

Round LED modules 350mm

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 Optimum G4

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux* ϕ [lm]	Voltage* Vf [V]	Power* P [W]	Efficacy* [lm/W]	Current maximum If max [mA]
RdLED 350mm 4000lm 830 36V Opt G4	1010 117 83046	3000	680	3878	33	23	172	1600
RdLED 350mm 4000lm 840 36V Opt G4	1010 117 83146	4000	680	4202	33	23	186	1600

RdLED CRI 80 Optimum G3

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux* ϕ [lm]	Voltage* Vf [V]	Power* P [W]	Efficacy* [lm/W]	Current maximum If max [mA]
RdLED 350mm 4000lm 830 144V Opt G3	1010 117 55946	3000	175	3969	135	24	168	300
RdLED 350mm 4000lm 830 36V Opt G3	1010 117 56146		700	3969	34	24	168	1200
RdLED 350mm 4000lm 840 144V Opt G3	1010 117 56046	4000	175	4172	135	24	177	300
RdLED 350mm 4000lm 840 36V Opt G3	1010 117 56246		700	4172	34	24	177	1200

RdLED CRI 90 Optimum G3

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux* ϕ [lm]	Voltage* Vf [V]	Power* P [W]	Efficacy* [lm/W]	Current maximum If max [mA]
RdLED 350mm 4000lm 927 144V Opt G3	1010 117 68546	2700	200	3567	142	28	125	300
RdLED 350mm 4000lm 927 36V Opt G3	1010 117 68846		800	3567	36	28	125	1200
RdLED 350mm 4000lm 930 144V Opt G3	1010 117 68646	3000	200	3831	142	28	135	300
RdLED 350mm 4000lm 930 36V Opt G3	1010 117 68946		800	3831	36	28	135	1200
RdLED 350mm 4000lm 940 144V Opt G3	1010 117 68746	4000	200	4095	142	28	144	300
RdLED 350mm 4000lm 940 36V Opt G3	1010 117 69046		800	4095	36	28	144	1200

*At nominal current and T_p

Tolerance range for optical and electrical $\pm 10\%$

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

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Technical data

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

Certificates & standards

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

Lumen maintenance

for LinLED CRI 80 Optimum G4

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>72 000	>72 000	>72 000	>72 000	43 000	38 000
	65°C	>72 000	>72 000	>72 000	>72 000	33 000	29 000
	85°C	>72 000	>72 000	>72 000	>72 000	28 000	25 000

reported data based on LM80 LED data 10 000h

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Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>72 000	>72 000	>72 000	>72 000	66 000	56 000
	55°C	>72 000	>72 000	>72 000	>72 000	66 000	56 000
	65°C	>72 000	>72 000	>72 000	>72 000	64 000	55 000
	75°C	>72 000	>72 000	>72 000	>72 000	63 000	53 000
	85°C	>72 000	>72 000	>72 000	>72 000	61 000	53 000
	45°C	>72 000	>72 000	>72 000	>72 000	51 000	39 000
If max	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	>72 000	43 000	34 000

