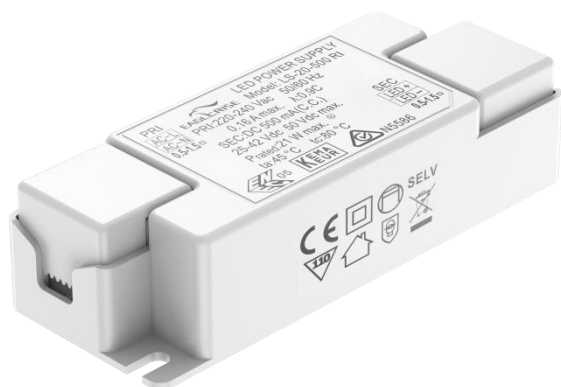


20W Constant Current -LS Series



■ Approve



Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor 0.9C
- Efficiency $\geq 86\%$
- 5 years warranty

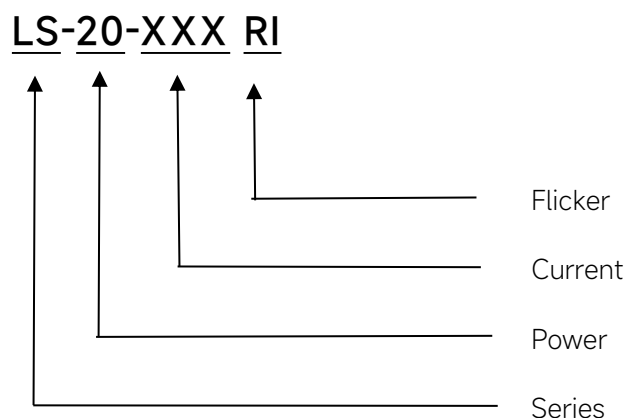
Applications

- LED panel, LED down light
- LED spot light

◆ Description

LS-20-XXX RI is a 20W constant current LED driver that operates from 176-264Vac input with 300 to 700mA output current. With it's compact dimensions from 100 x 38 x 25mm it is easy to integrate in LED Panel , spot and down light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

