

LINEAR LED DRIVER / DALI-2

ARVIK LINEAR 60 DALI

Technical model: AR-60-550-LI-DALI-AN



POWER

60 W

OUTPUT CURRENT

120-550 mA

OUTPUT VOLTAGE

54-240 VDC*

CONTROL

DALI-2 / PUSH

KEY FEATURES

-  Flicker-free
-  DALI-2
-  DIP current setting
-  5-year warranty

Efficiency	up to 94.4%
Dimensions	280 x 29.4 x 21 mm
Installation	Built-in
Protection	IP20 / Class I / non-isolated
Input	220-240 VAC / 50-60 Hz

Technical specifications apply to the stated ARVIK model. Before implementation, confirm the selected variant, operating conditions and document revision.

* The voltage range depends on the selected output current.

PRODUCT DATASHEET

AR-60-550-LI-DALI-AN

ARVIK | TECHNICAL DOCUMENTATION



Feature

- No-Isolation
- Flick free
- Complete protections: OSP / OVP /OPP
- Standby power consumption ≤ 0.45W
- Class 1 LED driver
- 5 year warranty (TOPAZCON, HUAWEI, KINLS SAPPHIRE, MAN YUE, Aihua capacitor).



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency Typical	Output Voltage	No load Voltage
AR-35-400-LI-DALI-AN	120mA	0.15A	30.90W	6.48-28.80W	0.91	93.2%	54-240V	260Vdc
	150mA	0.18A	38.13W	8.10-36.00W	0.93	94.4%	54-240V	
	200mA	0.23A	50.95W	10.80-48.00W	0.94	94.2%	54-240V	
	250mA	0.28A	63.62W	13.50-60.00W	0.94	94.3%	54-240V	
	300mA	0.28A	63.96W	16.20-60.00W	0.95	93.8%	54-200V	
	350mA	0.25A	56.33W	18.90-52.50W	0.94	93.2%	54-150V	
	400mA	0.28A	64.17W	21.60-60.00W	0.95	93.5%	54-150V	
	450mA	0.24A	53.19W	24.30-49.05W	0.94	92.2%	54-109V	
	500mA	0.27A	59.23W	27.00-54.50W	0.95	92.0%	54-109V	
	550mA	0.30A	65.30W	29.70-59.95W	0.95	91.8%	54-109V	

* Test result @230V, 50Hz, Full Load.

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	Amplitude (DALI-2)
	Output Features	Non-Isolation
	IP Grade	IP20
	Insulation Class	Class I
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	198-264VAC
	Range of DC Input Voltage	180-280VDC
	Frequency	0/50/60Hz, Range:0/47-63Hz
	Overvoltage protection	2h@380VAC, 48h@320VAC
	Input Current	≤0.30A max (230VAC, full load)
	Input Power	≤65.3W max (230VAC, full load)
	Power Factor	≥0.95 (230VAC, full load)
	THD	≤8.5% (230VAC, full load)
	No-load Power Consumption	≤0.45W @230VAC (DIM to 0)
	Inrush Current	≤10A/50us (230VAC, full load)
	Connected quantity of 10A Breaker	19pcs/type A ;31pcs/type B ;50pcs/type C @ 230Vac
	Connected quantity of 13A Breaker	25pcs/type A; 40pcs/type B; 65pcs/type C @ 230Vac
Output	Output Voltage Range	54-240VDC
	U-OUT (working voltage)	< 260VDC Max.
	Output Current:	120mA-550mA, Factory set current of 120mA
	Efficiency	≥94% (230VAC, full load)
	Max. Output Power:	60W
	LF Current Ripple (< 100 Hz)	<1% (Imax-Imin)/(Imax+Imin)
	Current Accuracy	±5%
	Starting Time (AC mode)	≤0.8S (230VAC, full load,by DALI system)
	Starting Time (DC mode)	≤0.4S
	Switching over time (AC/DC)	≤0.4S
	PstLM	≤1
	SVM	≤0.4
Control Method	Secondary PUSH dimming	Secondary PUSH dimming (Max. lead wire length:20m,same port of DALI)
	DALI function	DALI dimming (Max. lead wire length:300m) logarithm or linear dimming curve selectable
	Dimming range	DALI dimming: 1%-100%
	PUSH-button	Max parallel connections qty for Push-dim 15
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery(not be hot swap)
	No-load Protection	Auto Recovery
	Insulation voltage	1500V 5mA 60S between P-E

