

■ **Features**

- Supply Voltage: 90~305Vac or 127-420Vdc, 380Vac for 2 hours
- Great Surge Immunity 10kV
- 80,000Hour Life @ Tc=75°C
- 5 Year Warranty
- Airset™ NFC Programmability
- 0-10V Isolated
- Dim Off
- Class II Model Available
- UL Class P, Class 2
- ENEC/CB/CCC SELV Output
- Safety according to EN 61347-1, 61347-2-3, 61347-2-13, 62384



■ **Application**

- Bay lights, Street lights, Tunnel lights, Flood lights

■ **Model List**

Model Number	Input Voltage Range	Output Power	Output Voltage	Full Power Settable Current Min	Full Power Settable Current Max	Certification
BLD-060-C105-XYZ	90 ~ 305 Vac	60 W	Refer to Appendix Last Page	700mA	1050mA	UL/FCC/CB/ENEC/CCC/RCM/PSE
BLD-060-C140-XYZ	90 ~ 305 Vac	60 W		1050mA	1400mA	
BLD-060-C210-XYZ	90 ~ 305 Vac	60 W		1400mA	2100mA	

XYZ Suffix	Dimming Method	NFC Programmable	12Vaux	Dim-off
NNZ-LCK000	-	-	-	-
DNZ-LCK000	0-10V Isolated	-	-	√
TRZ-LCK000	Time	√	-	-
DRZ-LCK000	0-10V Isolated/Time	√	-	√

Z = U, UL cable with ground wire (green) S, VDE cable/Class I D, VDE cable/Class II

■ Technical Data

Input Voltage	90~305Vac or 127V-420Vdc, 380Vac for 2 hours
Input Frequency	47~63Hz
Power Factor	>0.9@60-100%load, refer to PF vs. Load curve
THD	<15%@60-100%load, refer to THD vs. Load curve
Input Current	0.58Amax@120Vac & Full-Load, 0.31Amax@220Vac & Full-Load
Inrush Current	65A peak, 1.2ms duration, <0.25A2s@230Vac, Cold Start 70A peak, 1.3ms duration, <0.5A2s@277Vac, Cold Start
Leakage Current	1mA max @277Vac 60Hz, UL8750, 0.75mAmax @220Vac 50Hz, IEC61347-1
Input Under Voltage	Shut down and auto-recovery
Input Over Voltage	*Optional: Shutdown @320Vac
Surge Protection	Line to line 6kV, line to ground 10kV, IEC 61000-4-5
Current Accuracy	±5%Io
Ripple Current	Ip-p:5%Io max
Setup Time	1.2s max
Overshoot	10% Io max & LED Load
Output Over Voltage	120% Vomax, typ.
Short Circuit	Auto recovery. The output recovers when short is removed.
Over Temperature	Lower the output current when $T_c \geq 105 \pm 10^\circ\text{C}$; Auto Recovery When $T_c \leq 70 \pm 10^\circ\text{C}$
Auxiliary Power (Vaux)	12V+/-5%, 300mA max
Operating Temperature	Case Temperature $T_c = -40^\circ\text{C} \sim +90^\circ\text{C}$; 10%RH~100%RH
Storage Temperature	$-40^\circ\text{C} \sim +85^\circ\text{C}$; 5%RH~100%RH
MTBF	$\geq 300,000$ hours, 75°C case temperature (MIL-HDBK-217F)
Lifetime	$\geq 80,000$ hours, 75°C case temperature, refer to life vs. T_c curve
Case Temperature	90°C max, marked in the T_c point of label
Dimensions	3.11x2.66x1.32 by inch (body), 4.17x2.66x1.32 by inch (endcaps included) 79.0x68.0x33.5 by mm (body), 106.0x68.0x33.5 by mm (endcaps included)
Net Weight	480g
Packing	25pcs/Carton/16.3kg, 490x370x230mm

Notes: Unless specified, all the test results are measured in 25°C room temperature.

