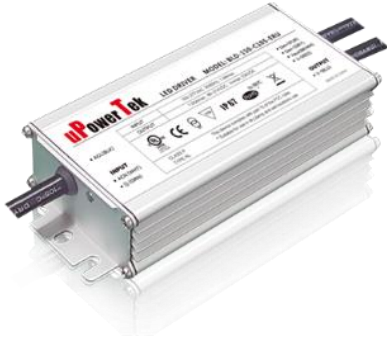


Product Datasheet



The global certified BLD-200-C series is a high cost performance LED driver. 10kV surge protection level, 80khour long life and 5-year warranty provide high confidence to luminaire designers and users. All around protections including digital OTP, SCP and OVP/OCP with auto-recovery secure 24hour non-stop operation for luminaires.

- Street
- Tunnel
- Bay
- Shoe box
- Architectural



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■ Features

- Supply Voltage: 90~305Vac 380Vac for 2 hours
- Great Surge Immunity 10kV
- 80,000Hour Life @ Tc=75°C
- 5 Year Warranty
- Airset™ NFC Programmability
- 0-10V Isolated
- 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

■ Model List

Model Number	Input Voltage Range	Output Power	Output Voltage	Full Power Settable Current Min	Full Power Settable Current Max	Certification
BLD-200-C105-XYZ	90 ~ 305 Vac	200W	Refer to Output Operation Range Section	700mA	1050mA	UL/FCC/CB/ENEC/CCC/RCM/EAC
BLD-200-C140-XYZ	90 ~ 305 Vac	200W		1050mA	1400mA	
BLD-200-C210-XYZ	90 ~ 305 Vac	200W		1400mA	2100mA	
BLD-200-C420-XYZ	90 ~ 305 Vac	200W		2800mA	4200mA	

XYZ Suffix	Dimming Method	NFC Programmable	12Vaux	Dim-off
NNZ-B00000	-	-	-	-
DNZ-B00000	0-10V Isolated	-	-	-
TRZ-B00000	Time	√	-	-
DRZ-B00000	0-10V Isolated /Time	√	-	-

Z = U, UL cable with ground wire 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	1.8Amax@120Vac & Full-Load, 0.9Amax@220Vac & Full-Load
Inrush Current	See Inrush Current Section in the datasheet
Leakage Current	1mA max @277Vac 60Hz, UL8750,0.75mAmax @240Vac 50Hz, IEC61347-1
Input Under Voltage	Shut down and auto-restart
Input Over Voltage	*Optional: Shutdown @320Vac
Surge Protection	Line to line 6kV, line to ground 10kV, IEC 61000-4-5
Current Accuracy	±5%lo (±2%lo for programmable models)
Ripple Current	Ip-p:5%lo 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 $T_c \leq 70 \pm 10^\circ\text{C}$
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	$\geq 280,000$ 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	6.38x2.66x1.63 by inch (body), 7.40x2.66x1.63 by inch (endcaps included) 162.0x68.0x38.5 by mm (body), 188.0x68.0x38.5 by mm (endcaps included)
Net Weight	700g
Packing	See Package Information Section in the datasheet

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

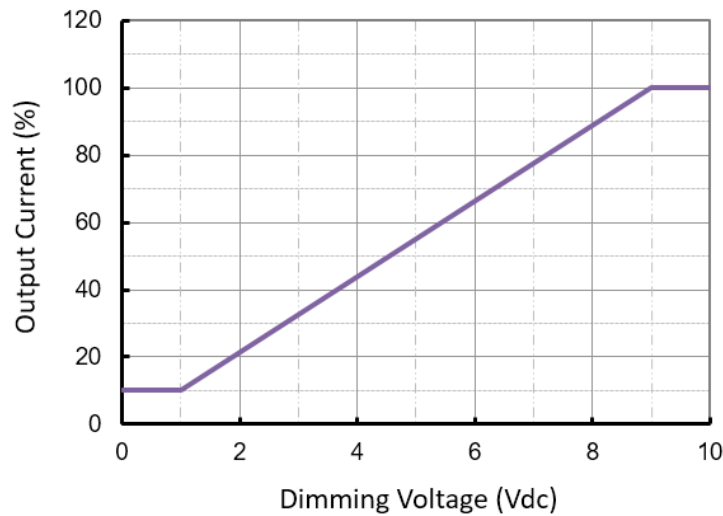
Safety Standard	Description
UL8750	Light emitting diode(LED) equipment for use in lighting products
UL1012	Power units other than class 2
IEC 61347-1	Lamp control gear Part 1: general and safety requirements
IEC 61347-2-13	Lamp control gear Part 2-13: particular requirement for d.c. or a.c. supplied 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	50uA	100uA	200uA
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

