

45-DBFE Series

0~10V Dimmable



FEATURES:

- AC Input 100~277VAC
- Built-in Active PFC Function
- Protection: SCP / OVP / OTP
- 0-10V Dimming Control
- High Operating Ambient Temp.: -20°C~+60°C
- Surge protection: L-N 1KV, L-FG/N-FG 2KV
- Safety: Comply with UL 8750
- EMI: Comply with FCC Part 15 Class B / CE
- IP 67 Compliant
- Warranty: 5 years (refer to warranty policy)
- RoHS Compliant

PRODUCT SPECIFICATION

MODEL	DC OUTPUT POWER (W)	DC OUTPUT VOLTAGE (V)	OUTPUT CURRENT (A)	OUTPUT CURRENT TOLERANCE	EFFICIENCY (Typ.)				Power Factor (Typ.)			
					100VAC	120VAC	200VAC	277VAC	100VAC	120VAC	200VAC	277VAC
DBFE-045U172	42	14 - 24	1.75	±5%	84.0%	84.0%	84.0%	83.5%	0.98	0.98	0.92	0.92
DBFE-045U192	45.6	14 - 24	1.9	±5%	84.0%	84.0%	84.0%	83.5%	0.98	0.98	0.92	0.92

Input Specifications

	Min.	Typ.	Max.	Units	Conditions/Description
Input Voltage Range	90		305	Vac	
Input Frequency Range	47		63	Hz	
Input Current		0.55		A	100VAC in
Inrush Current			43	A	230VAC in, 25°C Cold start
Leakage Current			0.75	mA	277VAC in
Power Factor (PF)	0.9				
Total Harmonics Distortion (THD)			20	%	100-277VAC, 100% load

Output Specifications

	Min.	Typ.	Max.	Units	Conditions/Description
Line Regulation			±5	%	
Load Regulation			±5	%	
Output Current Regulation	-5	±2.5	5	%	
Ripple and Noise (pk-pk)			2.5	V	20MHz Bandwidth. See note (3)
Ripple Current	<30% of rated output current				*Measured at electronic load LED mode and nominal input voltage with DC10V dimming.
Turn-on Delay Time			3	s	*Measured at 100-277VAC and at full load

Protection Functions

	Min.	Typ.	Max.	Units	Conditions/Description
Short Circuit Protection					Auto recovery
Over Voltage Protection					Latching, See individual models OVP levels
Over Temp Protection (Tc)		100		°C	Latching, re-power on to recover

Environmental Conditions

	Min.	Typ.	Max.	Units	Conditions/Description
Operating Temperature (Ta)	-20		60	°C	Non-condensing
Operating Humidity	10		90	%RH	Non-condensing
Operating Case Temperature (Tc)			90	°C	Case temperature measured at the case hot spot Measured at 100Vac, Ta 60°C
Storage Temperature	-40		80	°C	Non-condensing
Storage Humidity	10		95	%RH	Non-condensing
Life Time	Measured at 277Vac, 50,000 hours at Tc 60°C for DBFE-045U192.				
Dimensions(L*W*H)	163 * 47 * 31.6 mm 【6.42 * 1.85 * 1.24 inch】				
Weight		403		g	

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EMC Compliance and Safety			
EMC Compliance			
Conducted and Radiated Emission		Comply with FCC Part 15 Class B / Comply with CE	
Harmonic Current Emissions		Comply with EN 61000-3-2	
Voltage Fluctuations & Flicker		Comply with EN 61000-3-3	
EMS Standards	Electrostatic Discharge (ESD)	Comply with IEC 61000-4-2	8 KV air discharge, 4 KV contact discharge
	RF Electromagnetic Field Susceptibility	Comply with IEC 61000-4-3	
	Electrical Fast Transient	Comply with IEC 61000-4-4	
	Surge Immunity	Comply with IEC 61000-4-5	L-N 1KV, L-FG/N-FG 2KV
	Conducted RF Disturbances	Comply with IEC 61000-4-6	
	Power Frequency Magnetic Field	Comply with IEC 61000-4-8	
	Voltage Dips	Comply with IEC 61000-4-11	
Safety			
UL	Comply with UL 8750		

