

20/30-DBFE Series

**FEATURES:**

- AC Input 120-277VAC
- Built-in Active PFC Function
- Protection: SCP / OVP / OTP
- 0-10V Dimming / < Dim-to-off (Optional for customization)
- High Operating Ambient Temp.: -30°C~+60°C
- Surge protection: L-N 2KV
- Safety: UL 8750, Type TL
- EMI: FCC Part 15 Class B
- IP 64 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.)			
					108VAC	120VAC	200VAC	277VAC	108VAC	120VAC	200VAC	277VAC
DBFE-030U901	28.8	18-32	0.9	±7%	84.5%	85.0%	86.5%	87.0%	0.98	0.97	0.95	0.93
DBFE-030U701	29.4	24-42	0.7	±7%	85.0%	86.0%	87.0%	88.0%	0.98	0.97	0.95	0.91
DBFE-026U701	25.9	20-37	0.7	±7%	86.0%	86.0%	87.0%	87.0%	0.98	0.97	0.95	0.93
DBFE-020U701	19.6	11-28	0.7	±7%	83.0%	84.0%	84.5%	85.0%	0.98	0.97	0.95	0.9
DBFE-020U451	18.9	24-42	0.45	±7%	85.0%	86.0%	87.0%	87.0%	0.98	0.97	0.95	0.93
DBFE-013U451	12.6	11-28	0.45	±7%	82.0%	83.0%	83.0%	84.0%	0.98	0.97	0.95	0.9

Input Specifications

	Min.	Typ.	Max.	Units	Conditions/Description
Input Voltage Range	108		305	Vac	
Input Frequency Range	47		63	Hz	
Input Current	0.16		0.43	A	108VAC in
Inrush Current			10	A	230VAC in, 25°C Cold start
Leakage Current			0.7	mA	277VAC in
Power Factor (PF)	0.9				120-277VAC, 100% load
Total Harmonics Distortion (THD)			20	%	

Output Specifications

	Min.	Typ.	Max.	Units	Conditions/Description
Line Regulation			±3	%	
Load Regulation			±3	%	
Output Current Regulation			±7	%	
Ripple and Noise (pk-pk)			4	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		0.5		s	*Measured at 120-277VAC 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)	-30		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
Storage Temperature	-40		80	°C	Non-condensing
Storage Humidity	10		95	%RH	Non-condensing
Life Time	Measured at 277Vac, 67,000 hours at Tc 75°C for DBFE-030U901.				
Dimensions(L*W*H)	80 * 40 * 25.2 mm 3.31 * 1.57 * 0.99 inch				
Weight		170		g	

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0-10V Dimmable

EMC Compliance and Safety				
EMC Compliance				
Conducted and Radiated Emission		FCC Part 15 Class B		
Harmonic Current Emissions				
Voltage Fluctuations & Flicker				
EMS Standards	Electrostatic Discharge (ESD)			
	RF Electromagnetic Field Susceptibility			
	Electrical Fast Transient			
	Surge Immunity		Comply with IEC 61000-4-5	L-N 2KV
	Conducted RF Disturbances			
	Power Frequency Magnetic Field			
	Voltage Dips			
Safety				
UL	UL 8750, Type TL			

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.