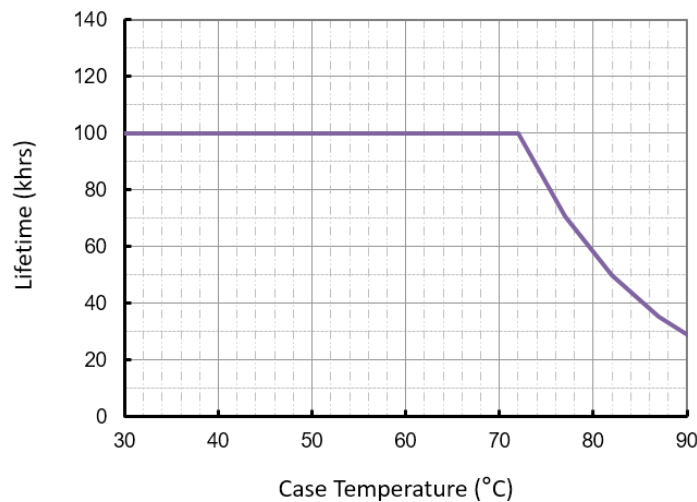
- Dimming Curve

0-10V Dimming Curve



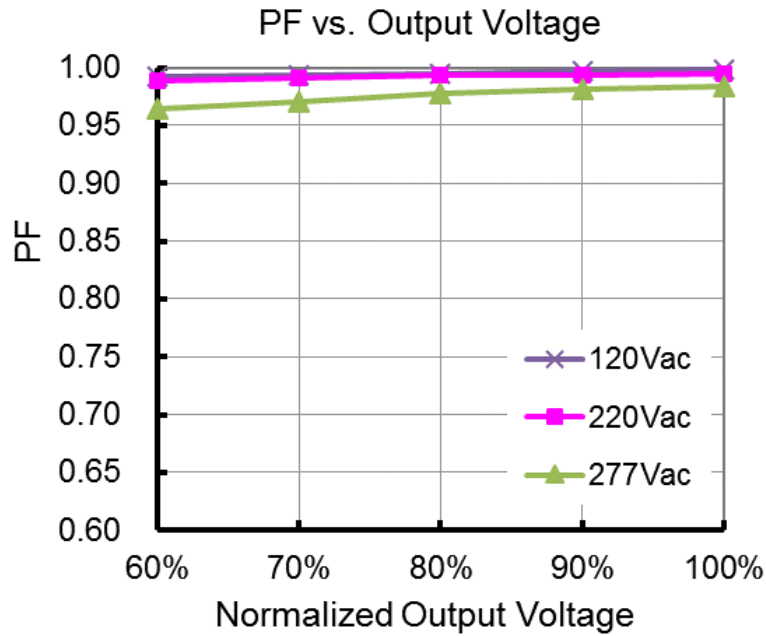
■ Lifetime vs. Case Temperature

Lifetime vs. Case Temperature

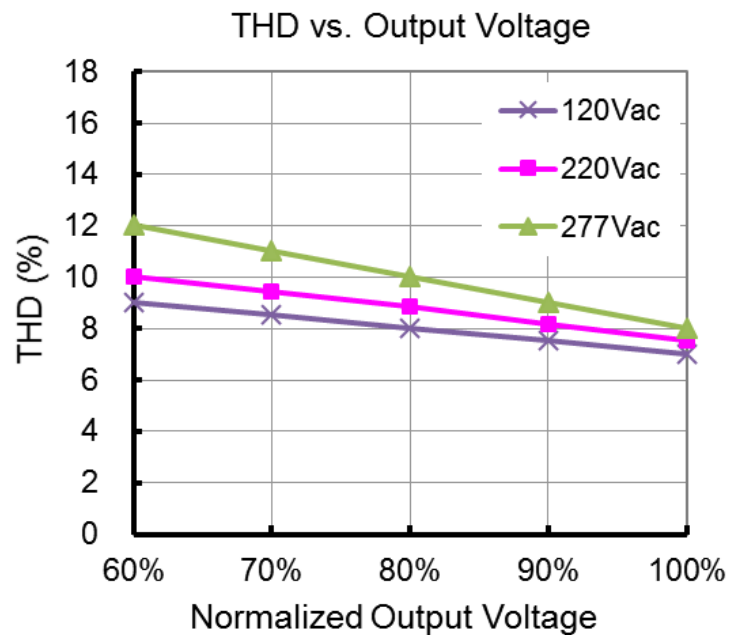