	Insulation resistance	>100M ohm @ 500VDC L/N to PE
	Leakage current	< 700μA, I/P to O/P or I/P to PE @230V input
Environment	Ta/Operation Temperature	-25....+60℃
	Ts/Storage Temperature	-25....+85℃
	Tc/Enclosure Temperature	85℃
	Humidity	10%....90%RH
	Atmosphere	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Built-in
	SEC Wire preparation	0.5-1.5□ / 8-9mm
	PRI Wire preparation	0.5-1.5□ / 8-9mm
	DALI Wire preparation	0.5-1.5□ / 8-9mm
	Dimension	280*29.4*21mm (L*W*H)
Standards	Certification	CE
	Safety Standards	EN61347-1:2015/A1:2021; EN61347-2-13:2014/A1:2017;
	DALI performance	EN 62386-101 (DALI-2),EN 62386-102 (DALI-2) EN 62386-207 (DALI-2, including part 251, 252, 253)
	Performance	EN62384
	Surge	L-N/1KV (L/N)-PE/2KV
	RoHS	complied to 2011/65/EU
Others	Life Time	50000h Tc=85℃
		75000h Tc=80℃
		100000h Tc=75℃
	Warranty	5years , F.R. < 10000ppm
Remark: 1.All Parameters, if not specified, are measured at 230VAC/50Hz and 25℃ ambient temperature. 2.LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again. 3.During the PUSH DIM test,the number of parallel connections must be less than 15PCS.		

2. Output Current Setting

Output Current	1	2	3	4
120mA	-	-	-	-
150mA	-	-	-	ON
200mA	-	-	ON	-
250mA	-	-	ON	ON
300mA	-	ON	-	-
350mA	-	ON	-	ON
400mA	-	ON	ON	-
450mA	-	ON	ON	ON
500mA	ON	-	-	-
550mA	ON	-	-	ON

