

Round LED modules 190mm

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



RdLED CRI 80 CJ G4

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ Φ [lm]	Useful luminous flux ² [lm]	Voltage Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 190mm 1500lm 830 36V EMG CJ G4	1010 147 65346	3000	240	1487	1525	32	7,7	194	50	1000	C
Emergency light			300	153	157	2,7	0,8	189	40	800	
RdLED 190mm 1500lm 840 36V EMG CJ G4	1010 147 65446	4000	240	1546	1586	32	7,7	202	50	1000	B
Emergency light			300	159	163	2,7	0,8	196	40	800	

RdLED CRI 80 CN G3

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ Φ [lm]	Useful luminous flux ² [lm]	Voltage Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 190mm 1500lm 830 36V EMG CN G3	1010 147 65146	3000	250	1482	1534	32	8,0	185	50	750	C
Emergency light			320	156	161	2,7	0,9	178	40	600	
RdLED 190mm 1500lm 840 36V EMG CN G3	1010 147 65246	4000	250	1563	1618	32	8,0	195	50	750	C
Emergency light			320	164	170	2,7	0,9	188	40	600	

RdLED CRI 80 LG G2

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ Φ [lm]	Useful luminous flux ² [lm]	Voltage Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 190mm 1500lm 830 36V EMG LG G2	1010 147 64946	3000	250	1446	1491	33	8,2	177	50	750	C
Emergency light			320	148	153	2,8	0,9	166	40	600	
RdLED 190mm 1500lm 840 36V EMG LG G2	1010 147 65046	4000	250	1536	1584	33	8,2	188	50	750	C
Emergency light			320	157	162	2,8	0,9	176	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%

Round LED modules 190mm

Temperature & humidity

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

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

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

Tc - Highest permissible value for safe operation

Technical data

Specification item	Unit	Value
Classification acc. to IEC 62031		built-in
Working voltage	[Vdc]	350
Beam angle	[deg]	120
Initial color consistency	[SDCM]	3
Photobiological safety		RG1 unlimited

Color coordinates

According to CIE 1931

Specification item	CIE _x	CIE _y
2700K	0.4578	0.4101
3000K	0.4338	0.4030
4000K	0.3818	0.3797
6500K	0.3123	0.3282

Certificates & standards

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

Lumen maintenance

for LE G5, LG G2, LA G3

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C>100 000	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	55°C>100 000	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	65°C>100 000	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	75°C>100 000	>100 000	>100 000	>100 000	>100 000	98 000	98 000
	85°C>100 000	>100 000	>100 000	>100 000	>100 000	81 000	73 000
If max	45°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000
	55°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000
	65°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000
	75°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000
	85°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000

Calculated data based on LM80 LED data (12 000h)