(End of Life: Maximum Failure Rate=10%)

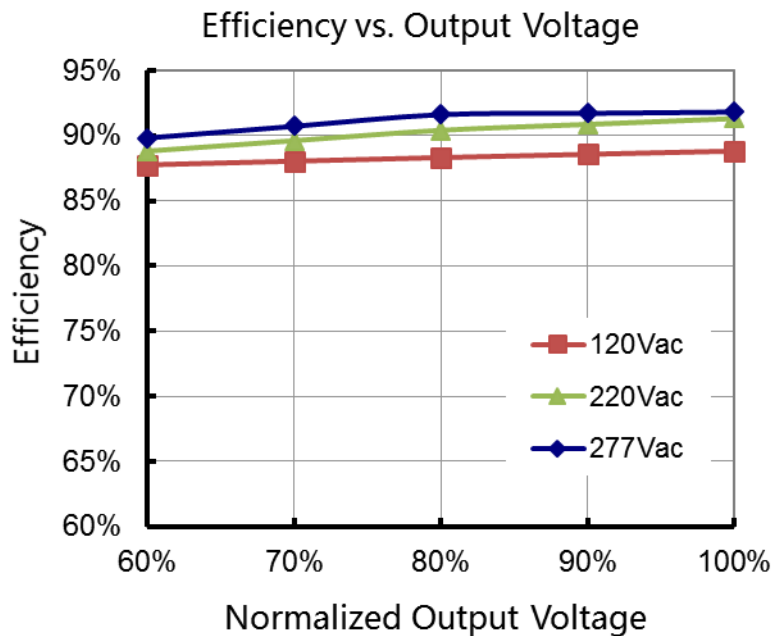
■ Power Factor vs. Load



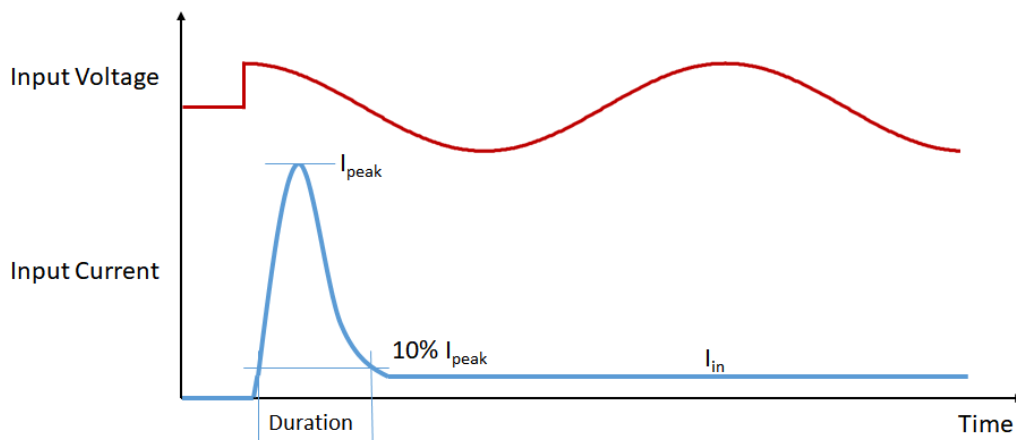
■ THD vs. Load



■ Efficiency vs. Load (1.4A Model)



