

Product features

- Dimming isolated adjustable power LED driver
- 2Channel Intelligent DC to DC LED driver
- Supports DALI-2 D4i Parts 25x + AUX
- Flicker-free LED driver
- 24 V 0.1 A Auxiliary source
- Supports i-Data function (DALI part 251, 252, 253)
- Current adjustment via NFC
- NTC use for lamp temperature acquisition or output current set
- Output current 150...1400 mA
- Max. output power 54 W
- Constant lumen output (CLO)
- For luminaires with protection class I,II
- 5 years warranty



Product specifications

165780 XNA LNR DST 54/120-277/CC150-1400/2CH/D4i NFC

Output current	Input voltage	Output voltage	Efficiency @ full load	Current accuracy	Power factor	Dimension LxWxH (mm)
150 mA	120 Vac	10...54 Vdc	83%	± 5%	0.9 @ > 10 W load	360 x 30 x 21
350 mA		10...54 Vdc	86%			
750 mA		10...54 Vdc	89.5%			
1000 mA		10...54 Vdc	89.5%			
1200 mA		10...45 Vdc	88%			
1400 mA		10...38.5 Vdc	88%			
150 mA	277 Vac	10...54 Vdc	79.5%		0.9 @ > 40 W load	
350 mA		10...54 Vdc	83%			
750 mA		10...54 Vdc	89.5%			
1000 mA		10...54 Vdc	89.5%			
1200 mA		10...45 Vdc	89.5%			
1400 mA		10...38.5 Vdc	88.5%			

Electrical specifications

Mains voltage supply

Rated input voltage range	120...277 Vac; performance range
Max. input voltage range	108...305 Vac; operational safety range
Rated frequency range	50/60 Hz
Performance / Operational safety	47...63 Hz
Max. input current	0.58 A @ 120 Vac

Protection against voltage peaks

Withstand voltage	I/p-O/p: 1.8 kVac, < 5 mA 60 s; I/p-FG: 1.8 kVac, < 5 mA 60 s I/p-DIM: 1.8 kVac, < 5 mA 60 s; DIM-FG: 0.6 kVac, < 5 mA 60 s O/p-FG: 0.6 kVac, < 5 mA 60 s
Mains surge immunity	L-N 1 kV, L/N-FG: 2kV per IEC 61000-4-5
Ring wave	L-N 2.5 kV, L-FG 2.5 kV, N-FG 2.5 kV

Total harmonic distortion (THD)

At rated input voltage range @ full load	≤ 10% @ 120 Vac; ≤15% @ 277 Vac
--	---------------------------------

Output data

Output current tolerance	± 5% at rated input voltage range
No load output voltage	60 Vdc
Ripple output current	5% (ripple = peak/average total 100/120 Hz)
Output PstLM	≤ 1 at full load @ rated input voltage
Output SVM	≤ 0.4 at full load @ rated input voltage

Protection functions output side

Over voltage protection	The output voltage is less than or equal to 60 V Over voltage protection: Hiccup mode. protection device will trigger when load voltage exceeds specified output voltage and will auto recover after the fault mode is removed.
Overpower protection	The output power is less than or equal to 59.4 W
Short circuit protection	Short circuit protection: Hiccup mode. Protection device will trigger when short circuit and will auto recover after the fault mode is removed.

Dimming operation and interface

Dimming current range	1%... 100%
Standby power consumption	< 0.5 W

Connection terminals

Connection terminal type	45° push in terminal
Wire cross section	Input and output wire: 18-20 AWG
Wire stripping length	9...10 mm

Degree of protection

Protection rating	IP20
-------------------	------

Operating data

Output current range	NFC control adjusts the current: 150...1400 mA
Default current	150 mA
Output voltage range	10...54 Vdc
Noise level	< 20 dB, at full load @ 100 cm distance

Supplementary instructions

- The luminaire manufacturer is responsible for measuring and verifying the EMI compliance of the complete luminaire, as the level of radio interference will vary depending on the luminaire construction. Especially primary and secondary cable lengths and their routing may have a significant effect on radio interference.

Environmental specifications

Operating temperature	-20...+50°C
Storage temperature	-25...+85°C
Working humidity	5%...90%
Store humidity	5%...95%
Lifetime	at Tc 90°C: 50,000 hrs; at Tc 80°C: 100,000 hrs @ 120 Vac (0.2% / 1,000 h failure rate)
Maximum Tc temperature	90°C

