VAC	0.47W @277VAC

PROTECTION	
Short Circuit	Hiccup mode. After faulty condition is corrected, driver recovers automatically
Overload	@ ≤120%: Hiccup mode. After faulty condition is corrected, driver recovers automatically
Overheat	@ 100°C ±10°C / @ 212°F ±18°F: Voltage Output Shutdown Once cooled down, driver recovers automatically

ENVIRONMENT		
Working Temperature	-40°C ~ +60°C / -40°F ~ 140°F (See Derating Curve below)	
Working Humidity	20% ~ 95% Relative Humidity, Non-Condensing	
Storage Temperature & Humidity	-40°C ~ +80°C / -40°F ~ 176°F	10% ~ 95% Relative Humidity
Temperature Coefficient	±0.03%/°C (0°C ~ 50°C) / ±0.054%/°F (32°F ~ 122°F)	
Vibrations	10 ~ 500Hz, 5G 12min. / 1 cycle, 72 min. period each. / Along X, Y and Z axes	

SAFETY & ELECTROMAGNETIC COMPATIBILITY (EMC)			
Safety Standards	UL8750, CAN/CSA-C22.2 No. 250.13 (US)		
Withstand Voltage	Input to Output: 1.80KVAC	Input to Frame Ground: 1.80KVAC	Output to Frame Ground: 1.80KVAC
Isolation Resistance	Input to Output: 100MΩ / 500VDC / 25°C (77°F) / 70% Relative Humidity		
EMC Emission	FCC Part 15, Subpart B		
EMC Immunity	EN61000-4-2,3,4,5,6,11 & EN61547 (EU)		

OTHERS		
Net Weight	1.65Kg	
Dimensions (L x W x H)	241 x 125 x 42.7mm	9.49 x 4.92 x 1.68in

ⓘ Unless mentioned otherwise, all specifications are measured at 120VAC input, rated load and 25°C (77°F) ambient temperature. Reduce input voltage load to extend the driver's life.

LUMEN WARM

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155 Fortin Street, Suite 180, Quebec City, QC G1M 3M2, Canada

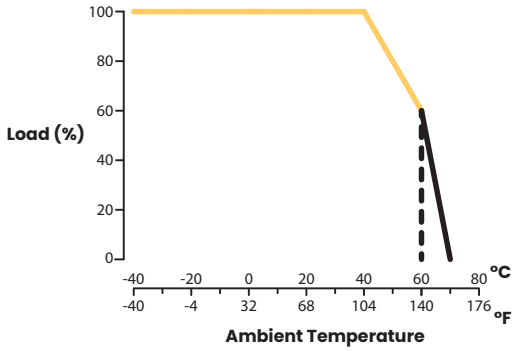
LAST UPDATE
3/12/2024

PRODUCT NUMBER:

LW-DT8-100~277VAC-24V-96W-2C-IP67-JBX

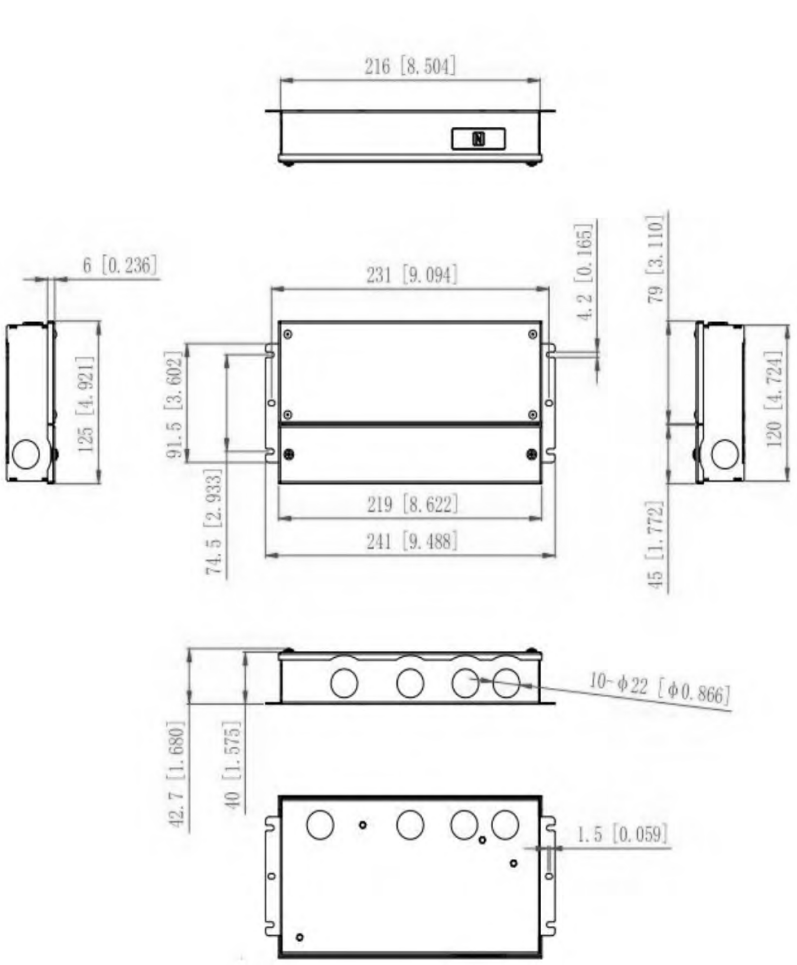
PROJECT: **TYPE:** **QTY:**

Derating Curve

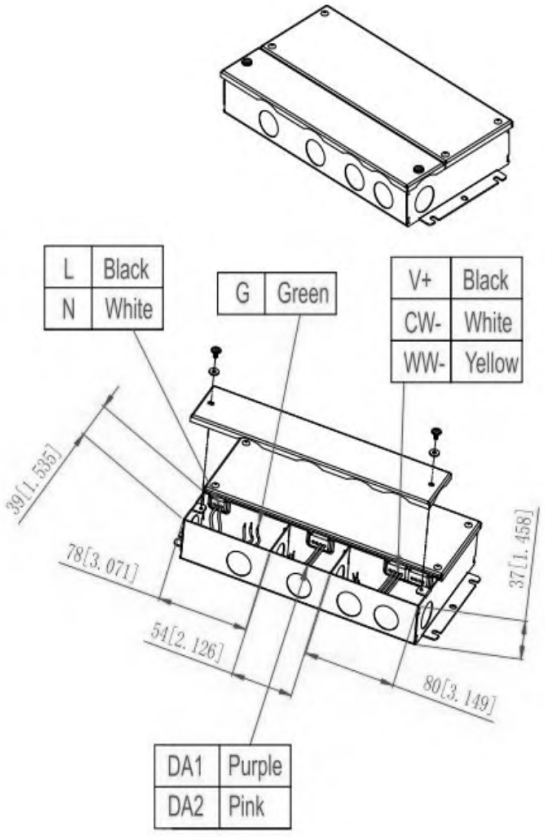


To extend Driver's life, derate according to the ambient temperature.

Dimensions



241 x 125 x 42.7mm
9.49 x 4.92 x 1.68in



[Inch]
Millimetre

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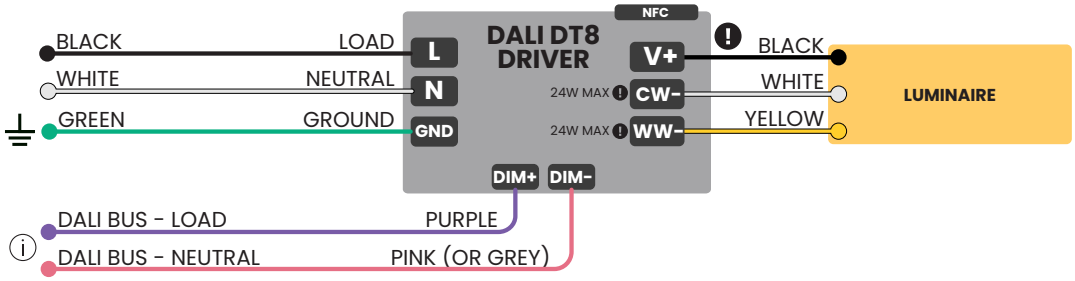
PROJECT: **TYPE:** **QTY:**

