

MDC-100 SERIES:



250 Watt LED Power Supply

- 7.32 x 2.48 x 1.57" IP65 /IP67 Enclosed Package

Features:

- Universal AC Input (90~305VAC Input Range)
- Protections : Short circuit/Over current
- Over voltage/Over temperature auto recover
- Constant current design (C.C.mode)
- 10KV 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,CB, CCC, CE Csafety regulations
- 5 year Warranty

INPUT:

Input Voltage	Universal Input (90~305 VAC)
Input Frequency	47-63Hz
Inrush Current	75A @ 230 VAC max Cold Start
Input Current	1.6A _{rms} @ 115VAC / 0.7A _{rms} @ 230 VAC
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

GENERAL:

Efficiency	93-94%
Operating Temperature	-40 ~ 70°C (see derating curve)
Storage Temperature	-40 ~ 85°C
Operating Humidity	10% to 95% RH, non-condensing
MTBF	220Khrs min. MIL-HDBK-217F (25°C)

OUTPUT:

Minimum Load	None
Output Current Tolerance	±0.5
Line Regulation	±1%
Output Ripple Current	±5%
Ripple & Noise	3v p-p max
Over Voltage	Latching, recycle input to reset (see output models selection table for trip points)
Short Circuit Protection	Auto-Recovery
Over Temperature Protection	70°C, ±10%

APPROVALS:

EMI	EN 55015, EN 61000-3-2, EN 61000-3-3, FCC Part18; CNS 14115, GB 17743
EMS	EN 61547, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN61000-4-8, EN 61000-4-11, GB 17625.1
SAFETY	UL 8750, EN 61347-1, EN 61347-2-13, GB 19510.1, GB 19510.14
Surge	10KV(L/N-PE) & 5KV(L-N) /1.2*50μ sec

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Output Specifications:

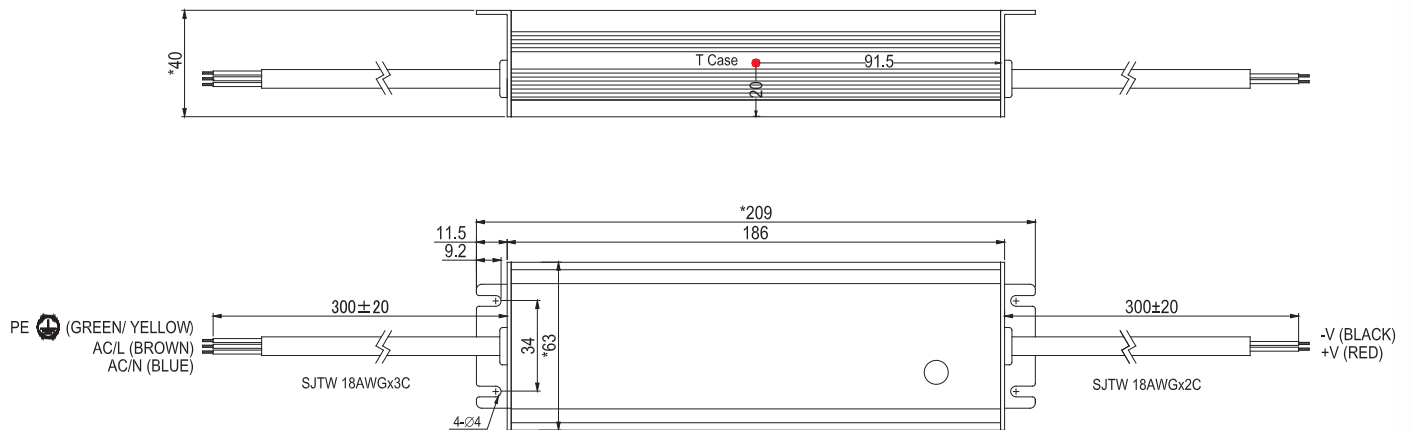
Model:	Rated Current	Current Adj. Range	Output Voltage	OVP Level	Output Power	Efficiency
MDC-100-1650x	700mA	420~700mA	200~400V	430~460V	250W	94%
MDC-100-1950x	1050mA	630~1050mA	134~267V	290~320V	250W	94%
MDC-100-2290x	1400mA	840~1400mA	100~200V	220~240V	250W	93%
MDC-100-2740x	4200mA	2520~4200mA	27~56V	65~73V	235W	93%
MDC-100-3560x	4900mA	2940~4900mA	24~49V	56~64V	240W	93%

