



Light  
is our passion

## 50W DALI 'Dim to Dark' LED Drivers

### Input characteristics

Input voltage AC	120-250V (ENEC) 120-277V (UL)
Input voltage DC	120-250V
Input current	0.65A max
Input frequency	50-60Hz
Efficiency @ full load	86%
Efficiency @ 2/3 load	≥85%
Power factor @ full load	>0.9C
THD @ full load	<20%
Inrush current	negligible: 30mA*s @ 277V
Surge protection	2kV DM, 2kV CM
Standby power	<0.5W

### Output characteristics

LED output power	50W max
LED output current range	150-1,400mA (settable)
LED output current resolution	programmable in 1mA steps
LED output current tolerance	+/- 5%
LED outputs	2 (UL Class 2)
LED output voltage range	1.5 - 55V

### Control characteristics

Control channels	2
Dimming protocol	DALI
Dimming range	100%-0%
Dimming curve	linear, logarithmic, or LightShape
LightShape	Tunable white, 2x pc-white
Dimming method	Hybrid HydraDrive
Driver configuration	with TOOLbox pro and FluxTool

### Product offering

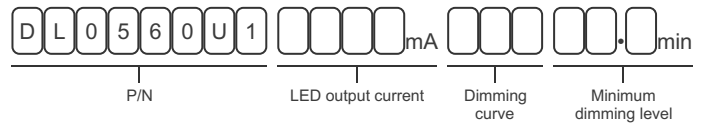


#### DUALdrive 560/U

P/N: DL0560U1

DUALdrive AC, 50W, DALI, 2 control channels, constant current, 2x 55V outputs, long metal

### Order number configuration - Standard



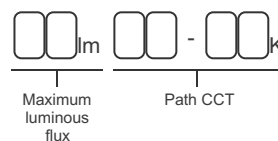
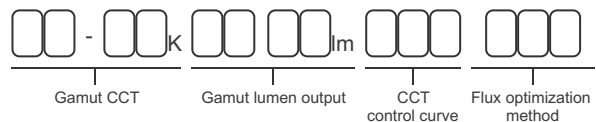
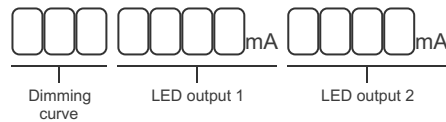
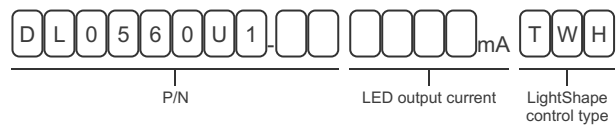
P/N: LED driver part number.

LED output current: in 1mA steps, e.g. "0258", "1011", etc.

Dimming curve: enter "LOG" for logarithmic (default) or "LIN" for linear dimming curve.

Minimum dimming level: write to one decimal place, e.g. "05.0" for 5%, "07.5" for 7.5%, "10.1" for 10.1%, etc. Leave blank if default minimum dimming level (0.1%) is required.

### Order number configuration - LightShape

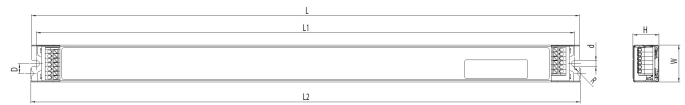


LED output current	<p>Output current identical for all outputs? Enter value in 1mA increments, e.g. "725" for 725mA and leave the fields "LED output 1" and "LED output 2" blank.</p> <p>Output current different per output? Enter "MCUR" in LED output current and specify the differing currents in LED output 1/2.</p>
LightShape control type	"TWH" stands for Tunable White
Gamut CCT	<p>LightShape-specific option. Enter the LEDs' CCT as "XX-YY" where XX is LED output 1 and YY is LED output 2. Available options per output: 18, 20, 22, 25, 27, 30, 35, 40, 50, 57 and 65. E.g. "18-50" for 1800K on LED output 1 and 5000K on LED output 2.</p>
Gamut lumen output	<p>Enter the lumen output range for LED output 1 and 2 as "XX-YY" where XX is LED output 1 and YY is LED output 2. Available range per output: from "01" for 100lm to "99" for 9900lm. E.g. "10-12" for 1000lm on LED output 1 and 1200lm on LED output 2.</p>
CCT control curve	Enter the required CCT control curve: "LOG" for logarithmic, "LIN" for linear
Flux optimization method	Leave blank if a consistent luminous flux output over the full CCT range is required (default); enter "MAX" if the luminous flux must be limited to a maximum value for all outputs combined.
Maximum luminous flux	If Flux optimization method is set to "MAX", specify the required lumen output, e.g. "12" for 1200lm. If left blank it is constant (default).
Path CCT	<p>Leave blank if Path CCT requires the same values as Gamut CCT. Or specify the Path CCT values as "XX-YY" where XX is LED output 1 and YY is LED output 2. Available options per output: 18, 20, 22, 25, 27, 30, 35, 40, 50, 57, 65. E.g. "18-50" for 1800K on LED output 1 and 5000K on LED output 2.</p>

## Dimensions, weight and packaging

### DUALdrive 560/U

LxWxH	444x29.9x21mm
Weight	364 g
Items per carton	28 pcs



## Standards and certifications

### Standards compliance

UL, Recognized Component	UL 1310, UL 8750 (Class 2 output) Type TL LED driver
EN	61347-1/-2-13, 62384, 55015, 55022, 61000-3-2, 61547, 62386-101/102/207
FCC	FCC 47 CFR Part 15 Class B
RoHS2	

### Certifications



## Wiring Specifications

Wire type	AWG 20-16, 0.5-1.5mm <sup>2</sup> solid or stranded copper
Wire strip length	9mm

## Wiring diagrams

### DUALdrive 560/U



## Thermal protection

External NTC thermistor	throttling @ 70 °C (settable)
External thermistor value	47kΩ
Recommended thermistors	238164063473 (leaded) NTCASCWE3473J (screw)

## Thermal specification

Ta operating range	-20 °C ... +50 °C
Tc max	80 °C
Tc lifetime	80 °C
Lifetime @ Tc lifetime	50,000 hours
Type TL	@1400mA: Tref 67 °C, max 86 °C

## Protection

LED output short	yes
Overload	yes
Reverse polarity	yes, for LED output
Restart after protection	yes

## Warranty

Warranty period	3 years
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