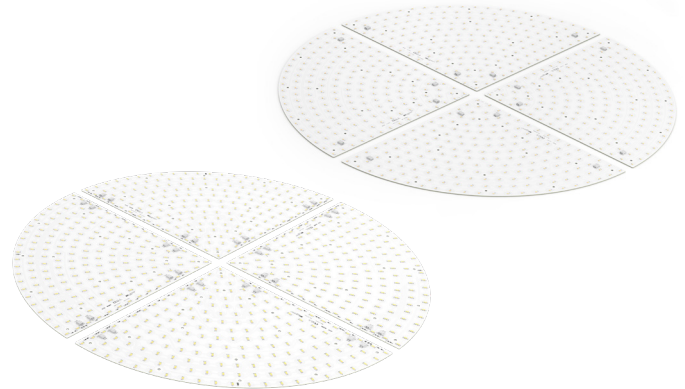


## Round LED modules 1/4 800mm

### 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 <sup>1</sup> φ [lm] | Useful luminous flux <sup>2</sup> [lm] | Voltage <sup>1</sup> Vf [V] | Power <sup>1</sup> P [W] | Efficacy <sup>1</sup> [lm/W] | Current minimum If min <sup>3</sup> [mA] | Current maximum If max [mA] | Energy Efficiency Class |
|--------------------------------------|----------------|------------------------|-----------------------------|-----------------------------------|--|-----------------------------|--------------------------|------------------------------|--|-----------------------------|-------------------------|
| RdLED 1/4 800mm 3000lm 830 33V CJ G4 | 1010 147 88446 | 3000                   | 530                         | 3032                              | 3109                                   | 29                          | 15                       | 197                          | 160                                      | 3200                        | B                       |
| RdLED 1/4 800mm 3000lm 840 33V CJ G4 | 1010 147 88546 | 4000                   | 530                         | 3153                              | 3233                                   | 29                          | 15                       | 205                          | 160                                      | 3200                        | B                       |

### RdLED CRI 80 CN G3

| Product name                               | Ordering code  | Colour temperature [K] | Current nominal If nom [mA] | Luminous flux <sup>1</sup> φ [lm] | Useful luminous flux <sup>2</sup> [lm] | Voltage <sup>1</sup> Vf [V] | Power <sup>1</sup> P [W] | Efficacy <sup>1</sup> [lm/W] | Current minimum If min <sup>3</sup> [mA] | Current maximum If max [mA] | Energy Efficiency Class |
|--|----------------|------------------------|-----------------------------|-----------------------------------|--|-----------------------------|--------------------------|------------------------------|--|-----------------------------|-------------------------|
| RdLED 1/4 800mm 2x3000lm 827-865 33V CN G3 | 1010 137 81646 | 2700                   | 550                         | 2885                              | 2985                                   | 29                          | 16                       | 180                          | 160                                      | 2400                        | C                       |
|  |                | 6500                   | 550                         | 3130                              | 3239                                   | 29                          | 16                       | 195                          | 160                                      | 2400                        |                         |
| RdLED 1/4 800mm 3000lm 830 33V CN G3       | 1010 147 87846 | 3000                   | 550                         | 3007                              | 3112                                   | 29                          | 16                       | 188                          | 160                                      | 2400                        | C                       |
| RdLED 1/4 800mm 3000lm 840 33V CN G3       | 1010 147 87946 | 4000                   | 550                         | 3173                              | 3283                                   | 29                          | 16                       | 198                          | 160                                      | 2400                        | B                       |

### RdLED CRI 90 EH1.1 G3

| Product name                                  | Ordering code  | Colour temperature [K] | Current nominal If nom [mA] | Luminous flux <sup>1</sup> φ [lm] | Useful luminous flux <sup>2</sup> [lm] | Voltage <sup>1</sup> Vf [V] | Power <sup>1</sup> P [W] | Efficacy <sup>1</sup> [lm/W] | Current minimum If min <sup>3</sup> [mA] | Current maximum If max [mA] | Energy Efficiency Class |
|---|----------------|------------------------|-----------------------------|-----------------------------------|--|-----------------------------|--------------------------|------------------------------|--|-----------------------------|-------------------------|
| RdLED 1/4 800mm 2x3000lm 927-965 33V EH1.1 G3 | 1010 127 36046 | 2700                   | 560                         | 2949                              | 3038                                   | 30                          | 17                       | 174                          | 160                                      | 2400                        | C                       |
|   |                | 6500                   | 560                         | 3133                              | 3228                                   | 30                          | 17                       | 185                          | 160                                      | 2400                        |                         |
| RdLED 1/4 800mm 3000lm 927 33V EH1.1 G3       | 1010 127 12146 | 2700                   | 560                         | 2949                              | 3038                                   | 30                          | 17                       | 174                          | 160                                      | 2400                        | C                       |
| RdLED 1/4 800mm 3000lm 930 33V EH1.1 G3       | 1010 117 46446 | 3000                   | 560                         | 2949                              | 3038                                   | 30                          | 17                       | 174                          | 160                                      | 2400                        | C                       |
| RdLED 1/4 800mm 3000lm 940 33V EH1.1 G3       | 1010 117 30946 | 4000                   | 560                         | 3133                              | 3228                                   | 30                          | 17                       | 185                          | 160                                      | 2400                        | C                       |

