

COMPACT LED DRIVER / ON-OFF

ARVIK MINI 21

Technical model: AR-21-500-MI-A-H



POWER

21 W

OUTPUT CURRENT

150-500 mA

OUTPUT VOLTAGE

25-42 VDC

CONTROL

ON-OFF
KEY FEATURES

- Isolated
- Flicker-free
- THD < 6%
- 5-year warranty

Efficiency	up to 93%
Dimensions	97 x 43 x 22.8 mm
Installation	Built-in / independent
Protection	IP20 / Class II
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.

PRODUCT DATASHEET

AR-21-500-MI-A-H

ARVIK | TECHNICAL DOCUMENTATION



Feature

- Isolation
- Flick free
- High efficiency $\geq 93\%$
- Low THD $< 6\%$ (@230Vac Full Load)
- Complete protections: OSP / OVP /OPP
- Standby power consumption $< 0.5W$
- It can be used for lighting equipment in protection class I and class II
- 5 year warranty



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency Typical	Output Voltage	No load Voltage
AR-21-500-MI-A-H	150mA	0.13A	7.00W	3.75-6.30W	0.83	90%	25-42V	59V
	200mA	0.14A	9.33W	5.00-8.40W	0.84	90%	25-42V	
	250mA	0.15A	11.53W	6.25-10.50W	0.85	91%	25-42V	
	300mA	0.16A	13.84W	7.50-12.60W	0.86	91%	25-42V	
	350mA	0.17A	15.97W	8.75-14.70W	0.87	92%	25-42V	
	400mA	0.18A	18.26W	10.00-16.8W	0.88	92%	25-42V	
	450mA	0.19A	20.32W	11.25-18.9W	0.89	93%	25-42V	
	500mA	0.20A	22.58W	12.50-21.00W	0.90	93%	25-42V	

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

1. Parameters

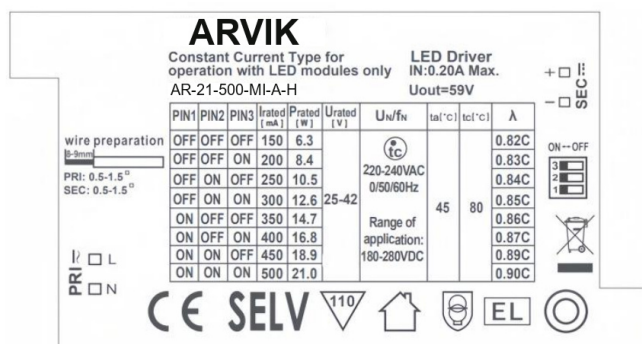
Category	Item	Technical Norm
Features	Output Type	Constant Current
	Output Features	Isolation
	IP Grade	IP20
	Insulation Class	Class II (compatible Class I)
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	198-264VAC
	Range of DC Input Voltage	180-280VDC
	Frequency	0/50/60Hz, Range:0/47-63Hz
	Overvoltage protection	2h@380VAC, 48h@320VAC
	Input Current	≤0.20A
	Input Power	≤22.58W
	Power Factor	≥0.90 (230VAC, full load)
	THD	≤6% (230VAC, full load)
	No-load Power Consumption	≤0.5W @230VAC
	Inrush Current	≤7.9A/21us (230VAC, full load)
	Connected quantity of 10A Breaker	24pcs/type A ;39pcs/type B ;63pcs/type C@230Vac
	Connected quantity of 13A Breaker	32pcs/type A ;51pcs/type B ;82pcs/type C@230Vac
Output	Connected quantity of 16A Breaker	39pcs/type A ;63pcs/type B ;101pcs/type C@230Vac
	Connected quantity of 20A Breaker	49pcs/type A ;79pcs/type B ;126pcs/type C@230Vac
	Output Voltage Range	25-42VDC@150-500mA
	Output Current:	150mA-500mA (Max.output) , Factory set current of 150mA
	Efficiency	≥93% (230VAC, full load)
	Max. Output Power:	21W
	LF Current Ripple (< 120 Hz)	±3% (Imax-Imin)/(Imax+Imin) MAX
	Current Accuracy	±5%
	Started Delay Time	≤0.5S (230VAC, full load)
	PstLM	≤1
Protection	SVM	≤0.4
	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	No-load Protection	Auto Recovery
	Insulation voltage	3000V 5mA 60S between P-S
	Insulation resistance	>100M ohm @ 500VDC
Environment	Leakage current	< 700μA, I/P to O/P or I/P to PE @230V input
	Ta/Operation Temperature	-20...45℃
	Ts/Storage Temperature	-20...80℃
	Tc/Enclosure Temperature	80℃
	Humidity	10%....90%RH
Construction	Atmosphere	86-108KPa
	Connection Method	Push-in Terminal
Construction	Installation	Built-in/Independent