* marked items are optional and contact with sales people to get the functions.

■ Safety/EMC Compliance

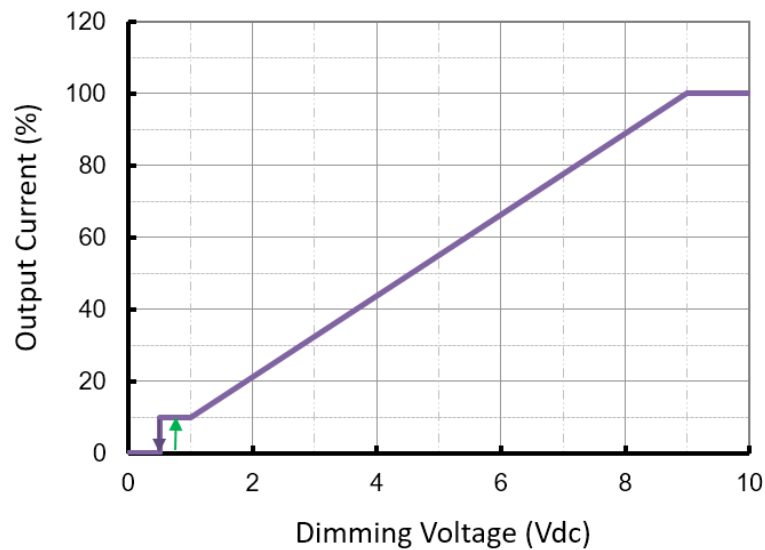
Safety Standard	Description
UL8750	Light emitting diode(LED) equipment for use in lighting products
UL1012/1310	Power units other than class 2 / Class 2 power units
IEC 61347-1	Lamp control gear Part 1: general and safety requirements
IEC 61347-2-13	Lamp control gear Part 2-13: particular requirement for d.c. or a.c. supplied electronic control gear for LED modules
EMI Standards	Description
IEC 55015	Conducted emission test & radiated emission test
IEC 61000-3-2	Harmonic current emissions; Class C
IEC 61000-3-3	Voltage fluctuations & flicker
FCC Part 15	ANSI C63.4:2009 Class B
EMS Standards	Description
IEC 61000-4-2	Electrostatic discharge (ESD): 8 kV air discharge, 4 kV contact discharge
IEC 61000-4-3	Radio frequency electromagnetic field susceptibility test (RS)
IEC 61000-4-4	Electrical fast transient (EFT)
IEC 61000-4-5	Surge immunity test
IEC 61000-4-6	Conducted radio frequency disturbances test (CS)
IEC 61000-4-8	Power frequency magnetic field test
IEC 61000-4-11	Voltage dips
IEC 61547	Electromagnetic immunity requirements applies to lighting equipment

■ **Dimming**

Parameter	Min.	Typ.	Max.
Vdim Sourcing Current		-	
Vdim Allowed Input Voltage	-20 V		20 V
0-10V Dimming Range	10% (Vdim=1V)	Linear	100% (Vdim=9~10V)
Dim off threshold	0.4V	0.5V	0.6V
Dim on threshold	0.6V	0.7V	0.8V