<sup>1</sup>At nominal current and T<sub>p</sub>

<sup>2</sup>At nominal current and 25°C

<sup>3</sup>It 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 1/4 800mm

### Temperature & humidity

| Specification item                                | Unit | Value       |
|---|------|-------------|
| <b>Tp</b>   | [°C] | 45          |
| <b>Tp rated</b>                                   | [°C] | 65          |
| <b>Tc</b>   | [°C] | 85          |
| <b>Relative humidity (non-condensing)</b>         | [%]  | 5 ... 85    |
| <b>Storage ambient temperature</b>                | [°C] | -25 ... +85 |
| <b>Storage relative humidity (non-condensing)</b> | [%]  | 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         |
|---|--------|---------------|
| <b>Classification acc. to IEC 62031</b> |        | built-in      |
| <b>Working voltage</b>                  | [Vdc]  | 400           |
| <b>Beam angle</b>                       | [deg]  | 120           |
| <b>Initial color consistency</b>        | [SDCM] | 3             |
| <b>Photobiological safety</b>           |        | 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 |

### 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      |
| <b>If nom</b>   | 45°C     | >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 |
|                 | 65°C     | >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   |
|                 | 85°C     | >100 000 | >100 000 | >100 000 | >100 000 | 81 000   | 73 000   |
| <b>If max</b>   | 45°C     | >100 000 | >100 000 | 92 000   | 87 000   | 45 000   | 42 000   |
|                 | 55°C     | >100 000 | >100 000 | 92 000   | 87 000   | 45 000   | 42 000   |
|                 | 65°C     | >100 000 | >100 000 | 92 000   | 87 000   | 45 000   | 42 000   |
|                 | 75°C     | >100 000 | >100 000 | 92 000   | 87 000   | 45 000   | 42 000   |
|                 | 85°C     | >100 000 | >100 000 | 92 000   | 87 000   | 45 000   | 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      |
| <b>If nom</b>   | 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   |
| <b>If max</b>   | 45°C     | >102 000 | >102 000 | >102 000 | >102 000 | >102 000 | >102 000 |
|                 | 55°C     | >102 000 | >102 000 | >102 000 | >102 000 | 97 000   | 96 000   |
|                 | 65°C     | >102 000 | >102 000 | >102 000 | >102 000 | 82 000   | 81 000   |
|                 | 75°C     | >102 000 | >102 000 | >102 000 | >102 000 | 69 000   | 68 000   |
|                 | 85°C     | >102 000 | >102 000 | >102 000 | >102 000 | 59 000   | 58 000   |