■ Inrush Current



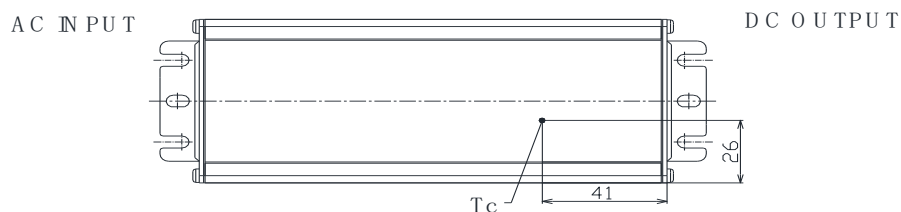
Input Voltage	I_{peak}	Duration
120Vac	33.0A	920uS
220Vac	63.2A	760uS
277Vac	82.8A	700uS

Please contact with us for MCB calculation and waveforms.

■ Dielectric Strength

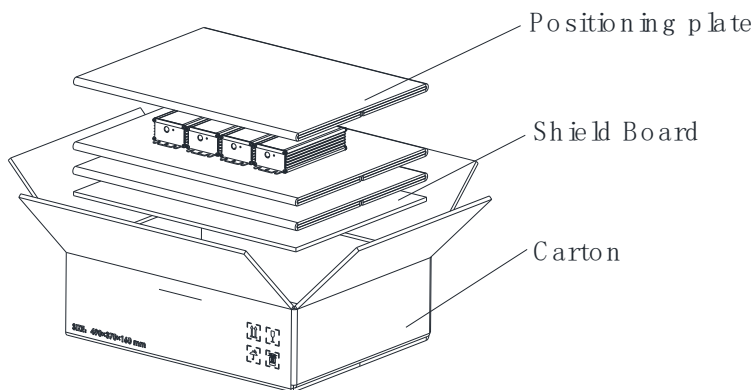
Unit: Vac	Input	Output	Dimming	Case
Input	-	3750	3750	1554
Output	3750	-	1554	1554
Dimming	3750	1554	-	1554
Case	1554	1554	1554	-

