

Rectangular LED modules 400x400mm

Product description

- Long life-time
- Re-workable push-in terminals enabling easy connection
- Compliance and approval: CE
- Small colour tolerance (MacAdam3)
- Tolerance range for optical and electrical $\pm 10\%$
- Available CCT from 2200K to 6500K and CRI 80, 90 and 95



Optimum CRI 80

Product name	Ordering code	Colour temp. [K]	If nominal [mA]	Luminous flux @ If nom & Tp Φ [lm]	Voltage @ If nom & Tp Vf [V]	Power @ If nom & Tp P [W]	Efficiency @ If nom & Tp [lm/W]	Max. current If [mA]
RecLED 400x400mm 5000lm 830 36V Opt G2	101011739446	3000	850	4799	34	29	166	1800
RecLED 400x400mm 5000lm 830 108V Opt G2	101011739246		280	4746	102	29	166	600
RecLED 400x400mm 5000lm 840 36V Opt G2	101011739546	4000	850	5044	34	29	175	1800
RecLED 400x400mm 5000lm 840 108V Opt G2	101011739346		280	4988	102	29	175	600

Optimum CRI 90

Product name	Ordering code	Colour temp. [K]	If nominal [mA]	Luminous flux @ If nom & Tp Φ [lm]	Voltage @ If nom & Tp Vf [V]	Power @ If nom & Tp P [W]	Efficiency @ If nom & Tp [lm/W]	Max. current If [mA]
RecLED 400x400mm 5000lm 927 36V Opt G2	101011772946	2700	960	4371	35	33	131	1800
RecLED 400x400mm 5000lm 927 108V Opt G2	101011735946		320	4371	104	33	131	600
RecLED 400x400mm 5000lm 930 36V Opt G2	101011773046	3000	960	4695	35	33	141	1800
RecLED 400x400mm 5000lm 930 108V Opt G2	101011736046		320	4695	104	33	141	600
RecLED 400x400mm 5000lm 940 36V Opt G2	101011773146	4000	960	5019	35	33	151	1800
RecLED 400x400mm 5000lm 940 108V Opt G2	101011736146		320	5019	104	33	151	600

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Temperatures

Specification item

T_p	45°C	Temperature related to the performance parameters of the LED modules
T_{p rated}	65°C	Maximum operating temperature to which the rated performance characteristics are declared
T_c	85°C	Highest permissible value for safe operation

Electrical & Optical data

Specification item	Unit	Value
Classification acc. to IEC 62031	[V]	built-in
Energy Efficiency Class		A++
Working Voltage	[Vdc]	350
Beam angle	[deg]	120
Initial color consistency	[step]	3
Initial color coordinates		Acc. to CIE 1931
Photobiological safety		RG1 unlimited

Certificates & standards

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

Lumen maintenance

ReclLED CRI 80

Forward current	T _p temperature	L70		L80		L90	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>60,000	>60,000	>60,000	>60,000	>60,000	>60,000
	55°C	>60,000	>60,000	>60,000	>60,000	>60,000	>60,000
	65°C	>60,000	>60,000	>60,000	>60,000	>60,000	53,000
If max	45°C	>60,000	>60,000	>60,000	>60,000	>60,000	57,000
	55°C	>60,000	>60,000	>60,000	>60,000	>60,000	54,000
	65°C	>60,000	>60,000	>60,000	>60,000	>60,000	48,000

