

Rectangular LED modules 225x225mm

Product description

- Long life-time
- Built-in, constant current LED module
- Re-workable push-in terminals enabling easy connection
- Compliance and approval: CE, ENEC
- Available CCT from 2700K to 6500K and CRI 80, 90



RecLED CRI 80 Optimum G1

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ φ [lm]	Useful luminous flux ² [lm]	Voltage ¹ Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
RecLED 225x225mm 1500lm 830 30V EMG SSW Opt G1 Emergency light	1010 117 42946	3000	300	1486	1537	27	8.2	181	80	1200	C
RecLED 225x225mm 1500lm 840 30V EMG SSW Opt G1 Emergency light	1010 117 43146	4000	300	1561	1615	27	8.2	190	80	1200	C
			300	145	150	2.8	0.9	170	40	600	
			300	152	158	2.8	0.9	179	40	600	

¹At nominal current and T_p

²At nominal current and 25°C

³It is recommended not to operate below minimum current in order to avoid un-even brightness

Tolerance range for optical and electrical ±10%

Temperature & humidity

Specification item	Unit	Value
T _p	[°C]	45
T _p rated	[°C]	65
T _c	[°C]	85
Relative humidity (non-condensing)	[%]	5 ... 85
Storage ambient temperature	[°C]	-25 ... +85
Storage relative humidity (non-condensing)	[%]	5 ... 85

T_p - Temperature related to the performance parameters of the LED modules

T_p rated - Maximum operating temperature to which the rated performance characteristics are declared

T_c - Highest permissible value for safe operation

Technical data

Specification item	Unit	Value
Classification acc. to IEC 62031		built-in
Working voltage	[Vdc]	60
Beam angle	[deg]	120
Initial color consistency	[SDCM]	3
Photobiological safety		RG1 unlimited

Color coordinates

According to CIE 1931

Specification item	CIEx	CIEy
2700K	0.4578	0.4101
3000K	0.4338	0.4030
4000K	0.3818	0.3797
6500K	0.3123	0.3282

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Certificates & standards

Specification item	Compliant
ENEC	Yes
CE	Yes
RoHS	Yes
REACH	Yes
Zhaga	No
IP rating	No IP rating

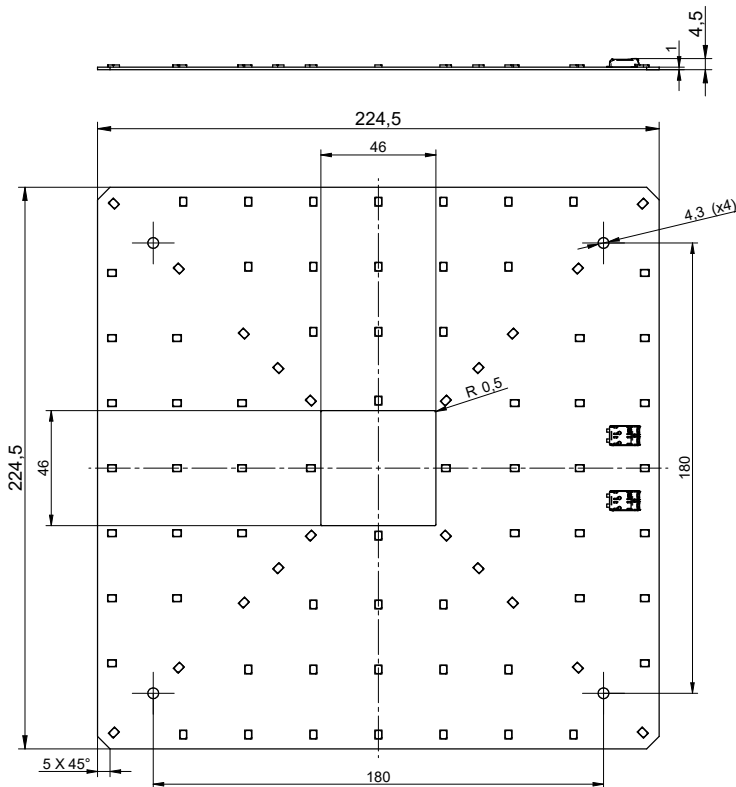
Lumen maintenance

RecLED CRI 80

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>102 000	>102 000	>102 000	>102 000	79 000	70 000
	55°C	>102 000	>102 000	>102 000	>102 000	79 000	70 000
	65°C	>102 000	>102 000	>102 000	>102 000	78 000	69 000
	75°C	>102 000	>102 000	>102 000	>102 000	77 000	68 000
	85°C	>102 000	>102 000	>102 000	>102 000	76 000	68 000
If max	45°C	>72 000	>72 000	>72 000	>72 000	51 000	39 000
	55°C	>72 000	>72 000	>72 000	>72 000	51 000	39 000
	65°C	>72 000	>72 000	>72 000	>72 000	48 000	37 000
	75°C	>72 000	>72 000	>72 000	>72 000	45 000	35 000
	85°C	>72 000	>72 000	>72 000	69 000	43 000	34 000

reported data based on LM80 LED data (@65mA 17000h / @160mA & 200mA 12000h)

Dimensions



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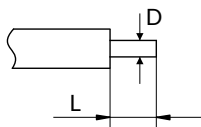
Mounting

LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepage distance between screw's head and surface of the pcb. Max. torque for fixing: 0,5Nm.

LED modules are sensitive to electrostatic discharge (ESD). Follow safety regulations according to IEC 61340-5-1.

Wiring

Wire cross section and strip length:



D - wire cross section (solid and flexible wires)	Min	Max
	0.2mm ²	0.75mm ²
	AWG 24	AWG 18

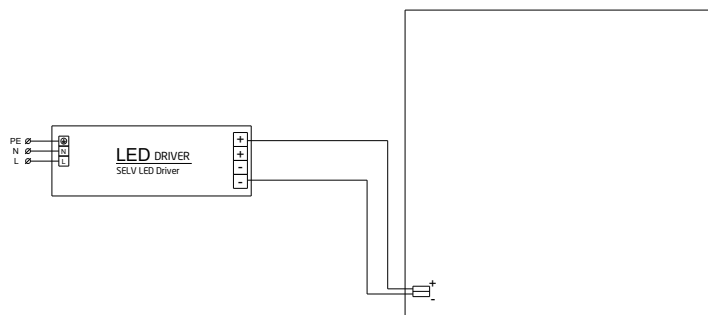
L - strip length	Min	Max
	8mm	9mm

Opening for the release of wires from the top with release pin Electroterminal art. 881 167 884:



Connections

Wiring for parallel connection system



To prevent irregular luminous intensity in parallel connection use only LED modules from the same V-code group. V-code (e.g. *A*, *B*, *AB*) is printed on the LED module and box label. Naming is not adequate to efficacy or luminous flux.

Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
RecLED 225x225mm 1500lm 830 30V EMG SSW Opt G1	1010 117 42946	20	2100	238 x 238 x 91
RecLED 225x225mm 1500lm 840 30V EMG SSW Opt G1	1010 117 43146	20	2100	238 x 238 x 91