* Suffix Required to complete part number as follows:

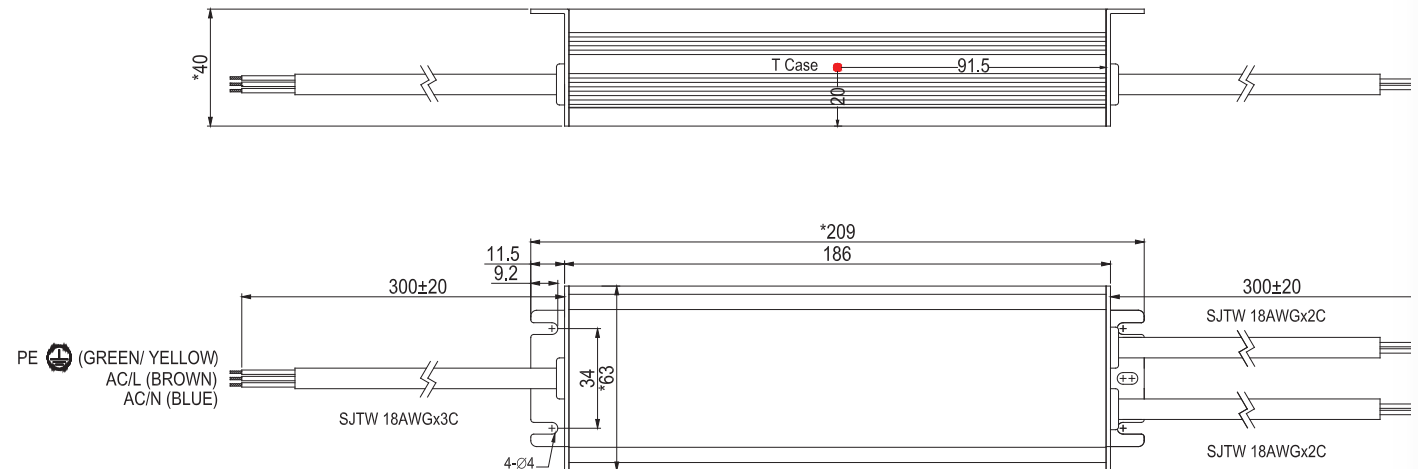
A suffix designates IP65 Grade, current adjustable via internal variable resistor

B suffix designates IP67 Grade, current adjustable by 1~10 PWM Signal / Resistor

OUTLINE DRAWING (Suffix A models):



OUTLINE DRAWING (Suffix B models):



MDC-100 SERIES:

Type B Models, Resistor / V_{ADJ} / 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

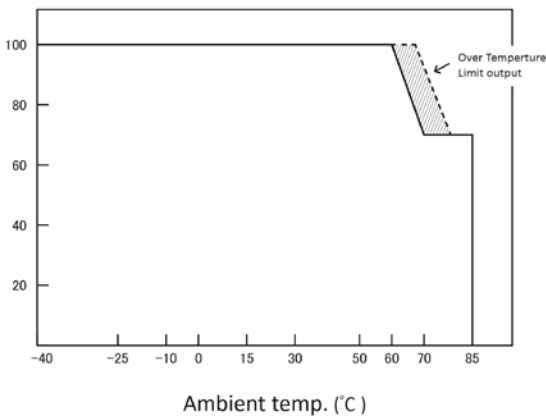
Vdc	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Rated Current rate	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~105%

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

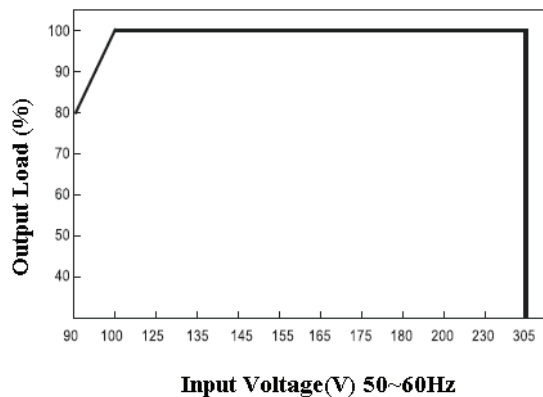
Duty	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Rated Current rate	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~105%

Output Load De-rating Curve

Temperature-De-rating curve



Input Voltage-De-rating curve



Efficiency Vs Load(MDC-100-2740)

Power Factor Vs Load(MDC-100-2740)

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CHARACTERISTIC CURVES

