

LMB-20V Series, 20Watt
FEATURES:

- ✓ Constant voltage output
- ✓ Input voltage range 200-240Vac
- ✓ Short circuit, overload, and over temperature protections
- ✓ Designed to worldwide safety standards for lighting
- ✓ Cooling by free air convection
- ✓ 3 years warranty



Model	Input voltage (Vac)	Output voltage (Vdc)	Output current (mA)		Output power (W)
			Min.	Max.	
LMB20-V12	200-240	12	0	1670	20
LMB20-V24		24	0	830	20

ELECTRICAL

Input							
Parameters	Symbols	Test Conditions / Comment	Min.	Typ.	Max.	Units	
Input voltage	V_{in}	---	180	--	264	Vac	
Input frequency	f_{line}	---	47	--	63	Hz	
Input current	I_{in}	Full load, $V_{in} = 230\text{ Vac}$	--	--	0.3	A	
Inrush current	I_{inrush}	Cold start, $V_{in} = 230\text{ Vac}$	--	--	50	A	
Power factor	PF	70%~100% load, $V_{in} = 220\text{ Vac}$	--	0.5	--	PF	
Efficiency	η	Full voltage, full load	83	85	--	%	
Output							
Output current	I_{out}	LMB20-V12	--	1670	--	mA	
		LMB20-V24	--	830	--	mA	
Output voltage	V_{out}	LMB20-V12	11.4	12	12.6	V	
		LMB20-V24	22.8	24	25.2	V	
Line regulation	$I_{out-line}$	V_{in} from 200Vac to 240Vac	--	--	1	%	

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Output						
Parameters	Symbols	Test Conditions / Comment	Min.	Typ.	Max.	Units
Load regulation	I _{out-load}	V _{out} from min. To max.	--	--	5	%
Turn-on delay time	T _{on_delay}	Cold start, power on	--	--	2	s
Ripple	--	---	--	200	240	mV

Protection

Overload	Hiccup mode, it will recover automatically after fault conditions remove
Short circuit	Hiccup mode, it will recover automatically after fault conditions remove
Over temperature	Protection type: shut down o/p voltage recovers automatically after temperature goes down
Over voltage	Protection type: shut down and latch off O/P voltage, re-power on to recover

Environment

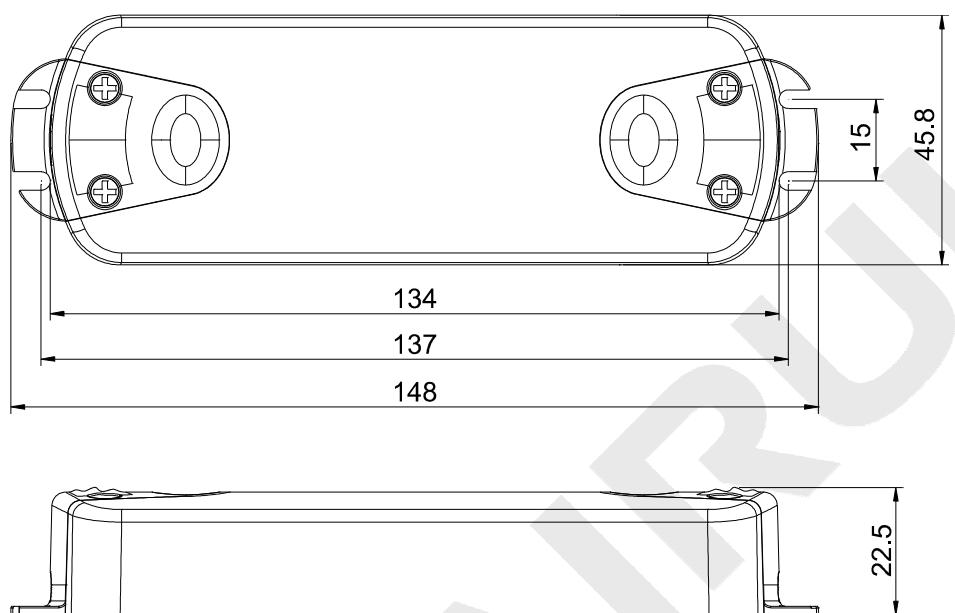
Storage	T _{storage}	Humidity: 5% RH to 95% RH	-40	--	+80	°C
Ambient operating temperature	T _a	Startup at rated voltage	-20	--	+45	°C
Maximum case temperature	T _c	Hot-spot on case	--	--	+80	°C
Operating relative humidity	H _a	Non condensing	10	--	95	%
MTBF	T _{MTBF}	Full load, 220Vac input, 25°C ambient temperature	--	--	30	kHrs

Dimension(LxWxH) 148x45.8x22.5mm

Safety / EMC

Safety standards	IEC61347-1	IEC61347-2-13
EMI	IEC55015	
EMS IMMUNITY	IEC61547	
THD	IEC61000-3-2	

Notes: Unless otherwise specified, all the above parameters are measured at ambient temperature of 25°C and Vin = 200Vac to 240Vac.

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Unit: mm