

# LB240 SERIES INSTALLATION INSTRUCTIONS

Sheet 1 is cover sheet for logging ECOs and approval signatures. Sheet 2 only is printed and used in product.

## DO NOT PRINT THIS SHEET

RECORD OF REVISIONS					SL POWER ELECTRONICS		
LTR	ECN	DESCRIPTION	INC	DATE			
1	49973	RELEASE	RMc	3/12/15	6050 KING DR. BLDG. A, VENTURA, CA 93003 - 805-486-4565		
2	50322	Add the description of H option	RMc		DRAWN	DATE	DRAWING NO.
3	50658	Add LB240S39KH	RMc	2/22/16	<b>JBP</b>	3/13/15	<b>41-36506-0001-3</b>
					CHECK	DATE	
					SHT 1 OF 3		

## LB240 SERIES INSTALLATION INSTRUCTIONS

**MODEL NUMBERS:**

**LB240SXXK(H)YY**, Where LB is LED Boardmount, 240 is Output Watts, S is Single Output, XX is 24, 48 or 56 which represents the Output Volts YYY is any number 00-99 which denotes Value Added Options not related to Safety. May be followed by an Optional (H) which represents the use of a Cold Plate. Unit is RoHS Compliant

**RATINGS:**

Input: 100-240 V ac, 3.0 A, 50/60 Hz

Output: 24, 48 or 56 V, 240 W maximum. See table below for airflow/convection ratings.

Model #	Output Volts	300 LFM 240W	200 LFM 190W	Convection 130W	Cold Plate Option (H)	
					300 LFM 240W	Conduction 200W
LB240S24K(H)	24	10A	7.92A	5.42A	10A	8.33A
LB240S39KH	39	--	--	--	--	5.13 <sup>4</sup>
LB240S48K(H)	48	5A	3.95A	2.71A	5A	4.17A
LB240S56K(H)	56	4.29A	3.39A	2.32A	4.29A	3.57A

- NOTES:
1. Consult factory for application with convection cooling and usage at higher operating ambient temperature.
  2. Maximum Operating Relative Humidity 96 %, no condensation.
  3. Storage: -40 to +85 °C. Units should be allowed to warm-up under non-condensing conditions before application of power.
  4. The LB240S39KH has only been evaluated with the coldplate option at specified ambient temperatures.

**CERTIFICATION:** All models are Certified to be in compliance with the applicable requirements of UL 60950-1, CSA 60950-1, and EN 60950-1 2<sup>nd</sup> Ed..



**SAFETY DECLARATION:** SL Power Electronics Corp. declares under our sole responsibility that all models listed above are in conformity with the applicable requirements of EN 60950-1 following the provisions of the Low Voltage Directive 2006/95/EC. They are certified for Pollution Degree 2 environment and Class I TN-S power systems.

**GROUNDING: Protection Class I** requires that the chassis and/or Ground tab be bonded to Protective Earth in the end application. Using the ground tab for the end product's protective earthing terminal is not recommended. A separate dedicated protective earthing point should be used.

**OUTPUTS:** The DC outputs are SELV under normal and single fault conditions.

**OVERVOLTAGE PROTECTION:** The output is monitored for an overvoltage condition. In some applications where an overvoltage condition could result in a hazard as defined in applicable safety standards, redundant or additional overvoltage protection may be required. Consult factory for details.

**CAUTION:** When performing Dielectric Strength Tests, catastrophic failure of the unit may result if a Dielectric Strength test voltage greater than 3000 V ac is applied between primary and secondary circuits or 1700 V ac between Primary and Ground

**ISOLATION:** The creepage distance between primary and secondary circuits is 8 mm minimum. The required creepage and clearance distances from primary to secondary circuits must be maintained after installation to preserve the intended safety.

**TEMPERATURES:** The maximum operating temperatures of certain safety components, as defined in the applicable safety standards, must not be exceeded after installation to preserve the intended safety. The output power, ambient air temperature and the availability, amount, direction and/or restriction of airflow influence the temperatures of these components.

**FUSING:** Fuse is provided in the Line side of the input, rated T 5.0 A/250 V.

**WARNING! RISK OF FIRE!** A blown internal fuse is an indication of catastrophic failure of circuit component(s). Repair must be performed by SL Power Electronics Corp. authorized personnel.

**WARNING! SHOCK HAZARD!** Dangerous voltages are present on some components, printed wiring traces and heatsinks.

**MISCELLANEOUS:** The use of an insulator between the PWB Bottom and a metal chassis should be considered.





## LB240 SERIES INSTALLATION INSTRUCTIONS (Contd.)

### CONNECTIONS

J100	AC Input (AMP 640445-3)
1	Line
2	Empty
3	Neutral
Mating connector: AMP 640250-3 Pins: AMP 640252-2	

J300	DC Output (All except the 39KH) (AMP 640445-6)	DC Output LB240S39KH (AMP 640445-4)
1, 2, 3	Return	1, 2      Return
4, 5, 6	+ Vout	3, 4      + Vout
Mating connector: AMP 640250-6 Pins: AMP 640252-2		AMP 770849-4 Pins: 3-640252-1

Ground Connector
0.25" Faston Tab
Mating connector: Molex 190020001

EXPLANATION OF SYMBOLS	
	Alternating Current
	Direct Current
	Attention, Consult Accompanying Documents
	Attention, Dangerous Voltages

SL Power Electronics Corp. will not be liable for the safety, reliability or performance of these power supplies if a) any changes, modifications or repairs are carried out by other than authorized agents of SL Power Electronics Corp., or b) the installation of the supply is not in accordance with these installation instructions and the applicable UL, CSA, EN/IEC safety standards.