■ Tc Point



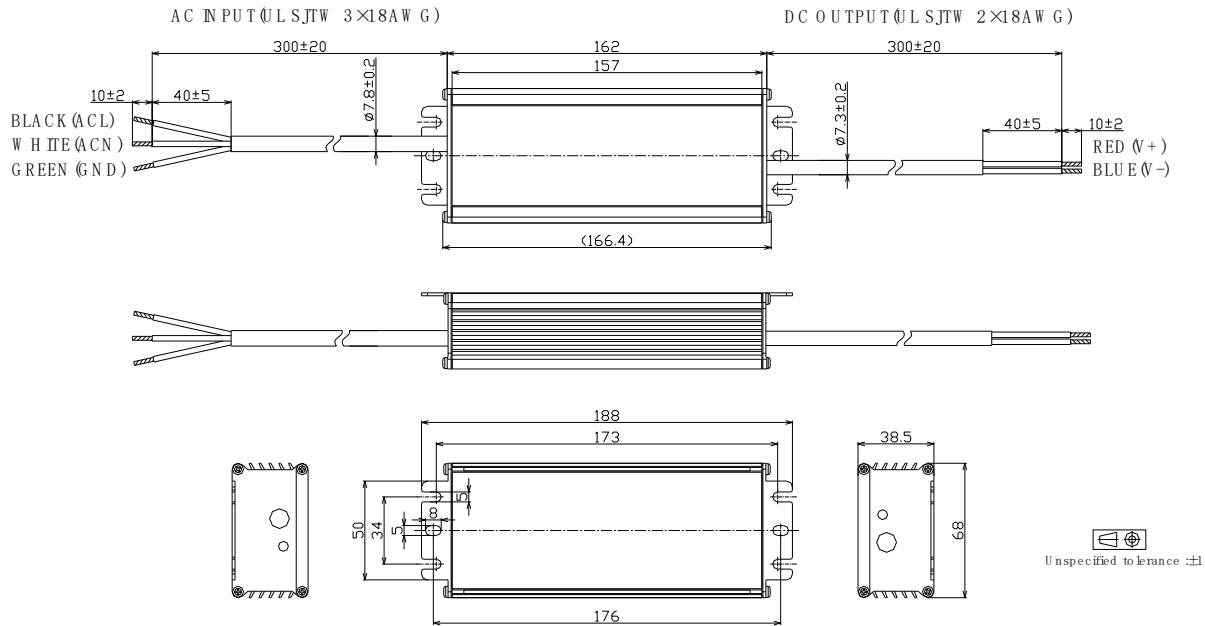
■ Packaging Information

Typical Carton Dimension(L×W×H)	490×370×160 mm
Positioning plate	3pcs/carton
Shield Board	1pcs/carton
LED Drivers	12pcs/carton

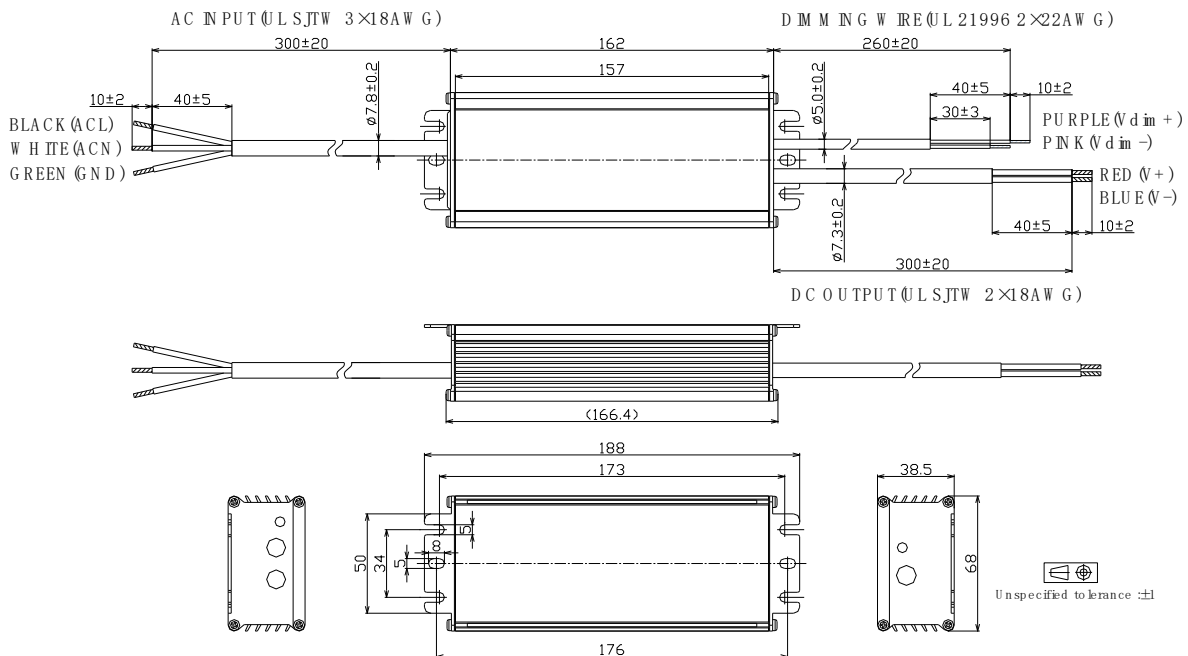


Mechanical Design

BLD-200-Cxxx-NN/TRU (UL Cable)

