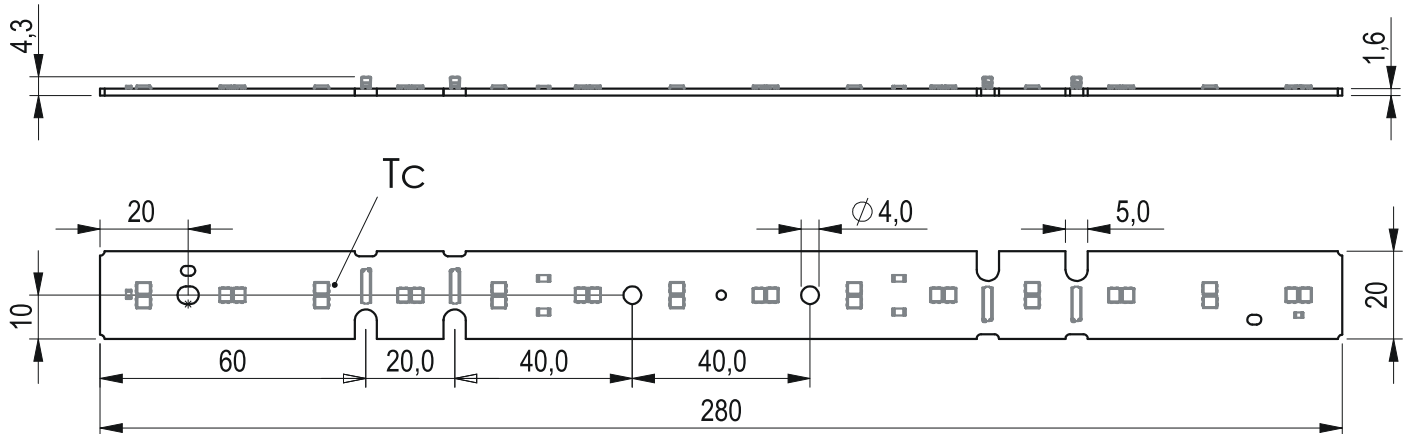


A2820L28

Drawing



Technical data

Nominal forward current	175 mA / channel
Maximum forward current	400 mA / channel
Ambient temperature range	-25 ... +45 °C
tc	85 °C
tp rated	65 °C
Lumen maintenance L80B10	60000 h
Lumen maintenance L70B50	>72000 h
Max. working voltage for insulation SELV	<60 V
Insulation test voltage	500 V
Classification acc. to IEC 62031	Built-in
Risk group (IEC 62471)	RG1
Type of protection	IP00
Beam characteristic	120 °

Product details

- Built-in LED module
- Long life-time
- Design for LEDiL DAISY-MINI
- SELV module
- Ideal for linear luminaires
- Dimmension according to L28W2
- 5 years guarantee

Product code	Photometric code	Useful luminous flux at tp=25 °C	Expected luminous flux at tp rated	Forward current	Min. forward voltage at tp=85 °C	Max. forward voltage at tp=25 °C	Power consumption at tp=25 °C	Efficacy at tp=25 °C	Expected efficacy of at tp rated	Energy classification
A2820L28-175-827-865	827/359	610 lm	570 lm	175 mA	18,8 V	19,9 V	3,4 W	179 lm/W	168 lm/W	C
	865/359	650 lm	610 lm	175 mA	18,8 V	19,9 V	3,4 W	192 lm/W	181 lm/W	-
A2820L28-175-830-840	830/359	630 lm	580 lm	175 mA	18,8 V	19,9 V	3,4 W	184 lm/W	173 lm/W	C
	840/359	650 lm	610 lm	175 mA	18,8 V	19,9 V	3,4 W	192 lm/W	181 lm/W	-
A2820L28-350-827	827/359	1170 lm	1090 lm	350 mA	18,8 V	19,9 V	6,8 W	173 lm/W	162 lm/W	C
A2820L28-350-830	830/359	1250 lm	1160 lm	350 mA	18,8 V	19,9 V	6,8 W	184 lm/W	173 lm/W	C
A2820L28-350-840	840/359	1300 lm	1210 lm	350 mA	18,8 V	19,9 V	6,8 W	192 lm/W	181 lm/W	C
A2820L28-350-865	865/359	1300 lm	1210 lm	350 mA	18,8 V	19,9 V	6,8 W	192 lm/W	181 lm/W	C

