

DBL-170 SERIES:



100-170 Watt Models

- Measures 6.69 x 2.48 x 1.57"

Features:

- Universal DC full range input (10~52 Vdc)
- Protections: Short circuit/Over current auto recovery
- Over voltage/Over temperature power reset
- Constant current design (C.C.mode)
- Multiple dimming functions
- 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 years Warranty

INPUT:

Input Voltage 11~50.4 VDC Input Range
 Inrush Current 150A Cold Start (Typical)

OUTPUT:

Output Current Tolerance ±5%
 Ripple & Noise 1V p-p (Ripple current is measured at 20MHz, paralleled with a 22µF E-cap and a 0.1µF ceramic cap)
 Output Ripple Current ±5%
 Line Regulation ±1% typ. pk-pk @ 20MHz
 Turn-On Delay <0.5s @ 24 VDC / 48VDC full load
 Short Circuit Auto-Recovery or Power Reset
 OVP Power Reset
 OCP Auto-Recovery or Power Reset

GENERAL:

MTBF 350Khrs min. MIL-HDBK-217F(25)
 Lifetime >50,000hrs , 48VDC , 100% Load, @ T-Case 70 °C
 Dimension 170 * 63 * 40mm (L*W*H)
 Weight 730g

ENVIRONMENTAL:

Operating -40°C~70°C ; 10%~95% RH , Non-condensing
 Storage -40°C~85°C ; 10%~95% RH
 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
 OTP Over 50°C, Fixed 75% load output
 85°C ±10°C , Power reset

APPROVALS:

Safety Meet UL 8750, EN 61347-1, EN 61347-2-13 , GB 19510.1, GB 19510.14
 EMI Meet EN 55015, EN 61000-3-2, EN 61000-3-3, FCC Part18, CNS 14115, GB 17743
 EMS Meet 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, GB 17625.1

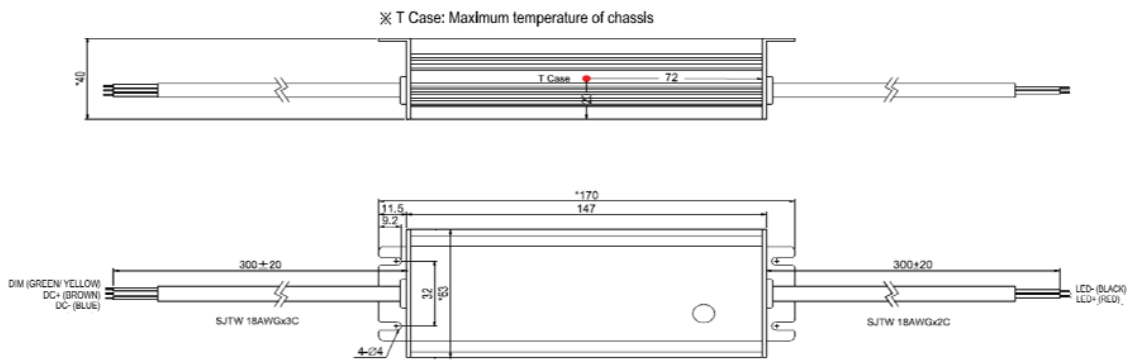
DBL-170 SERIES:

Model	Rated Current	Current Adjust Range(1)	Output Voltage	OVP level	Input DC Voltage				Output Power	Efficiency (3)
					12V	24V	36V	48V		
DBL-170-0700x	700mA	280~700mA	115~165V	181~198V	V	V	V	V	100W	88%
DBL-170-1400x	1400mA	560~1400mA	70~120V	132~144V	V	V	V	V	120W	89%
DBL-170-3150x	3150mA	1260~3150mA	45~75V	90~97.5V	V	V	V	V ⁽⁴⁾	140W	90%
DBL-170-4200x	4200mA	1680~4200mA	30~48V	57.6~62.4V	V	V	V ⁽⁴⁾	-	170W	91%