Notes

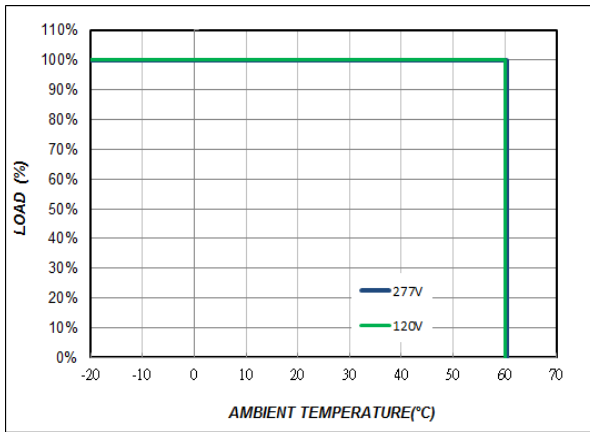
- (1) All parameters not specially mentioned are measured 230VAC input.
- (2) All specifications Typical @25°C, unless otherwise noted, at normal line and load.
- (3) Ripple and Noise measured directly at pins/terminals at nom. load, 0.1uF bypass and 47uF electrolytic, pk-pk @20MHz bandwidth.
- (4) Specified for free-air convection cooling.

* REFERENCE: www.linkcom.com.tw

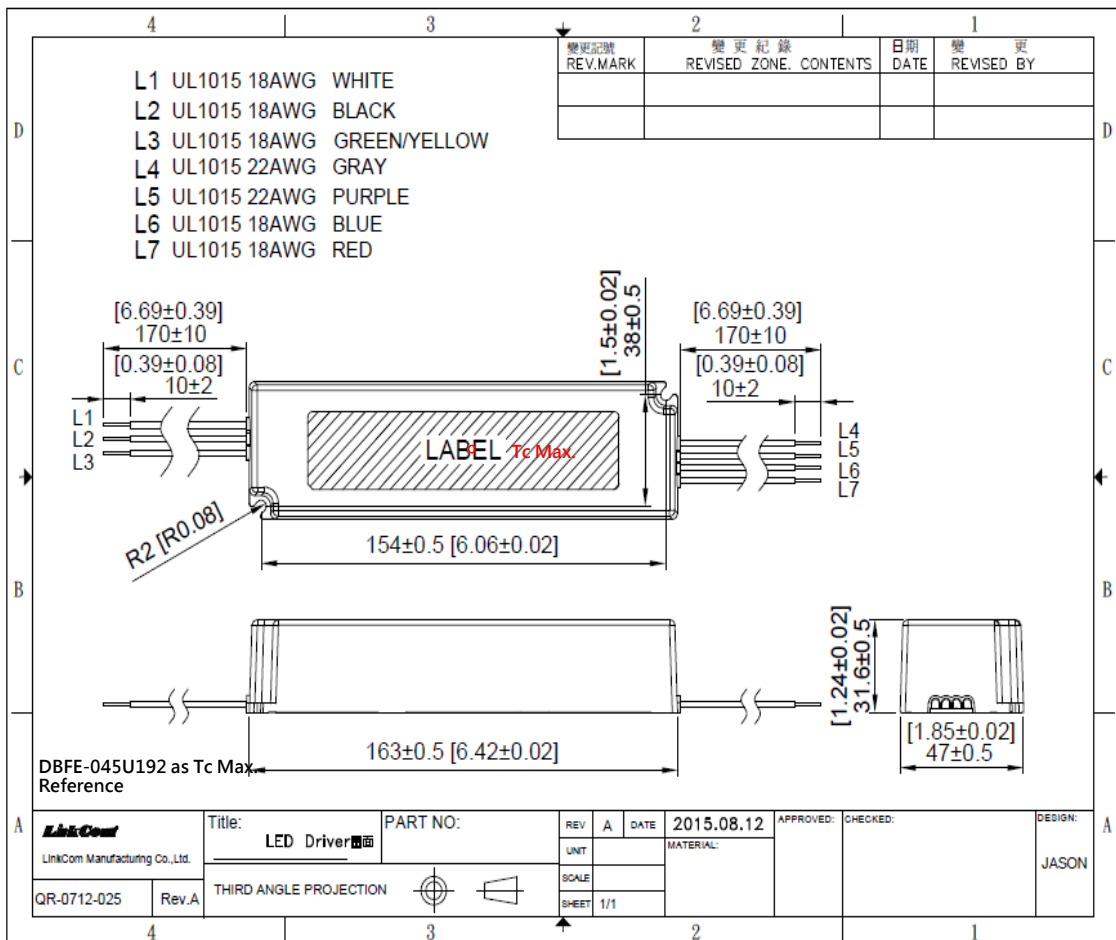
* Please contact sales@linkcom.com.tw, sales@linkcomusa.com for more information