◆ Model code



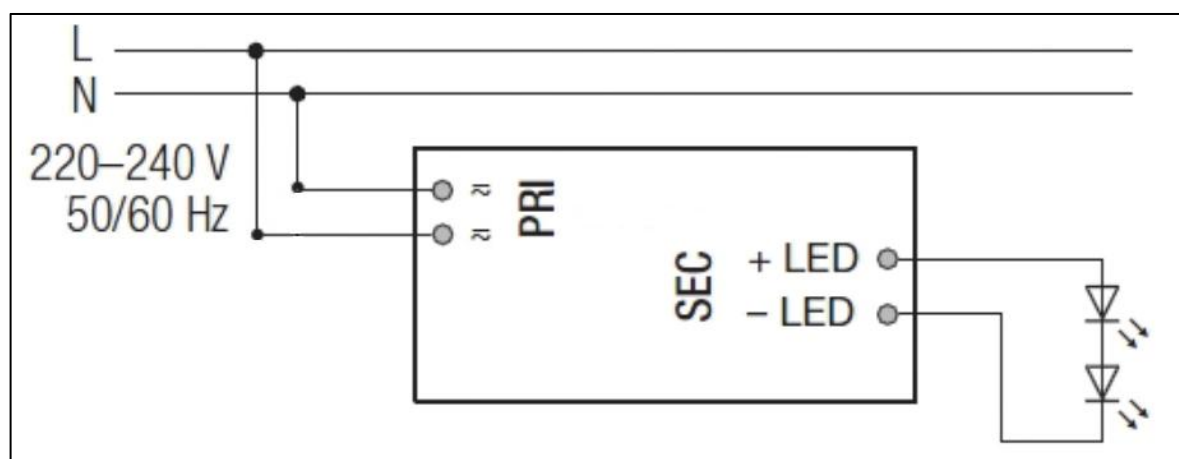
◆ Specification

Output	Constant Current	300mA	350mA	500mA	...	700mA
	Voltage Range	42-70VDC	36-60VDC	25-42VDC	...	18-30VDC
	Unload voltage Max.	80VDC	72VDC	50VDC	...	40VDC
	Current Accuracy	±5%				
	Ripple& Noise *Note.2	≤120mA _{p-p}	≤140mA _{p-p}	≤200mA _{p-p}	...	≤350mA _{p-p}
	Efficiency(Typ.)	86%				
Input	Rated input voltage	220-240VAC				
	Range of input voltage	176-264VAC				
	Frequency(Hz)	50/60 Hz				
	Power Factor	0.9C				
	Input Current max	0.16A				
	Start-up time	< 0.5S				
	No Load Power	≤0.5W				
	THD (Typ.)	< 15%				
Protection	Over Load Protection	103-120%				
		YES/Auto Resume				
	Over Voltage Protection	> 80VDC	> 72VDC	> 50VDC	...	> 40VDC
		YES/Auto Resume				
	Short circuit Protection	YES/Auto Resume				
Environment	Operating Temperature	-20°C~~+45°C				
	Humidity	20%-90%RH				
	Tc	80°C				
	Storage Temperature	-25°C~~+60°C				
	Life time	> 50000h@Tc=75°C,230VAC				
Surface	Dimension	100X38X25(LXWXH)mm				
Standards	EN 61347-1; EN61347-2-13; EN62384; EN55015; EN61000-3-2 ; EN61000-3-3; EN 61547;					
Others	RoHS	RoHS (2011/65/EU) (EU)2015/863				
Note	1.All parameters NOT specially mentioned are measured at 240VAC input , full load and 25°C of ambient temperature. 2.Ripple & Noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capacitor.					

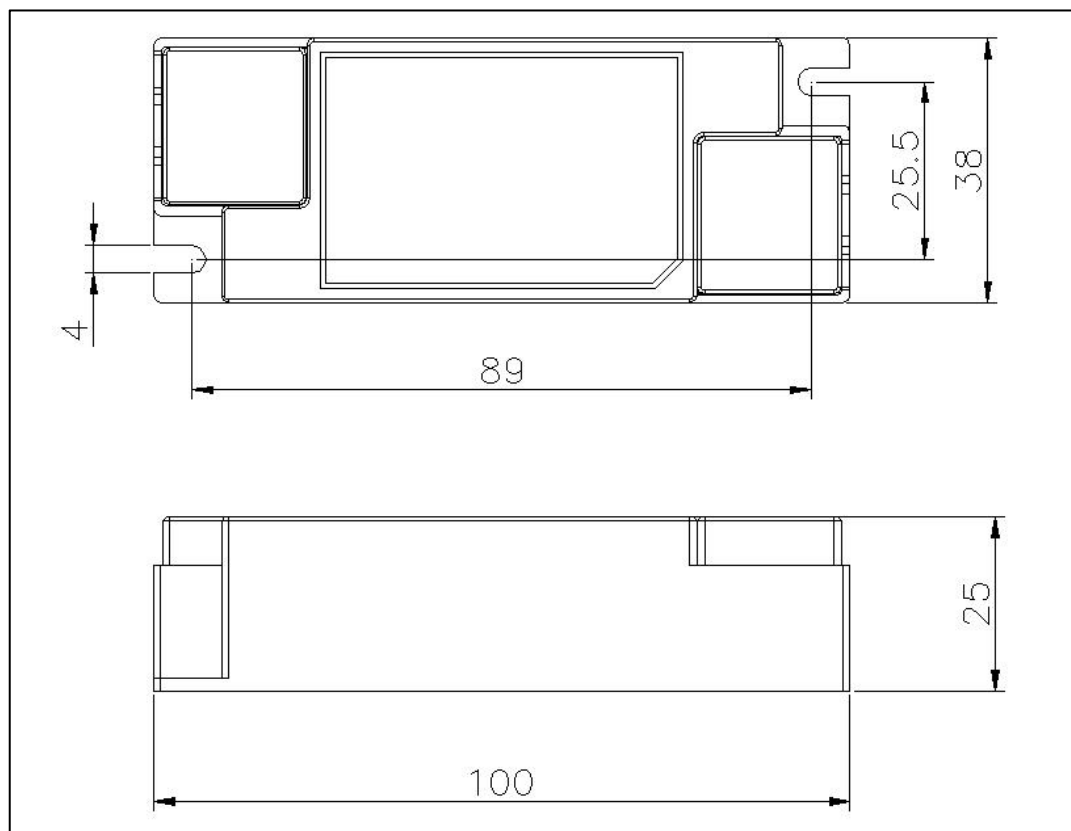
◆ Model list

Model number	Input			Output			Max. Prated(W)
	Voltage (VAC)	Current (A)	Frequency (Hz)	Constant current (mA)	Normal working voltage (VDC)	No load working voltage (VDC)	
LS-20-300 RI	220-240	0.16	50/60	300	42-70	80	21
LS-20-350 RI				350	36-60	72	21
LS-20-400 RI				400	31-51	61	20.4
LS-20-450 RI				450	28-46	56	20.7
LS-20-500 RI				500	25-42	50	21
LS-20-550 RI				550	24-38	50	20.9
LS-20-600 RI				600	21-35	45	21
LS-20-650 RI				650	19-32	42	20.8
LS-20-700 RI				700	18-30	40	21