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

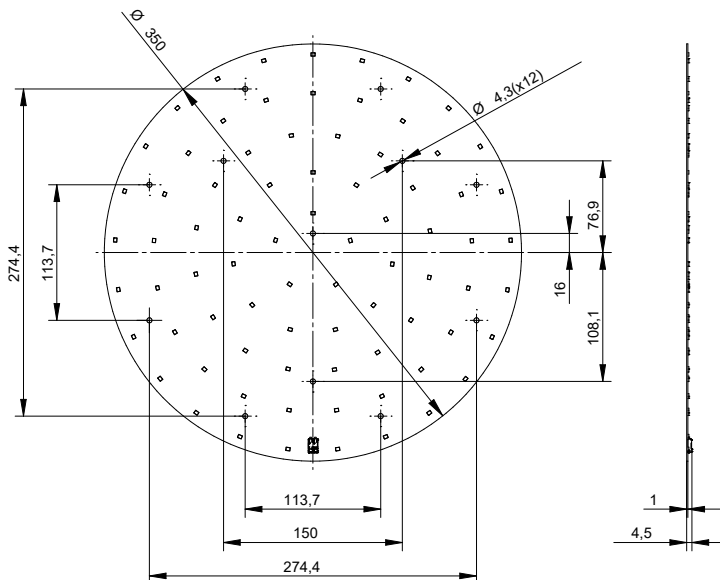
RdLED CRI 90

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>60 000	>60 000	>60 000	>60 000	52 000	50 000
	65°C	>60 000	>60 000	>60 000	>60 000	42 000	41 000
	85°C	>60 000	>60 000	>60 000	>60 000	34 000	30 000
If max	45°C	>60 000	>60 000	52 000	49 000	29 000	28 000
	65°C	>60 000	>60 000	47 000	44 000	25 000	24 000
	85°C	>60 000	58 000	41 000	38 000	22 000	19 000

reported data based on LM80 LED data 10 000h

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Dimensions



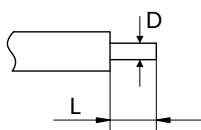
Mounting

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.

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

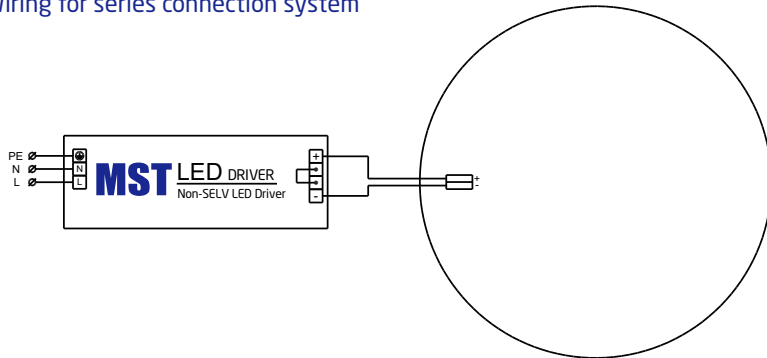
Opening for the release of wires from the top with release pin Electroterminal art. 881 167 884:



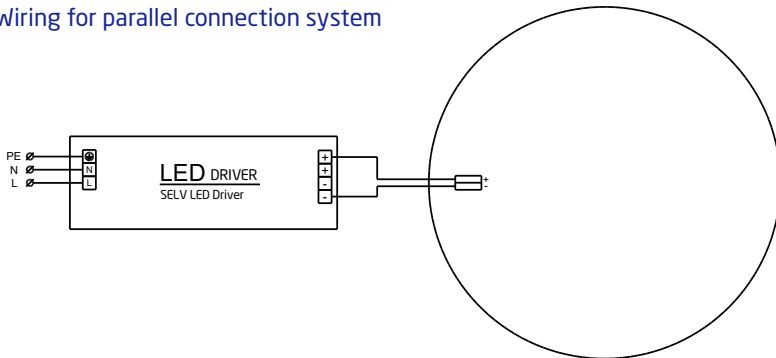
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Connections

Wiring for series connection system



Wiring for parallel connection system



Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
RdLED 350mm 4000lm 830 144V Opt G3	1010 117 55946	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 830 36V Opt G3	1010 117 56146	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 840 144V Opt G3	1010 117 56046	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 840 36V Opt G3	1010 117 56246	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 827 144V Opt G3	1010 117 68546	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 827 36V Opt G3	1010 117 68846	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 830 144V Opt G3	1010 117 68646	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 830 36V Opt G3	1010 117 68946	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 840 144V Opt G3	1010 117 68746	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 840 36V Opt G3	1010 117 69046	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 830 36V Opt G4	1010 117 83046	12	1008	363 x 363 x 58
RdLED 350mm 4000lm 840 36V Opt G4	1010 117 83146	12	1008	363 x 363 x 58