

Tech sheet POWERdrive 561/M, 56*/A, 56*/S

AC Series

Electrical specifications

Input

· Voltage: 120-250V AC, 50-60Hz 120-250V DC

120-277V AC, 50-60Hz (UL approved)

· Current, max: 0.7A

Output

· Power: 50W max · Voltage: 55V max

• Current range: 200 - 1,050 mA (configurable)

· Current: +/- 5% accuracy

General

• Standby power: < 0.5W

• Inrush current: negligible, 30mA2s @ 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

• DMX / RDM: USITT DMX512A and ANSI E1.20 (explore & address)

. Three (562) or four (561) LED outputs





POWERdrive 562/A



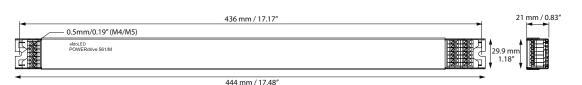
Dimensions, weight and packaging

POWERdrive 561/M

Weight: 360 g, 12.7 oz

Packaging:

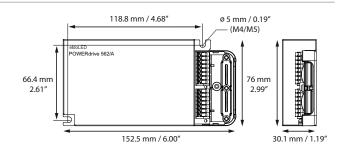
8 or 28 pcs/carton



POWERdrive 561/A, 562/A

Weight: 372 g, 13.12 oz

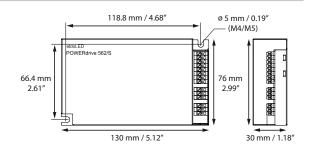
Packaging: 6 or 45 pcs/carton



POWERdrive 561/S, 562/S

Weight: 350 g, 12.35 oz

Packaging: 6, 10 or 45 pcs/carton



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
- For POWERdrive 561/S and 561/A only: onboard DMX out and LEDcode connector: Molex 87437-0843

Optional available wiring harness:

WH0081S1: wiring harness, 8-pin Molex, DMX, POWERdrive 561/S and 561/A

· 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

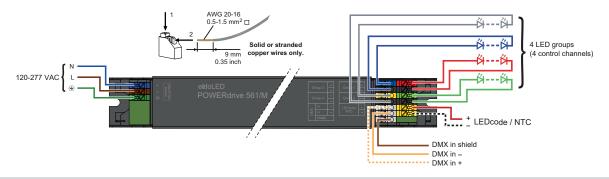
<u>/i</u>\

Please observe voltage drop over long cable lengths.

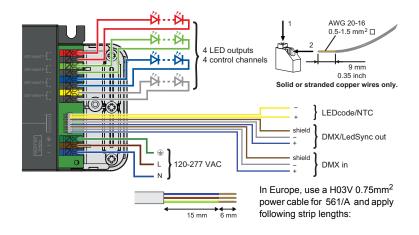


Longer cable lengths increase EMI susceptibility.

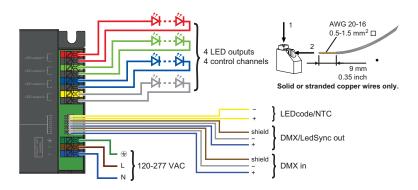
POWERdrive 561/M



POWERdrive 561/A



POWERdrive 561/S





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

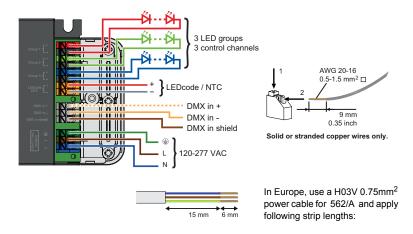


CAUTION: The device may only be connected and installed by a qualified electrician. All applicable regulations, legislation and building codes must be observed. Incorrect installation of the device can cause irreparable damage to the device and the connected LEDs.

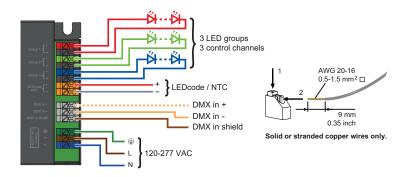


CAUTION: Pay attention when connecting the LED groups: polarity reversal results in no light output and often damages the LEDs.

POWERdrive 562/A



POWERdrive 562/S



Other information

Thermal

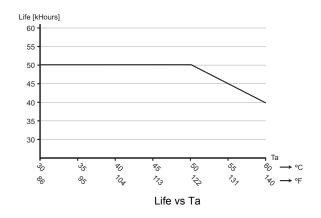
- Ta range: -20 °C to +50 °C / -4 °F to +122 °F
- Tc max: 85 °C / 185 °F
- Tc lifetime: 78 °C / 172 °F (561/S, 561/M, 562/S, 562/A) 72 °C / 161.6 °F (561/A)
- LED temperature feedback using $47k\Omega$ NTC thermistor. Recommended thermistors by Vishay:
 - NTCS0805E4473JXT (SMD version)
 - 238164063473 (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
- CE
- · ENEC by DEKRA
- EL: EN 61347-2-7
- UL: Recognized Component (file no E333135), according to UL1310, UL8750. US/Canada: Class 2 output.
- FCC: Title 47CFR Part 15 Class B
- RCM (561/A and 561/S pending)



Lifetime data



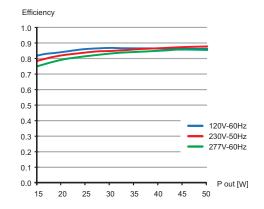
- Life expectancy of 50K hours at Ta of lower or equal to 50 $^{\circ}$ C / 122 $^{\circ}$ F
- MTBF: 480,000 hours

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

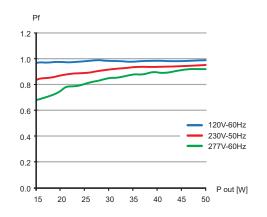
All lifetime-related figures are the result of simulations. Actual lifetime tests are ongoing.

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.

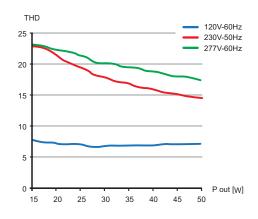
Efficiency data (561/M, 562/S, 562/A)



Power factor data (561/M, 562/S, 562/A)



Total Harmonic Distortion data (561/M, 562/S, 562/A)



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Other documentation and support

Europe, Rest of World

Science Park Eindhoven 5125

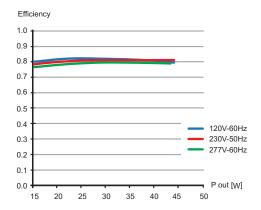
eldoLED B.V.

NL-5692 ED Son

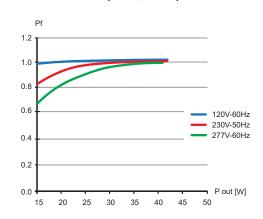
The Netherlands

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

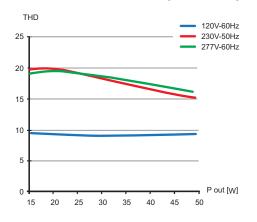
Efficiency data (561/S, 561/A)



Power factor data (561/S, 561/A)



Total Harmonic Distortion data (561/S, 561/A)



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.