

Light
is our passion

50W 0-10V/AUX LED Drivers with Smooth Dimming to 1%

Input characteristics

Input voltage AC	120-277V (UL)
Input current	0.7A max
Input frequency	47-63Hz
Efficiency @ full load	89%
Efficiency @ 2/3 load	85%
Power factor @ full load	>0.9
THD @ full load	<20%
Inrush current	negligible: 30mA ² s @ 277V
Surge protection	2kV DM, 2kV CM
Standby power	<0.5W (561/M) <0.53W (566/M)

Output characteristics

LED output power	50W max
Programmable LED output current range	150-1,400mA
LED output current resolution	programmable in 25mA steps
LED output current tolerance	+/- 5% at programmed LED output current
LED outputs	1 (UL Class 2)
LED output voltage range	2-55V
AUX output	25.5V DC, 18mA max (566/M)

Control characteristics

Control channels	1
Dimming protocol	0-10V
Dimming range	100%-1%
Dimming method	Hybrid HydraDrive
Dimming curve	linear, logarithmic, soft-linear or square
Driver configuration	with TOOLbox pro and FluxTool
0-10V isolation	to line voltage input: 1500V to LED output: 3750V Only applies to 561/M
0-10V current draw	<2mA

Protection

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

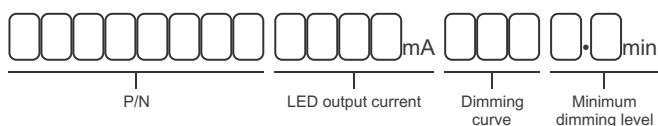
Product offering



ECOdrive 561/M **P/N: EC0561M2**
ECOdrive AC, 50W, 0-10V, constant current, 1x 55V output, flying leads, long metal

ECOdrive 566/M **P/N: EC0566M2**
ECOdrive AC, 50W, 0-10V+aux, constant current, 1x 55V output, flying leads, long metal

Order number configuration



P/N: for LED driver part number, see 'Product offering' above.

LED output current: in 25mA steps, e.g. "0275", "1025", etc.

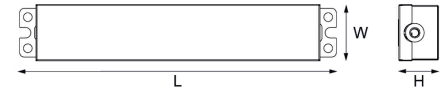
Dimming curve: enter "LOG" for logarithmic, "LIN" for linear, "SLN" for soft-linear or "SQU" for square.

Minimum dimming level: write to one decimal place, e.g. "05.0" for 5%, "07.5" for 7.5%, "10.1" for 10.1%, etc. Leave blank if default minimum dimming level (1%) is required.

Dimensions, weight and packaging

ECOdrive 561/M, 566/M

LxWxH	240x42x30mm / 9.45x1.65x1.18in
Weight	400 g / 14.1 oz
Items per carton	40 pcs



Standards and certifications

Standards compliance

UL, Recognized Component	UL 1310, UL 8750 (Class 2 output)
FCC	47 CFR Part 15 class A
RoHS3	(Directives 2011/65/EU-2015/863/EU)

Certifications



Wiring Specifications

Wire type	AWG 22 stranded (LEDcode) AWG 18 solid (other wires)
Wire length	Line in: 453mm 0-10V: 663mm (561/M, 566/M) Aux: 663mm (566/M) LED output: 236mm LEDcode: 236mm
Wire strip length	9.5mm / 0.375in

Wiring diagrams

ECOdrive 561/M

120-277 VAC



— LEDcode / NTC
— LED output
— 0-10V

ECOdrive 566/M

120-277 VAC



— LEDcode / NTC
— LED output
— 0-10V / aux

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	-20 °C ... +50 °C / -4 °F ... +122 °F
Tc max	75 °C
Tc lifetime	75 °C
Lifetime @ Tc lifetime	50000 hours

Warranty

Warranty period	3 years
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Maximum loading of automatic circuit breakers

Automatic circuit breaker type	B10	B13	B16	C10	C13	C16
Amount of LED drivers	14	18	22	14	18	22