

Art. 168354

Product features

- Built-in isolated adjustable power LED driver
- Output current 600...1200 mA
- Max. output power 50 W
- Flicker-free
- Dimming range 0.1%...100%
- Current output default value 100%
- For luminaires with protection class I







Product specifications

168354 NAFSCB50-120277-600-1200 010V-W

Output current	Input voltage	Output voltage	Efficiency @ full load	Current accuracy	Power factor
6001200 mA	120277 Vac	1552 Vdc	90% (typical)	± 5%	0.9 (Output Power > 27 W)

Electrical specifications

Mains voltage supply

Rated input voltage range	120277 Vac; performance range	
Max. input voltage range	108305 Vac; operational safety range	
Rated frequency range	50/60 Hz	
Performance/Operational safety	4763 Hz	
Max. input current	0.5 A @ 120 Vac	

Protection against voltage peaks

Withstand voltage	I/p-O/p: 1.6 kVac, < 5 mA 60 sec, I/p-earth: 1.6 kVac, < 5 mA 60 sec, O/p-earth: 0.5 kVac, < 5 mA 60 sec
Mains surge immunity	L-N 1 kV, L/N-earth 2kV per IEC 61000-4-5, 2.5 kV ring wave

Total harmonic distortion (THD)

At rated input voltage range @ full load	≤ 15%

page 1



Art. 168354

0	utp	ut	data

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

Protection functions output side

Overvoltage protection	The output voltage is less than or equal to 60 V		
Overpower protection	The output power is less than or equal to 55 W		
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 mode	0/110 V (programmable)	
Dimming method	Amplitude dimming	
Dimming current range	0.1%100% (1.21200 mA)	

Wiring

Main input wire	UL1332, 18 AWG, 300 V, 200 $^{\circ}$ C, black L, white N, wire exposed 5.9 \pm 0.39 in (150 \pm 10 mm), tinplating length 0.39 \pm 0.04 in (10 \pm 1 mm).
Main output wire	UL1332, 20 AWG, 300 V, 200 $^{\circ}$ C, brown LED+, blue LED-, wire exposed 5.9 ± 0.39 in (150 ± 10 mm), tinplating length 0.39 ± 0.04 in (10 ± 1 mm).
DALI control input wire	UL1332, 22 AWG, 300 V, 200 $^{\circ}$ C, purple DIM+, pink DIM-, wire exposed 5.9 \pm 0.39 in (150 \pm 10 mm), tinplating length 0.39 \pm 0.04 in (10 \pm 1 mm).

Degree of protection

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

Operating data

Output current range	6001200 mA (programmable)	
Default output current	1200 mA	
Output voltage range	1552 Vdc	
Noise level	< 20 dB, at full load @ 100 cm distance	

Circuit breaker / Inrush current

	Inrush current lp		Inrush current Twidth: 133 µs			
MCB loading quantity	MCB type	B10	C1	0	B16	C16
	Units	16	16	3	26	26

page 2



Art. 168354

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.
- The driver can be programmed by inserting one end of the programmer into the drive and the other end into the USB port
 of the computer. The driver does not need to be powered on during the programming processWhen ordering drivers, make
 sure you order the appropriate programmer.

Environmental specifications

Operating temperature	-20 +50°C
Storage temperature	-25 +85°C
Working humidity	10%90%
Store humidity	5%95%
Lifetime	at Tc 75°C: 50,000 hrs @ performance range (0.2% / 1,000 h failure rate)
Maximum Tc temperature	90°C

Safety & EMC compliance

UL
UL8750
CLASS P
CSA C22.2 NO.250.13
UL1310-CLASS 2

FCC		
1		



Art. 168354

Dimensions

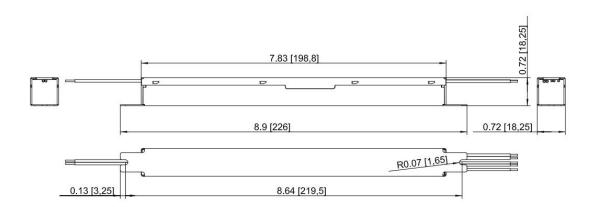
Housing dimensions

Length (L)	8.90 in (226 mm)
Width (W)	0.72 in (18.25 mm)
Height (H)	0.72 in (18.25 mm)

For all dimensions: values in in/mm; tolerances: ± 0.5 mm

Packaging details

Packing units	50 pcs
Carton size	12.60 x 9.72 x 6.81 in (320 x 247 x 173 mm)
Carton weight	7.7 kg
Product weight	0.135 kg

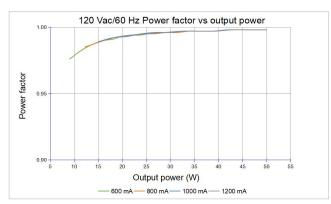


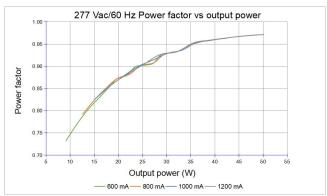
- All connections must be as short as possible to ensure good EMI performance.
- The luminaire wire should keep a certain distance from the LED power supply and other wires (5...10 cm is preferred).
- No secondary switches are allowed.
- Incorrect wiring can damage the LED.
- The wire must be well protected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

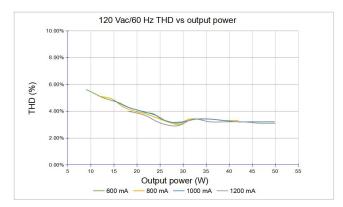


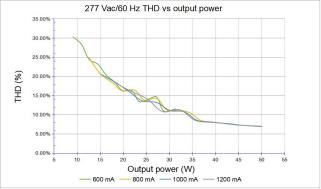
Art. 168354

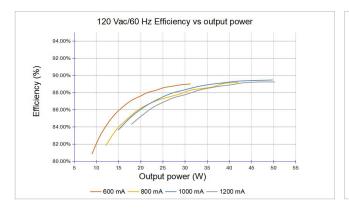
Technical information

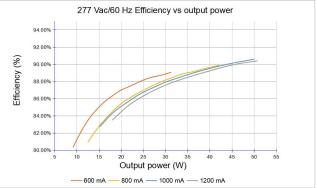








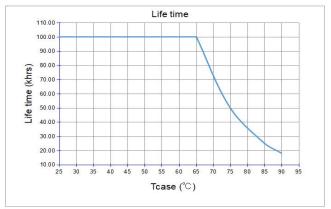




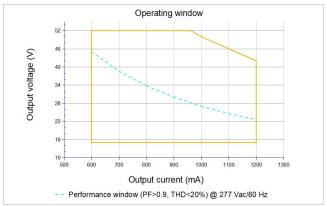
Errors excepted. We reserve the right to make alterations in the interest of improving our products.



Art. 168354



at Tc 75°C (0.2% / 1,000 h failure rate)



It's important to set the output current (AOC value) according to the LED voltage and make sure the power is within 50 W + 5%.

Example of AOC settings

V LED (Vdc)	AOC max	Pout (W)
42	1200 mA	50.4
50	1000 mA	50
52	961 mA	50