eldoLED
your product | *our drive*

Tech sheet SOLOdrive 561/M, 561/S, 561/A — AC Series

Electrical Specifications


SOLOdrive 561/M

Input

- Voltage: 120-250V AC 50-60Hz
  120-250V DC
  UL approved: 120-277V AC, 50-60Hz
- Current, max: 0.7A
- 0-10V current draw: max 2mA


SOLOdrive 561/S

Output

- Power: 50W max
- Voltage: 55V max
- Current range: 200 - 1,050 mA (configurable) in 1mA steps
- Current: +/- 5% accuracy

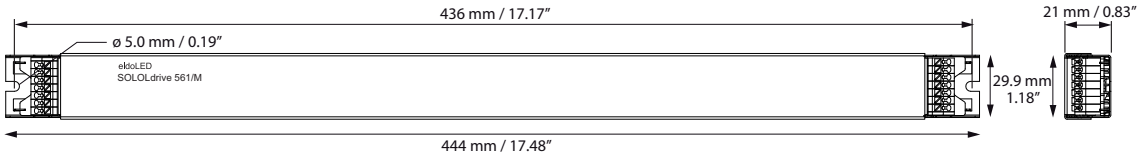

SOLOdrive 561/A

General

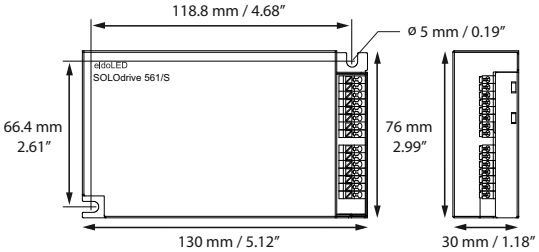
- Standby power: < 0.5W
- Inrush current: negligible, 30mA^{2}s @ 277V
- Surge protection: 1kV differential mode surge, 2kV common mode surge
- Efficiency: 89% at full load, ≥ 85% above 67% load
- Power factor: > 0.9
- THD: <20% between 67% and 100% load

Dimensions and weight

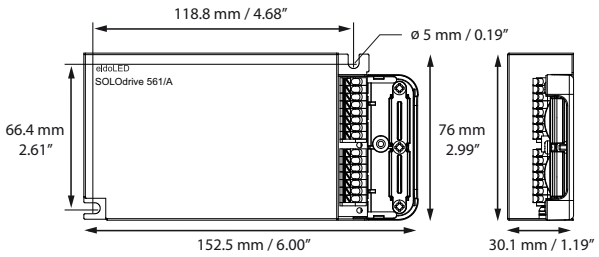
SOLOdrive 561/M
Weight: 360 g,
12.7 oz



SOLOdrive 561/S
Weight: 350 g, 12.35 oz



SOLOdrive 561/A
Weight: 372 g, 13.12 oz



Wiring data

- Wire type: solid or stranded copper
- Wire strip length: 9mm, 0.35 in.
- Wire core cross section:
  0.5 - 1.5 mm², AWG 20 - 16

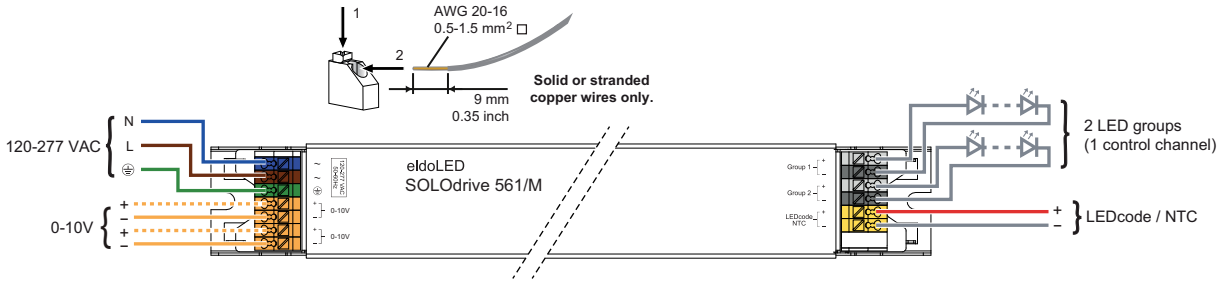
- Maximum LED wiring length:

AWG value	20	19	18	17	16
Distance (m)	14	18	22	28	36
Distance (ft)	46	59	72	92	118

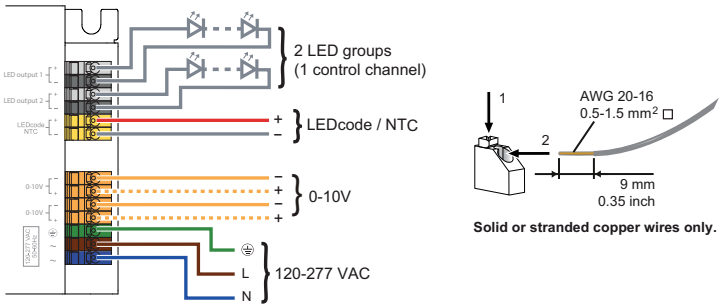
⚠ Please observe voltage drop over long cable lengths

⚠ Longer cable lengths increase EMI susceptibility.