Safety & EMC compliance

UL	CCC	SAA

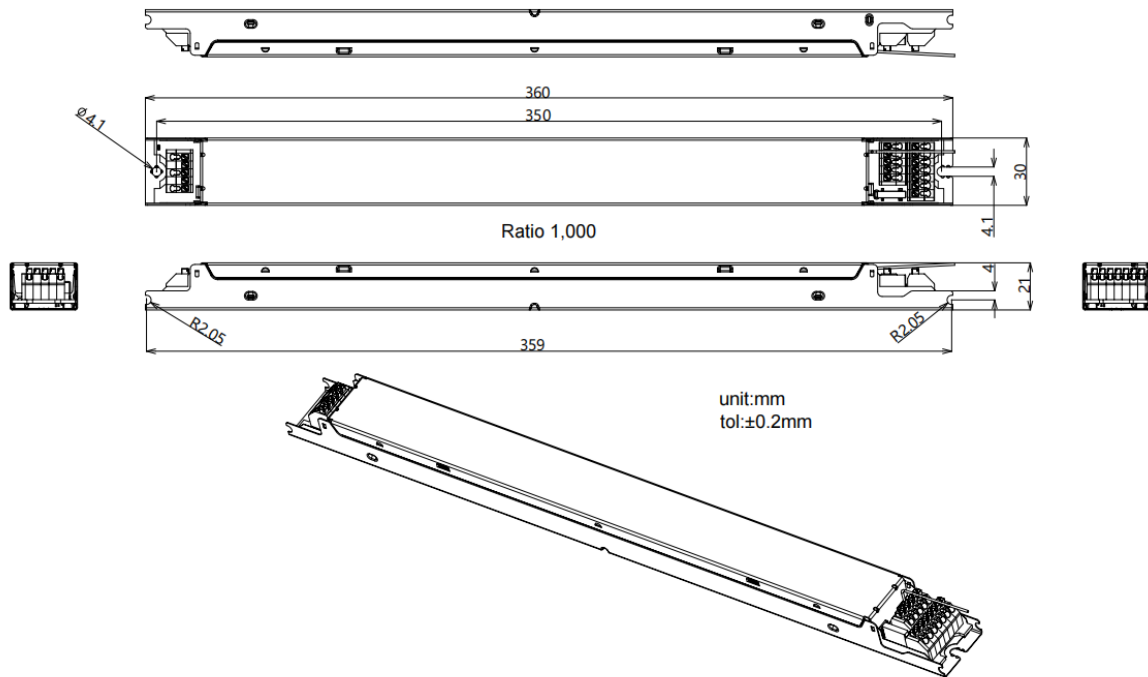
Dimensions

Housing dimensions

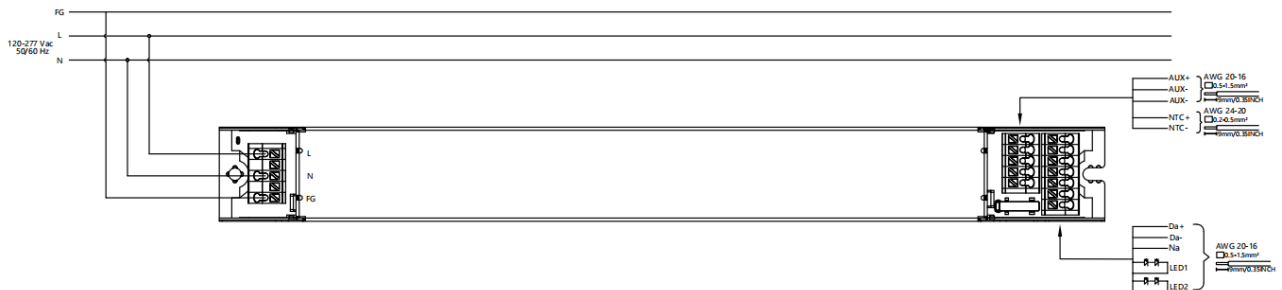
Length (L)	360 mm
Width (W)	30 mm
Height (H)	21 mm
Weight	0.269 kg

Packaging details

Packing units	20 pcs
Carton size	381 x 128 x128 mm
Weight	6.4 kg



Wiring diagram



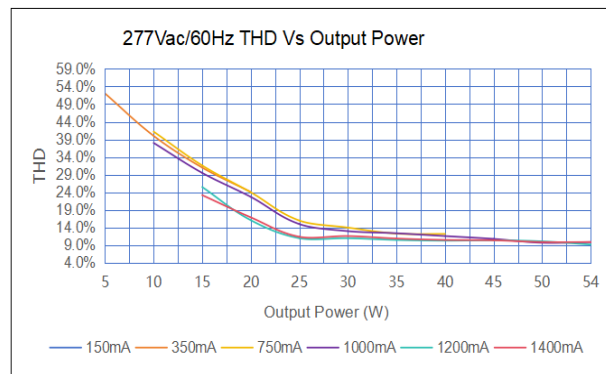
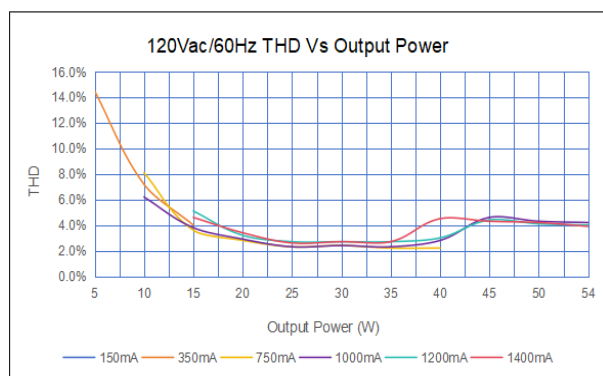
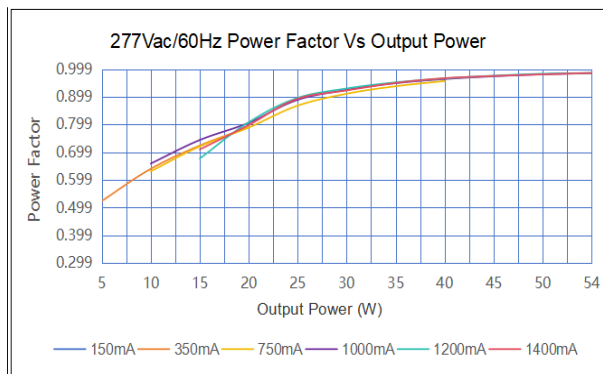
- All connections must be as short as possible to ensure good EMI performance.
- The luminaire wire should keep a certain distance from the LED power supply and other wires (5...10 cm is preferred).
- No secondary switches are allowed.
- Incorrect wiring can damage the LED.
- The wire must be well protected against short circuit.

