STOP

Constant current LEDs are to be wired in SERIES and require a MINIMUM and maximum number of fixtures connected to a driver as indicated on the following page.

POWERING or TESTING less than the MINIMUM number of fixtures per driver OR connecting fixtures with the driver live OR wiring them in parallel will IMMEDIATELY and PERMANENTLY DESTROY the LEDs.
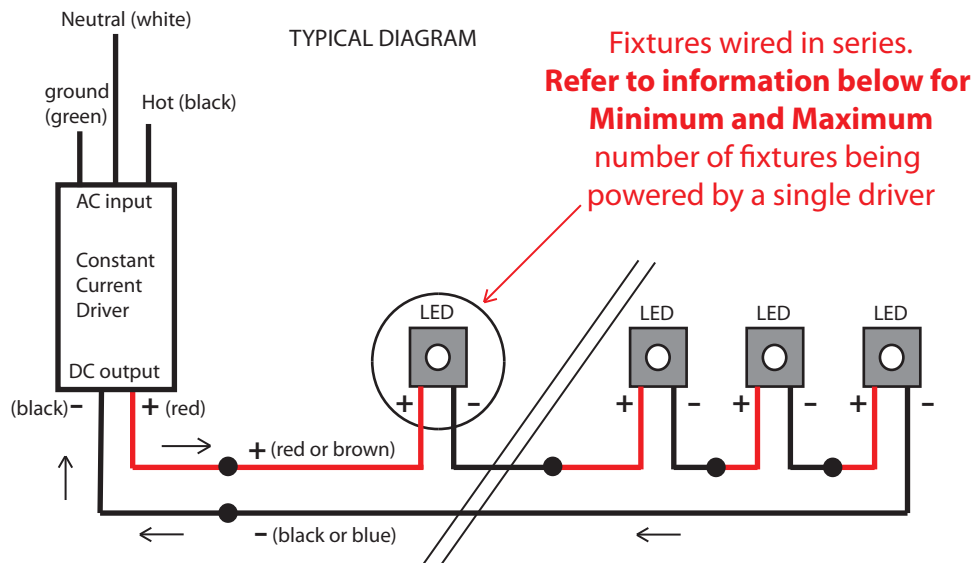
Carefully read instructions prior to installation and testing.

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Constant Current drivers

Wiring Key Points

1. This product shall be installed by a qualified electrician.

2. Make sure the main power supply to the driver is turned off when wiring either the LEDs or driver.

3. LEDs shall be wired in series as shown in wiring diagram. CAUTION: parallel wiring will damage LEDs.

4. Wire shall be 18 awg stranded minimum. Large gauge wire shall be used to limit voltage drop in order to maintain the proper operating voltage. Take every precaution to avoid interferance from other electrical circuits and equipment.

5. Dimming circuits are more sensitive to voltage drop and electrical interference from other electrical sources.

6. Isolating LED wiring by dedicated circuit for each control zone is recommended.

7. Contractor shall verify the fixture quantities connected to the driver are compatible with the driver's specifications prior to energizing the circuit.

8. All Class II power cable remote wiring and driver enclosures by others.

LED's can be permanently damaged if these points are not followed

TYPICAL DIAGRAM

Neutral (white)

ground (green)   Hot (black)

AC input

Constant Current Driver

DC output

(black) −   + (red)

+ (red or brown)

− (black or blue)

Fixtures wired in series.
Refer to information below for Minimum and Maximum number of fixtures being powered by a single driver

LED   + −

LED   + −   LED   + −   LED   + −

Driver options:

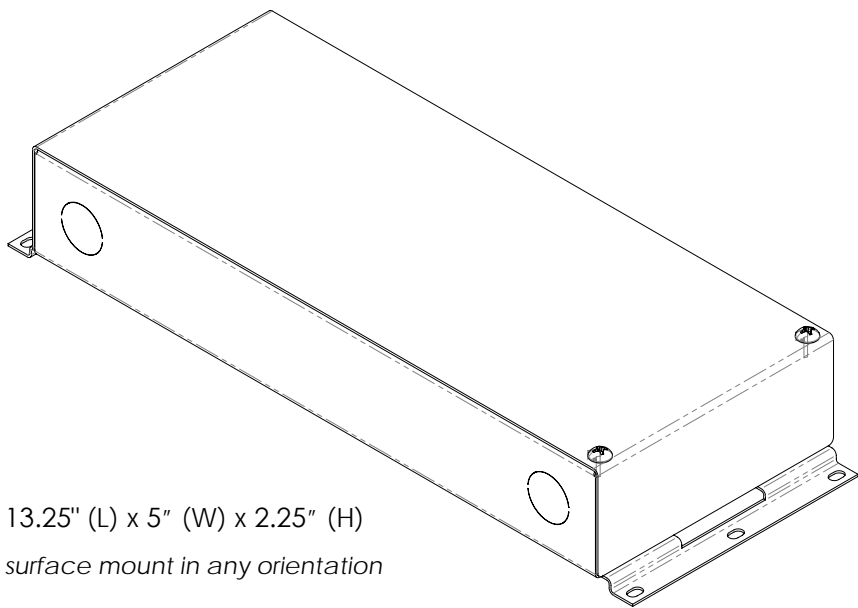| Driver	AC Input	Dimming	Minimum number of fixtures	Maximum number of fixtures

Please note: Dimming/control wiring not shown in the diagram above.
A relay or Powerpack may be required. Running separate line side (line voltage) and controls (low voltage) leads may be required. Refer to the NEC, your local jurisdiction and the 0-10V dimmer or dimming system manufacturer you are planning on using for additional considerations on how to wire the 0-10V control leads.

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Project:	Type:	Date:
Manufacturer:	Fixture:	Page:

Dry Location Enclosure

Maximum Wiring Distance Guide*

Wire Gauge	Maximum Lead Length
18	72 ft (22 m)
16	118 ft (36 m)
14	150 ft (46 m)
12	200 ft (61 m)

*Actual distance must be calculated by installer.
Must comply with NEC code.

13.25" (L) x 5″ (W) x 2.25″ (H)

surface mount in any orientation

Our drivers are programmed to Linear dimming curve by default.
Compatible/Recommended dimmers and interfaces*:

- Lutron Diva DVSTV (Wallbox dimmer)
- Lutron Nova T NTSTV (Wallbox dimmer)
- Lutron Maestro MS-Z101/MS-Z101-V (Wallbox dimmer/sensor)
- Lutron PowPak 0-10V RMJ-5T-DV-B (Energi Tripak)
- Lutron GRX-TVI (0-10V interface for Grafik QS and some commercial dimming panels)
- Lutron TVI-LMF-2A (EcoSystem to 0-10V interface)
- Lutron QSN-4T16-S (Energi Savr Node 0-10V)
- Lutron TVM2 module (HomeWorks and commercial dimming panels)

Consult factory for any dimmer not listed above or if programming to a logarithmic dimming curve is required before ordering the drivers.

eldoLED
your product | *our drive*

Light
is our **passion**

30W 0-10V LED Drivers with Smooth Dimming to 1%

Input characteristics

Input voltage AC	120-250V (ENEC approved)
	120-277V (UL approved)
Input voltage DC	120-250V
Input current	0.35A max
Input frequency	50-60Hz
Efficiency @ full load	/A: 84%, /B: 85% and /S: 85%
Efficiency @ 2/3 load	/A: ≥82%, /B: ≥83% and /S: ≥83%
Power factor @ full load	>0.9
THD @ full load	<20%
Inrush current	negligible: 30mA²s @ 277V
Surge protection	2kV DM, 2kV CM
Standby power	<0.5W

Output characteristics

LED output power	30W max
LED output current range	/A: 150-1,050mA (settable)
	/B, /S: 150-1,400mA (settable)
LED output current resolution	programmable in 25mA steps
LED output current tolerance	+/- 5%
LED outputs	1 (UL Class 2)
LED output voltage range	2-55V

Control characteristics

Control channels	1
Dimming protocol	0-10V
Dimming range	100%-1%
Dimming method	Hybrid HydraDrive
Dimming curve	linear or logarithmic
Driver configuration	with TOOLbox pro and FluxTool
0-10V isolation	to line voltage input: 1500V
	to LED output: 3750V
0-10V current draw	<2mA

Protection

LED output short	yes
Overload	yes
Reverse polarity	yes, for LED output
Restart after protection	yes

Product offering

ECOdrive 361/A **P/N: EC0361A3**

ECOdrive AC, 30W, 0-10V, constant current, 1x 55V output, side feed, plastic long