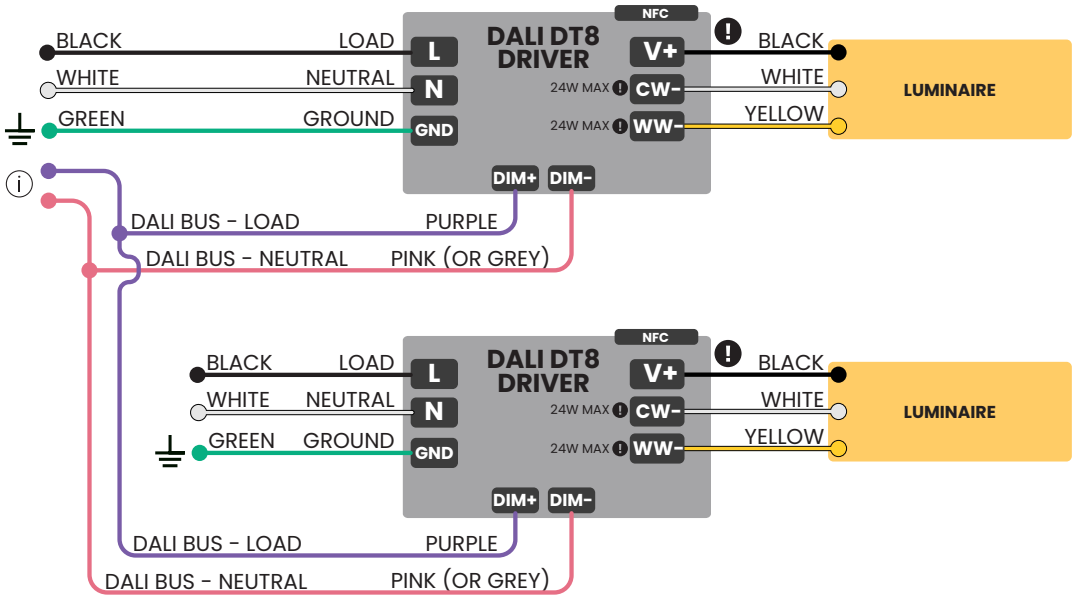
Connection Diagrams

1. This Driver should be installed by a qualified professional.
2. Make sure the Driver is installed with adequate ventilation to allow heat dissipation.
3. Make sure the wiring is correct before testing to avoid damaging Luminaire and Power Supply.
4. **DO NOT ATTEMPT TO REPAIR THE DRIVER.**

DALI DIMMING SINGLE DRIVER



DALI DIMMING MULTIPLE DRIVERS



Lumen Warm recommends **NOT TO EXCEED 80%** of the Driver's load capacity for longer durability.

Lumen Warm recommends matching wire colours to corresponding LED terminals to prevent programming issues.

Only one DALI power is needed into the DALI bus. No extra DALI power is needed if Master or Dimmer already provides power to DALI bus.

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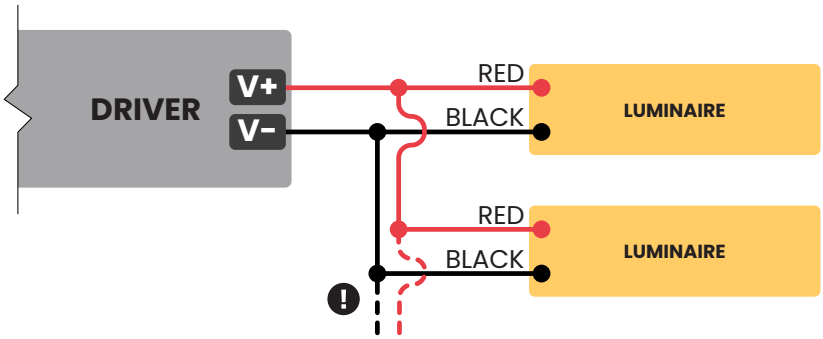
PROJECT: TYPE: QTY:

Multiple Luminaires Wiring Methods

IN PARALLEL, DAISY CHAIN METHOD

IN PARALLEL, PARALLEL STANDARD METHOD

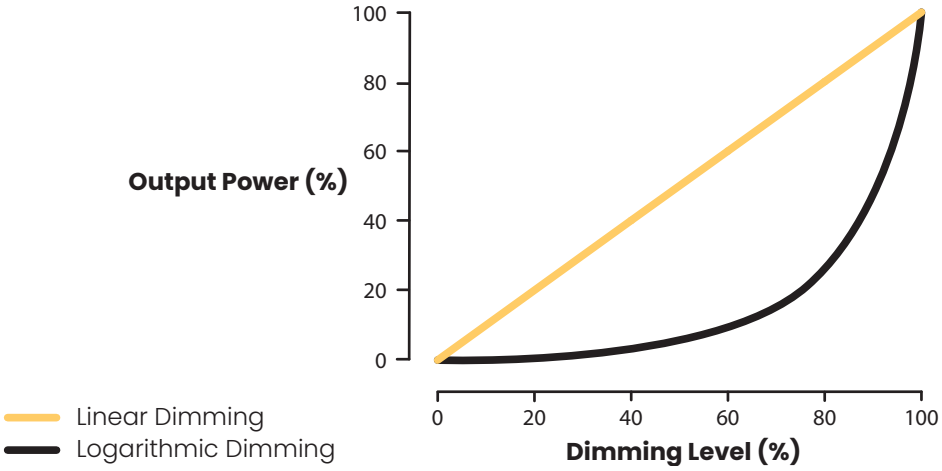


ⓘ Both connection methods can be combined if applicable.

ⓘ This is a simplified diagram. Use for reference only.