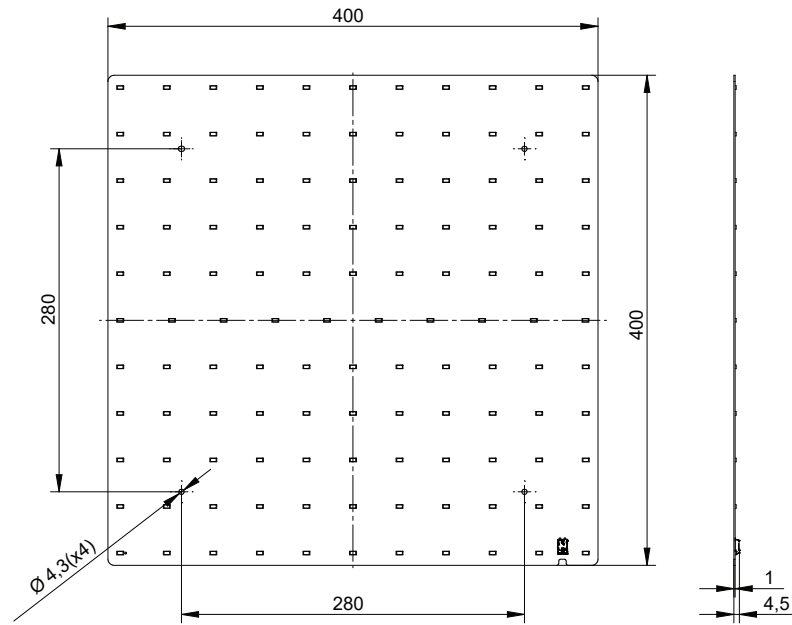
ReclLED CRI 90

Forward current	T _p temperature	L70		L80		L90	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>60,000	>60,000	>60,000	>60,000	>60,000	>60,000
	55°C	>60,000	>60,000	>60,000	>60,000	>60,000	>60,000
	65°C	>60,000	>60,000	>60,000	>60,000	>60,000	>60,000
If max	45°C	>60,000	>60,000	52,000	49,000	29,000	28,000
	55°C	>60,000	>60,000	50,000	46,000	27,000	26,000
	65°C	>60,000	>60,000	47,000	44,000	25,000	24,000

simulation based on LM80 LED data (10,000h)

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Dimensions



Mounting

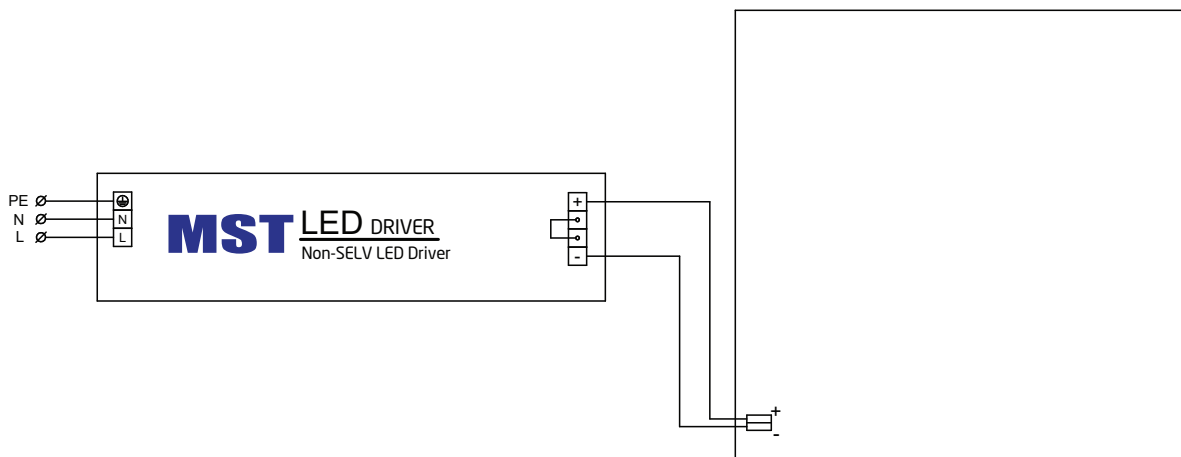
LED Modules cannot be exposed to tensile or compressive stresses.

For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws.

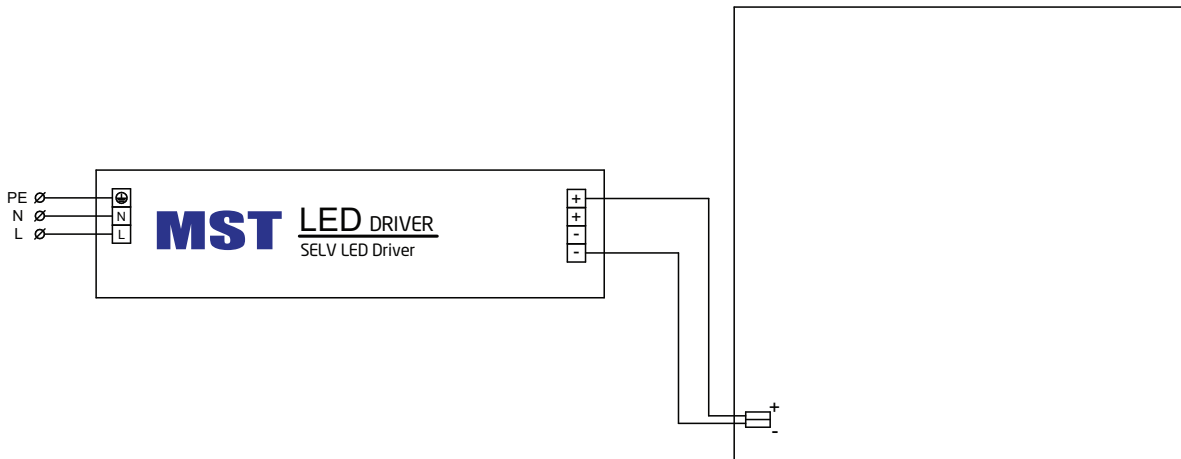
Additionally plastic flat washer should be used to ensure creepage distance between screw's head and surface of the pcb.