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

## Round LED modules 1/4 800mm

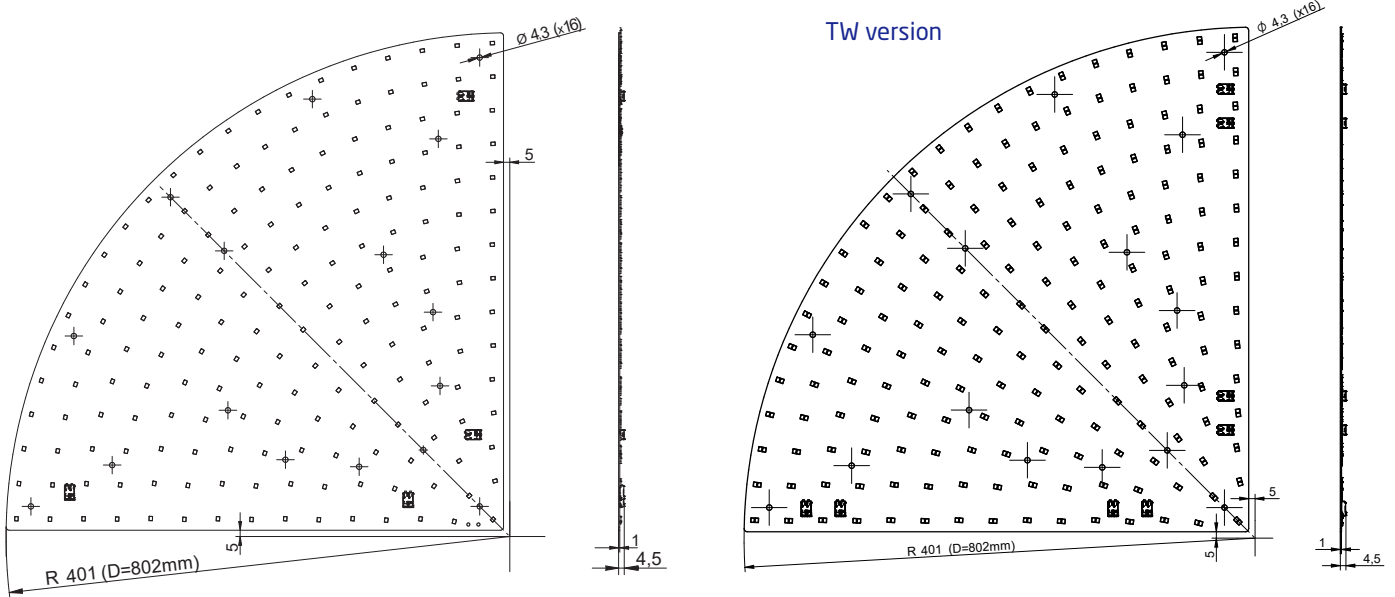
### Lumen maintenance

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



### Mounting

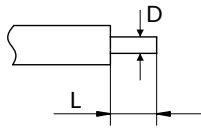
LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepage distance between screw's head and surface of the pcb. Max.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

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

## Round LED modules 1/4 800mm

### Wiring

Wire cross section and strip length:



| D - wire cross section<br>(solid and flexible wires) | Min                | Max                 |
|--|--------------------|---------------------|
|  | 0.2mm <sup>2</sup> | 0.75mm <sup>2</sup> |
|  | AWG 24             | AWG 18              |

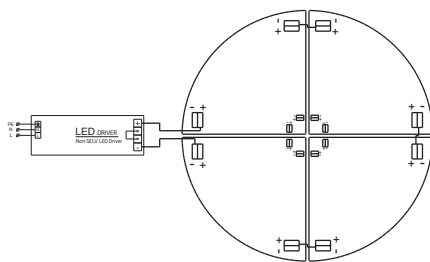
| L - strip length | Min | Max |
|------------------|-----|-----|
|                  | 8mm | 9mm |

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

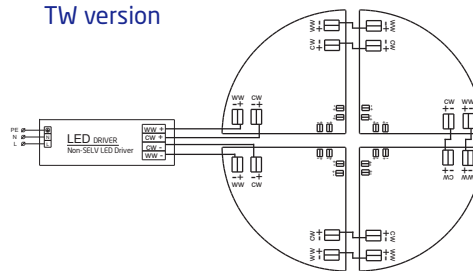


### Connections

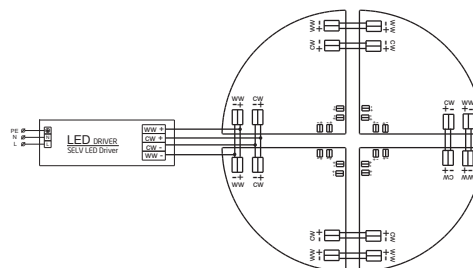
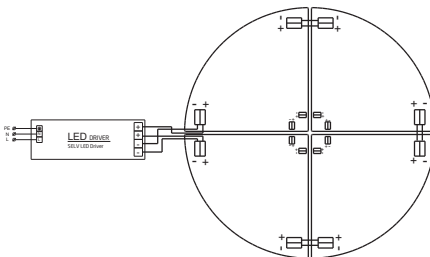
Wiring for series connection system



TW version



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.

### 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.

## Round LED modules 1/4 800mm

### Ordering codes

| Product name                                  | Ordering code  | Pieces per box | Pieces per pallet | Box dimensions [mm] |
|---|----------------|----------------|-------------------|---------------------|
| RdLED 1/4 800mm 3000lm 830 33V CJ G4          | 1010 147 88446 | 12             | 336               | 441 x 441 x 58      |
| RdLED 1/4 800mm 3000lm 840 33V CJ G4          | 1010 147 88546 | 12             | 336               | 441 x 441 x 58      |
| RdLED 1/4 800mm 2x3000lm 827-865 33V CN G3    | 1010 137 81646 | 12             | 336               | 441 x 441 x 58      |
| RdLED 1/4 800mm 3000lm 830 33V CN G3          | 1010 147 87846 | 12             | 336               | 441 x 441 x 58      |
| RdLED 1/4 800mm 3000lm 840 33V CN G3          | 1010 147 87946 | 12             | 336               | 441 x 441 x 58      |
| RdLED 1/4 800mm 2x3000lm 927-965 33V EH1.1 G3 | 1010 127 36046 | 12             | 336               | 441 x 441 x 58      |
| RdLED 1/4 800mm 3000lm 927 33V EH1.1 G3       | 1010 127 12146 | 12             | 336               | 441 x 441 x 58      |
| RdLED 1/4 800mm 3000lm 930 33V EH1.1 G3       | 1010 117 46446 | 12             | 336               | 441 x 441 x 58      |
| RdLED 1/4 800mm 3000lm 940 33V EH1.1 G3       | 1010 117 30946 | 12             | 336               | 441 x 441 x 58      |