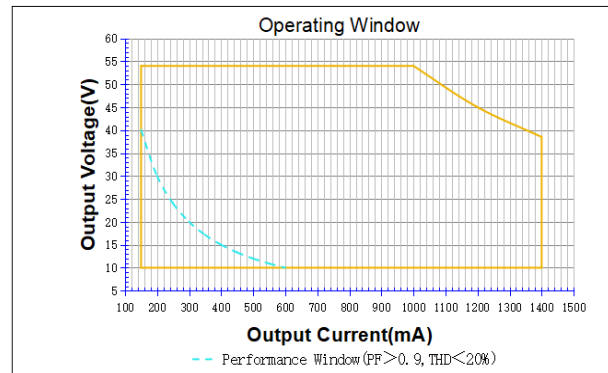
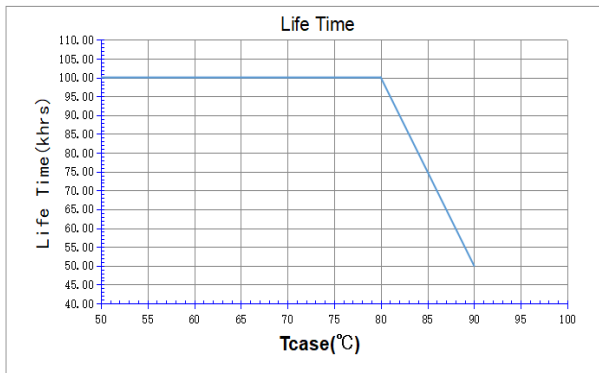
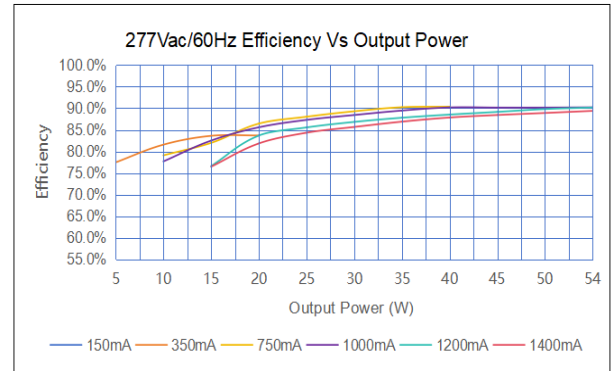
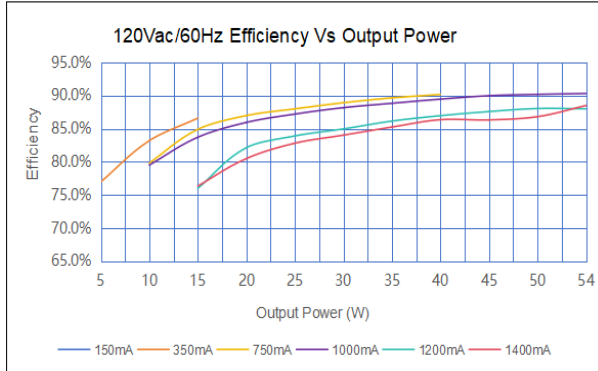
MCS ±

- NTC + / - interface voltage 3.3 V
- Could connect to external NTC
NTC thermal management protects LED lamp , when the temperature of LED lamp over temperature protection point
the current will be reduced by 50% every 5 minutes . Default setting is 85°C .
- NTC compatibility list :

NTC Manufacturer	NTC Mode INO .
MURATA	NCP21WB473J03RA
VISHAY	NTCS0805e4473JXT
VISHAY	NTCLE100E3473

Technical information





It's important to set the output current (AOC value) according to the LED voltage and make sure the power is within 54 W + 5%.

Example of AOC settings

V LED (Vdc)	AOC max	Pout (W)
54	150 mA	8
54	350 mA	19
54	750 mA	40
54	1000 mA	54
45	1200 mA	54
38.5	1400 mA	54