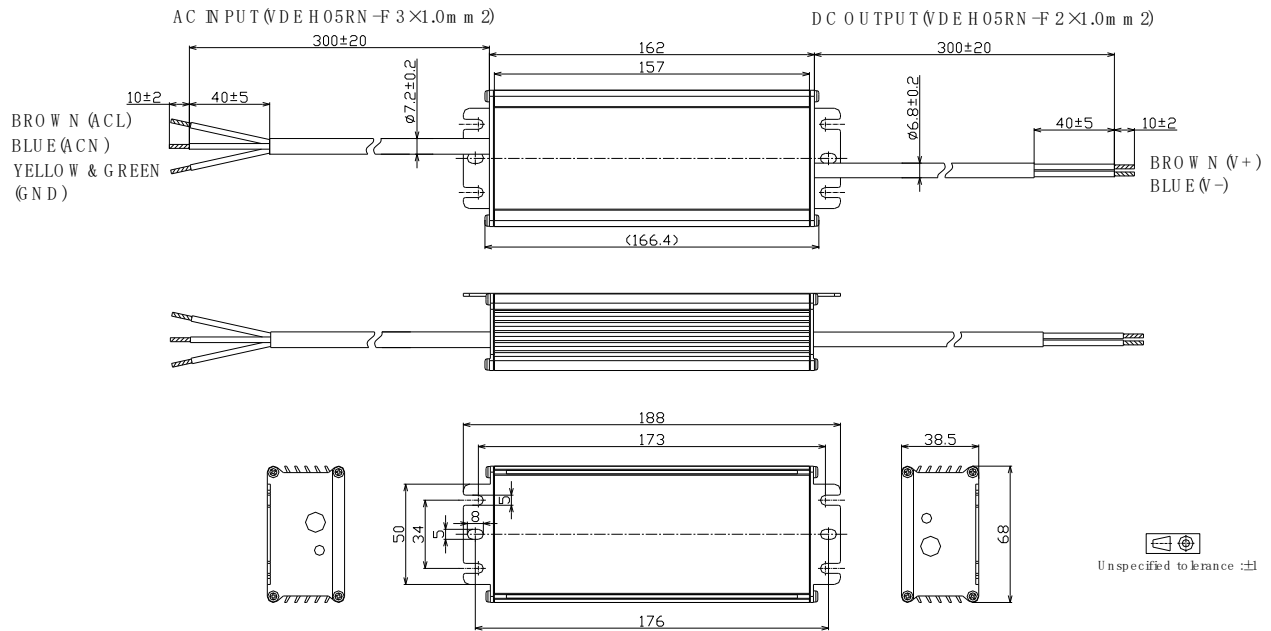


BLD-200-Cxxx-DN/DRU (UL Cable)