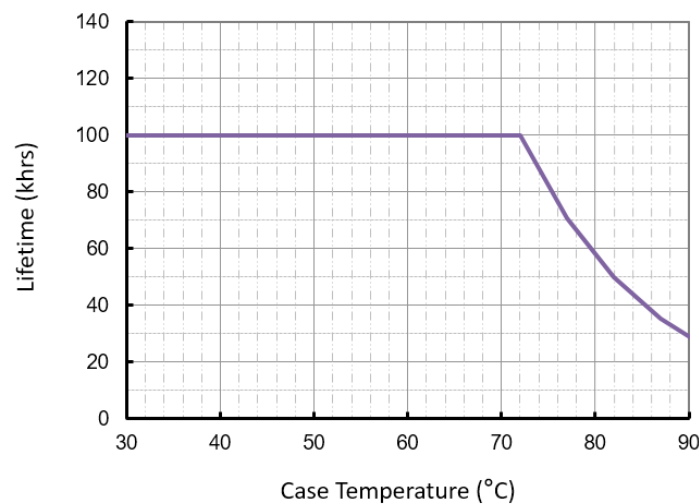
- **Dimming Curve**

0-10V Dimming Curve



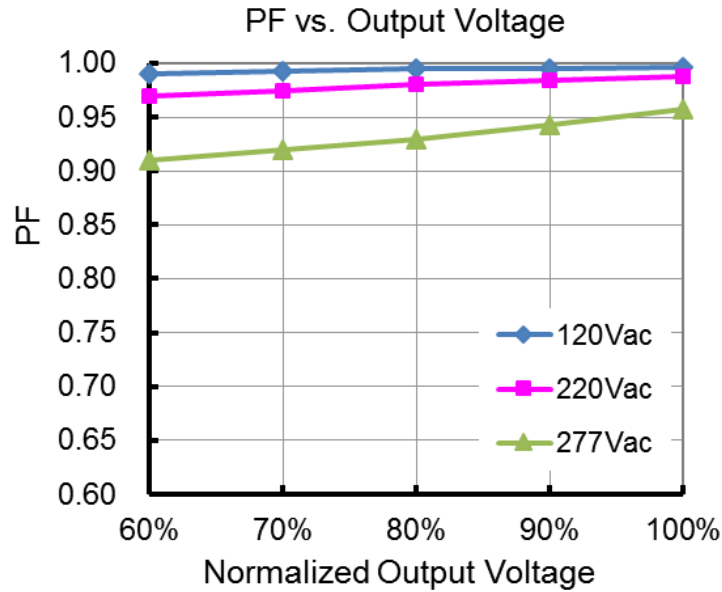
■ **Lifetime vs. Case Temperature**

Lifetime vs. Case Temperature

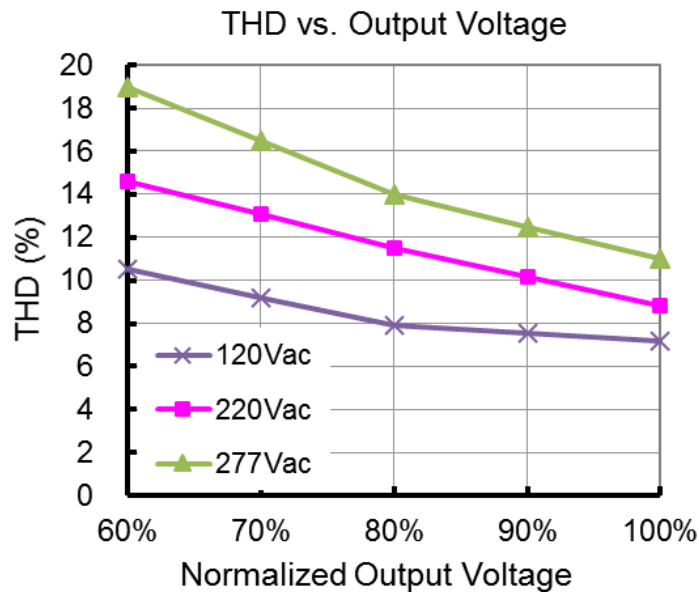


(End of Life: Maximum Failure Rate=10%)

