



Magnetic Power Supply

Model:KGP-XXXVXXN



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (*Typical)	Output Voltage	No load Voltage
KGP-100V24N	0-2.1A	≤0.6A	≤115W	0- 100W	≥0.95	≥90%	24V	≤25V
KGP-100V48N	0-4.2A	≤0.6A	≤115W	0- 100W	≥0.95	≥90%	48V	≤49V
KGP-150V48N	0-3.12A	≤1.0A	≤173W	0- 150W	≥0.95	≥90%	48V	≤49V
KGP-250V48N	0-5.21A	≤1.5A	≤288W	0- 250W	≥0.95	≥90%	48V	≤49V

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

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Voltage
	Output Features	Isolation
	IP Grade	IP20
	Insulation Class	Class II
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	198-264VAC
	Frequency	0/50/60Hz
	Input Current	@ 100W≤0.6A, 230VAC , Rated Load @ 150W≤1A, 230VAC , Rated Load @ 250W≤1.5A , 230VAC , Rated Load
	Input Power	@ 100W ≤115W (230VAC, full load) @ 150W ≤120W (230VAC, full load) @ 250W ≤280W (230VAC, full load)
	Power Factor	≥0.95 (230VAC , full load)
	Inrush Current	≤80A/220us (230VAC, Full-load)
	THD	≤10% 230VAC/50Hz, 100%
	No-load Power Consumption	≤1.2W @230VAC
Output	Output Voltage Range	24VDC±3% , 48VDC±3%
	Voltage Accuracy	±5%
	No Load Voltage	24VDC±5% , 48VDC±5%
	Output Current	@ 100W , 24V 0-4.2A ;100W , 48V 0-2. 1A @ 150W , 48V 0-3. 12A @ 250W , 48V 0-5.21A
	Max. Output Power	@ 100W 100W

		@ 150W 150W @ 250W 250W
	Efficiency	@ 100-250W ≥90%
	Output Voltage Ripple	<960mV PK-PK (0.5%)
	Line Regulation	±5%
	Load Regulation	±5%
	PstLM	≤1
	SVM	≤0.4
	Started Delay Time	≤0.5S(230VAC, full load)
Protection	Short Circuit Protection	Auto Recovery
	Over Current Protection	120%-200% I _o ,Auto Recovery
	Overload Protection	Auto Recovery
	Over Voltage Protection	120%-150%V _o , Auto Recovery
	Over Temperature Protection	90<T _c <110℃, Auto Recovery
	No-load Protection	Auto Recovery
	Insulation voltage	I/ P to O/P,3KVac/5mA/ 1min
	Insulation resistance	>100M ohm @ 500VDC
	Leakage current	I/P to O/P <0.7mA
Environment	Ta/Operation Temperature	-25...+40℃
	Ts/Storage Temperature	-40...+85℃
	Tc/Enclosure Temperature	85℃
	Humidity	5%85% RH
	Atmosphere	86-108KPa
Construction	Connection Method	Touch sensitive
	Installation	Independent
	PRI Wire preparation	2*0.75mm ²
	Dimension	267.5×43.6×22mm(L*W*H)
Standards	Certification	CE SAA
	Safety Standards	EN 61347-1:2015/A1:2021 EN 61347-2-13:2014/A1:2017 EN IEC 62384:2020 EN 62493:2015/A1:2022 AS61347.2.13:2018 AS/NZS61347.1:2016 Inc A1 GB 17625.1-2022 GB/T 17743-2021 GB 19510.1-2009 GB 19510.14-2009 GB 19510.1-2023 GB 19510.213-2023
	EMC Standards	EN IEC 55015:2019 EN IEC 55015:2019/A11:2020 EN IEC 61000-3-2:2019/A1:2021 EN 61000-3-3:2013/A2:2021 EN IEC 61547:2023
	Performance	EN62384

Others	Surge	L N/ 2KV
	RoHS	Complied to 2011/65/ EU
	REACH	EU Regulation (EC) No 1907/2006
	Life Time	50000h @Ta/Tc
	Warranty	5years ,F.R. < 10000ppm
	Noise	≤ 24dB @Background noise ≤18d,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.
3. Output ripple should be measured at the output end which has with 0.1uF/50V ceramic capacitance and 47uF/50V Aluminum capacitance connected in parallel. Measured using oscilloscope with bandwidth limited to 20MHz.

