



Constant Current & Dimmable Driver
Model: RCXXWXXXG1 Triac



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (*Typical)	Output Voltage	No load Voltage
RC21W500G1 Triac	500mA	≤0.13A	≤25W	15-20W	0.95	85%	30-40V	≤52V
RC21W550G1 Triac	550mA	≤0.13A	≤25.5W	16.5-20.9W	0.95	85%	30-38V	≤52V
RC24W500G1 Triac	500mA	≤0.16A	≤30W	18-25W	0.95	86%	36-50V	≤59V
RC24W600G1 Triac	600mA	≤0.16A	≤29W	16.2-24W	0.95	86%	27-40V	≤52V

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

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Dimming Type	Phase dimming
	Dimming Range	5%-100%
	IP Grade	IP44
	Insulation Class	Class II
Input	Rated Input Voltage	220-240VAC_stable
	Range of Input Voltage	198-264VAC_stable or 198-264VDC_stable
	Frequency	0/50/60Hz
	Input Current	≤0.16A (230VAC,full load)
	Input Power	≤30W (230VAC,full load)
	Power Factor	≥0.95 (230VAC,full load)
	THD	≤25%(230VAC, full load)
	No-load Power Consumption	≤0.5W @230VAC
	Inrush Current	≤10A/32us (230VAC, full load)
Output	Output Voltage	30-40VDC@ 500mA,30-38VDC@ 550mA 36-50VDC@ 500mA,27-40VDC@ 600mA
	Current Accuracy	±6%
	Max. Output Power	25W
	Started Delay Time	≤1S (230VAC,full load)
	Efficiency	≥86% (230VAC,full load)
	Current Ripple(< 120 Hz)	±5% (Imax-Imin) / (Imax+Imin)
	PstLM	≤1
SVM	≤0.4	
Protection	Short Circuit Protection	Auto Recovery

	Overload Protection	Auto Recovery
	No-load Protection	Auto Recovery
	Insulation voltage	I/P to O/P , 3.75KVac/2mA/1min
	Insulation resistance	>100M ohm @ 500VDC
	Leakage current	I/P to O/P <0.7mA
Environment	Ta/Operation Temperature	-20....+60°C
	Ts/Storage Temperature	-25....+85°C
	Tc/Enclosure Temperature	90°C (RC24W600G1 Triac)
		85°C (RC21W500G1 Triac, RC21W550G1 Triac, RC24W500G1 Triac)
	Humidity	10%....90%RH
Atmosphere	86-108KPa	
Construction	Connection Method	Direct Lead
	Installation	Build-in
	PRI Wire preparation	0.5mm ²
	SEC Wire preparation	0.5mm ²
	Dimension	φ57*H26mm (L*H)
Standards	Certification	CE EAC
	Safety Standards	EN 61347-1:2015/A1:2021 EN 61347-2-13:2014/A1:2017 EN IEC 62384:2020 AS61347.2.13:2018 AS/NZS61347.1:2016 Inc A1
	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
	Surge	L-N/ 2KV
Others	RoHS	Complied to 2011/65/EU
	REACH	EU Regulation (EC) No 1907/2006
	Life Time	RC21W500G1 Triac, RC21W550G1 Triac ta=60°C,Tc=85°C 50000H
		RC24W500G1 Triac ta=60°C,Tc=85°C 40000H ta=55°C,Tc=80°C 50000H
		RC24W600G1 Triac ta=60°C,Tc=90°C 40000H ta=55°C,Tc=85°C 50000H
Warranty	5years , F.R. < 10000ppm	
Noise	≤ 22dB@Background noise ≤18dB , Interval≥15cm	
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.
3. It is recommended that the control mode is back dimming for better effect.
4. Do not install upside down.

