

**Description:** EFC-020 series, long-life LED Driver with Rubycon long life capacitors, long life, high efficiency, high power factor, compatible with TRIAC dimming, no output blinking, instant start, dimming can be simultaneously a large area. Meets IEC 61000-4-5 ringwave, IEC 61000-3-2 Class C harmonics and EN55015 B conducted EMI.



1. High efficiency (Up to 86%), high power factor (> 0.95)
2. TRIAC dimmer compatible (including low cost leading edge type)
3. Consistent dimming performance unit to unit, >1000:1 dimming range
4. Protections: Short circuit / Overload / Over voltage / Over temperature
5. IP67 design for indoor or outdoor installations
6. 100% full load burn-in test
7. Suitable for LED lighting and moving sign applications
8. Compliance to worldwide safety regulations for lighting
9. 3 years warranty

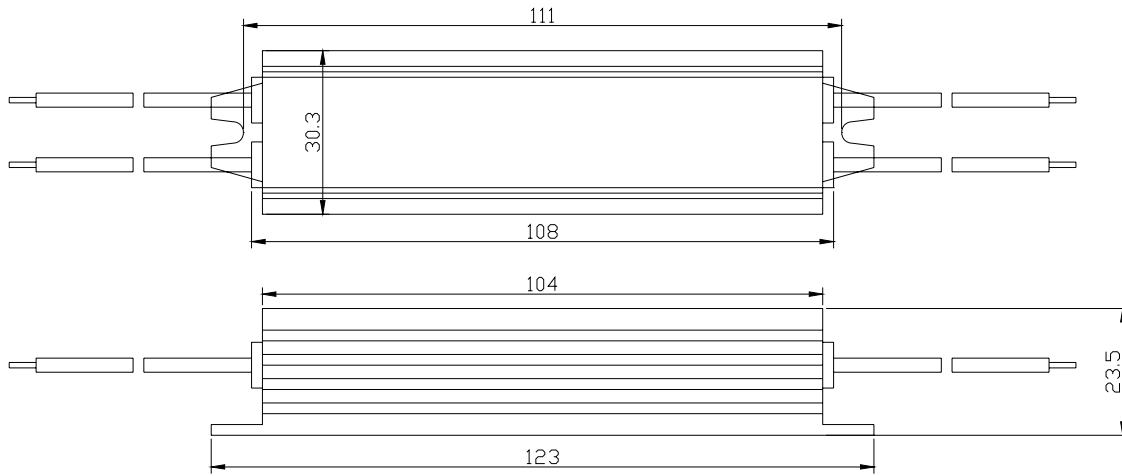

**SPECIFICATION**

MODEL		EFC-020-1750	EFC-020-1050	EFC-020-700	EFC-020-350
OUTPUT	Rated current	1750mA	1050mA	700mA	350mA
	Operating Voltage Range	9~11V	16.5~20V	24~30V	45~55V
	Current range	0~1.75A	0~1.05A	0~0.7A	0~0.35A
	Rated Power	19.2W	21W	21W	19.2W
	Setup time	<300 ms			
	Ripple & Noise	15% Operating Voltage			
INPUT	Voltage range	90~115VAC, 175~265VAC			
	Power factor	PF> 0.95 at full load and rated output voltage			
	Max AC Current	0.6A/115VAC	0.3A/220VAC		
	Frequency range	47~65Hz			
	Efficiency (Typ.)	80%	82%	85%	86%
PROTECTION	Short Circuit	short circuit protection , Auto Recovery			
	Over Temperature	Maximum temperature of components inside the case			
	Over current	95% ~ 110% Protection type : Constant current limiting, recovers automatically after fault condition is removed			
ENVIRONMENT	Working TEMP	-25℃~50℃			
	Storage TEMP.	-40℃~80℃10 ~ 95% RH			
	Working Humidity	20 ~ 95% RH non-condensing			
	Vibration	10~500Hz 2G 10min/1cycle period for 60min. each along X, Y, Z axes			
	TEMP. coefficient	±0.03%/℃ (0~50℃)			
SAFETY & EMC	SAFETY STANDARDS	CE EN 61347-1, EN61347-2-13 Design refer to UL1310 Class 2			
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25 / 70% RH			
	EMI CONDUCTION & RADIATION	Compliance to EN55015			
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, EN61547, light industry level, criteria A			
OTHER	MTBF	600KHours MIL-HDBK-217F (25℃)			
	Dimension	108x30x23.5mm			
	Weight	160g			