2. Connected quantities of different current Breaker

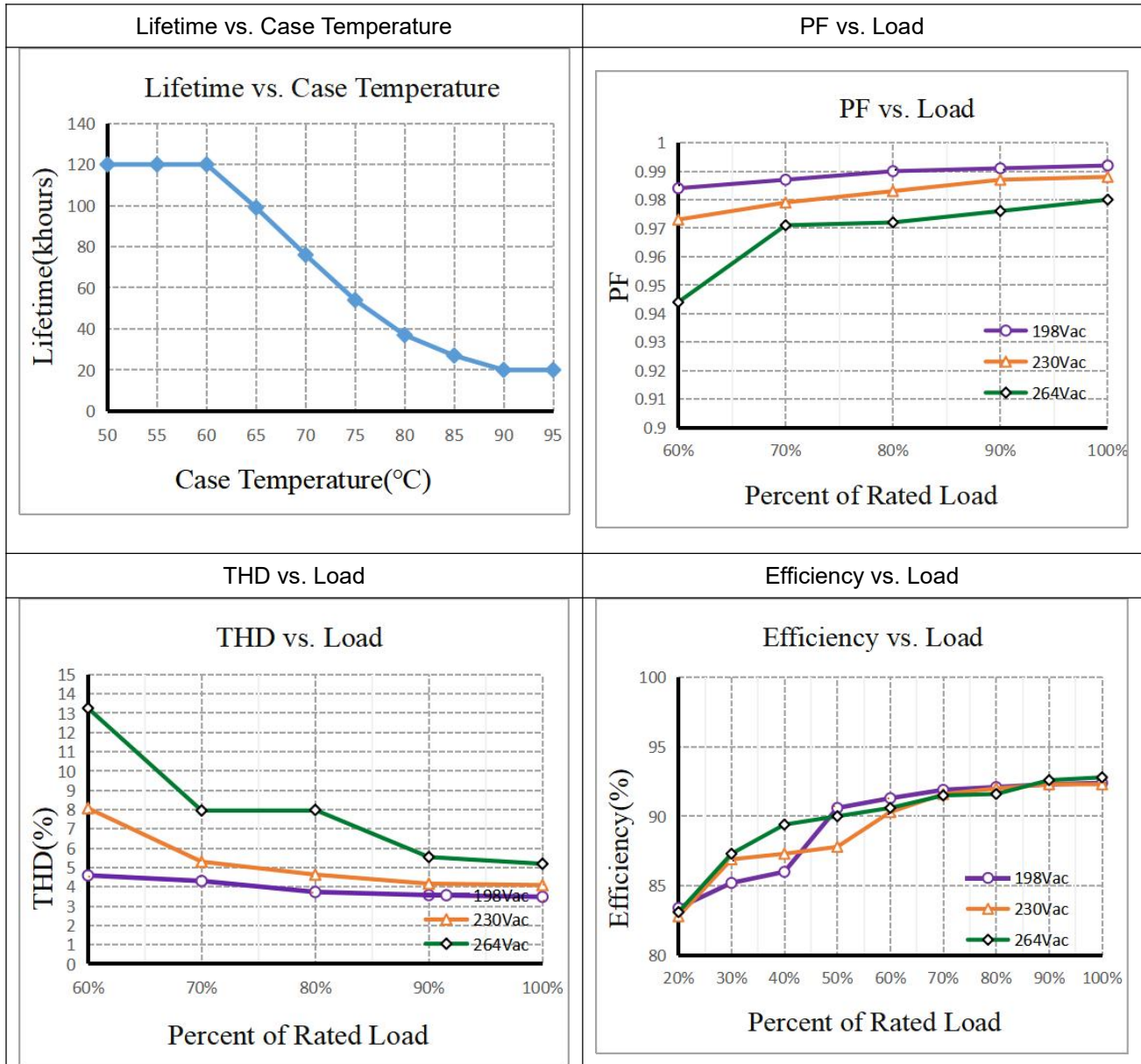
TYPE	Connected quantities of different current Breaker						Input Voltage (V)	Inrush Current(A)	Time (μs)
	current (A)	10	13	16	20	25			
	Installation wire diameter	1.5mm ²	2.5mm ²	2.5mm ²	4mm ²	4mm ²			
TYPE B	8	10	12	15	19		@230VAC	80	220
TYPE C	13	16	19	24	30				
TYPE D	20	25	31	38	49				