ECOdrive 361/B **P/N: EC0361B2**

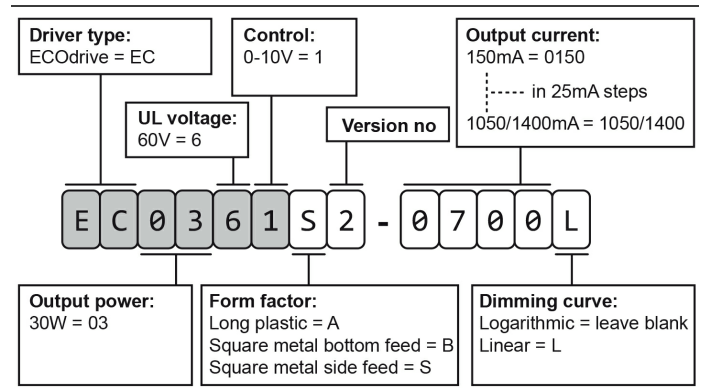ECOdrive AC, 30W, 0-10V, constant current, 1x 55V output, bottom feed, metal square

ECOdrive 361/S **P/N: EC0361S2**

ECOdrive AC, 30W, 0-10V, constant current, 1x 55V output, side feed, metal square

Order number configuration

Driver type:
ECOdrive = EC

Control:
0-10V = 1

Output current:
150mA = 0150
⋯⋯ in 25mA steps
1050/1400mA = 1050/1400

UL voltage:
60V = 6

Version no

E C 0 3 6 1 S 2 - 0 7 0 0 L

Output power:
30W = 03

Form factor:
Long plastic = A
Square metal bottom feed = B
Square metal side feed = S

Dimming curve:
Logarithmic = leave blank
Linear = L

AcuityBrands.

Dimensions, weight and packaging

ECOdrive 361/A

LxWxH	210x40.4x33.5mm / 8.27x1.59x1.32in
Weight	225 g / 7.94 oz
Drivers per carton	50 pcs

ECOdrive 361/B

LxWxH	130x72x34.4mm / 5.12x2.83x1.35in
Weight	285.5 g / 10.07 oz
Drivers per carton	40 pcs

ECOdrive 361/S

LxWxH	130x72x28mm / 5.12x2.83x1.10in
Weight	285.5 g / 10.07 oz
Drivers per carton	40 pcs
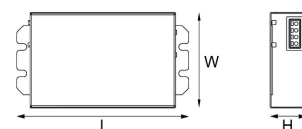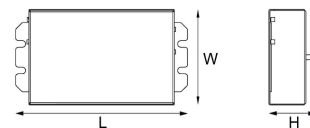
Standards and certifications

Standards compliance

EN	61347-1/-2-13, 62384, 55015, 55022, 61000-3-2, 61547
UL, Recognized Component	UL 1310, UL 8750 (Class 2 output) Type TL LED driver (excluding /A)
FCC	47 CFR Part 15 class B
RoHS	RoHS2

Certifications

Wiring Specifications

Wire type	AWG 20-16, 0.5-1.5mm² solid or stranded copper
Wire strip length	9mm / 0.35in
Recommended mains wires	for 361/A: H03/H05VVH2-F, 2x0,75 mm² (flat) H03/H05VV-F 2x0,75 mm² (round)

Wiring diagrams

ECOdrive 361/A

120-277 VAC
0-10V — LED output — LEDcode / NTC

ECOdrive 361/B

120-277 VAC
0-10V — LED output — LEDcode / NTC

ECOdrive 361/S

0-10V — LEDcode / NTC
120-277 VAC — LED output

Thermal protection

External NTC thermistor	throttling @ 70 °C / 158 °F (settable)
External thermistor value	47kΩ
Recommended thermistors	238164063473 (leaded) NTCASCWE3473J (screw)

Thermal specification

Ta operating range	-20ºC ... +50ºC / -4ºF ... +122ºF
Tc max	/A: 85ºC/185ºF, /B, /S: 80ºC/176ºF
Tc lifetime	/A: 80ºC/176ºF, /B, /S: 75ºC/167ºF
Type TL	/B /S: @1400mA: Tref 54ºC/129.2ºF, max 81ºC/177.8ºC

Warranty

Warranty period	3 years