

**Driver LC 45W 500–1400mA bdW SC PRE2**

premium series



With strain-relief

**Product description**

- \_ Dimmable built-in constant current LED Driver
- \_ Can be either used built-in or independent with clip-on strain-relief (see accessory)
- \_ Forms automatically a wireless communication network with up to 250 nodes
- \_ Adjustable output current between 500 and 1,400 mA via ready2mains Programmer or I-SELECT 2 plugs
- \_ Max. output power 45 W
- \_ Up to 91 % efficiency
- \_ Power input on stand-by < 0.35 W
- \_ Dimming range 1 to 100 %
- \_ For luminaires of protection class I and protection class II
- \_ Nominal life-time up to 100,000 h
- \_ 5-year guarantee

**Housing properties**

- \_ Casing: polycarbonate, white
- \_ Type of protection IP20

**Interfaces**

- \_ basicDIM Wireless
- \_ ready2mains (configuration via mains)
- \_ Terminal blocks: 0° push terminals

**Functions**

- \_ Adjustable output current in 1-mA-steps (ready2mains, I-SELECT 2)
- \_ Constant light output function (CLO)
- \_ Power-up fading at AC
- \_ Configurable via ready2mains
- \_ Service monitor to log certain events
- \_ Protective features (overtemperature, short-circuit, overload, no-load, input voltage range, 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 and high efficiency
- \_ Flexible configuration via basicDIM Wireless, ready2mains and I-SELECT 2