3. Label

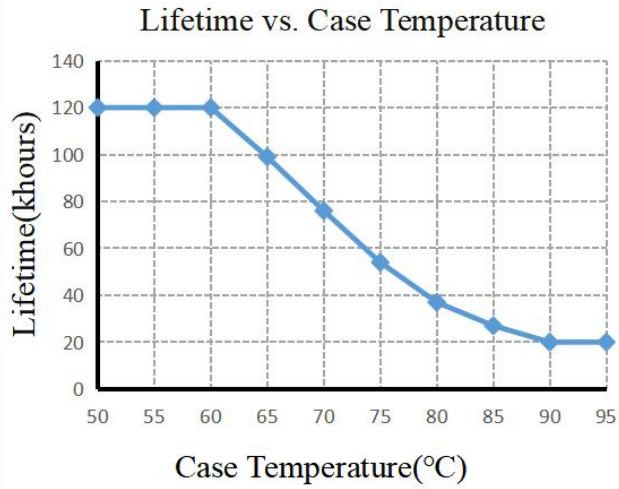
INPUT ☐ ACL BN ☐ ACN BU MADE IN CHINA www.kg-power.com	KGP KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid	LED Driver MODEL:KGP-100V24N Constant Voltage Type INPUT:220-240V~ Max 0.6A 50/60Hz PF≥0.95	OUTPUT:24V 0-4.20A RATED POWER: 100W For LED Module only	CE SELV ta: 80°C ①tc:80°C	OUTPUT Vo+ --- BN ☐ Vo- --- BU ☐
INPUT ☐ ACL BN ☐ ACN BU MADE IN CHINA www.kg-power.com	KGP KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid	LED Driver MODEL:KGP-100V48N Constant Voltage Type INPUT:220-240V~ Max 0.6A 50/60Hz PF≥0.95	OUTPUT:48V 0-2.1A RATED POWER: 100W For LED Module only	CE SELV ta: 80°C ①tc: 80°C	OUTPUT Vo+ --- BN ☐ Vo- --- BU ☐
INPUT ☐ ACL BN ☐ ACN BU MADE IN CHINA www.kg-power.com	KGP KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid	LED Driver MODEL:KGP-150V48N Constant Voltage Type INPUT:220-240V~ Max 1A 50/60Hz PF≥0.95	OUTPUT:48V 0-3.12A RATED POWER: 150W For LED Module only	CE SELV ta: 80°C ①tc:80°C	OUTPUT Vo+ --- BN ☐ Vo- --- BU ☐
INPUT ☐ ACL BN ☐ ACN BU MADE IN CHINA www.kg-power.com	KGP KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid	LED Driver MODEL:KGP-250V48N Constant Voltage Type INPUT:220-240V~ Max 1.5A 50/60Hz PF≥0.95	OUTPUT:48V 0-5.21A RATED POWER: 250W For LED Module only	CE SELV ta: 80°C ①tc:80°C	OUTPUT Vo+ --- BN ☐ Vo- --- BU ☐