	SEC Wire preparation	0.5-1.5□/ 8-9mm
	PRI Wire preparation	0.5-1.5□/ 8-9mm
	Dimension	97*43*22.8mm (L*W*H)
Standards	Certification	CE
	Safety Standards	EN61347-1:2015/A1:2021; EN61347-2-13:2014/A1:2017;
	Performance	EN62384
	Surge	L/N-Ground:2kV; L-N:1kV
	RoHS	complied to 2011/65/EU
Others	Life Time	50000h Tc=80℃
		75000h Tc=75℃
		100000h Tc=70℃
	Warranty	5years , F.R. < 10000ppm
	Noise	≤28dB@Background noise ≤18dB , Interval≥15cm
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.		

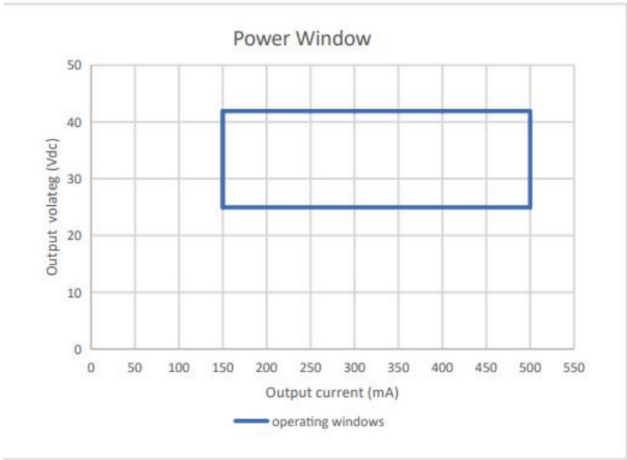
2. Output Current Setting

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

3. Label

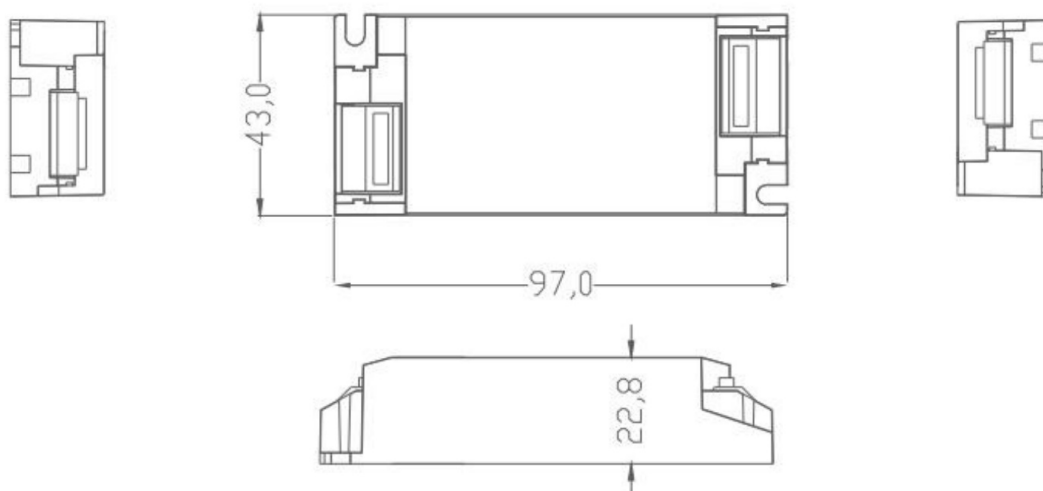


4. Electrical values

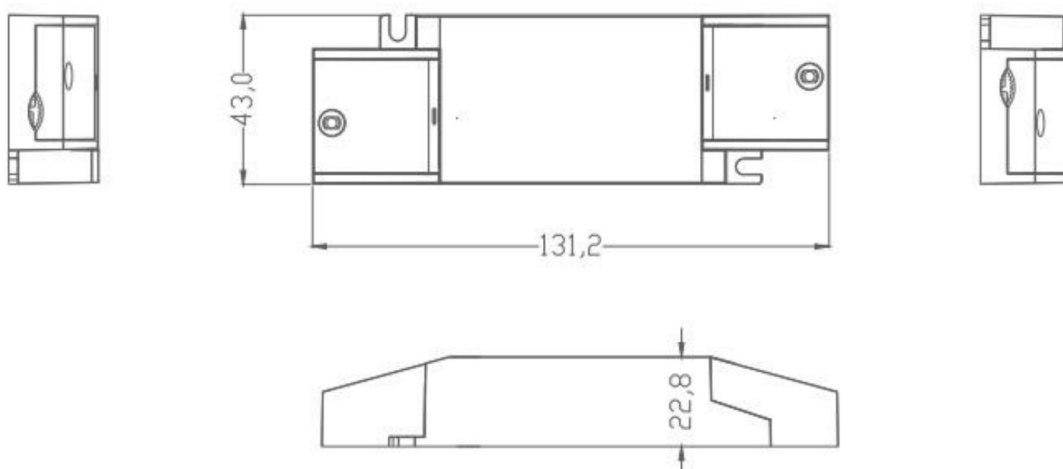
Operating power windows 	Efficiency v.s. Load TBD
PF v.s. Load TBD	THD v.s. Load TBD
Life time TBD	Derating TBD

5. Dimension (Unit: mm)

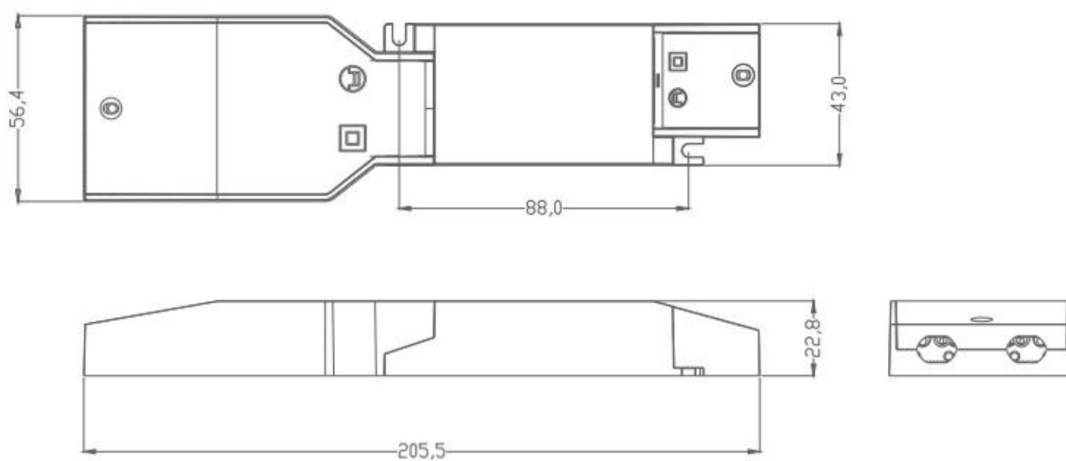
Built in type:



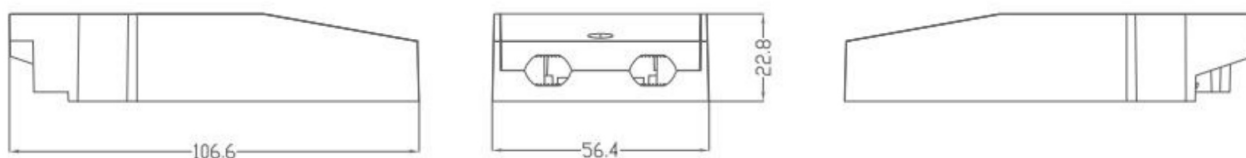
Small side cover:



Large side cover:



Large side cover specifications



Mechanical, Operating & Storage Conditions

Driver cross-section dimensions: 55.4-57.4 x 20.0-22.0 mm

Wire size: 0.5 - 2.5 mm²

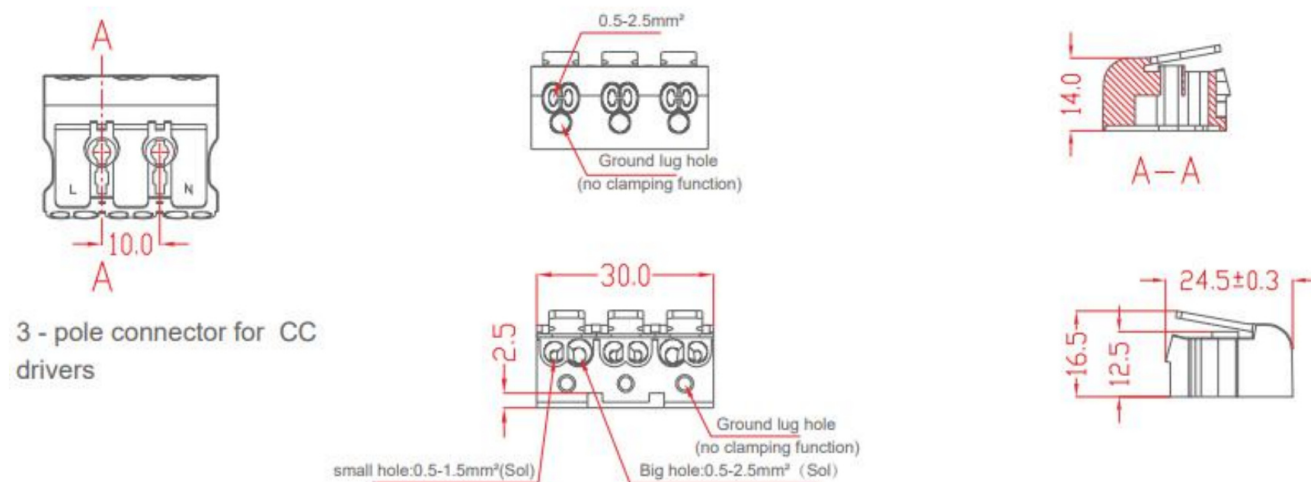
Ambient temperature range: -20...+50 °C

Storage temperature range: -20...+85 °C

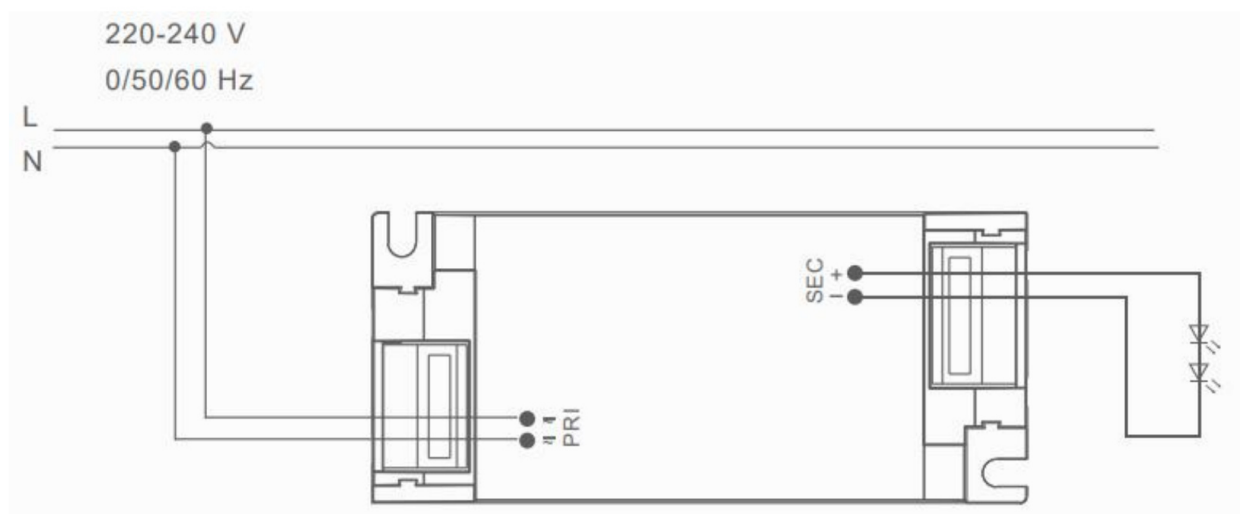
Assembly temperature range: +5...+30 °C

Do not store in wet or humid environment!

Terminal



6. Wiring Diagram



7. Packing information(Built in type)

Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
398*230*130	100	0.091	9.07	9.25

***The details shall be subject to the shipping package.**

8. Wiring instructions

- All connections must be kept as short as possible to ensure good EMI behaviour
- Mains leads should be kept apart from LED Driver and other leads (ideally 5 – 10 cm distance)
- Advice the maximum length of output wires is 3 m
- Secondary switching is not permitted (Except for constant voltage)
- Incorrect wiring can damage LED modules.
- The wiring must be protected against short circuits to earth (sharp edged metals parts, metal cable clips, louver, etc

9. REVISION HISTORY

DATE	VER	REMARK
2025-05-27	V1.0	Initial release.