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Chrobrego 8, 11-400 Kętrzyn, Poland
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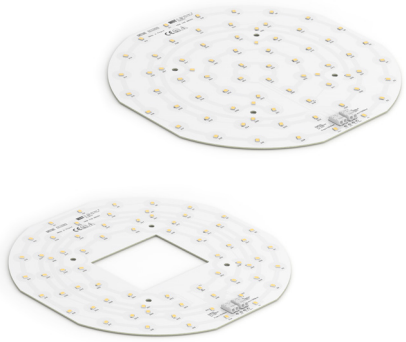
Round LED modules 220mm

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 2200K 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[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
RdLED 220mm 1500lm 830 EMG 24V CJ G4	1010 137 59746	3000	360	1488	1526	21	7.7	194	80	2400	C
Emergency light			360	182	187	2.7	1.0	185	40	1200	
RdLED 220mm 1500lm 830 EMG SSW 24V CJ G4	1010 137 59846		360	1488	1526	21,3	7,7	194	80	2400	C
Emergency light			360	182	187	2,7	1,0	185	40	1200	
RdLED 220mm 1500lm 840 EMG 24V CJ G4	1010 137 46846	4000	360	1548	1587	21	7.7	202	80	2400	B
Emergency light			360	189	194	2.7	1.0	193	40	1200	
RdLED 220mm 1500lm 840 EMG SSW 24V CJ G4	1010 137 59946		360	1548	1587	21,3	7,7	202	80	2400	B
Emergency light			360	189	194	2,7	1,0	193	40	1200	

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[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
RdLED 220mm 1500lm 830 EMG 24V CN G3	1010 147 66146	3000	370	1465	1516	21.4	7.9	185	80	1200	C
Emergency light			370	179	185	2.8	1.0	176	40	600	
RdLED 220mm 1500lm 830 EMG SSW 24V CN G3	1010 147 66946		370	1465	1516	21.4	7.9	185	80	1200	C
Emergency light			370	179	185	2.8	1.0	176	40	600	
RdLED 220mm 1500lm 840 EMG 24V CN G3	1010 147 66246	4000	370	1545	1599	21.4	7.9	196	80	1200	B
Emergency light			370	189	195	2.8	1.0	185	40	600	
RdLED 220mm 1500lm 840 EMG SSW 24V CN G3	1010 147 67046		370	1545	1599	21.4	7.9	196	80	1200	B
Emergency light			370	189	195	2.8	1.0	185	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[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
RdLED 220mm 1500lm 830 EMG 24V LG G2	1010 147 65946	3000	380	1470	1516	21.8	8.3	178	80	1200	C
Emergency circuit			380	172	178	2.8	1.1	162	40	600	
RdLED 220mm 1500lm 830 EMG SSW 24V LG G2	1010 147 66746		380	1470	1516	21.8	8.3	178	80	1200	C
Emergency circuit			380	172	178	2.8	1.1	162	40	600	
RdLED 220mm 1500lm 840 EMG 24V LG G2	1010 147 66046	4000	380	1562	1611	21.8	8.3	189	80	1200	C
Emergency circuit			380	183	189	2.8	1.1	172	40	600	
RdLED 220mm 1500lm 840 EMG SSW 24V LG G2	1010 147 66846		380	1562	1611	21.8	8.3	189	80	1200	C
Emergency circuit			380	183	189	2.8	1.1	172	40	600	

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RdLED CRI 90 EH1.1 G3

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
RdLED 220mm 1500lm 927 24V EMG EH1.1 G3	1010 117 42246	2700	390	1468	1512	22	8.7	170	80	1200	C
emergency circuit			390	173	178	3.0	1.2	149	40	600	
RdLED 220mm 1500lm 930 24V EMG EH1.1 G3	1010 117 42346	3000	390	1468	1512	22	8.7	170	80	1200	C
emergency circuit			390	173	178	3.0	1.2	149	40	600	
RdLED 220mm 1500lm 940 24V EMG EH1.1 G3	1010 117 42446	4000	390	1559	1607	22	8.7	180	80	1200	C
emergency circuit			390	184	189	3.0	1.2	158	40	600	

[1]At nominal current and Tp
[2]At nominal current and 25°C
[3]It 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
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-condesing)	[%]	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	CIEx	CIEy
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

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Lumen maintenance

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
	55°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	65°C	>102 000	>102 000	>102 000	>102 000	89 000	88 000
	75°C	>102 000	>102 000	>102 000	>102 000	75 000	74 000
	85°C	>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
	55°C	>102 000	>102 000	>102 000	>102 000	90 000	89 000
	65°C	>102 000	>102 000	>102 000	>102 000	77 000	76 000
	75°C	>102 000	>102 000	>102 000	>102 000	65 000	64 000
	85°C	>102 000	>102 000	>102 000	>102 000	55 000	54 000

reported data based on LM80 LED data 17000h

for LG G2, LE G5,LA 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
	55°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	65°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	75°C	>102 000	>102 000	>102 000	>102 000	>102 000	98 000
	85°C	>102 000	>102 000	>102 000	>102 000	81 000	73 000
If max	45°C	>102 000	>102 000	92 000	87 000	45 000	42 000
	55°C	>102 000	>102 000	92 000	87 000	45 000	42 000
	65°C	>102 000	>102 000	92 000	87 000	45 000	42 000
	75°C	>102 000	>102 000	92 000	87 000	45 000	42 000
	85°C	>102 000	>102 000	92 000	87 000	45 000	42 000