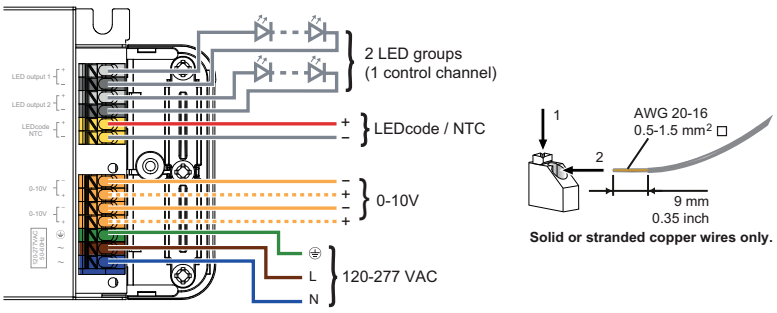
SOLOdrive 561/M



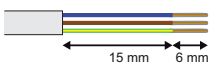
SOLOdrive 561/S



SOLOdrive 561/A



In Europe, use a H03V 0.75mm² power cable for 561/A and apply following strip lengths:



⚠ WARNING: Risk of electrical shock. May result in serious injury or death. Disconnect power before servicing or installing.

⚠ CAUTION: The device may only be connected and installed by a qualified electrician. All applicable regulations, legislation and building codes must be observed. Incorrect installation of the device can cause irreparable damage to the device and the connected LEDs.

⚠ CAUTION: Pay attention when connecting the LED groups: polarity reversal results in no light output and often damages the LEDs.

Other information

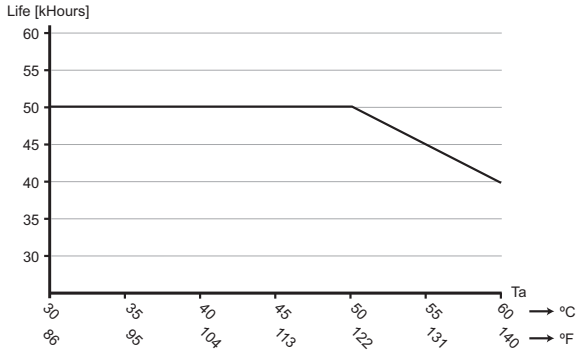
Thermal

- Ta range: -20 ºC ... +50 ºC / -4 ºF ... +122 ºF
- Tc max: 85 ºC / 185 ºF
- Tc lifetime: 78 ºC / 172 ºF
- LED temperature feedback using 47kΩ NTC thermistor.
  Recommended thermistors by Vishay:
  - NTCS0805E4473JXT (SMD version)
  - 238164063473 (leaded version)
  - NTCASCWE3473J (screw version)

Certifications

- EN 61347-1 / -2-7 / -2-13, EN 62384, EN 55015, EN 55022, EN 61000-3-2, EN 61547, EN 60929 Annex E
- CE
- ENEC by DEKRA
- EL: EN 61347-2-7
- UL: Recognized Component (file no E333135), according to UL1310, UL8750. US: Class 2 output. Canada: Non-Class 2 output.
- FCC: Title 47CFR Part 15 Class B

Lifetime data



Life vs Ta

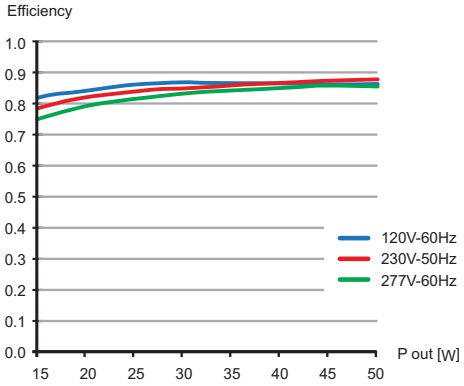
- Life expectancy of 50K hours at Ta of lower or equal to 50 ºC / 122 ºF
- MTBF: 480,000 hours

All measurements have been carried out at maximum load in free air without heat sink.

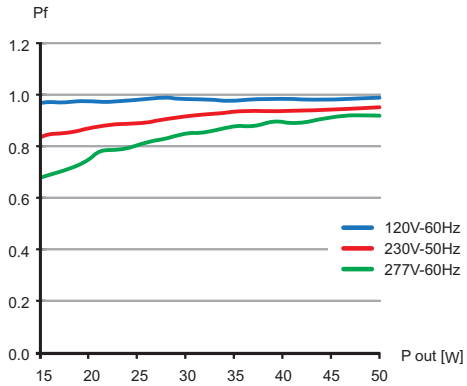
All lifetime-related figures are the result of simulations. Actual lifetime tests are ongoing.

The following efficiency, power factor and THD diagrams are the result of measurements of a worst case scenario: the LED outputs were stressed at full load (23.8V and 1,050mA).

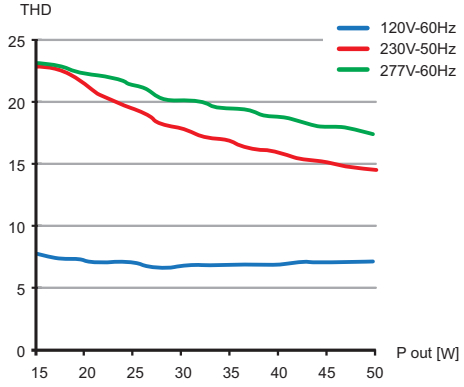
Efficiency data



Power factor data



Total Harmonic Distortion data



Notes

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Other documentation and support
Visit www.eldoled.com/ACsupport for further documentation such as quick start guide, wiring diagram, tech sheet and 3D IGES files.

Warranty
eldoLED represents and warrants that for a period of 3 (three) years, as of the date of invoice, Products materially meet the specifications and specifically agreed upon quality, both as stated in the applicable datasheet and/or written design-in specifications, or as stated in writing otherwise by eldoLED, provided that these specifications are explicitly designated by eldoLED as "warranted specifications".
For the complete warranty text, visit www.eldoled.com/terms.