Max. torque for fixing: 0,5Nm

Connections

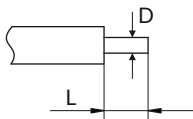


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Wiring

Wire cross section and strip length:



D - wire cross section <i>solid and flexible wires</i>	Min	Max
	0.2mm ²	0.75mm ²
	AWG 18	AWG 24

L - strip length	Min	Max
	8mm	9mm

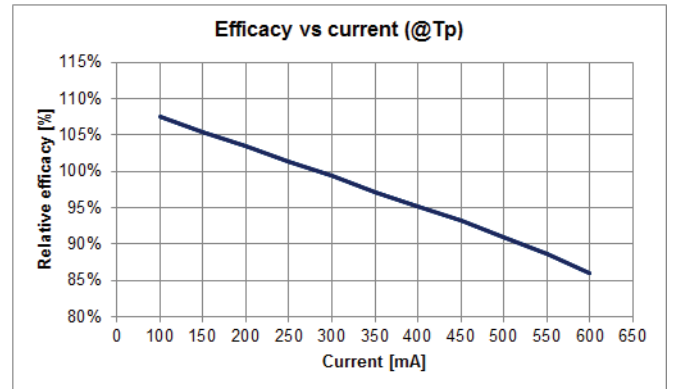
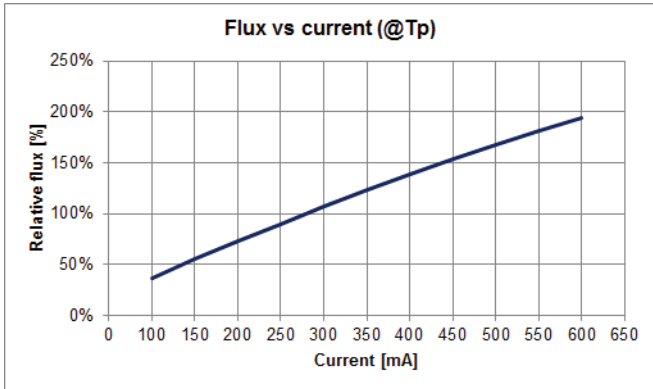
Opening for the release of wires from the top with release pin Electroterminal art. 881 167 884:



