

Driver LC 38W 350–1050mA bDW TW SR PRE2
premium series Tunable White



Product description

- _ Independent dimmable constant current 2-channel LED Driver
- _ Forms automatically a wireless communication network with up to 250 nodes
- _ Adjustable output current between 350 and 1,050 mA via I-SELECT 2 plugs
- _ Max. output power 38 W
- _ Up to 87 % efficiency
- _ Power input on stand-by < 0.37 W
- _ Dimming range 1 to 100 %
- _ Suitable for luminaires of protection class I and protection class II (see data sheet chapter 3.4 for details)
- _ Nominal life-time up to 100,000 h
- _ 5-year guarantee

Housing properties

- _ Casing: polycarbonate, black
- _ Type of protection IP20
- _ Strain relief with loop through function

Interfaces

- _ basicDIM Wireless
- _ Terminal blocks: 45° / 0° push terminals

Functions

- _ Adjustable output current in 1-mA-steps (I-SELECT 2)
- _ Constant light output function (CLO)
- _ Power-up fading and fade2zero
- _ Protective features (overtemperature, short-circuit, overload, no-load, reduced surge amplification)
- _ Intelligent Voltage Guard (overvoltage and undervoltage monitoring)
- _ Suitable for emergency escape lighting systems acc. to EN 50172

Benefits

- _ Application-oriented operating window for maximum compatibility
- _ Best energy savings due to low stand-by losses

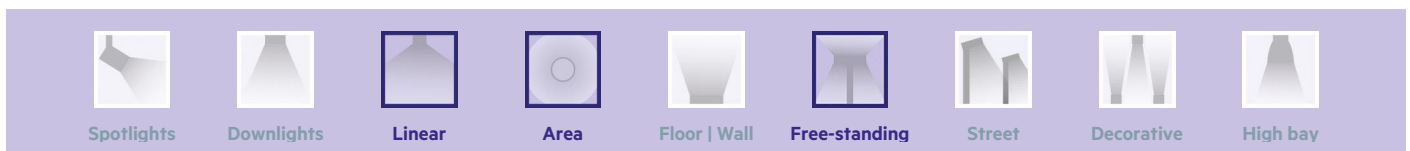
Typical applications

- _ For spot light and downlight in retail and hospitality applications
- _ Tunable white application



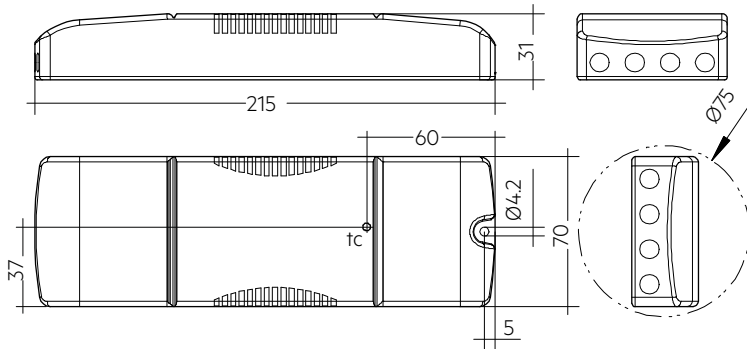
Website

<http://www.tridonic.com/28002584>



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The complete data sheet for this product is available in the Downloads section.



Ordering data

Type	Article number	Packaging, carton	Packaging, pallet	Weight per pc.
LC 38/350-1050/50 bDW TW SR PRE2	28002584	10 pc(s).	400 pc(s).	0.235 kg

Technical data

Rated supply voltage	220 – 240 V
AC voltage range	198 – 264 V
DC voltage range	176 – 280 V
Mains frequency	0 / 50 / 60 Hz
Overvoltage protection	320 V AC, 48 h
Typ. current (at 230 V, 50 Hz, full load) ^{①②}	96 – 192 mA
Typ. current (220 V, 0 Hz, full load, 15 % dimming level) ^②	35 mA
Leakage current (at 230 V, 50 Hz, full load) ^{①②}	< 500 µA
Typ. efficiency (at 230 V, 50 Hz, full load) ^②	87 %
λ (at 230 V, 50 Hz, full load) ^①	> 0.96
Typ. power input on stand-by	< 0.37 W
Typ. input current in no-load operation	22 mA
Typ. input power in no-load operation	< 0.5 W
In-rush current (peak / duration)	26.4 A / 224 µs
THD (at 230 V, 50 Hz, full load) ^①	< 10 %
Starting time (at 230 V, 50 Hz, full load) ^①	< 0.6 s
Starting time (DC mode)	< 0.4 s
Switchover time (AC/DC) ^③	< 0.2 s
Turn off time (at 230 V, 50 Hz, full load)	< 20 ms
Output current tolerance ^{④⑤}	± 3 %
Max. output current peak (non-repetitive)	≤ output current + 20 %
Output LF current ripple (< 120 Hz)	± 2 %
Output P_ST_LM	≤ 1
Output SVM	≤ 0.4
Max. output voltage (U-OUT)	60 V
Dimming range	1 – 100 %
Colour tuning range	2,700 – 6,500 K
Mains surge capability (between L - N)	1 kV
Mains surge capability (between L/N - PE)	2 kV
Surge voltage at output side (against PE)	< 500 V
Type of protection	IP20
Life-time	up to 100,000 h
Dimensions L x W x H	215 x 70 x 31 mm

