

## MBC-240 SERIES:



### 240 Watt LED Power Supply

- 7.48 x 7.48 x 2.76" IP65 / IP67 Enclosed Package

#### Features:

- Universal AC full range input (to 305Vac)
- Protections : Short circuit/Over current
- Over voltage/Over temperature auto recover
- Constant current design (C.C.mode)
- 4KV Lightning Surge protect
- With active PFC function
- Multiple dimming function
- IP65/IP67 Design for indoor and outdoor used
- Suitable for LED and street lighting application
- Comply with UL,TUV,CE,FCC,CQC safety regulation
- 5 year Warranty

#### INPUT:

Input Voltage	Universal Input (90~305 VAC) / 127-431VDC
Input Frequency	47-63Hz
Inrush Current	80A @ 230 VAC max Cold Start
Input Current	2.7A @ 115VAC / 1.4A @ 230VAC / 1.2A @ 264VAC
Power Factor	PF>0.98 @ 115VAC, >0.95 @ 230VAC, >0.93 @ 264VAC
Total Harmonic Distortion	<10% @230VAC @ 50Hz, @ full load
Leakage Current	<0.75mA @ 277 VAC
Hold-Up	>12ms @ 115VAC Full Load

#### OUTPUT:

Minimum Load	None
Output Current Tolerance	±5%
Line Regulation	±1%
Ripple & Noise	3V p-p
Output Ripple Current	±5%
Over Voltage	Latching, recycle input to reset (see output models selection table for trip points)
Short Circuit Protection	Auto-Recovery
Over Temperature Protection	Ambient Temperature Over 70°C , Fixed 75% load output

#### GENERAL:

Efficiency	92%
Operating Temperature	-40 ~ 60°C (see derating curve)
Storage Temperature	-40 ~ 85°C
Operating Humidity	10% to 95% RH, non-condensing
Vibration	IEC 68-2-2-1995/CNS-3629-C6016/GB/T 2423.10-2008 ; 5-500Hz , 1.0G , 1 Oct/min , 2cycle X , Y , Z, 75 minutes
MTBF	220Khrs min. MIL-HDBK-217F (25°C )

#### APPROVALS:

EMI	EN 55015, EN 61000-3-2, EN 61000-3-3, FCC Part18; CNS 14115
EMS	EN 61547, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11
SAFETY	UL 8750, EN 61347-1, EN 61347-2-13 , GB 19510.1, GB 19510.14
Surge	4KV(L/N-PE) & 2KV(L-N) /1.2*50µ sec

## MBC-240 SERIES:

Output Specifications:						
Model:	Rated Current	Current Adj. Range	Output Voltage	OVP Level	Output Power	Efficiency
MBC-240-4200	4200mA	2520~4200mA	30~60V	68~78V	252W	92%
MBC-240-5250	5250mA	3150~5250mA	24~48V	55~62V	252W	92%
MBC-240-6650	6650mA	3990~6650mA	18~36V	41~48V	240W	92%
MBC-240-10150	10150mA	6090~10150mA	12~24V	27~32V	243W	92%

\* Suffix Required to complete part number as follows:

A suffix designates IP65 Grade, current adjustable via internal variable resistor

B suffix designates IP67 Grade, current adjustable by 1~10 PWM Signal, 10K~100KΩ Resistor or PWM

### Type B Models, Resistor /V<sub>ADJ</sub> / PWM Values

\* 10K~100KΩ adjust output current

Resistor value	10KΩ	20KΩ	30KΩ	40KΩ	50KΩ	60KΩ	70KΩ	80KΩ	90KΩ	100KΩ	OPEN
Rated Current rate	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~105%

\* 1~10Vdc adjust output current

Vdc	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Rated Current rate	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~105%

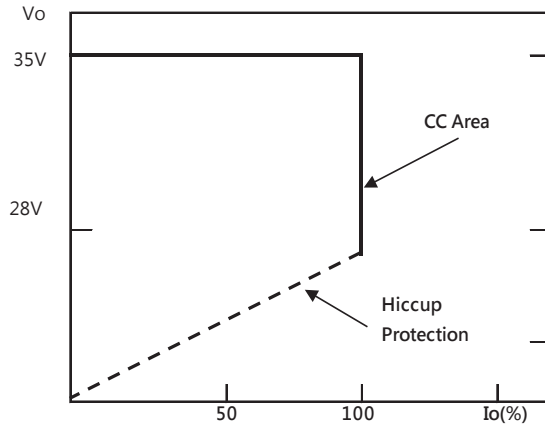
\* 10V PWM adjust output current ; Frequency range 100Hz~3KHz

Duty	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Rated Current rate	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~105%

## MBC-240 SERIES:

### LED Output curve(MBC-240-6650)

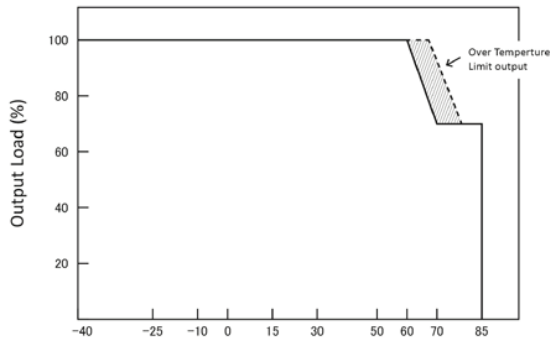
The characteristic of LED Driver is constant current(CC),  
Drive mode is constant current.



LED Driver I-V Curve

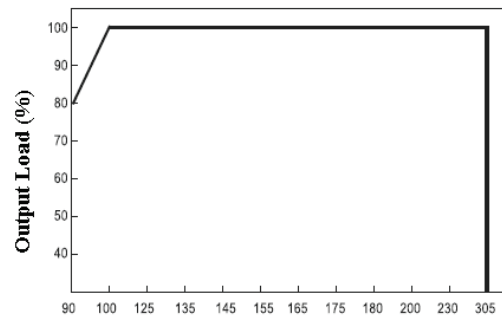
### Output Load De-rating Curve

Temperature-De-rating curve



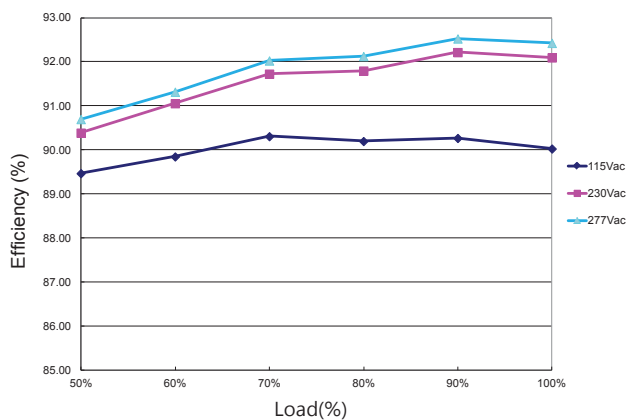
Ambient temp. (°C)

Input Voltage-De-rating curve



Input Voltage(V) 50~60Hz

Efficiency Vs Load MBC-240-6650



Power Factor Vs Load (MBC-240-6650)

