


Constant Voltage Driver
Model:FV90W(24-48)CG


Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency	Output Voltage	No load Voltage
FV90W24CG	0-3750mA	0.55A	100W	0-90W	0.95	91%	24V	25V
FV90W48CG	0-1875mA	0.55A	100W	0-90W	0.95	91%	48V	49V

* Test result @220V, 50Hz, Full Load.

* Recommended minimum power is 10% 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	176-264VAC
	Range of DC Input Voltage	230-280VDC
	Frequency	50/60Hz
	Input Current	≤0.55A
	Input Power	≤100W
	Power Factor	≥0.95 (230VAC, full load)
	THD	≤15% (230VAC, full load)
	No-load Power Consumption	≤0.5W@230VAC
Output	Output Voltage	24V ± 5% or 48V ± 5%
	Max. Output Power	90W
	Efficiency	≥91% (230VAC, full load)
	Voltage Ripple	3% (Vmax-Vmin) / (Vmax+Vmin)
	PstLM	≤1
	SVM	≤0.4
	Current Accuracy	N/A
	Start-up Time	≤0.5S (230VAC, full load)
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	No-load Protection	Auto Recovery

	Insulation voltage	I/P to O/P, 3.0KVac/5mA/1min
	Insulation resistance	>100M ohm @ 500VDC
	Leakage current	I/P to O/P < 250μA
Environment	Ta/Operation Temperature	-25....+45°C
	Ts/Storage Temperature	-40....+85°C
	Tc/Enclosure Temperature	90°C
	Humidity	10%....90%RH
	Atmosphere	86-108KPa
Construction	Connection Method	terminal block
	Installation	Independent
	PRI Wire preparation	0.75-1.5□
	SEC Wire preparation	0.75-1.5□
	Dimension	190*65*22mm (L*W*H)
Standards	Certification	ENEC、CE、EAC、SAA
	Safety Standards	EN61347-1:2015 EN61347-2-13:2014/A1:2017 EN62384:2006/A1:2009 AS61347.2.13:2018 AS/NZS61347.1:2016 Inc A1
	EMC Standards	EN IEC 55015:2019 EN IEC 55015:2019/A11:2019 EN IEC 61000-3-2:2019 EN 61000-3-3:2013/A1:2019 EN61547:2009
	Performance	EN62384
	Surge	L-N/2KV
	Others	RoHS
	Life Time	50000h @Ta/ Tc
	Warranty	5years , F.R. < 10000ppm
<p>Remark: 1.All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C 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.</p>		

2. Connected quantities of different current Breaker

TYPE	Connected quantities of different current Breaker						Input Voltage	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	17	22	27	34	42	@230VAC	35.8	324	
TYPE C	27	35	43	54	67				
TYPE D	43	56	69	86	107				

3. Label

KGP
KGP Electronics GmbH
Hueckstraße 19
DE-58511 Lüdenscheid

LED Driver
FV90W24CG
Constant Voltage Type for LED Only
● tc

Input Voltage: 220-240VAC
Input Frequency: 50/60Hz
Power Factor(λ): ≥0.95
I_{in} : ≤0.55A
U_{rated} = 24VDC
I_{range} = 0-3750mA
P_{range} = 0-90W
T_c: 90°C
T_a: -25to+45°C

wire preparation

SEC+ □
1 □

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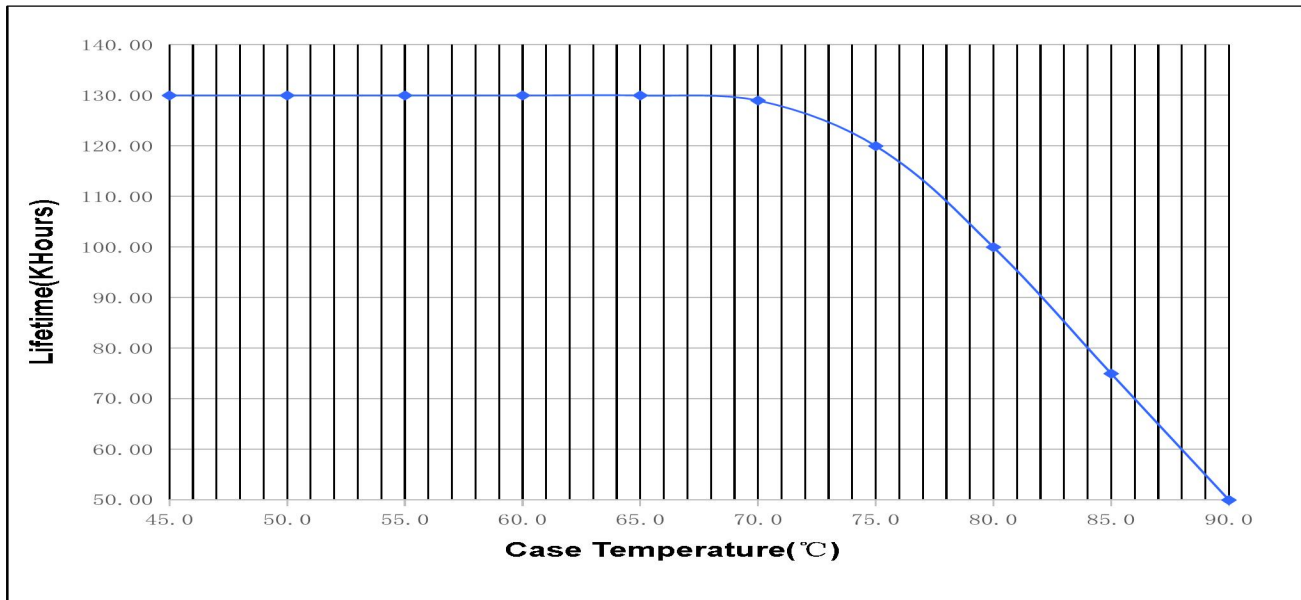
LED Driver
FV90W48CG
Constant Voltage Type for LED Only
● tc