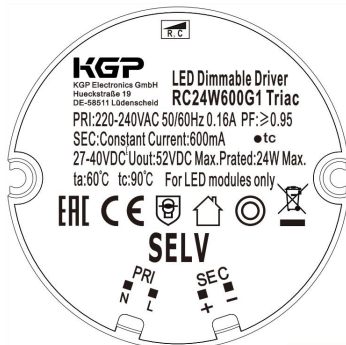
2. Trailing Edge Dimmer list approved by KGP

Manufacturer	Model	Q'ty of parallel connection
Yikai	EU-200P	T.B.D
Berker	286710	T.B.D
Schneider	SBD200LED	T.B.D
Schneider	SBD315RC	T.B.D
Eltako	DTD55L-230V-wg	T.B.D
ETMAN	ETM321PV2	T.B.D
EUCHIPS	Walldin 106	T.B.D
JISIM	JP1101	T.B.D

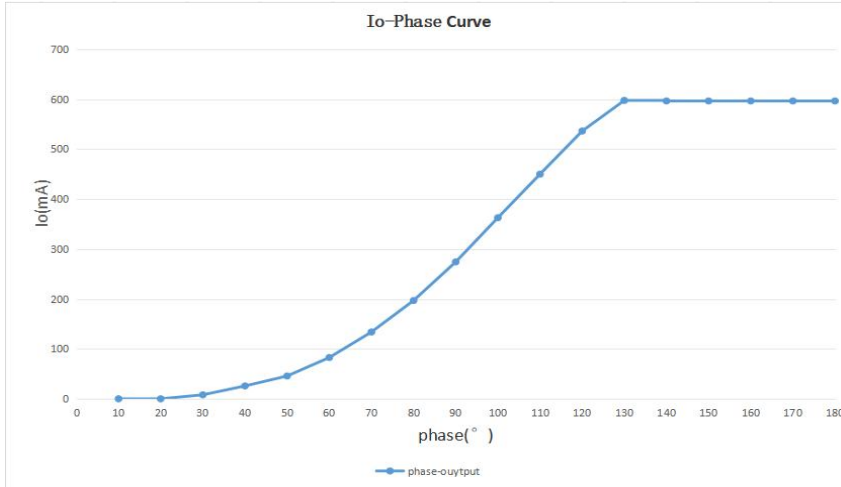
3. Connected quantities of different current Breaker

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	67	87	107	133	167	@230VAC	9	32	
TYPE C	107	139	171	213	267				
TYPE D	171	222	273	341	427				

