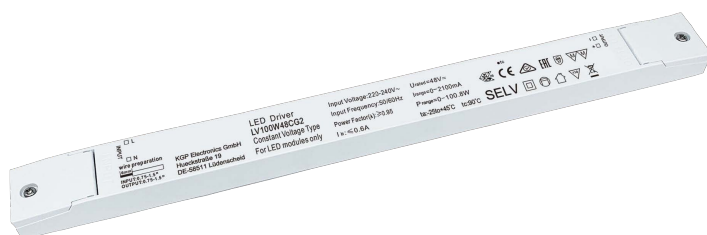


LV(100-250)W48CG2



Constant Voltage Driver

Model: LV(100-250)W48CG2



Model	Rated Input Voltage	Input Power	Input Current	PF	Output Power Range	Output Voltage	Output Current	Efficiency (typ.)
LV100W48CG2	220-240VAC	≤115W	≤0.6A	≥0.95	0-100.8W	48V	0-2.1A	92%
LV150W48CG2		≤168W	≤0.9A		0-150W		0-3.125A	92%
LV250W48CG2		≤275W	≤1.5A		0-250W		0-5.21A	93%

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

* Recommended minimum power is 10% load.

1. Parameters

Category	Item	Technical Norm			
Features	Output Type	Constant Voltage			
	Dimmable Type	Non-dimmable			
	Output Features	Isolation SELV			
	IP Grade	IP20			
	Insulation Class	Class II			
Input	Rated Input Voltage	220-240VAC			
	Range of AC Input Voltage	176-264VAC			
	Range of DC Input Voltage	175-280VDC(EMI not evaluated)			
	Frequency	Rate:50/60Hz, Range:47~63Hz			
	Power Factor	≥0.95, 220-240VAC, Rated Load, see graphs			
	THD	≤7% 230VAC, Rated Load, see graphs			
	Standby Power Consumption	≤0.5W, @230VAC,NO Load			
Output	Output Voltage	48VDC±2%			
	No load Voltage	48VDC+3%			
	Output Voltage Ripple	<480mVPK-PK (0.5%)			
	Line Regulation	±1%			
	Load Regulation	±2%			
	Filcker	SVM ≤0.4, PstLM ≤1.0			
	Overshoot	<105%Vo			
	Start-up Time	≤0.5S (220-240VAC)			
	Efficiency	100W	≥90%	92% typ.	230VAC, Rated Load, at output terminals, see graphs
		150W	≥90%	92% typ.	
250W		≥91%	93% typ.		
Protection	Short Circuit Protection	Auto Recovery			
	Over Current Protection	120%-180%Io, Auto Recovery			

	Over Voltage Protection	110%-150%Vo, Auto Recovery	
	Over Temperature Protection	90<Tc<110°C, Auto Recovery	
	Insulation voltage	I/P to O/P,3KVac/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 For Safety	90°C	
	Humidity	5% 85%RH	
	Atmosphere	86-108KPa	
Construction	Connection Method	Terminal	
	Cable Terminals	Input	1 terminal block(300V 10A)
		Output 100W/150W	1 terminal block(300V 10A)
		Output 250W	2 terminals block(300V 10A)
	Installation	Independent	
	Input Wire Cross Section	0.75mm²-1.5 mm²	
	Output Wire Cross Section	100W/150W	1*0.75mm²-1.5 mm²
		250W	2*0.75mm²-1.5 mm²
	Cable stripping lengths	6mm	
	Output Cable Length	Max. 3M	
	Cable diameters range	Input	2.2-4mm or 9.5-10.5mm
		Output & Dimming	2.2-4mm
	Dimension	100W/150W	350*30*18mm (L*W*H)
		250W	400*40*22mm (L*W*H)
Standards	Certification	CE,CB ENEC, SAA	
	Safety Standards	EN61347-2-13:2014/A1:2017,EN 61347-1:2015/A1:2021, EN IEC 62384:2020,EN61347-1:2015, EN62493:2015, AS61347.2.13:2018,AS/NZS 61347.1:2016 IncA1	
	EMC Standards	EN IEC 55015:2019,EN IEC 55015:2019/A11:2020, EN IEC 61000-3-2:2019/A1:2021,EN61547:2009, EN 61000-3-3:2013/A2:2021	
	Performance	EN62384	
	Surge	L-N:2KV	
Others	RoHS	2011/65/EU	
	MTBF	≥250KHours,Ta=25°C (MIL-HDBK-217F)	
	Life Time(@Ta max)	100W	≥100K Hrs
		150W	≥55K Hrs
		250W	≥63K Hrs
	Warranty	5years	
	Noise	≤ 24dB @Background noise ≤18dB , Interval≥15cm	