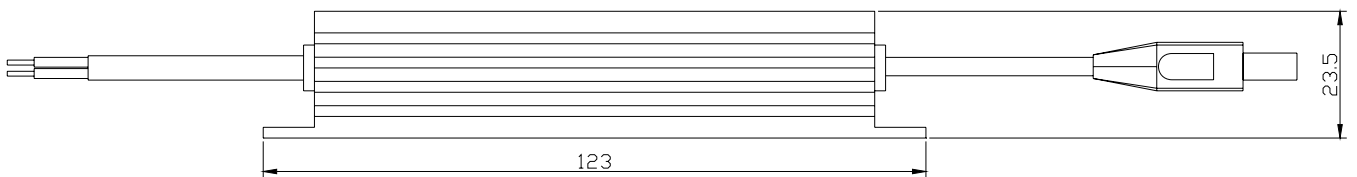
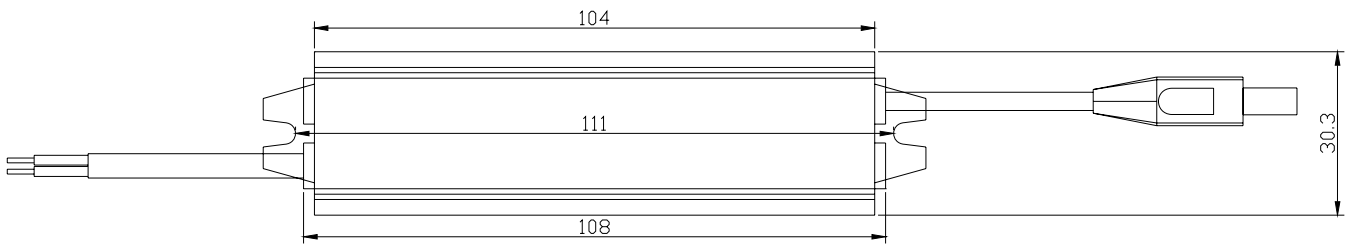
Notes All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.