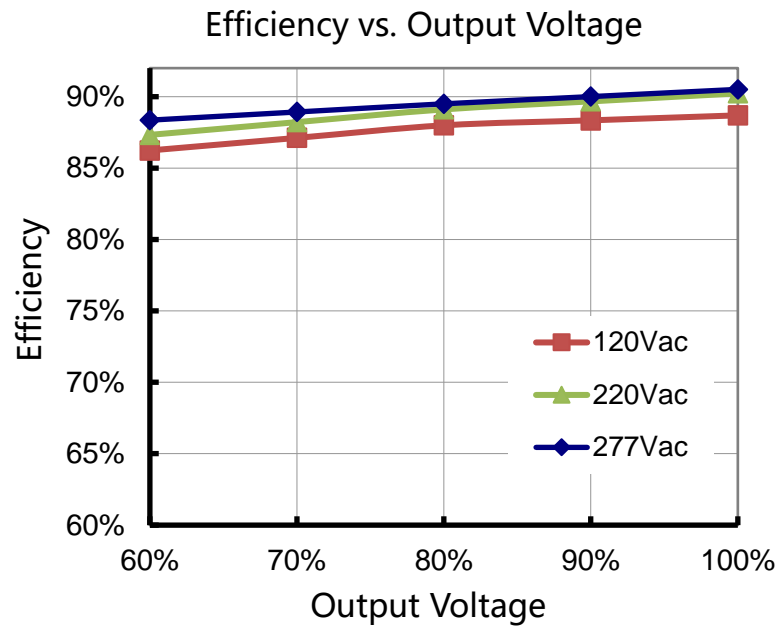
■ Power Factor vs. Load



■ THD vs. Load

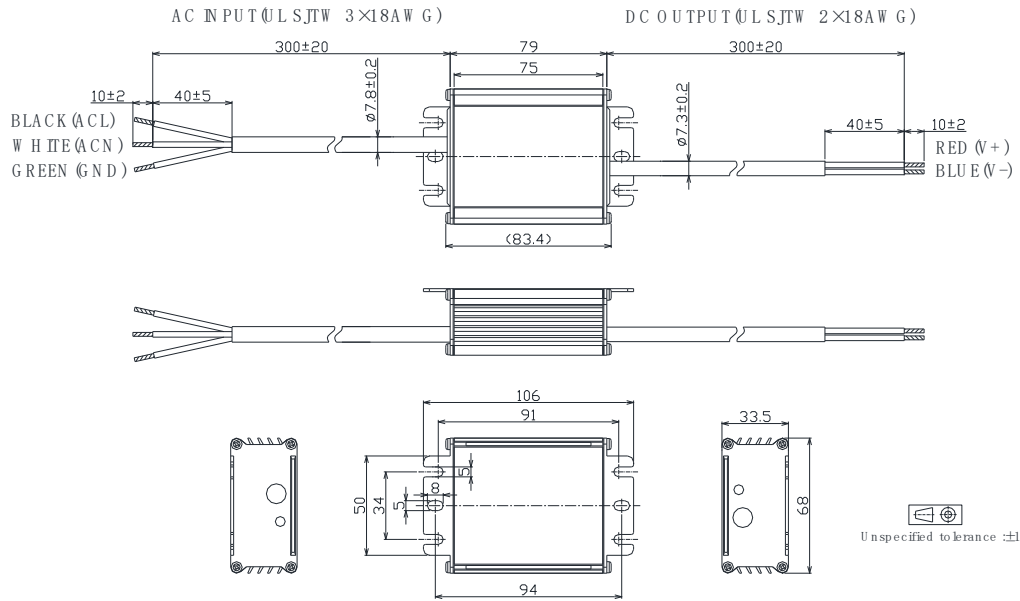


■ Efficiency vs. Load (1.05A Model)