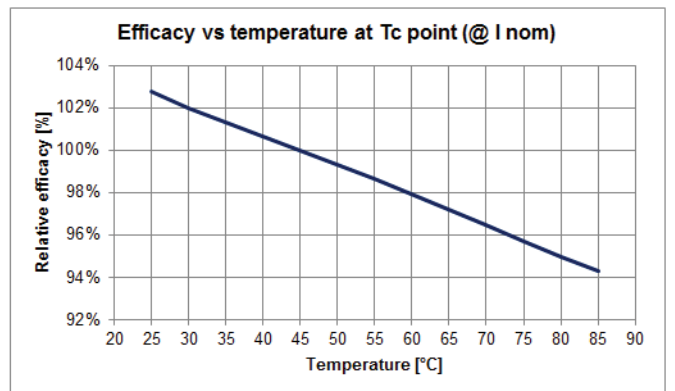
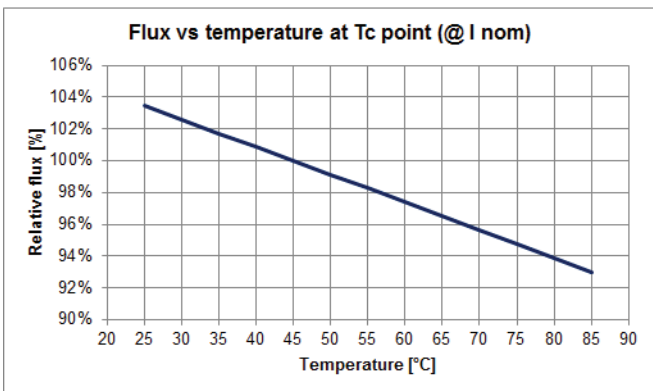
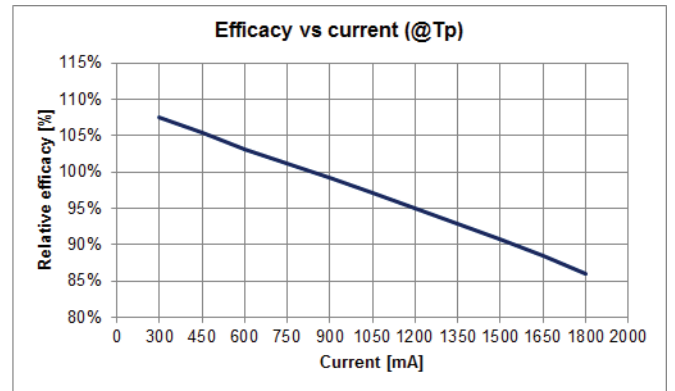
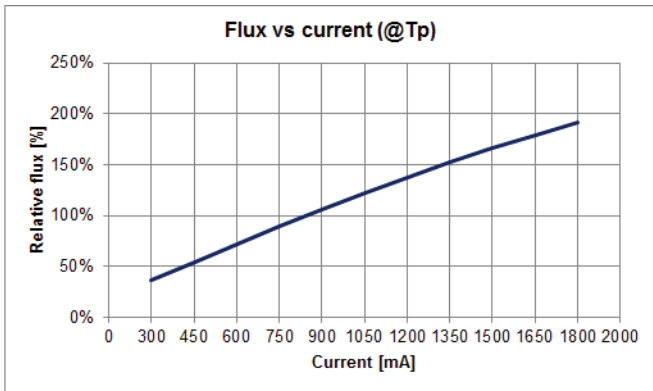
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Performance CRI 80

RecLED 400x400mm 5000lm 8xx 108V Opt G2



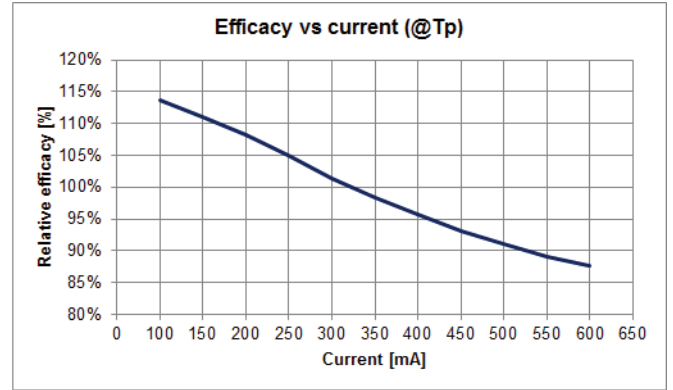
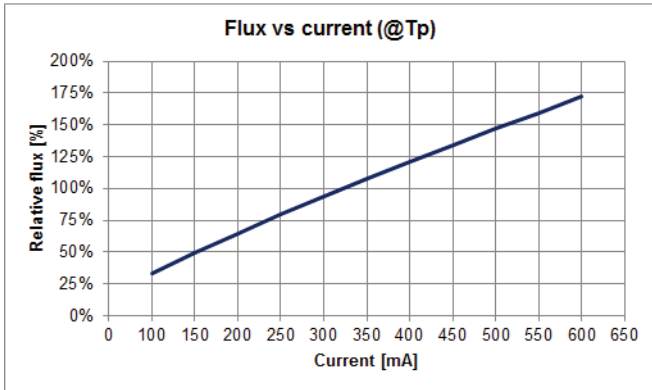
RecLED 400x400mm 5000lm 8xx 36V Opt G2



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Performance CRI 90

RecLED 400x400mm 5000lm 9xx 108V Opt G2



RecLED 400x400mm 5000lm 9xx 36V Opt G2

