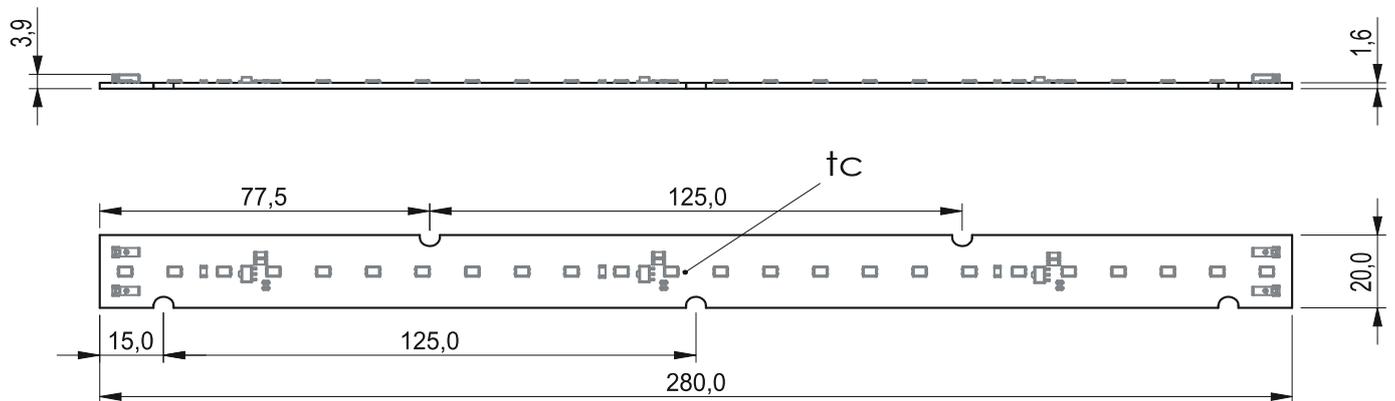


# AV2820L24 CRI80/90 1800 lm 24V 10W 4C V5/U5

## Drawing



### Technical data

DC supply voltage	24 V
DC supply voltage range	22-26 V
Ambient temperature range	-25 ... +45 °C
$t_c$	65 °C
tp rated	45 °C
Lumen maintenance L70B50	102000 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
- Ideal for linear luminaires
- Perfectly uniform light
- Dimension according to L28W2
- 5 years guarantee

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Product code	Photometric code	Useful luminous flux at tp=25 °C	Expected luminous flux at tp rated	Typ. current consumption at tp rated	Power consumption at tp rated	Efficacy of the module at tp=25 °C	Expected efficacy of the module at tp rated	Energy classification
AV2820L24-830-24V10-4C-V5	830/359	1810 lm	1750 lm	450 mA	10,8 W	168 lm/W	162 lm/W	D
AV2820L24-840-24V10-4C-V5	840/359	1830 lm	1780 lm	450 mA	10,8 W	169 lm/W	165 lm/W	D
AV2820L24-840-24V10-4C-U5	840/359	1820 lm	1770 lm	405 mA	9,7 W	188 lm/W	182 lm/W	C
AV2820L24-930-24V10-4C-U5	930/359	1710 lm	1650 lm	450 mA	10,8 W	158 lm/W	153 lm/W	D
AV2820L24-940-24V10-4C-U5	940/359	1900 lm	1840 lm	450 mA	10,8 W	176 lm/W	170 lm/W	C

## 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 (tc and tp) are measured at the same location.

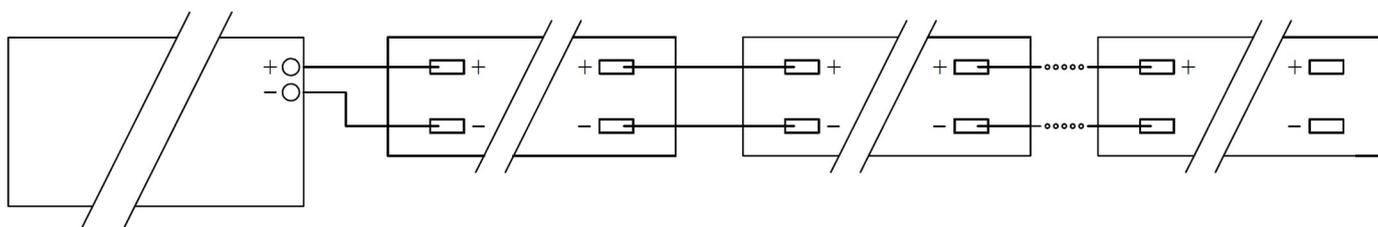
## Instalation

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 diectly 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 usedand stored together with oxidizing substances made of materials such as rubber, plain paper, lead solder cream, etc.

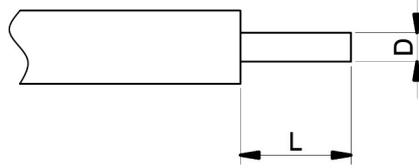
## Wiring example



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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 0.5mm<sup>2</sup>.



D - wire cross section	Min	Max
	0,2mm <sup>2</sup>	0,5mm <sup>2</sup>
L - strip length	Min	Max
	4mm	5,5mm

## 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