◆ Wiring diagram



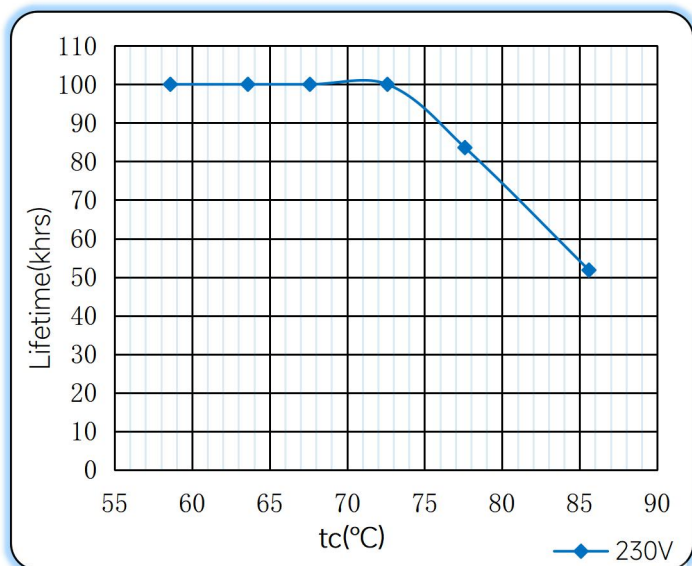
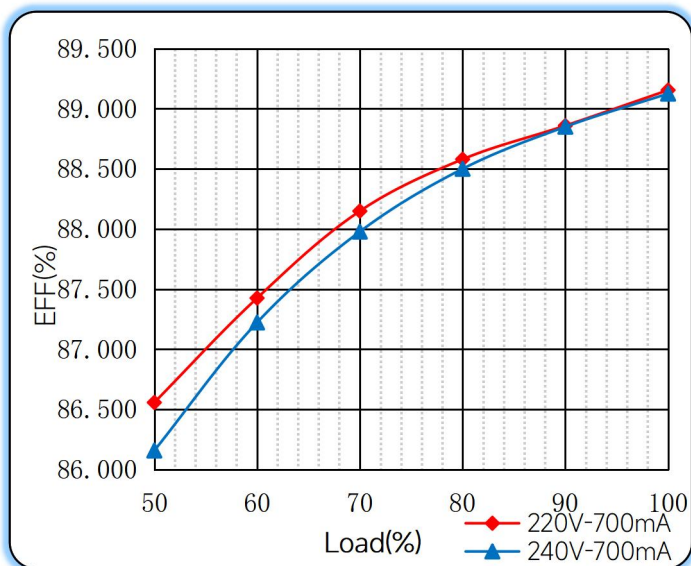
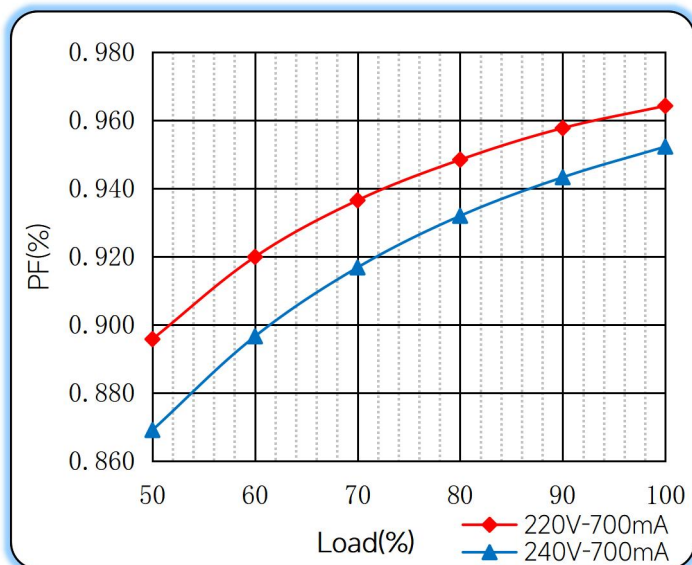
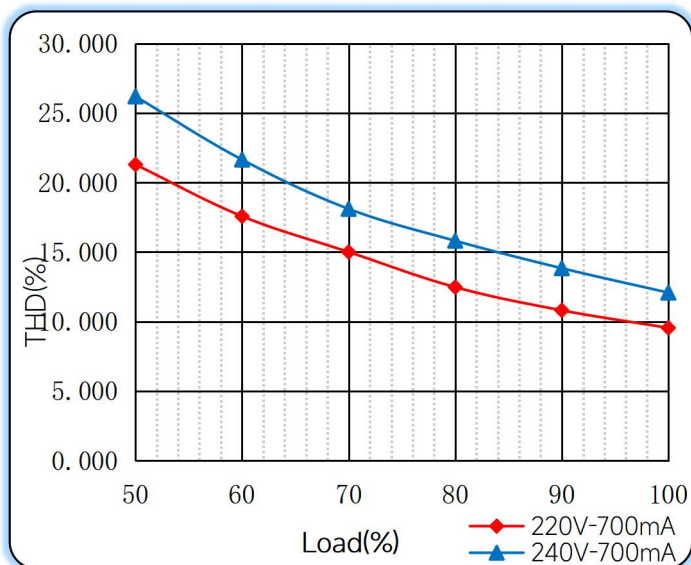
◆ 2D diagram