Remark:

All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C ambient temperature.

Terminal wiring must be operated with a suitable screwdriver. After installation, check to make sure that the terminals cannot be pressed against the wire sheath

LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again.

Output ripple should be measured at the output end which has with 0.1uF/100V ceramic capacitance and 10uF/100V Aluminum capacitance connected in parallel. Measured using oscilloscope with bandwidth limited to 20MHz.

2. Connected quantities of different current Breaker

TYPE	LV100W48CG2 Connected quantities of different current Breaker						Input Voltage	Inrush Current <50A	Time
	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		13	17	21	27	33	@230VAC	45	250us
TYPE C		21	28	34	43	53			
TYPE D		34	44	55	68	85			

TYPE	LV150W48CG2 Connected quantities of different current Breaker						Input Voltage	Inrush Current <60A	Time
	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		11	14	17	21	27	@230VAC	56	185us
TYPE C		17	22	27	34	43			
TYPE D		27	36	44	55	69			

TYPE	LV250W48CG2 Connected quantities of different current Breaker						Input Voltage	Inrush Current <80A	Time
	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	13	16	20	@230VAC	76	310us
TYPE C		13	16	20	25	32			
TYPE D		20	26	32	40	51			

3. Label

☐ L
☐ N
 wire preparation
 INPUT: 0.75-1.5" ☐ L
 OUTPUT: 0.75-1.5" ☐ N
 KGP Electronics GmbH
 Hueckstraße 19
 DE-58511 Lüdenscheid

LED Driver
LV100W48CG2
 Constant Voltage Type
 For LED modules only

Input Voltage: 220-240V~
 Input Frequency: 50/60Hz
 Power Factor(A): ≥ 0.95
 I in: $\leq 0.6A$

U rated = 48V=
 I range = 0 ~ 2100mA
 P range = 0 ~ 100.8W
 ta: 25to+45°C tc: 90°C

     
SELV     

☐ I
☒ +
 OUTPUT

☐ L
☐ N
 wire preparation
 INPUT: 0.75-1.5 Ø
 OUTPUT: 0.75-1.5 Ø

KGP Electronics GmbH
 Hueckstraße 19
 DE-58511 Lüdenscheid

LED Driver
LV150W48CG2
 Constant Voltage Type
 For LED modules only

Input Voltage: 220-240V~
 Input Frequency: 50/60Hz
 Power Factor(A): ≥0.95
 I in: ≤0.9A