**Typical applications**

- \_ For linear/area lighting in office applications

**Website**

<http://www.tridonic.com/28002414>



Spotlights



Downlights



Linear



Area



Floor | Wall



Free-standing



Street



Decorative

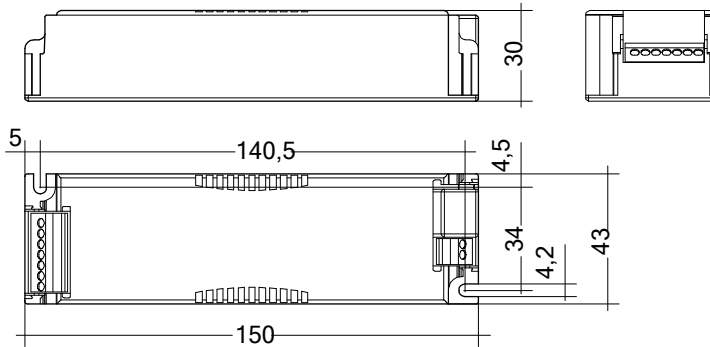


High bay

**Driver LC 45W 500–1400mA bDW SC PRE2**

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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 45/500-1400/50 bDW SC PRE2	28002414	10 pc(s).	1,000 pc(s).	0.146 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) <sup>①②</sup>	132 – 224 mA
Typ. current (220 V, 0 Hz, full load, 15 % dimming level) <sup>②</sup>	29 – 44 mA
Leakage current (at 230 V, 50 Hz, full load) <sup>①②</sup>	< 160 µA
Max. input power	50 W
Typ. efficiency (at 230 V, 50 Hz, full load) <sup>②</sup>	91 %
λ (at 230 V, 50 Hz, full load) <sup>①</sup>	0.98
Typ. power input on stand-by	< 0.35 W
Typ. input current in no-load operation	25.7 mA
Typ. input power in no-load operation	0.36 W
In-rush current (peak / duration)	23 A / 200 µs
THD (at 230 V, 50 Hz, full load) <sup>①</sup>	< 5 %
Starting time (at 230 V, 50 Hz, full load) <sup>①</sup>	< 0.3 s
Starting time (DC mode)	< 0.3 s
Switchover time (AC/DC) <sup>③</sup>	< 0.3 s
Turn off time (at 230 V, 50 Hz, full load)	< 20 ms
Output current tolerance <sup>①④</sup>	± 3 %
Max. output current peak (non-repetitive)	≤ output current + 40 %
Output LF current ripple (< 120 Hz)	± 2 %
Output P_ST_LM (at full load)	≤ 1
Output SVM (at full load)	≤ 0.4
Max. output voltage (U-OUT)	60 V
Dimming range	1 – 100 %
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	150 x 43 x 30 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 current <sup>④</sup>	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 <sub>ta</sub>	I-SELECT 2 resistor value <sup>⑤</sup>
LC 45/500-1400/50 bDW SC PRE2	500 mA	25 V	50.0 V	25.0 W	29.3 W	133 mA	80 °C	-25 ... +50 °C	-
LC 45/500-1400/50 bDW SC PRE2	550 mA	25 V	50.0 V	27.5 W	31.8 W	144 mA	80 °C	-25 ... +50 °C	9.09 kΩ
LC 45/500-1400/50 bDW SC PRE2	600 mA	25 V	50.0 V	30.0 W	34.4 W	150 mA	85 °C	-25 ... +50 °C	8.33 kΩ
LC 45/500-1400/50 bDW SC PRE2	650 mA	25 V	50.0 V	32.5 W	37.0 W	166 mA	85 °C	-25 ... +50 °C	7.69 kΩ
LC 45/500-1400/50 bDW SC PRE2	700 mA	25 V	50.0 V	35.0 W	39.5 W	176 mA	85 °C	-25 ... +50 °C	7.14 kΩ
LC 45/500-1400/50 bDW SC PRE2	750 mA	25 V	50.0 V	37.5 W	42.1 W	187 mA	85 °C	-25 ... +50 °C	6.67 kΩ
LC 45/500-1400/50 bDW SC PRE2	800 mA	25 V	50.0 V	40.0 W	44.7 W	198 mA	85 °C	-25 ... +50 °C	6.25 kΩ
LC 45/500-1400/50 bDW SC PRE2	850 mA	25 V	50.0 V	42.5 W	47.3 W	210 mA	85 °C	-25 ... +50 °C	5.88 kΩ
LC 45/500-1400/50 bDW SC PRE2	900 mA	25 V	50.0 V	45.0 W	49.9 W	221 mA	85 °C	-25 ... +50 °C	5.56 kΩ
LC 45/500-1400/50 bDW SC PRE2	950 mA	25 V	47.4 V	45.0 W	49.9 W	221 mA	85 °C	-25 ... +50 °C	5.26 kΩ
LC 45/500-1400/50 bDW SC PRE2	1,000 mA	25 V	45.0 V	45.0 W	49.8 W	220 mA	85 °C	-25 ... +50 °C	5.00 kΩ
LC 45/500-1400/50 bDW SC PRE2	1,050 mA	25 V	42.9 V	45.0 W	49.8 W	220 mA	85 °C	-25 ... +50 °C	4.76 kΩ
LC 45/500-1400/50 bDW SC PRE2	1,100 mA	25 V	40.9 V	45.0 W	49.7 W	220 mA	85 °C	-25 ... +50 °C	4.55 kΩ
LC 45/500-1400/50 bDW SC PRE2	1,150 mA	25 V	39.1 V	45.0 W	49.7 W	220 mA	85 °C	-25 ... +50 °C	4.35 kΩ
LC 45/500-1400/50 bDW SC PRE2	1,200 mA	25 V	37.5 V	45.0 W	49.8 W	220 mA	85 °C	-25 ... +50 °C	4.17 kΩ
LC 45/500-1400/50 bDW SC PRE2	1,250 mA	25 V	36.0 V	45.0 W	49.8 W	220 mA	85 °C	-25 ... +50 °C	4.00 kΩ
LC 45/500-1400/50 bDW SC PRE2	1,300 mA	25 V	34.6 V	45.0 W	49.9 W	221 mA	85 °C	-25 ... +50 °C	3.85 kΩ
LC 45/500-1400/50 bDW SC PRE2	1,350 mA	25 V	33.3 V	45.0 W	49.9 W	221 mA	85 °C	-25 ... +50 °C	3.70 kΩ
LC 45/500-1400/50 bDW SC PRE2	1,400 mA	25 V	32.1 V	44.9 W	50.0 W	221 mA	85 °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.

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