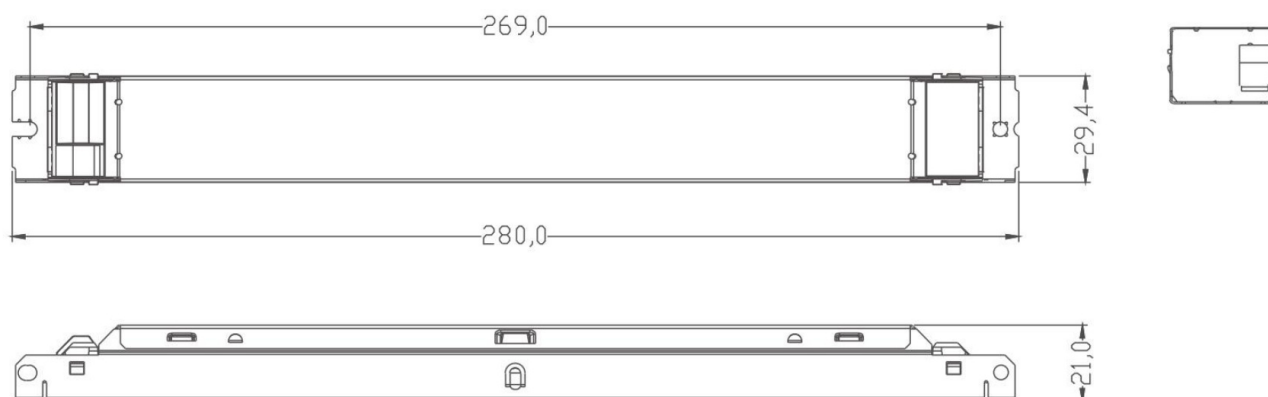
3. Label

☐ L ☐ N	ARVIK	LED Dimmable Driver AR-60-550-LI-DALI-AN Constant Current Type for operation with LED modules only Input Voltage: 220-240VAC Input Frequency: 50/60Hz Range of application DC 180-280V Output: 120-550mA 54-240VDC	lin: ≤ 0.3A Prange=6.4-60W Uout: 260VDC Max. 60W Tc: 85°C Ta: 60°C	<table><tr><th>Pout [W]</th><th>Iout [mA]</th><th>λ</th><th>1</th><th>2</th><th>3</th><th>4</th></tr><tr><td>28.8</td><td>120</td><td>0.91C</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>36.0</td><td>150</td><td>0.93C</td><td>-</td><td>-</td><td>-</td><td>ON</td></tr><tr><td>48.0</td><td>200</td><td>0.94C</td><td>-</td><td>-</td><td>ON</td><td>-</td></tr><tr><td>60.0</td><td>250</td><td>0.94C</td><td>-</td><td>-</td><td>ON</td><td>ON</td></tr><tr><td>60.0</td><td>300</td><td>0.95</td><td>-</td><td>ON</td><td>-</td><td>-</td></tr></table>							Pout [W]	Iout [mA]	λ	1	2	3	4	28.8	120	0.91C	-	-	-	-	36.0	150	0.93C	-	-	-	ON	48.0	200	0.94C	-	-	ON	-	60.0	250	0.94C	-	-	ON	ON	60.0	300	0.95	-	ON	-	-	<table><tr><th>Pout [W]</th><th>Iout [mA]</th><th>λ</th><th>1</th><th>2</th><th>3</th><th>4</th></tr><tr><td>52.5</td><td>350</td><td>0.94C</td><td>-</td><td>ON</td><td>-</td><td>ON</td></tr><tr><td>60.0</td><td>400</td><td>0.95</td><td>-</td><td>ON</td><td>ON</td><td>-</td></tr><tr><td>49.0</td><td>450</td><td>0.94C</td><td>-</td><td>ON</td><td>ON</td><td>ON</td></tr><tr><td>54.5</td><td>500</td><td>0.95</td><td>ON</td><td>-</td><td>-</td><td>-</td></tr><tr><td>59.9</td><td>550</td><td>0.95</td><td>ON</td><td>-</td><td>-</td><td>ON</td></tr></table>							Pout [W]	Iout [mA]	λ	1	2	3	4	52.5	350	0.94C	-	ON	-	ON	60.0	400	0.95	-	ON	ON	-	49.0	450	0.94C	-	ON	ON	ON	54.5	500	0.95	ON	-	-	-	59.9	550	0.95	ON	-	-	ON	wire preparation Input: 0.5-1.5" DALI: 0.5-1.5" Output: 0.5-1.5" CE EL 110 Output + Output - 5-1 off
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4. Electrical values

Operating power windows Power Window <table><caption>Operating power windows data</caption><tr><th>Output current (mA)</th><th>Power (W)</th><th>Mode</th></tr><tr><td>0 - 125</td><td>50 - 240</td><td>Dimmed</td></tr><tr><td>0 - 250</td><td>240</td><td>operating windows</td></tr><tr><td>250 - 350</td><td>240 - 150</td><td>operating windows</td></tr><tr><td>350 - 400</td><td>150</td><td>operating windows</td></tr><tr><td>400 - 450</td><td>150 - 110</td><td>operating windows</td></tr><tr><td>450 - 550</td><td>110</td><td>operating windows</td></tr></table>	Output current (mA)	Power (W)	Mode	0 - 125	50 - 240	Dimmed	0 - 250	240	operating windows	250 - 350	240 - 150	operating windows	350 - 400	150	operating windows	400 - 450	150 - 110	operating windows	450 - 550	110	operating windows	Efficiency v.s. Load TBD
Output current (mA)	Power (W)	Mode																				
0 - 125	50 - 240	Dimmed																				
0 - 250	240	operating windows																				
250 - 350	240 - 150	operating windows																				
350 - 400	150	operating windows																				
400 - 450	150 - 110	operating windows																				
450 - 550	110	operating windows																				
PF v.s. Load TBD	THD v.s. Load TBD																					
Life time TBD	Derating TBD																					