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DERATING CURVE



DIMENSIONS



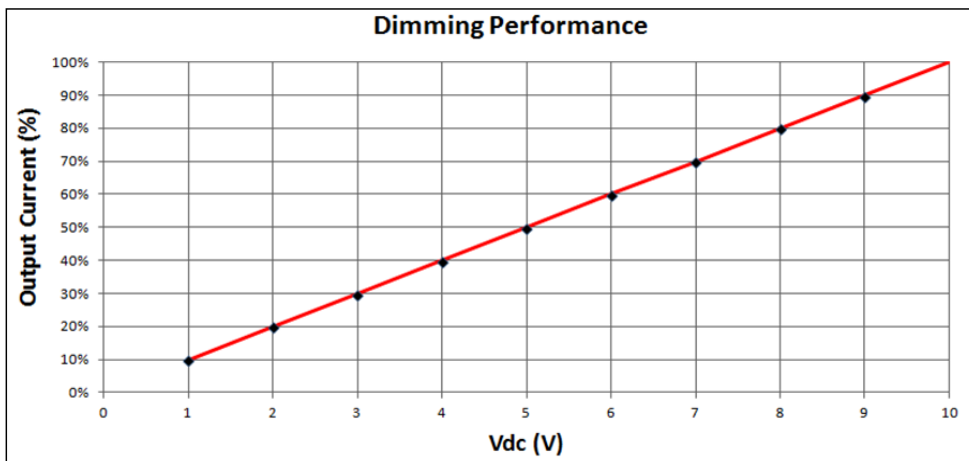
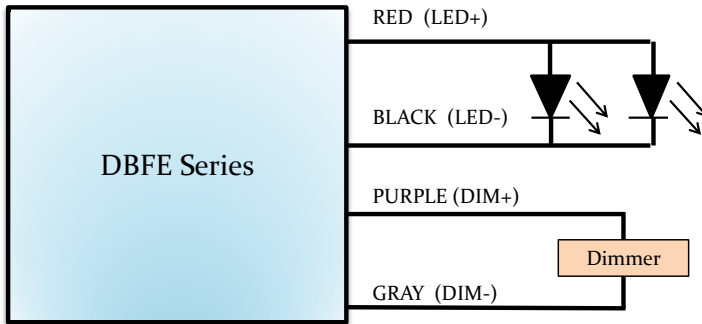
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DIMMING OPERATION

Parameters	Minimum	Typical	Maximum
Absolute maximum voltage on the 0-10V(+) Purple Wire	1V	—	10V
Source current on the 0-10V(+) Purple Wire	0mA	—	1mA

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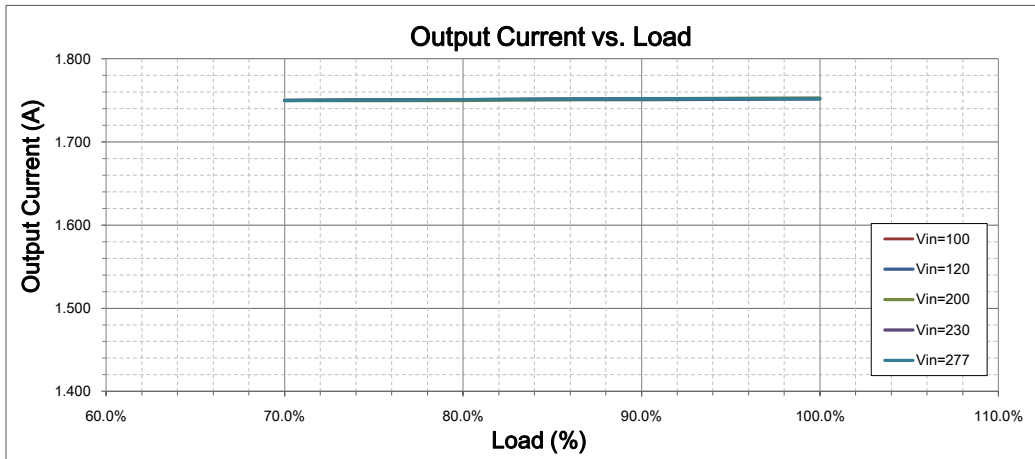
Notes:

1. Purple and Gray wires on the output side are used for 0-10V dimming.
2. Recommended dimmers are Leviton IP710, Lutron NTSTV-DV or equivalent.
3. When dimming wires +Purple/-Gray are left open, the output current will be at 100%.

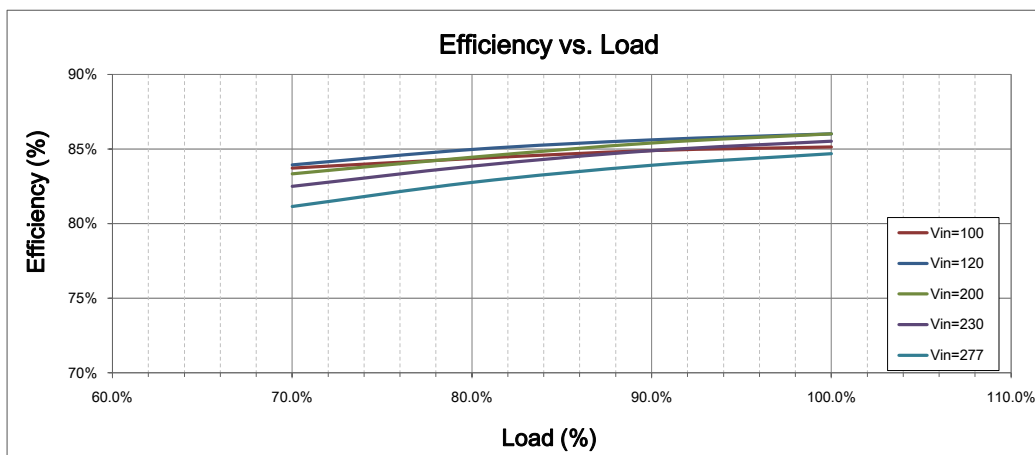
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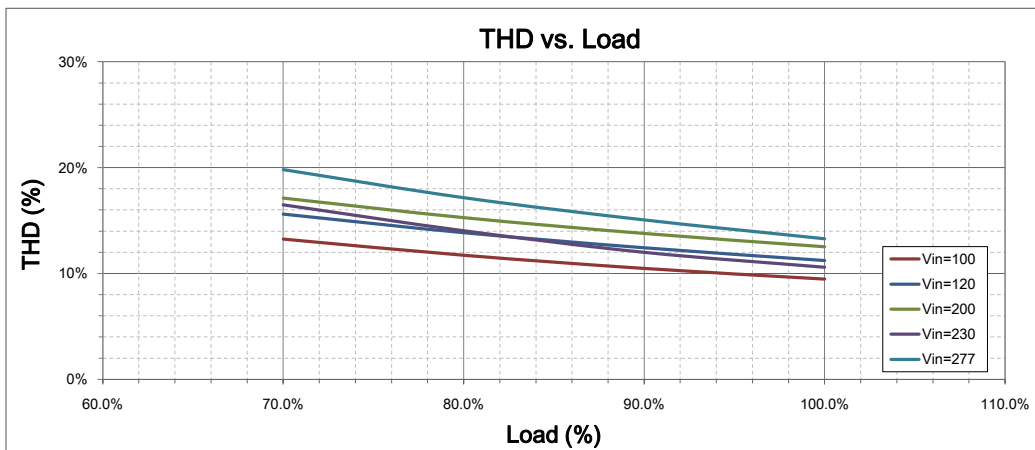
Output Current vs. Load (DBFE-045U172)



Efficiency vs. Load (DBFE-045U172)



THD vs. Load (DBFE-045U172)



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PF vs. Load (DBFE-045U172)