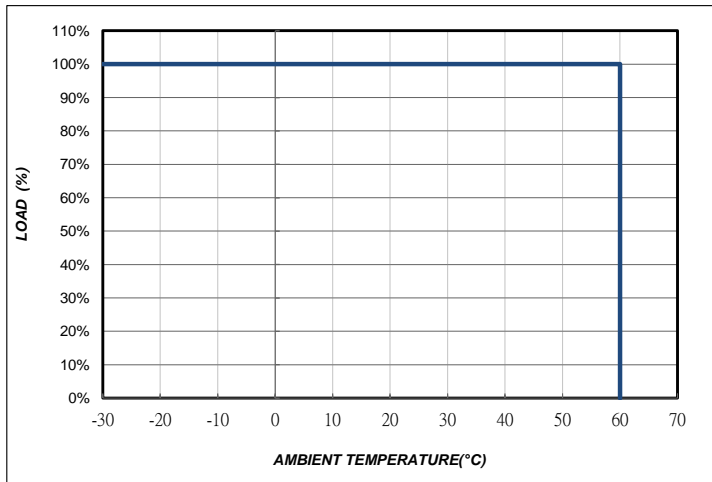
* REFERENCE: www.linkcom.com.tw

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

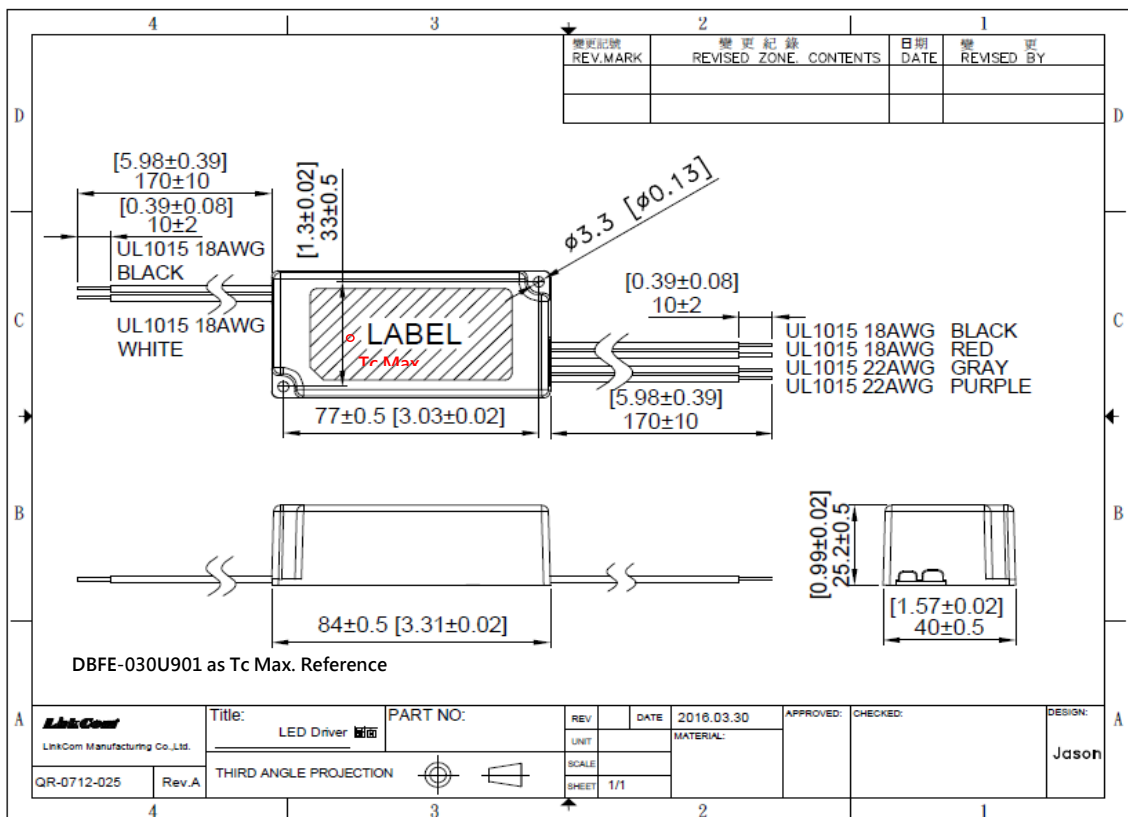
20/30-DBFE Series

0-10V Dimmable

DERATING CURVE



DIMENSIONS



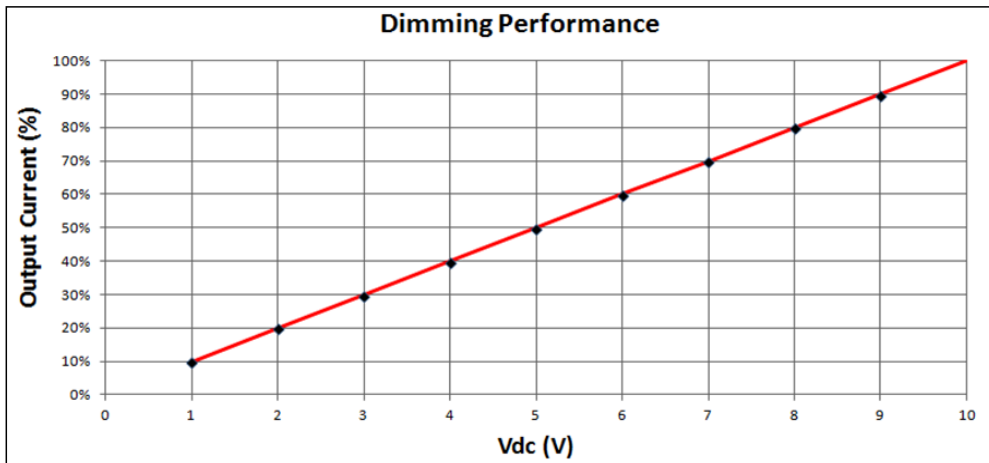
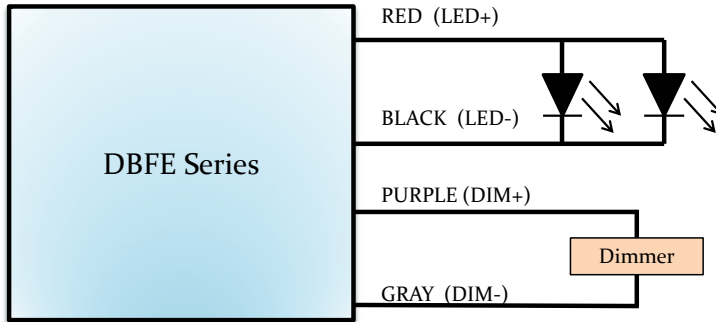
* REFERENCE: www.linkcom.com.tw