U rated=48V=
 I range=0~3125mA
 P range=0~150W
 ta: -25to+45°C tc: 90°C

•tc









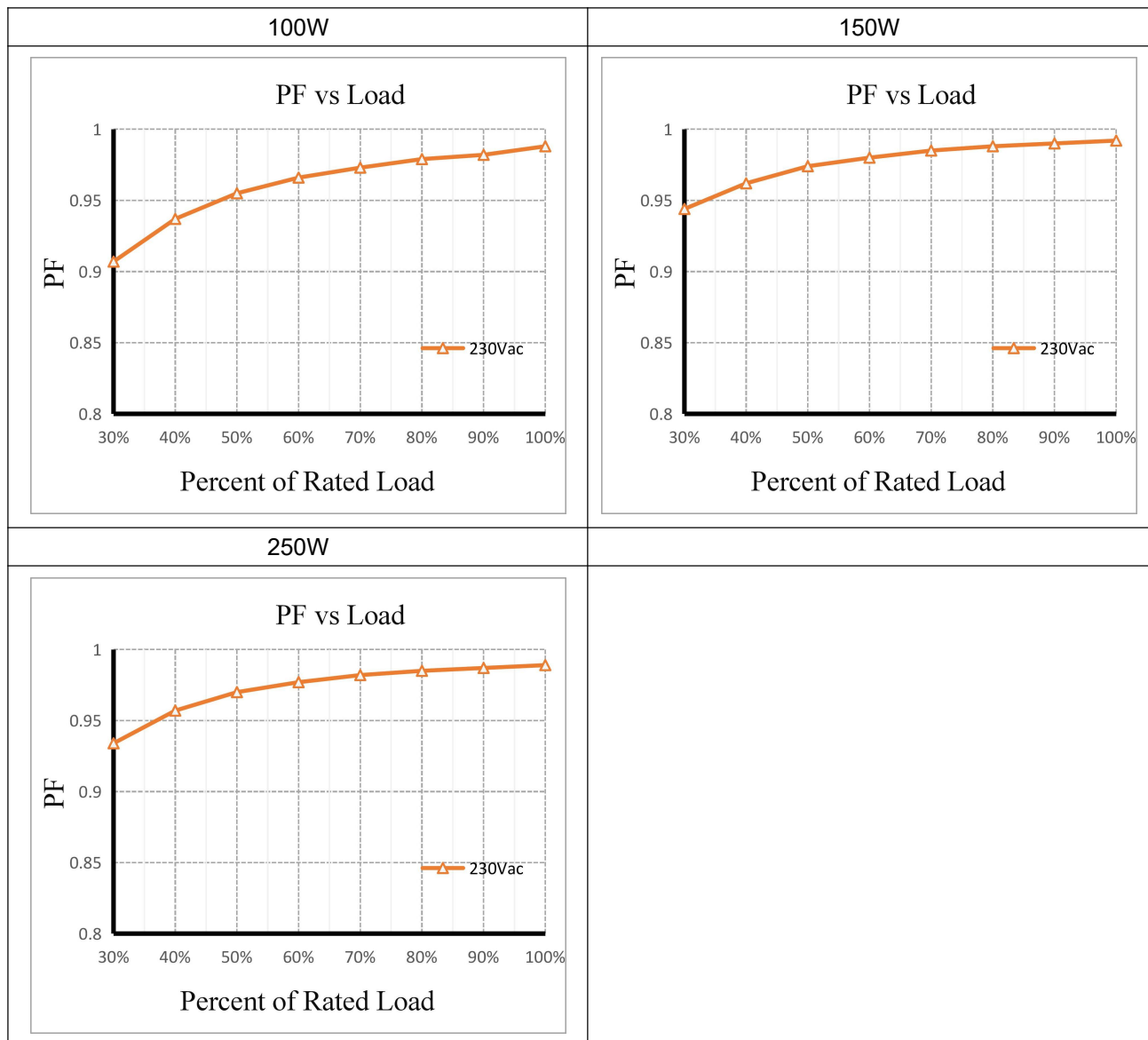



☐ INPUT
☐ OUTPUT

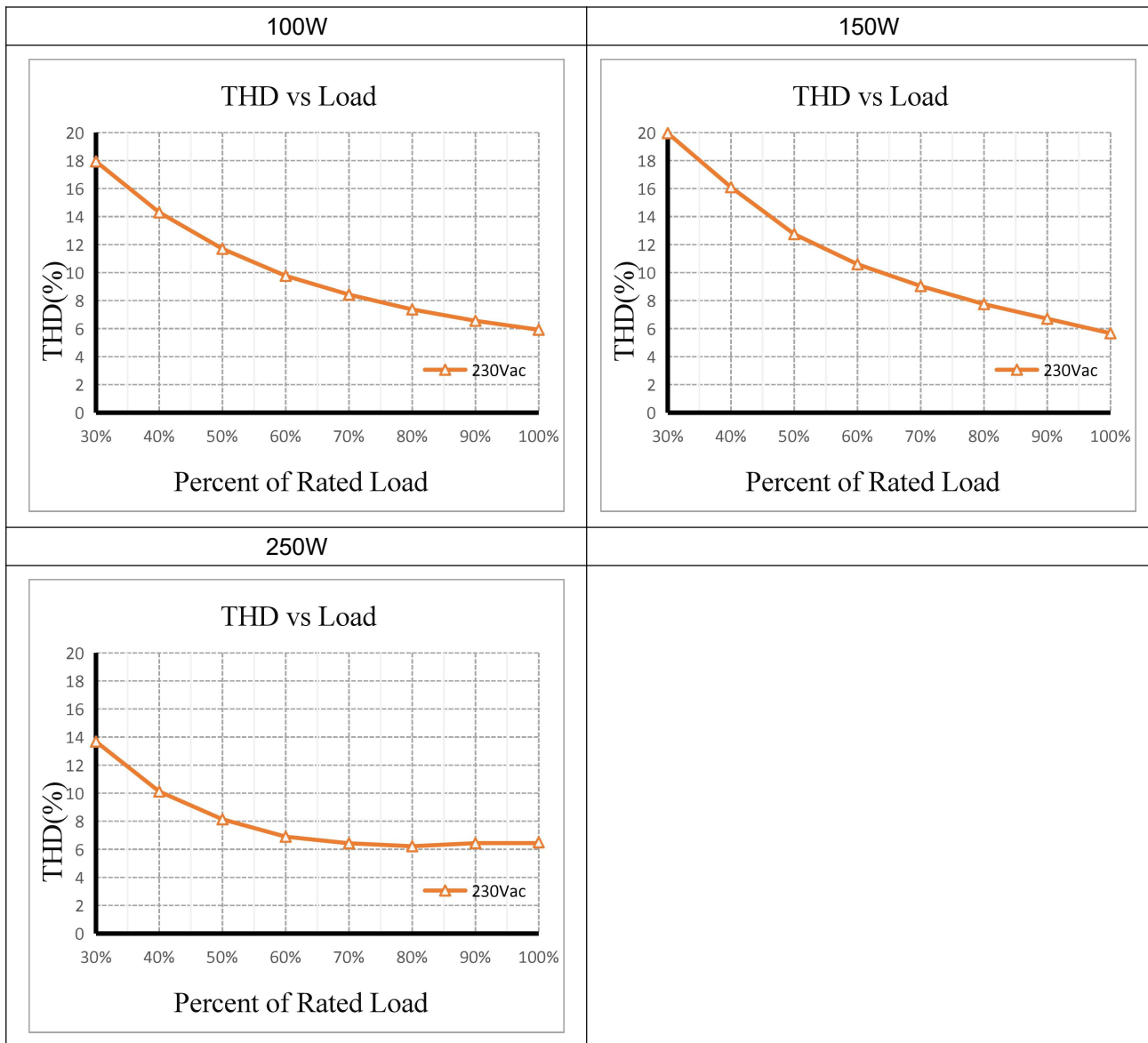
☐ L ☐ N wire preparation 5mm INPUT: 0.75-1.5 mm² OUTPUT: 0.75-1.5 mm²	KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid	LED Driver LV250W48CG2 Constant Voltage Type For LED modules only	Input Voltage: 220-240V ~ Input Frequency: 50/60Hz Power Factor(λ): ≥ 0.95 I_{in}: ≤ 1.5A	U_{rated} = 48V ~ I_{range} = 0 ~ 5210 mA P_{range} = 0 ~ 250W ta: -25to+45°C tc: 90°C	 SELV	
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4. Graph