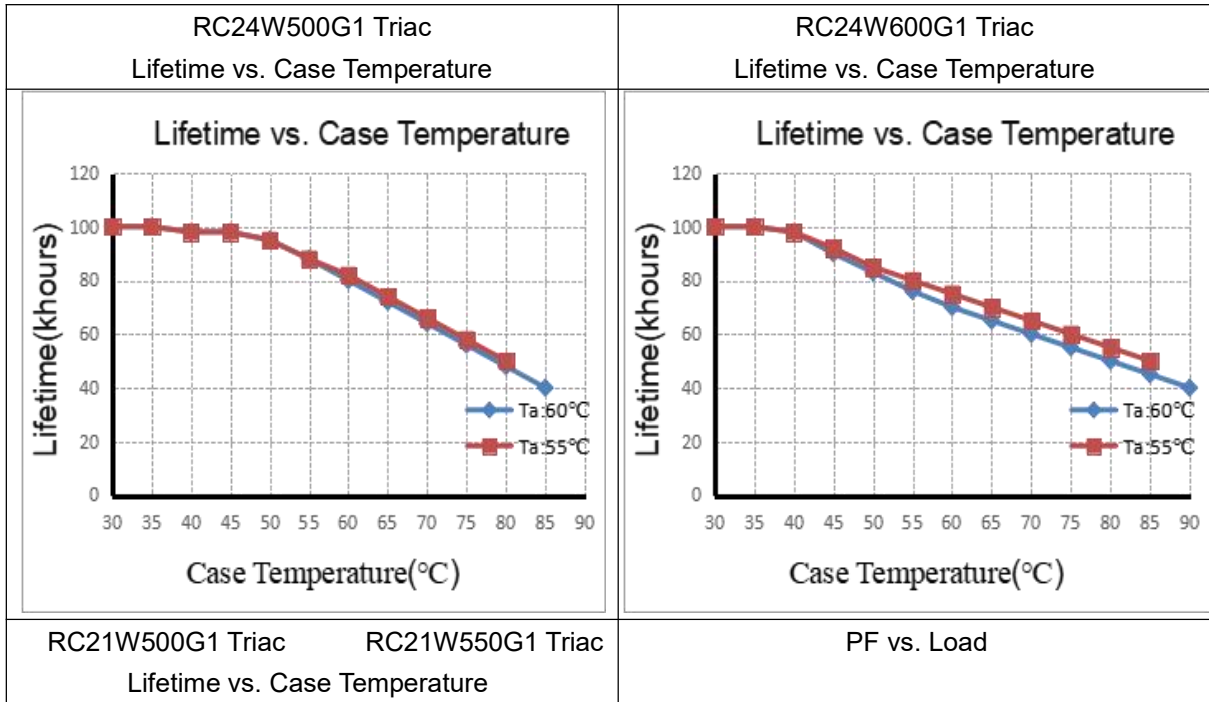
4. Label

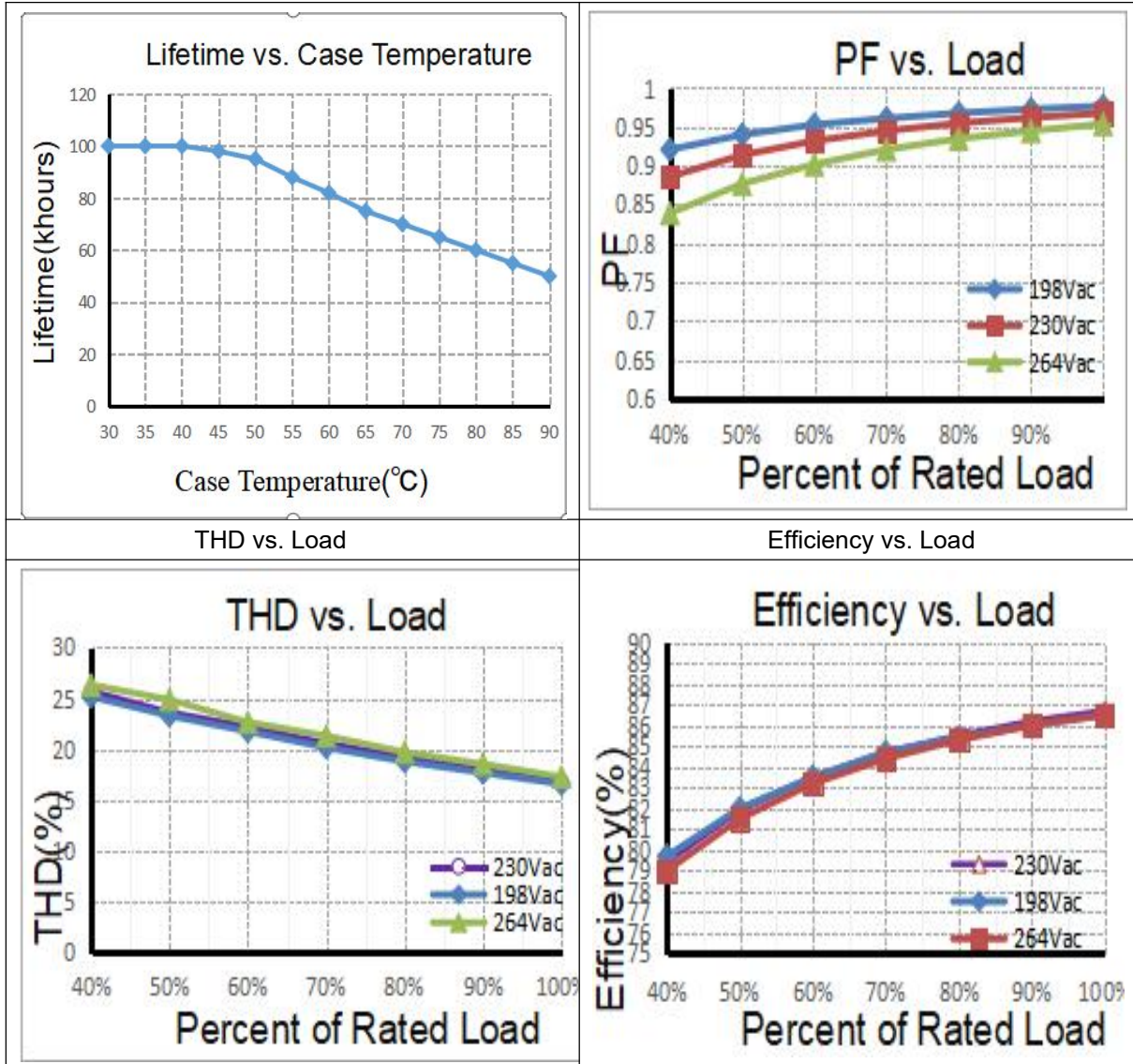


5. Dimming curve

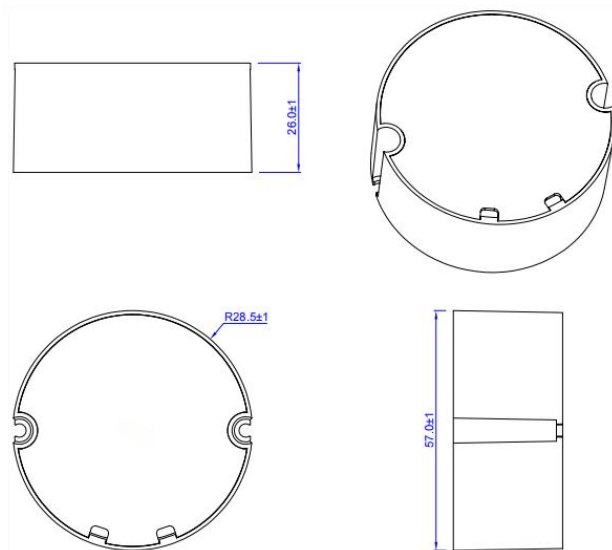


6. Electrical values

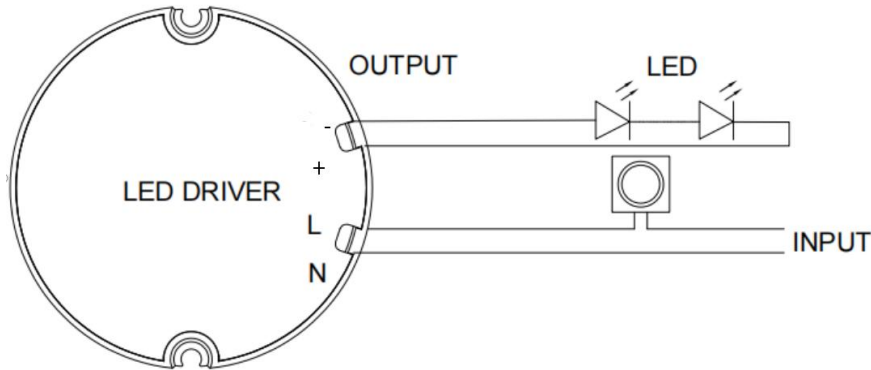




7. Dimension (Unit: mm)



8. Wiring Diagram



Wiring type and cross section

Input: Brown-blue wire, 175mm ±5mm ,0.5mm²

Output: Red-black wire, 175mm ±5mm,0.3mm²

9. Packing information

Packing way	Model	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
Industrial	RCXXWXXXG1 Triac	410*270*160	100	0.126	12.6	13.2

10. 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 0.5 m
- Secondary switching is not permitted
- 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.

11. 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

12. REVISION HISTORY

DATE	REV.	REMARK
2025-11-12	V1.0	Initial release.