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A2820L28-175-927-965	927/359	500 lm	460 lm	175 mA	19,1 V	20,2 V	3,5 W	143 lm/W	135 lm/W	E
	965/359	530 lm	500 lm	175 mA	19,1 V	20,2 V	3,5 W	154 lm/W	146 lm/W	-
A2820L28-175-930-940	930/359	510 lm	470 lm	175 mA	19,1 V	20,2 V	3,5 W	146 lm/W	139 lm/W	D
	940/359	530 lm	500 lm	175 mA	19,1 V	20,2 V	3,5 W	154 lm/W	146 lm/W	-
A2820L28-350-927	927/359	1000 lm	940 lm	350 mA	19,1 V	20,2 V	7,0 W	144 lm/W	137 lm/W	E
A2820L28-350-930	930/359	1030 lm	960 lm	350 mA	19,1 V	20,2 V	7,0 W	148 lm/W	140 lm/W	D
A2820L28-350-940	940/359	1080 lm	1010 lm	350 mA	19,1 V	20,2 V	7,0 W	155 lm/W	147 lm/W	D
A2820L28-350-965	965/359	1080 lm	1010 lm	350 mA	19,1 V	20,2 V	7,0 W	155 lm/W	147 lm/W	D

Multiplier	tp 25 °C	tp 45 °C	tp 65 °C	tp 85 °C	If 100 mA	If 175 mA	If 350 mA	If 400 mA
Expected luminous flux	1	0,96	0,93	0,89	0,58	1	1,93	2,20
Efficacy	1	0,97	0,94	0,91	1,04	1	0,92	0,91

Thermal details

Temperature has a great influence on the lifetime of LED products. Exceeding the permissible temperatures can significantly shorten the life of the module or even lead to its destruction. It is necessary to verify compliance with the maximum allowable temperature at the reference point under stable operating conditions. The maximum value should be determined based on the application-specific worst-case conditions. Both reference point temperatures (t_c and t_p) are measured at the same location.

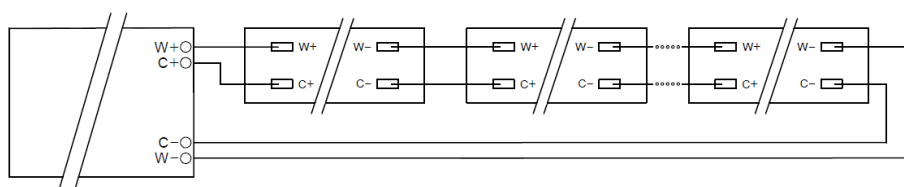
Installation

The module are not protected against overvoltages, overcurrents, overloads or short-circuit currents. Wrong polarity can damage the module. The module must be powered by a SELV or non-SELV constant current LED driver. Module can be mounted directly on earthed metal parts of luminaire only when max working voltage for insulation is higher than max. output voltage of LED driver (also against earth). Otherwise additional insulation between LED module and heat sink is required. At voltages > 60 V an additional protection against direct touch (test finger) to the light emitting side of the module has to be guaranteed. This is typically achieved by means of a non removable light distributor over the module or by a suitable luminaire construction.

Risk of sulfurization

The LED uses a silver-plated lead frame and its surface color may change to black (or dark colored) when it is exposed to sulfur (S), chlorine (Cl) or other halogen compound. Sulfurization of lead frame may cause intensity degradation, change of chromaticity coordinates and, in extreme cases, open circuit. It requires caution. Due to possible sulfurization of lead frame, the LED Modules should not be used and stored together with oxidizing substances made of materials such as rubber, plain paper, lead solder cream, etc.

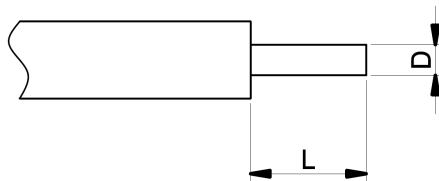
Wiring example



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Wiring type and cross section

The wiring can be in stranded wires or solid with a cross section of 0.2 to 0.75mm².



D - wire cross section	Min	Max
	0,2mm ²	0,75mm ²
L - strip length	Min	Max
	7,5mm	9,5mm

Photometric code

1 digit	2+3 digit	4 digit	5 digit	6 digit
CRI	Colour temperature in Kelvin x 100	MacAdam initial	Mac Adam after 25 % of the lifetime (max. 6000 h)	Luminous flux after 25% of the lifetime (max. 6000 h)
7 70-79				7 ≥ 70
8 80-89				8 ≥ 80
9 ≥90				9 ≥ 90