5. Dimension (Unit: mm)

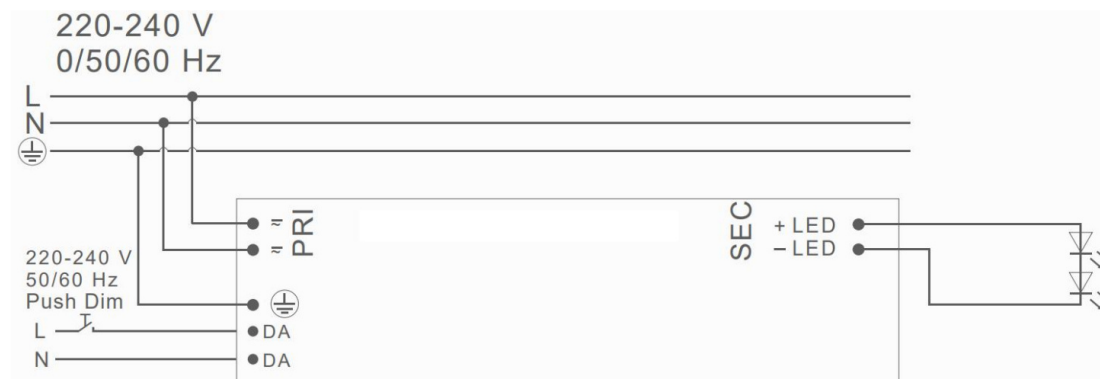


6. Wiring Diagram

Circuit diagram



Push Dimming



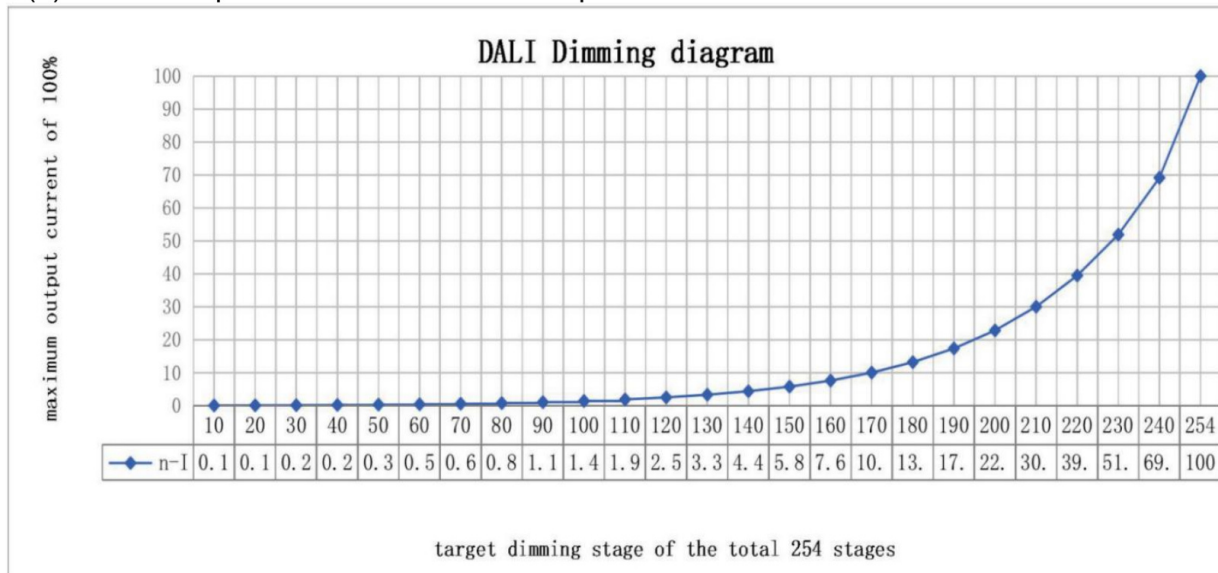
7. DALI dimming Curve

formula for DALI dimming.

$$X(n)=10^{\{[(n-1)/(253/3)]-1\}},$$

Here,n means the target dimming stage of the total 254 stages.

X(n) means the percent of the maximum output current



8. Packing information

Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
325*303*240	80	0.135	10.80	11.84

9. REVISION HISTORY

DATE	VER	REMARK
2025/12/22	V1.0	Initial release.