calculated data based on LM80 LED data 12000h

Lumen maintenance

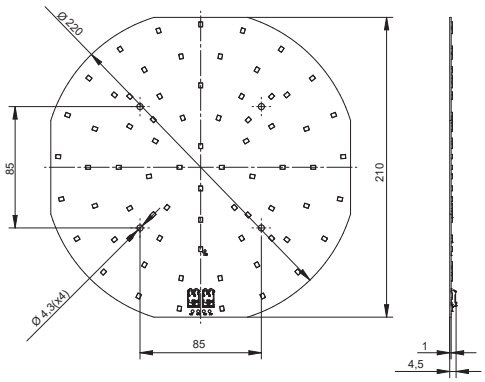
for EH1.1 G3

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	>72 000	>72 000
	55°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
	65°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
	75°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
	85°C	>72 000	>72 000	>72 000	>72 000	>72 000	>72 000
If max	45°C	>72 000	>72 000	67 000	62 000	30 000	29 000
	55°C	>72 000	>72 000	66 000	61 000	30 000	28 000
	65°C	>72 000	>72 000	65 000	60 000	29 000	27 000
	75°C	>72 000	>72 000	65 000	59 000	29 000	26 000
	85°C	>72 000	>72 000	64 000	58 000	28 000	26 000

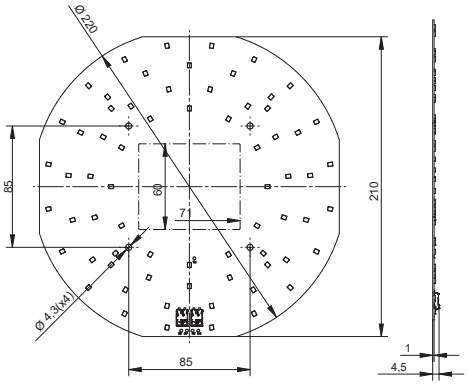
Calculated data based on LM80 LED data (12 000h)

Dimensions

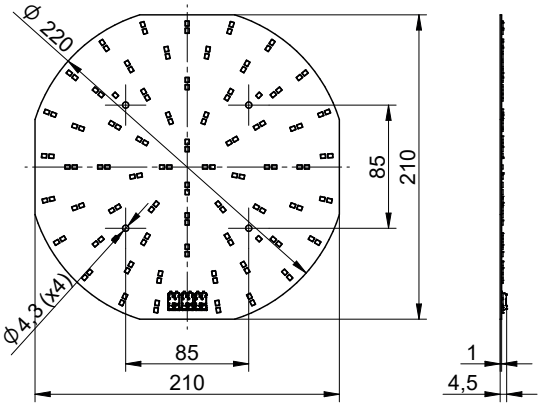
RdLED 220mm



RdLED 220mm SSW



RdLED 220mm TW



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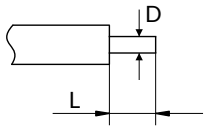
Mounting

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 creepeage 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:

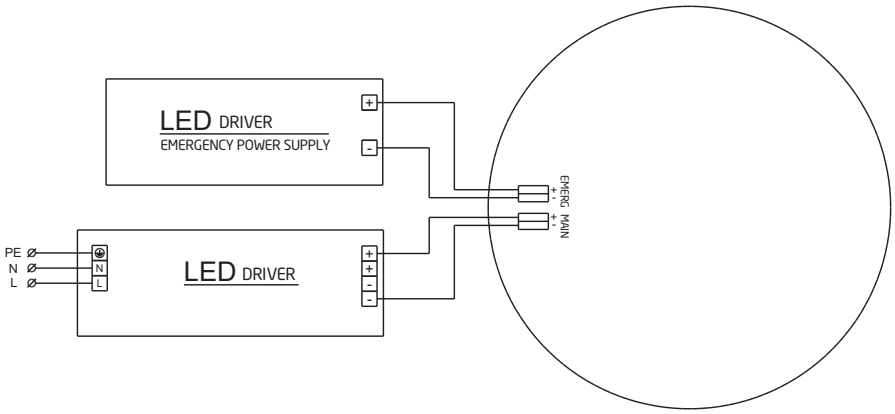


D - wire cross section (solid and flexible wires)	Min	Max
	0.2mm²	0.75mm²
	AWG 24	AWG 18

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



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.

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Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
RdLED 220mm 1500lm 830 EMG 24V CJ G4	1010 137 59746	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 830 EMG SSW 24V CJ G4	1010 137 59846	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 840 EMG 24V CJ G4	1010 137 46846	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 840 EMG SSW 24V CJ G4	1010 137 59946	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 830 EMG 24V CN G3	1010 147 66146	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 830 EMG SSW 24V CN G3	1010 147 66946	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 840 EMG 24V CN G3	1010 147 66246	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 840 EMG SSW 24V CN G3	1010 147 67046	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 830 EMG 24V LG G2	1010 147 65946	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 830 EMG SSW 24V LG G2	1010 147 66746	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 840 EMG 24V LG G2	1010 147 66046	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 840 EMG SSW 24V LG G2	1010 147 66846	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 927 24V EMG EH1.1 G3	1010 117 42246	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 930 24V EMG EH1.1 G3	1010 117 42346	20	2700	238 x 238 x 91
RdLED 220mm 1500lm 940 24V EMG EH1.1 G3	1010 117 42446	20	2700	238 x 238 x 91