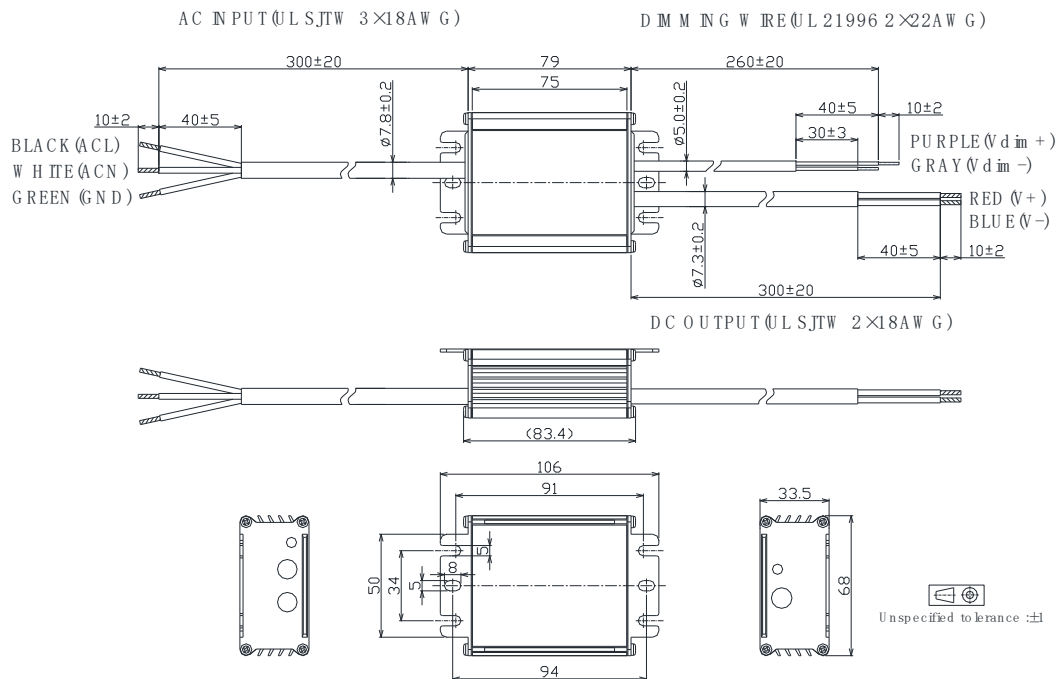


■ Mechanical Design

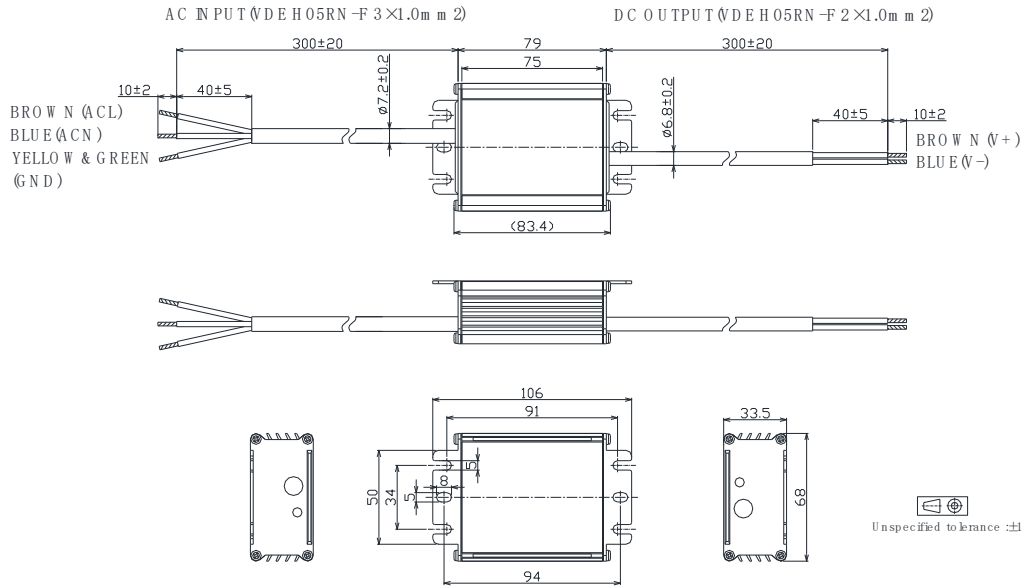
- BLD-060-Cxxx-NN/TRU (UL Cable)