Direct connecting to LEDs is not using additional drivers is highly recommended

Dimension

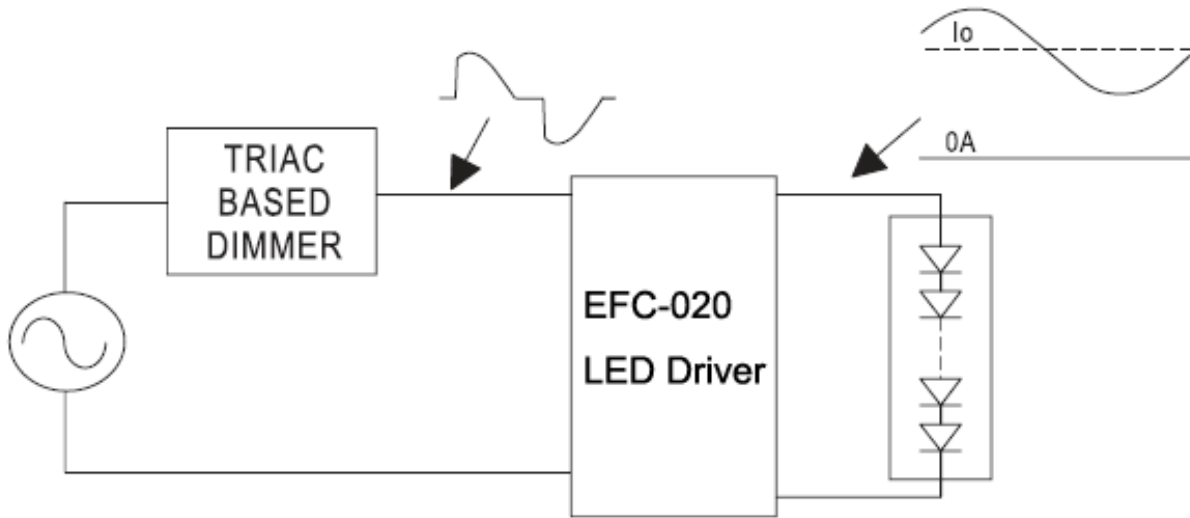


TYPE A UNIT:mm



TYPE B UNIT:mm

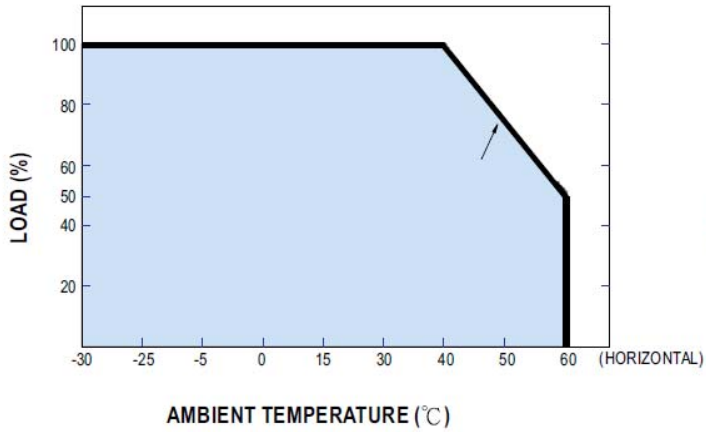
**Dimming Operation**



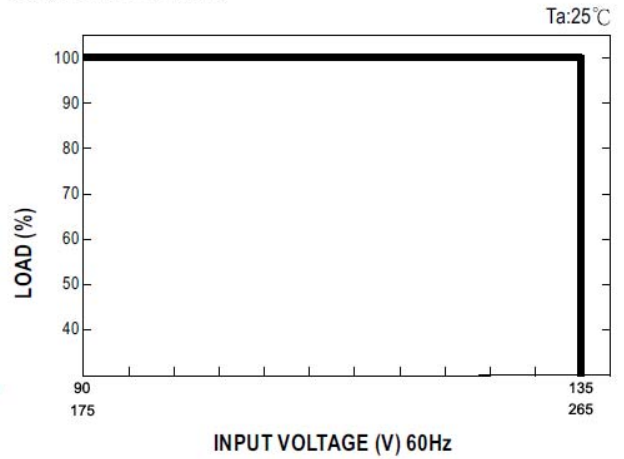
**Dimmer Compatibility Chart:**

place of production/ Manufacturer	MODEL
Taiwan/ SG Electric	XH004186
Taiwan	D-2160B
Taiwan	Y-25082A
Taiwan	Y-25088A
Taiwan	WS-5005
USA/ Leviton	OB4911
USA / Lutron	GLR11-F38875
Italy	RTS34DLI
China / CLIPMEI	
China / MANK	MK/TG100001
China / SB Electric	BM2
China / TCL	L2.0
China / Myongbo	
China / EBAHuang	
China / KBE	
LUTRON	SKYLARK SF-12P-277
JUNG	Licht-Management 225 TMD
BERKER	Tronic-Drehdimmer 286710

Derating Curve



Static Characteristics



**Note:**

All specifications are typical at 25 °C unless otherwise stated.

All specifications are typical at 230 Vac input unless otherwise stated.