4. Electrical values

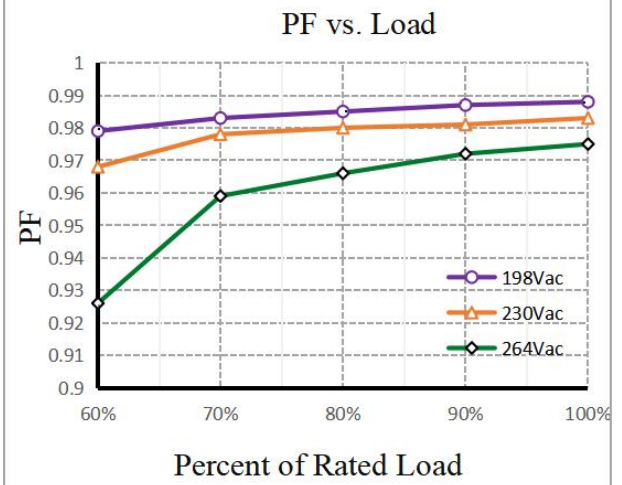
KGP-100V24/48N



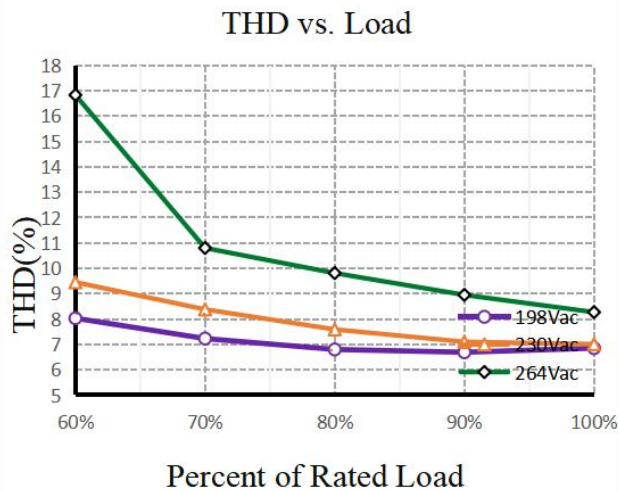
Lifetime vs. Case Temperature