❗ Lumen Warm recommends **NOT TO EXCEED 80%** of the Driver's load capacity for longer durability.

Dimming Curves



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PROJECT: **TYPE:** **QTY:**

Output Voltage Setup

- When installing a Driver remotely, a voltage drop may occur due to the wire length between the Luminaire and the Driver.
- **VOLTAGE LEVEL AT LUMINAIRE'S ENTRY MUST NOT EXCEED 24V, OR LUMINAIRE MAY GET PREMATURELY DAMAGED.**
- Check Voltage Level at the end of output wiring just before the Luminaire. Ensure it reads 24V.

SETUP INSTRUCTIONS WITH NFC DEVICE

- Driver's voltage output can be read and adjusted by using the ProNFC app or a NFC handheld device by holding it close to the Driver's NFC tag.
- Voltage range is divided in 10 levels. Each level is 0.2V. Default voltage output is Level 1.

OUTPUT VOLTAGE LEVELS										
Rated Voltage	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
24V	24V	24.22V	24.44V	24.66V	24.88V	25.10V	25.32V	25.54V	25.66V	26V

Driver Address Setup

- Driver's default DALI Address is set to 255.
- Address can be changed with any of these devices:

- **NFC device**:
Use a NFC handheld device or hold handheld device close to driver's NFC device.

- **ProNFC app on smartphone**:
Hold smartphone close to driver's NFC tag.

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PROJECT: _____ **TYPE:** _____ **QTY:** _____

Driver Address Setup (Cont.)

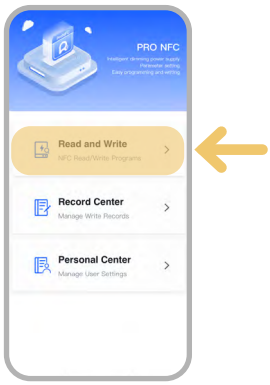
SETUP INSTRUCTIONS WITH ProNFC APP

1 Install the ProNFC app using the QR codes below.

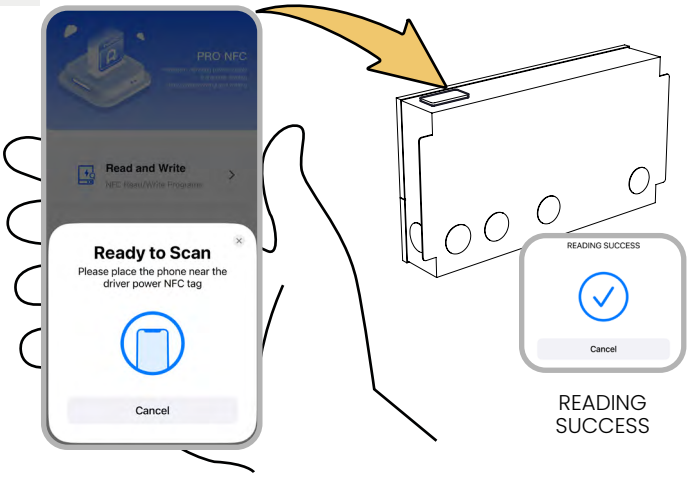
iOS

Android

2 Keep the phone away from Driver. Select *Read and Write*.



3 Hold the phone close to Driver's NFC tag.



READING SUCCESS

4 Set parameters as desired.

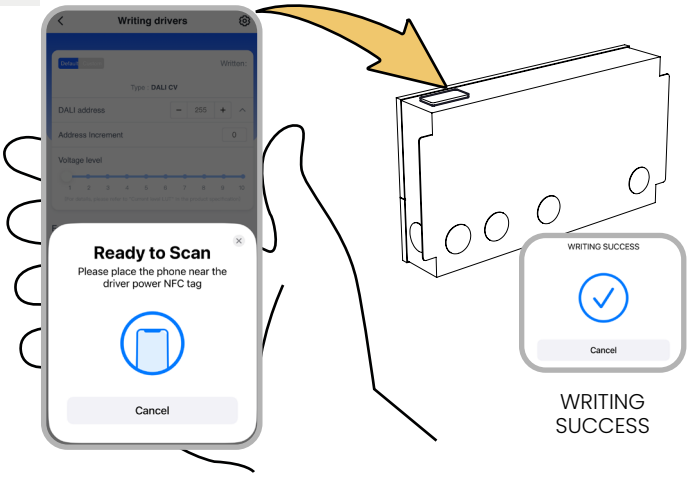
A Set *DALI Address* (Channel)

B Set *Address increment* (for multiple setup)

C Set *Voltage Level* (Refer to *Output Voltage Setup*)

D After setting parameters, select *Write All*

5 Hold the phone close to Driver's NFC tag.



WRITING SUCCESS

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