Approval marks



Standards

EN 55015, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-13, EN 62384, EN 61547, EN 300330 V2.1.1, EN 301 489-1 V2.1.1, EN 301 489-3 V2.1.1, EN 300328 V2.1.1, EN 301 489-17 V2.1.1, Acc. to EN 50172, Acc. to EN 60598-2-22

Specific technical data

Type	Output ^⑥ current	Min. forward voltage	Max. forward voltage	Max. output power	Typ. power consumption (at 230 V, 50 Hz, full load)	Typ. current consumption (at 230 V, 50 Hz, full load)	tc point max.	Ambient temperature ta	I-SELECT 2 resistor value ^⑥
LC 38/350-1050/50 bDW TW SR PRE2	350 mA	20 V	50.0 V	17.5 W	21.1 W	96 mA	75 °C	-25 ... +60 °C	-
LC 38/350-1050/50 bDW TW SR PRE2	400 mA	20 V	50.0 V	20.0 W	23.7 W	107 mA	75 °C	-25 ... +55 °C	12.50 kΩ
LC 38/350-1050/50 bDW TW SR PRE2	450 mA	20 V	50.0 V	22.5 W	26.4 W	119 mA	75 °C	-25 ... +55 °C	11.11 kΩ
LC 38/350-1050/50 bDW TW SR PRE2	500 mA	20 V	50.0 V	25.0 W	29.1 W	130 mA	75 °C	-25 ... +55 °C	10.00 kΩ
LC 38/350-1050/50 bDW TW SR PRE2	550 mA	20 V	50.0 V	27.5 W	31.7 W	141 mA	75 °C	-25 ... +55 °C	9.09 kΩ
LC 38/350-1050/50 bDW TW SR PRE2	600 mA	20 V	50.0 V	30.0 W	34.4 W	152 mA	75 °C	-25 ... +55 °C	8.33 kΩ
LC 38/350-1050/50 bDW TW SR PRE2	650 mA	20 V	50.0 V	32.5 W	37.0 W	164 mA	75 °C	-25 ... +55 °C	7.69 kΩ
LC 38/350-1050/50 bDW TW SR PRE2	700 mA	20 V	50.0 V	35.0 W	39.9 W	176 mA	75 °C	-25 ... +55 °C	7.14 kΩ
LC 38/350-1050/50 bDW TW SR PRE2	750 mA	20 V	50.0 V	37.5 W	42.5 W	187 mA	75 °C	-25 ... +50 °C	6.67 kΩ
LC 38/350-1050/50 bDW TW SR PRE2	800 mA	20 V	47.5 V	38.0 W	42.9 W	189 mA	75 °C	-25 ... +50 °C	6.25 kΩ
LC 38/350-1050/50 bDW TW SR PRE2	850 mA	20 V	44.7 V	38.0 W	43.1 W	190 mA	75 °C	-25 ... +50 °C	5.88 kΩ
LC 38/350-1050/50 bDW TW SR PRE2	900 mA	20 V	42.2 V	38.0 W	43.3 W	191 mA	75 °C	-25 ... +50 °C	5.56 kΩ
LC 38/350-1050/50 bDW TW SR PRE2	950 mA	20 V	40.0 V	38.0 W	43.4 W	191 mA	75 °C	-25 ... +50 °C	5.26 kΩ
LC 38/350-1050/50 bDW TW SR PRE2	1,000 mA	20 V	38.0 V	38.0 W	43.4 W	191 mA	75 °C	-25 ... +50 °C	5.00 kΩ
LC 38/350-1050/50 bDW TW SR PRE2	1,050 mA	20 V	36.2 V	38.0 W	43.6 W	192 mA	75 °C	-25 ... +50 °C	0.00 kΩ

① Valid at 100 % dimming level.

② Depending on the selected output current.

③ Valid for immediate change of power supply type otherwise the starting time is valid.

④ Output current is mean value.

⑤ The table only lists a number of possible operating points but does not cover each single point. The output current can be set within the total value range in 1-mA-steps.

⑥ Not compatible with I-SELECT (generation 1). Calculated resistor value.