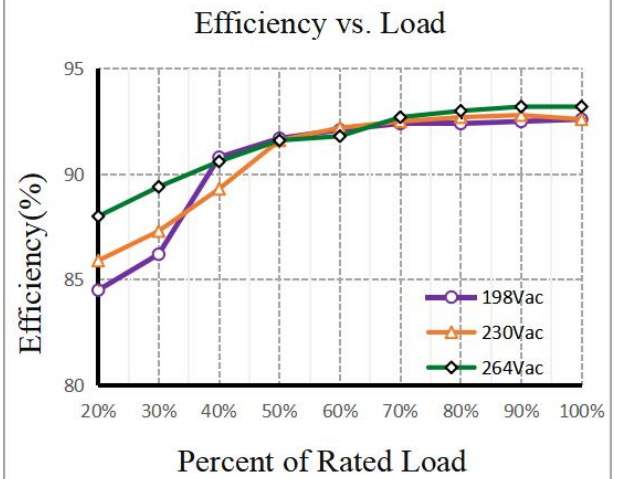
PF vs. Load



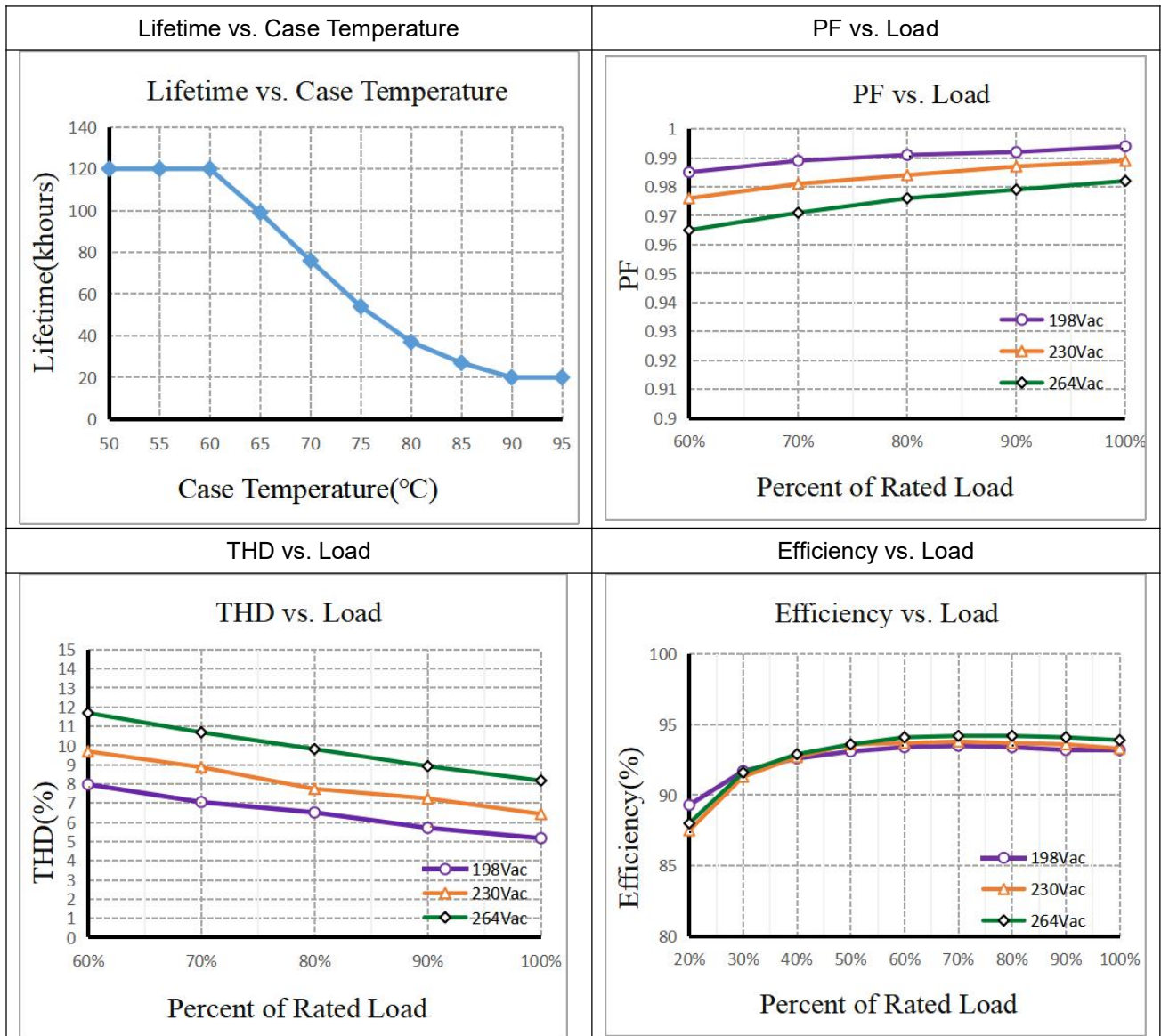
THD vs. Load



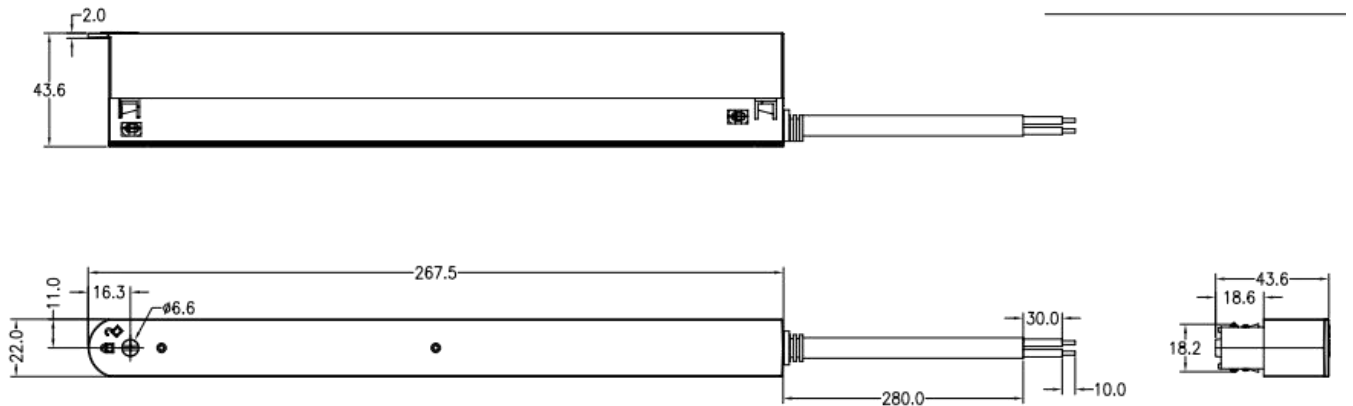
Efficiency vs. Load