Input Voltage: 220-240VAC
Input Frequency: 50/60Hz
Power Factor(λ): ≥0.95
I_{in} : ≤0.55A
U_{rated} = 48VDC
I_{range} = 0-1875mA
P_{range} = 0-90W
T_c: 90°C
T_a: -25to+45°C

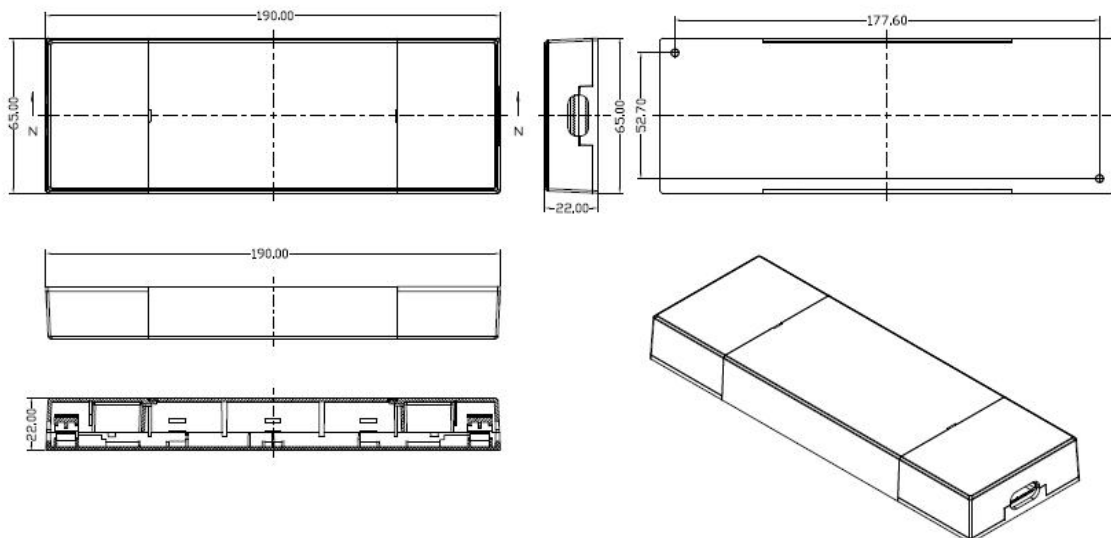
wire preparation

SEC+ □
1 □

4. Lifetime curve



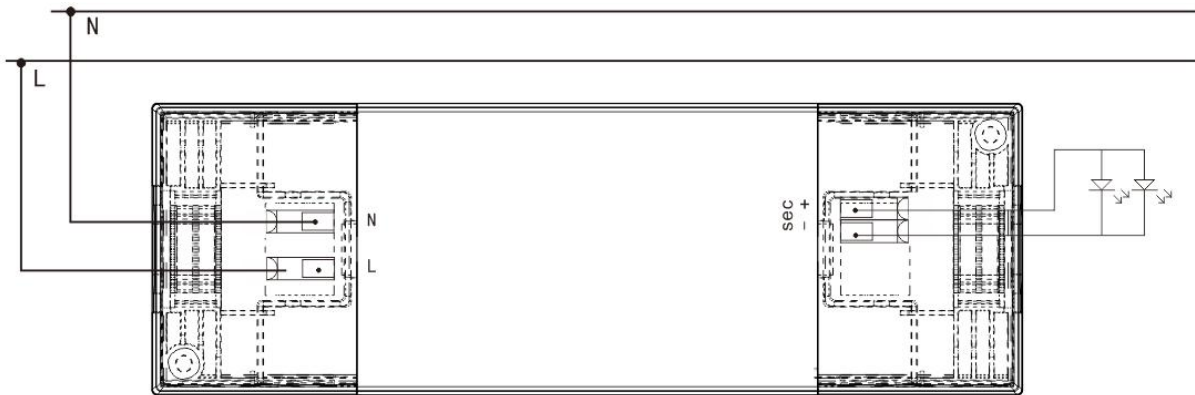
5. Dimension (Unit: mm)



6. Packing information

Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
305*215*305	40	0.200	8	8.53

7. Wiring Diagram



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	REV.	REMARK
2023-05-09	V1.0	Initial release.
2024-03-12	V1.1	Update packaging.