

Linear LED modules Tunable White

Product description

- Long life-time
- Built-in, constant current LED module
- Re-workable push-in terminals enabling easy connection
- Compliance and approval: CE, ENEC
- 4C - four connectors for parallel system, also recognized as a low voltage system - SELV
- Other CCT and CRI on request



LinLED 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
LinLED 140x24mm 2x500lm 827-865 2x4C 42V CN G3	1010 137 81946	2700	75	492	509	38	2.9	172	10	150	C
		6500	75	534	552	38	2.9	186	10	150	
LinLED 280x24mm 2x1000lm 827-865 2x4C 42V CN G3	1010 137 82046	2700	150	984	1018	38	5.7	172	20	300	C
		6500	150	1067	1104	38	5.7	186	20	300	
LinLED 560x24mm 2x2000lm 827-865 2x4C 42V CN G3	1010 137 82146	2700	300	1967	2036	38	11.4	172	40	600	C
		6500	300	2134	2209	38	11.4	186	40	600	

LinLED 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 Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
LinLED 140x24mm 2x500lm 927-965 2x4C 42V EH1.1 G3	1010 127 38746	2700	80	510	525	41	3.3	156	10	150	D
		6500	80	542	558	41	3.3	166	10	150	
LinLED 280x24mm 2x1000lm 927-965 2x4C 42V EH1.1 G3	1010 127 13946	2700	160	1020	1050	41	6.5	156	20	300	D
		6500	160	1083	1116	41	6.5	166	20	300	
LinLED 560x24mm 2x2000lm 927-965 2x4C 42V EH1.1 G3	1010 127 14046	2700	320	2039	2101	41	13	156	40	600	D
		6500	320	2167	2232	41	13	166	40	600	

¹At nominal current and Tp

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%

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

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Technical data

Specification item	Unit	Value
Classification acc. to IEC 62031		built-in
Working voltage	[Vdc]	60
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
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

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	87 000	86 000
	75°C>102 000	>102 000	>102 000	>102 000	>102 000	74 000	73 000
	85°C>102 000	>102 000	>102 000	>102 000	>102 000	63 000	62 000
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	100 000	99 000
	65°C>102 000	>102 000	>102 000	>102 000	>102 000	85 000	84 000
	75°C>102 000	>102 000	>102 000	>102 000	>102 000	71 000	70 000
	85°C>102 000	>102 000	>102 000	>102 000	>102 000	61 000	60 000

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

for EH1.1 G3

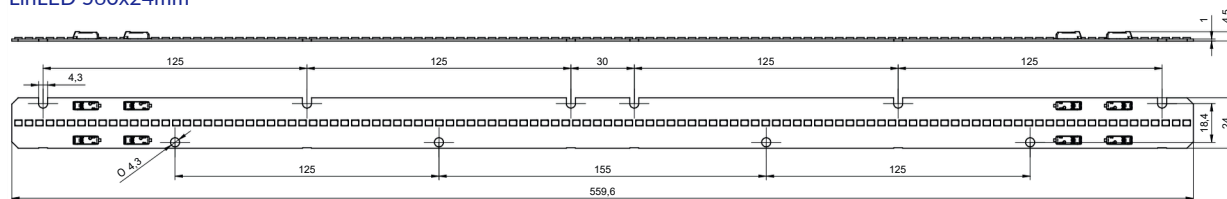
Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10 >72	B50	B10	B50	B10
If nom	45°C	>72 000	000 >72	>72 000	>72 000	64 000	60 000
	55°C	>72 000	000 >72	>72 000	>72 000	63 000	59 000
	65°C	>72 000	000 >72	>72 000	>72 000	62 000	57 000
	75°C	>72 000	000 >72	>72 000	>72 000	60 000	56 000
	85°C	>72 000	000 >72	>72 000	>72 000	59 000	55 000
If max	45°C	>72 000	000 >72	67 000	62 000	30 000	29 000
	55°C	>72 000	000 >72	66 000	61 000	30 000	28 000
	65°C	>72 000	000 >72	65 000	60 000	29 000	27 000
	75°C	>72 000	000 >72	65 000	59 000	29 000	26 000
	85°C	>72 000	000	64 000	58 000	28 000	26 000

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

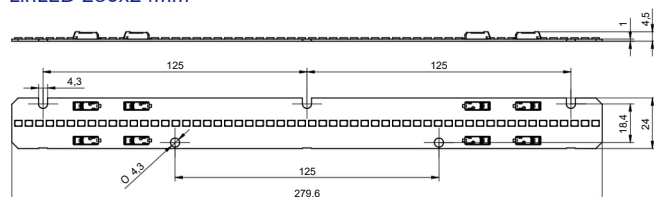
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Dimensions

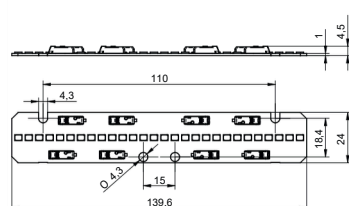
LinLED 560x24mm



LinLED 280x24mm



LinLED 140x24mm



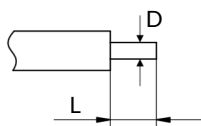
Mounting

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 crosssection 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:

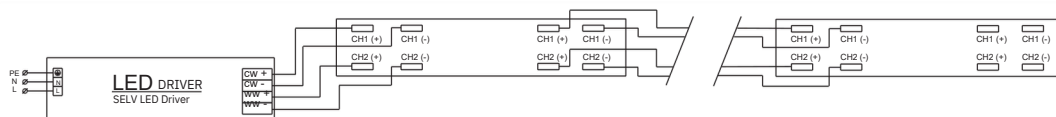


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Connections

Max number of modules	Unit	Series	Parallel
LinLED 140x24mm...	[pcs]	-	8
LinLED 280x24mm...	[pcs]	-	4
LinLED 560x24mm...	[pcs]	-	2

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.

Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
LinLED 140x24mm 2x500lm 827-865 2x4C 42V CN G3	1010 137 81946	160	38400	150 x 266 x 83
LinLED 280x24mm 2x1000lm 827-865 2x4C 42V CN G3	1010 137 82046	160	19200	300 x 266 x 83
LinLED 560x24mm 2x2000lm 827-865 2x4C 42V CN G3	1010 137 82146	160	9600	603 x 266 x 83
LinLED 140x24mm 2x500lm 927-965 2x4C 42V EH1.1 G3	1010 127 38746	160	38400	150 x 266 x 83
LinLED 280x24mm 2x1000lm 927-965 2x4C 42V EH1.1	1010 127 13946	160	19200	300 x 266 x 83
G3 LinLED 560x24mm 2x2000lm 927-965 2x4C 42V EH1.1 G3	1010 127 14046	160	9600	603 x 266 x 83