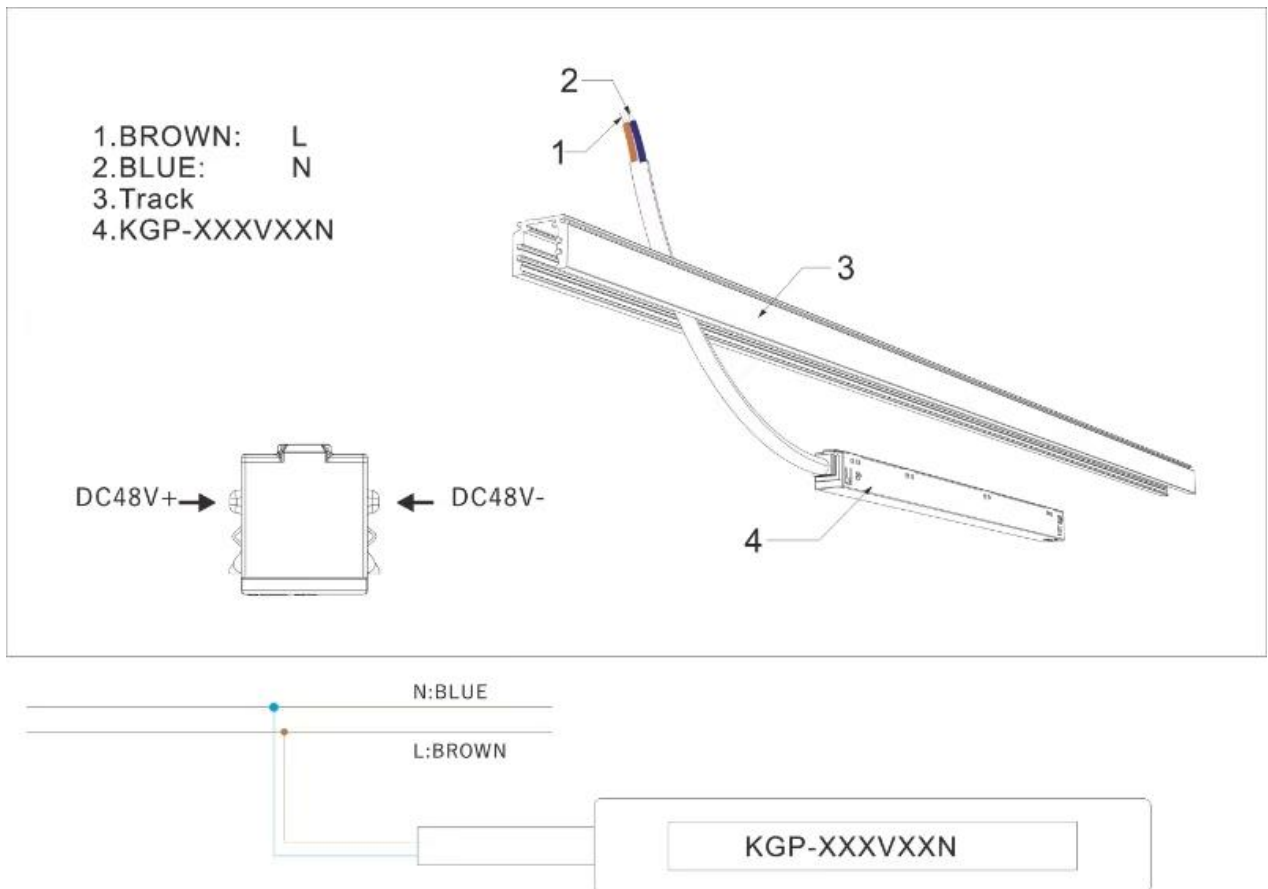
KGP-250V48N



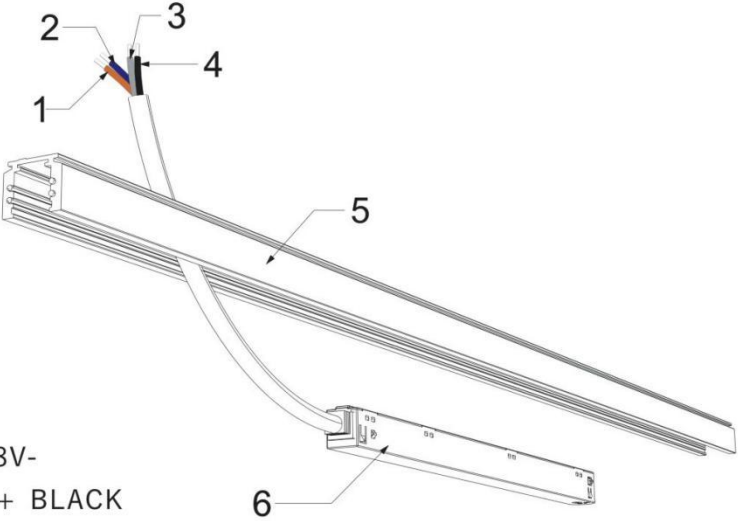
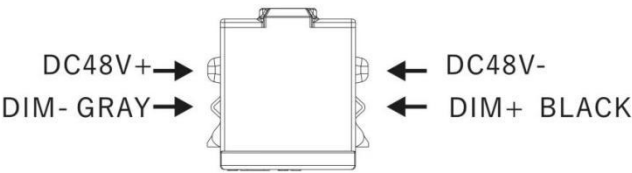
5. Dimension (Unit: mm)