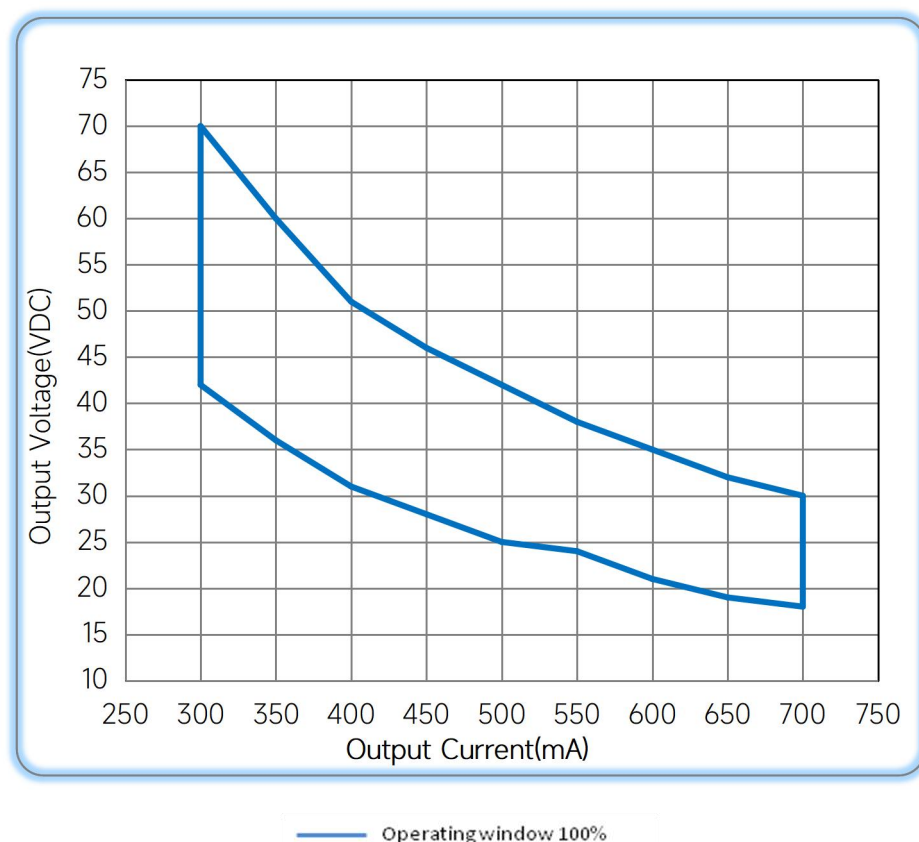
◆ Wiring & Connections

Specification item		Value (Unit)
Input	Input wire cross-section	0.5...1.5 mm ²
	Input wire gauge.	16...20 AWG
	Input wire strip length	7...9mm
Output	Output wire cross-section	0.5...1.5 mm ²
	Output wire gauge.	16...20 AWG
	Output wire strip length	7...9mm

◆ Curve for LS-20-700 RI, $I_o=700\text{mA}$

Lifetime vs. Temperature Curve

Efficiency vs. Load

Power Factor Characteristics

THD vs. Load


◆ Operating window



◆ Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2022/05/15

Tel: +86-0757-86256822, +86-0757-86256831

E-mail: sales@eaglerise.com

Website : <https://lighting.eaglerise.com>



EAGLERISE



Manual