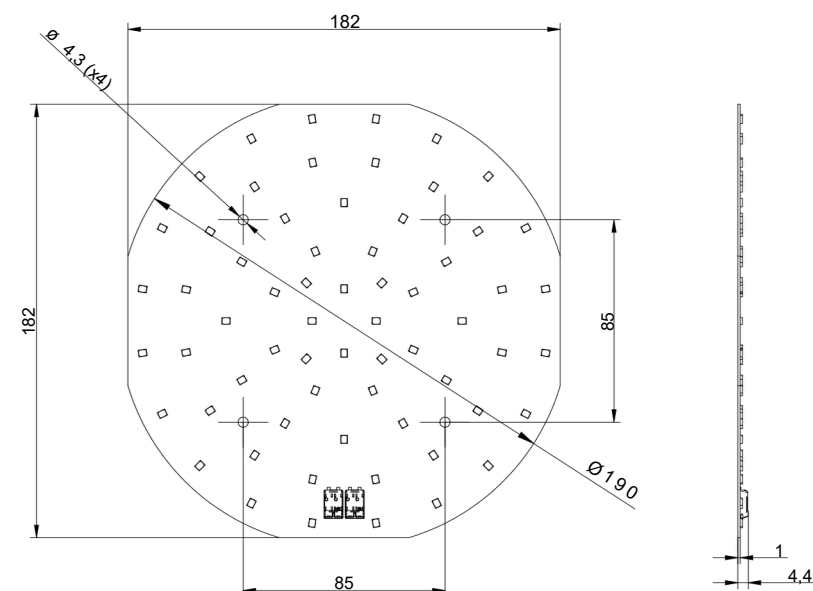
for CJ G4, CN G3

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	>102 000	>102 000	>102 000
	55°C>102 000	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	65°C>102 000	>102 000	>102 000	>102 000	>102 000	89 000	88 000
	75°C>102 000	>102 000	>102 000	>102 000	>102 000	75 000	74 000
	85°C>102 000	>102 000	>102 000	>102 000	>102 000	64 000	63 000
If max	45°C>102 000	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	55°C>102 000	>102 000	>102 000	>102 000	>102 000	97 000	96 000
	65°C>102 000	>102 000	>102 000	>102 000	>102 000	82 000	81 000
	75°C>102 000	>102 000	>102 000	>102 000	>102 000	69 000	68 000
	85°C>102 000	>102 000	>102 000	>102 000	>102 000	59 000	58 000

Reported data based on LM80 LED data (17 000h)

Round LED modules 190mm

Dimensions



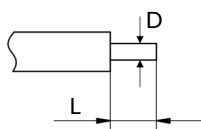
Mounting

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.

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

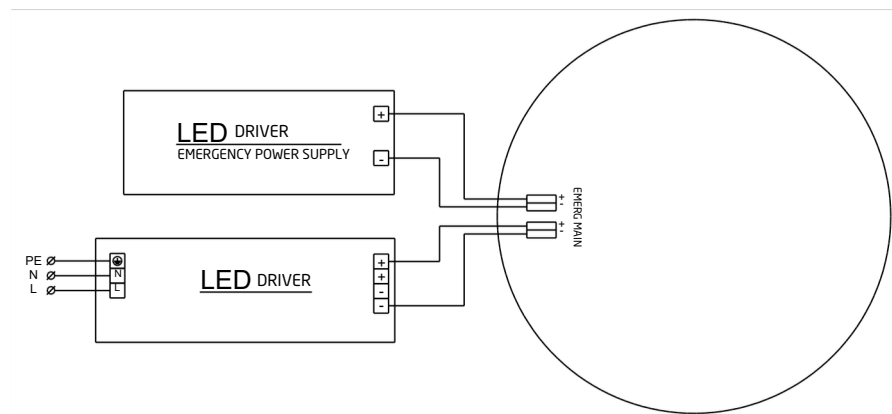
L - strip length	Min	Max
	8mm	9mm

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



Round LED modules 190mm

Connections



Energy Label / EPREL database

To obtain Energy Label for this product visit <https://eprel.ec.europa.eu/> and enter model identifier

Model identifier consists of 10 digits XXXX XXX XXX. It is printed directly on the LED module or on product label. This is the number you can see in EPREL database.

Ordering code consist of 12 digits XXXX XXX XXX46. Additional last two digits means packaging of the product.

Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
RdLED 190mm 1500lm 830 36V EMG CJ G4	1010 147 65346	20	2700	238 x 238 x 91
RdLED 190mm 1500lm 840 36V EMG CJ G4	1010 147 65446	20	2700	238 x 238 x 91
RdLED 190mm 1500lm 830 36V EMG CN	1010 147 65146	20	2700	238 x 238 x 91
G3 RdLED 190mm 1500lm 840 36V EMG	1010 147 65246	20	2700	238 x 238 x 91
CN G3 RdLED 190mm 1500lm 830 36V	1010 147 64946	20	2700	238 x 238 x 91
EMG LG G2 RdLED 190mm 1500lm 840 36V EMG LG G2	1010 147 65046	20	2700	238 x 238 x 91