6. Installation instruction



- 1.BROWN: L
- 2.BLUE: N
- 3.GRAY: DIM-
- 4.BLACK: DIM+
- 5.Track
- 6.KGP-XXXVXXN



7. Packing information

Packing way	Model	Colour	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
Industrial	KGP-100V24N KGP-100V48N KGP-150V48N KGP-250V48N	Black	320*310*205	30	0.38	11.52	12.8

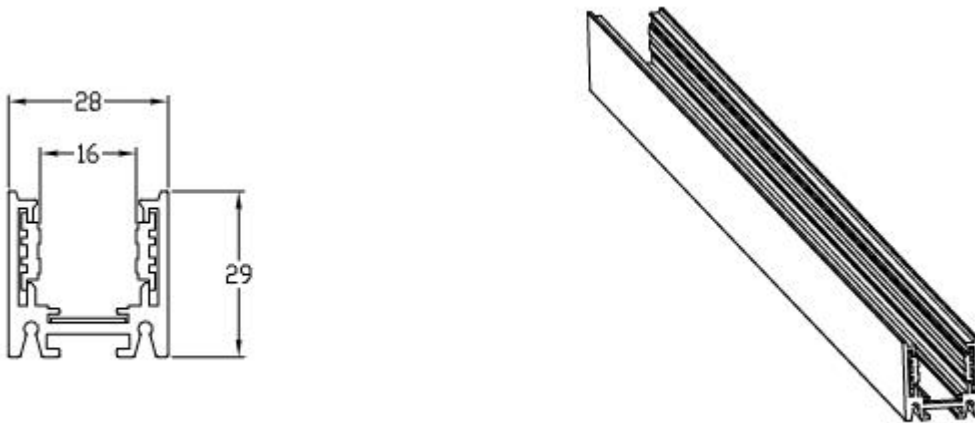
8. Suitable for following tracks

Serial number	Brand	Track model
1	A.A.G STUCCHI	Multisystem 9500 & EVO
2	Powergear	PRO-N110 (48V low voltage track)

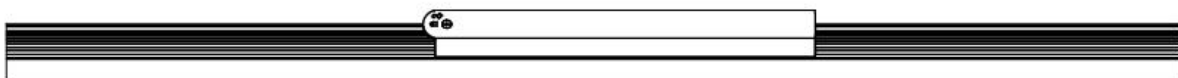
Remark:

1. The model name is Multisystem 9500 & EVO tracks, and its brand is A.A.G STUCCHI.
2. The model name used is the PRO-N110 (48V low voltage track), and its brand is Powergear.
3. If other brands are suitable, please communicate and consult first

9. Phase track light rail specification:



10. Lighting track adapter and rail system installation diagram:



The adaptor shall be given that the use is limited to the track system specified.

11. 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 0.07 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.)

- Hot plug-in is not supported due to residual output voltage of > 0 V up to mains voltage. Danger to life.
- When connecting an LED load, restart the device to activate the LED output.
- This can be done via mains reset or via interface (DALI, DSI, switch DIM).

12. Replace LED module

- Mains off
- Remove LED module
- Wait for 30 seconds
- Connect LED module again
- Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs

13. REVISION HISTORY

DATE	REV	Modification details
2023-06-15	V1.0	Initial release.
2023-08-24	V1.1	CE
2024-01-04	V1.2	Update model name/nameplate
2024-11-28	V1.3	Change version data
2025-08-29	V1.4	Update packaging information and wiring diagrams