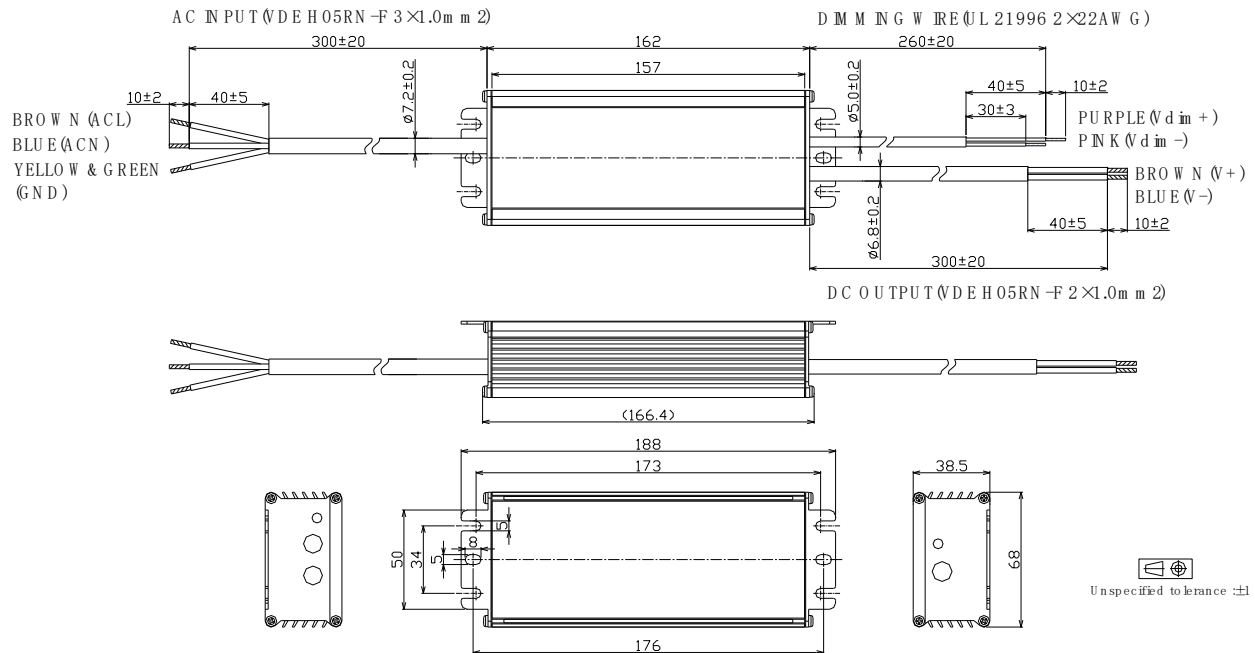


200W, Isolated Dimming, NFC Programmable LED Driver

- BLD-200-Cxxx-NN/TRS (VDE Cable)



- BLD-200-Cxxx-DN/DRS (VDE Cable)



■ Output 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	200	114	190	105
	1000	200	120	200	100
	950	200	126	211	95
	900	200	133	222	90
	850	200	141	235	85
	800	200	150	250	80
	750	200	160	267	75
	700	200	171	286	70
	650	186	171	286	70
	600	171	171	286	70
	550	157	171	286	70
	500	143	171	286	70

	70	20	171	286	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	200	86	143	140
	1300	200	92	154	130
	1200	200	100	167	120
	1100	200	109	182	110
	1050	200	114	190	105
	1000	190	114	190	105
	950	181	114	190	105
	900	171	114	190	105
	850	162	114	190	105
	800	152	114	190	105
	750	143	114	190	105
	700	133	114	190	105

	105	20	114	190	105

200W, Isolated Dimming, NFC Programmable LED Driver

Model	Typical Set Output Current (mA)	Max Output Power (W)	Output Voltage Min (V)	Output Voltage Max(V)	Minimum Dimming Current (mA)
-C210	2100	200	57	95	210
	2000	200	60	100	200
	1900	200	63	105	190
	1800	200	67	111	180
	1700	200	71	118	170
	1600	200	75	125	160
	1500	200	80	133	150
	1400	200	86	143	140
	1300	186	86	143	140
	1200	171	86	143	140
	1100	157	86	143	140
	1000	143	86	143	140

	140	20	86	143	140

Model	Typical Set Output Current (mA)	Max Output Power (W)	Output Voltage Min (V)	Output Voltage Max(V)	Minimum Dimming Current (mA)
-C420	4200	200	29	48	420
	4100	200	29	49	410
	4000	200	30	50	400
	3900	200	31	51	390
	3800	200	32	53	380
	3700	200	32	54	370
	3600	200	33	56	360
	3500	200	34	57	350
	3400	200	35	59	340
	3300	200	36	61	330
	3200	200	38	63	320
	3100	200	39	65	310
	3000	200	40	67	300
	2900	200	41	69	290
	2800	200	43	71	280
	2700	193	43	71	280
	2600	186	43	71	280

	280	20	43	71	280

■ Revision History

Revision	Date	Contents
C	2022-03-22	<ol style="list-style-type: none">1. Index page added2. Reduced dimming interface sourcing current3. Inrush current data added4. Tc point position indication added5. Dielectric strength level added6. Packaging information added7. Mechanical design change with dimming cable color8. Revision history added