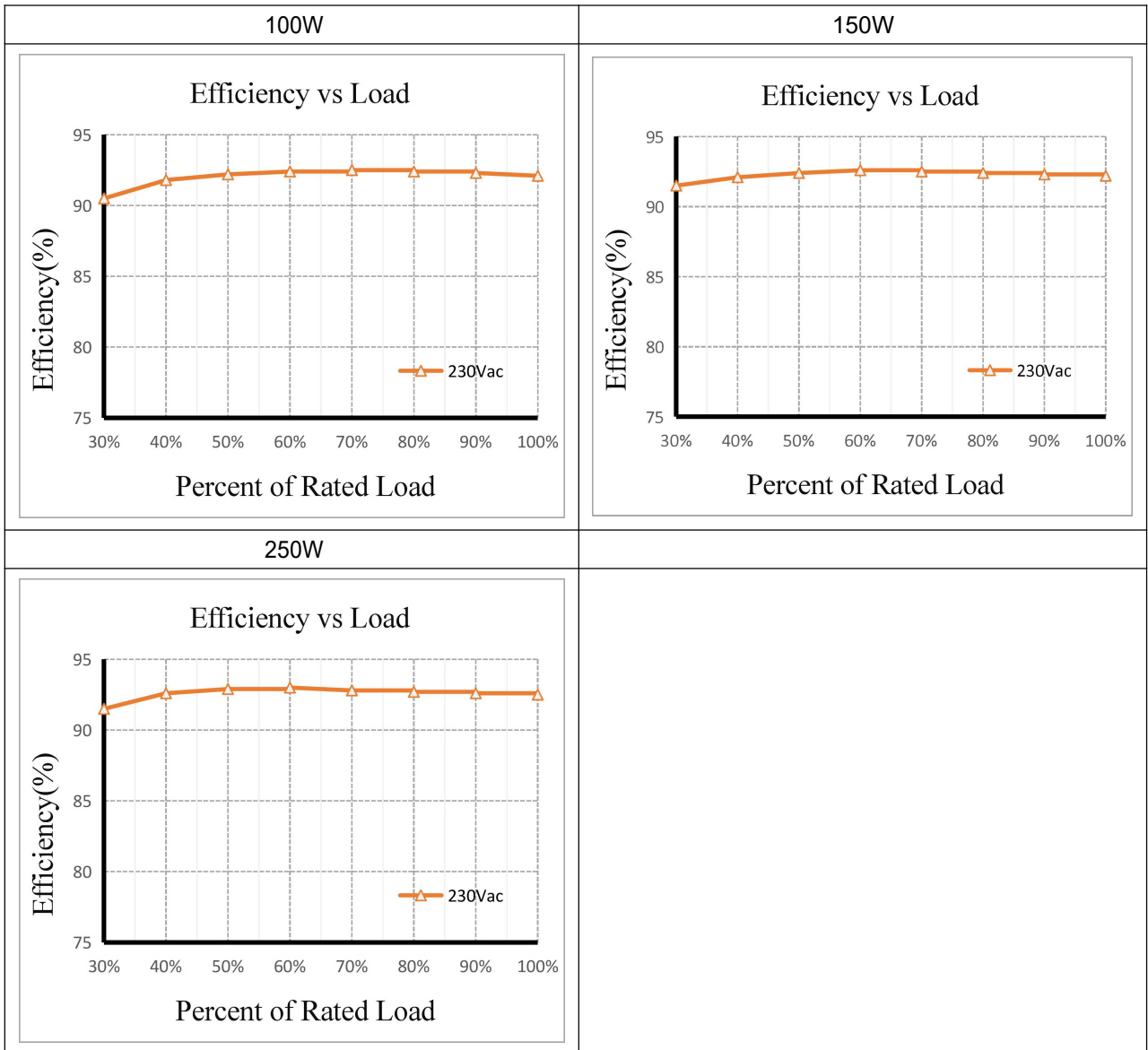
PF VS LOAD Curve



THD VS LOAD Curve

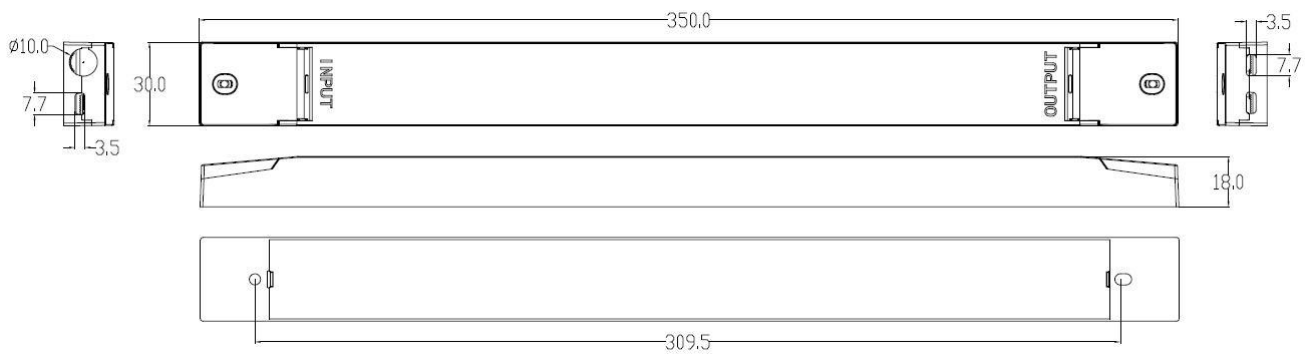


Efficiency VS LOAD Curve

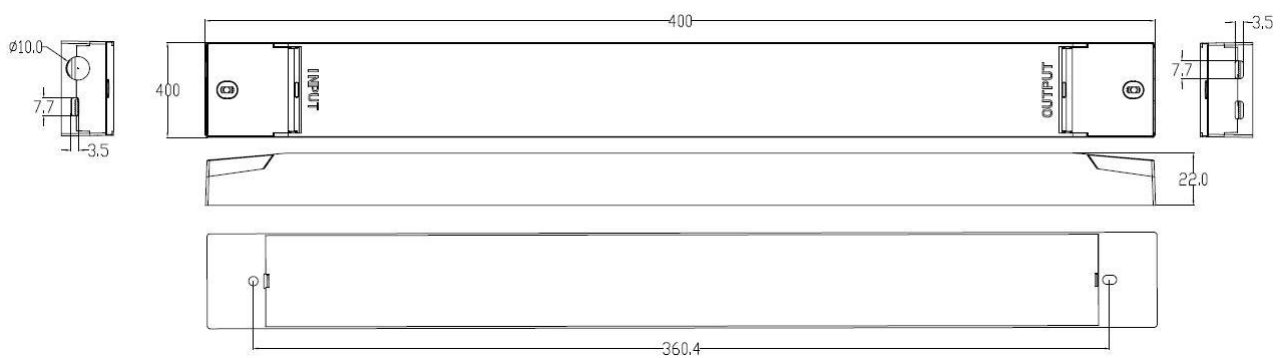


5. Dimension (Unit: mm)

LV100W48CG2 & LV150W48CG2:



LV250W48CG2:



6. Packing information

Packing way	Model	Carton L*W*H(mm)	Pcs/Carton	Net eight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
With white box and manual	LV100W48CG2	375*235*195 R15	50	0.21	10.5	11.03
	LV150W48CG2			0.309	15.45	16.02
	LV250W48CG2	420*230*160 R16	25	0.535	13.375	13.82
Without white box and manual	LV100W48CG2	440*345*155 R15	40	0.184	7.36	7.89
	LV150W48CG2			0.281	11.24	11.75
	LV250W48CG2	440*300*155 R15	25	0.502	12.55	13.0

7. 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.)

8. REVISION HISTORY

DATE	VER	REMARK
2022-04-13	V1.0	Initial release.
2022-06-02	V1.1	Add circuit breaker table.
2022-09-05	V1.2	Update safety standards and EMC standards.