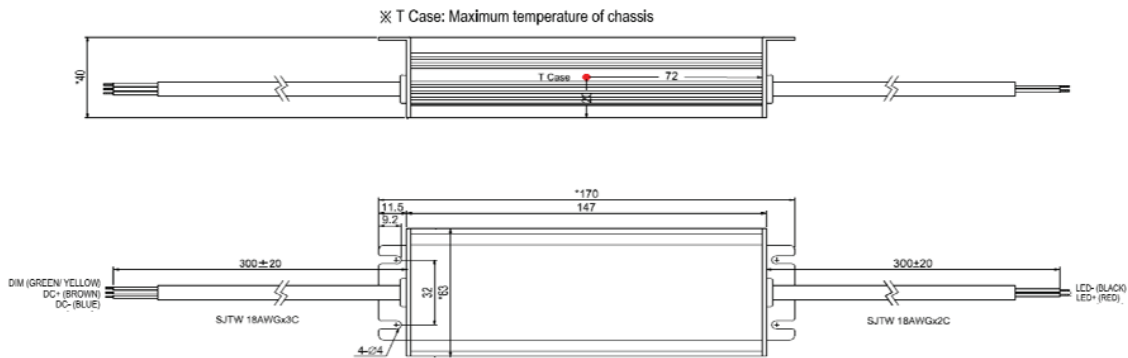
- 1 Add suffix to complete part number as follows:
 - A IP65 grade, Adjust current by variable resistor internal
 - B type: IP67grade, Dimming by 1~10V/PWM signal/Resistor

- 2) Only A Type Adjust current by variable resistor internal
 3) Efficiency test condition please reference "Efficiency Vs Load"
 4) Output voltage must be 3 volts higher than the input voltage

Atype:IP65 DBL170



B type:IP67 DBL170



Dimming Control

* 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

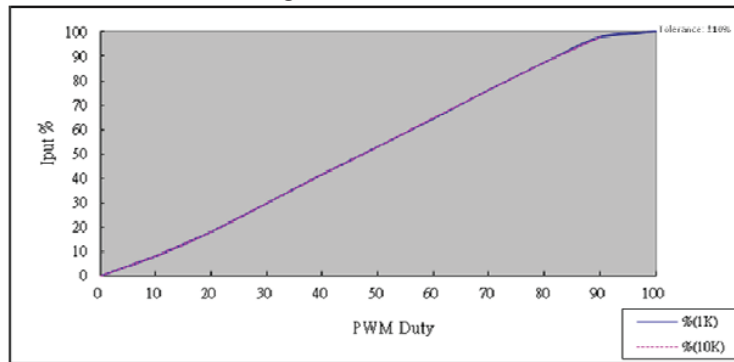
Vdc	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Rated Current rate	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~105%

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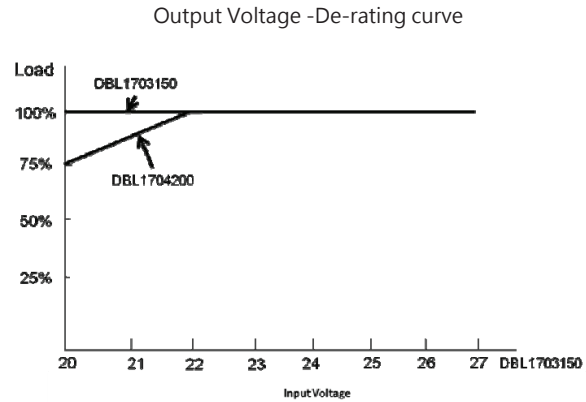
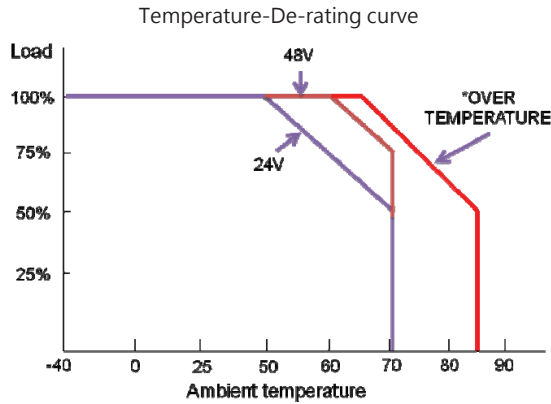
* 10V PWM adjust output current ; Frequency range 1KHz~10KHz

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%

PWM out current change of the PWM control



◆ Output Load De-rating Curve



Efficiency Vs Load(24V Input VF3.3V)