20/30-DBFE Series

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

0-10V Dimmable



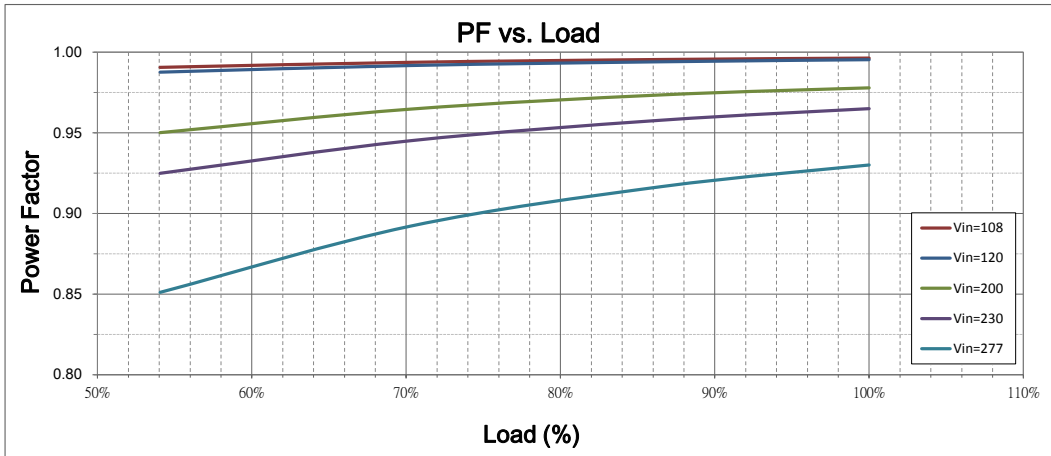
Notes:

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%.

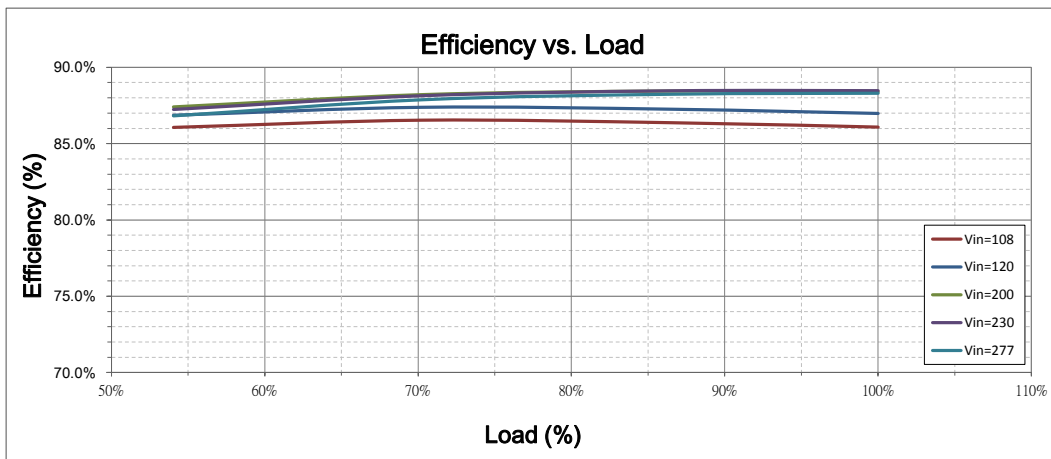
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0-10V Dimmable

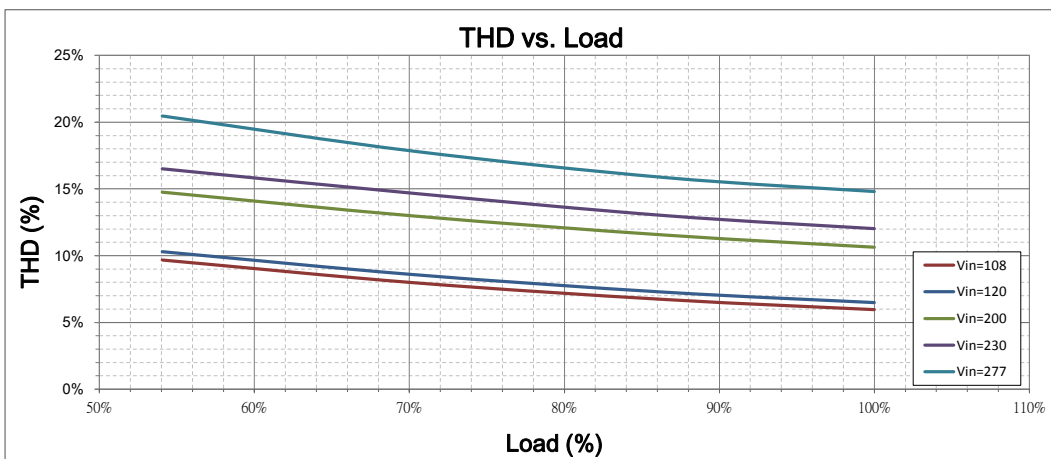
Power Factor vs. Load (DBFE-026U701)



Efficiency vs. Load (DBFE-026U701)



THD vs. Load (DBFE-026U701)



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Output Current vs. Load (DBFE-026U701)

0-10V Dimmable