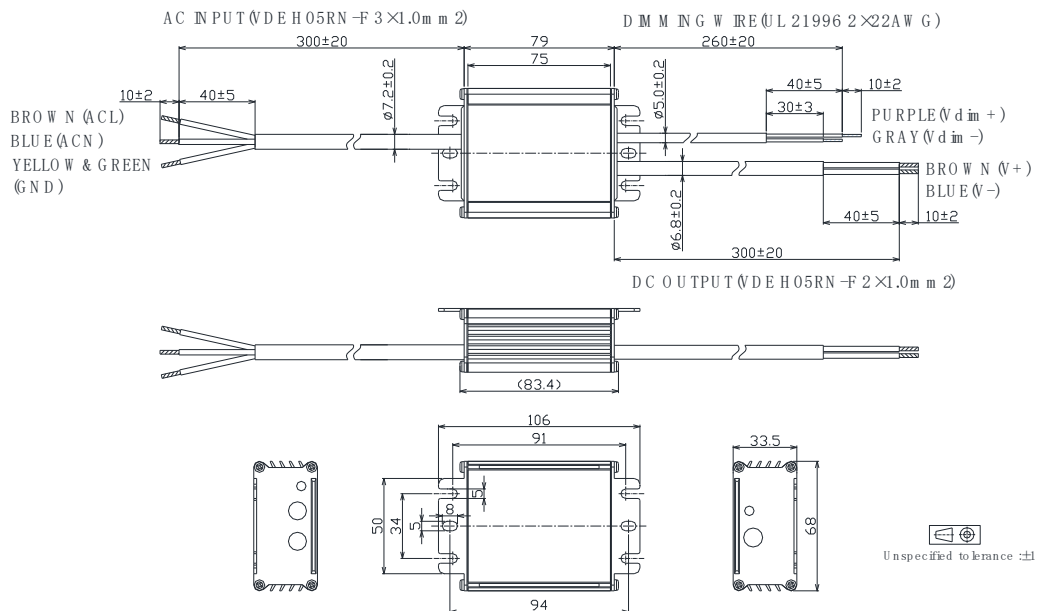
- BLD-060-Cxxx-DN/DRU (UL Cable)



- BLD-060-Cxxx-NN/TRS (VDE Cable)



- BLD-060-Cxxx-DN/DRS (VDE Cable)



■ Appendix – Operation Range

Model	Typical Set Output Current (mA)	Max Output Power (W)	Output Voltage Min (V)	Output Voltage Max(V)	Minimum Dimming Current (mA)
-C105	1050	60	34	57	105
	1000	60	36	60	100
	950	60	38	63	95
	900	60	40	67	90
	850	60	42	71	85
	800	60	45	75	80
	750	60	48	80	75
	700	60	51	86	70
	650	56	51	86	70
	600	51	51	86	70
	550	47	51	86	70
	500	43	51	86	70

	70	6	51	86	70

Model	Typical Set Output Current (mA)	Max Output Power (W)	Output Voltage Min (V)	Output Voltage Max(V)	Minimum Dimming Current (mA)
-C140	1400	60	26	43	140
	1300	60	28	46	130
	1200	60	30	50	120
	1100	60	33	55	110
	1050	60	34	57	105
	1000	57	34	57	105
	950	54	34	57	105
	900	51	34	57	105
	850	49	34	57	105
	800	46	34	57	105
	750	43	34	57	105
	700	40	34	57	105

	105	6	34	57	105

Model	Typical Set Output Current (mA)	Max Output Power (W)	Output Voltage Min (V)	Output Voltage Max(V)	Minimum Dimming Current (mA)
-C210	2100	60	17	29	210
	2000	60	18	30	200
	1900	60	19	32	190
	1800	60	20	33	180
	1700	60	21	35	170
	1600	60	23	38	160
	1500	60	24	40	150
	1400	60	26	43	140
	1300	56	26	43	140
	1200	51	26	43	140
	1100	47	26	43	140
	1000	43	26	43	140

	140	6	26	43	140



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