



## Product Datasheet

The global certified BLD-610-C is an extremely high efficiency smart LED driver for grow lights. 100khour long life and 7-year warranty provide high confidence to luminaire users. NFC and cable programming are both available for users. All around protections including digital OTP (internal and external by NTC) with auto-recovery secure non-stop operation for luminaires. Customized active daisy chain, master mode and button design greatly ease the design for horticultural usage.



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## 610W, 120-277Vac Input, Long Life High Quality Driver

## ■ Features

- Absolute Supply Voltage: 100-305Vac or 127-420Vdc, 380Vac for 2 hours
- Horticultural Customized Endcap
- 95% Efficiency Max.
- Low Inrush Current
- Programmable Hot Swap
- Active Daisy Chain and Master Mode
- 100,000Hour Life @ Tc=75°C
- 7 Year Warranty @ Tc≤75°C
- NFC or Cable Programmability and Isolated Dimming
- +/-2% Output Current Accuracy
- Isolated 0-10V/PWM/Time/DALI2.0/DMX/RDM Dimmable
- Dim Off with 0.5W Standby Power
- 12V 300mA Auxiliary Power to Power Controllers and Fans
- UL Class P, ENEC/CB/CCC SELV Output
- Global Certified Model Available
- Safety according to EN 61347-1, 61347-2-3, 61347-2-13, 623847

## ■ Model List

| Model Number     | Input Voltage Range | Output Power | Output Voltage | Full Power Settable Current Min | Full Power Settable Current Max | Certification                   |
|------------------|---------------------|--------------|----------------|---------------------------------|---------------------------------|---------------------------------|
| BLD-610-C14A-XYZ | 100-305Vac          | 610 W        | 30-55Vdc       | 11A                             | 14A                             | UL/FCC/CB/ENEC/RCM/EAC/CCC/UKCA |
| BLD-610-C860-XYZ | 100-305Vac          | 610 W        | 42-100Vdc      | 6A                              | 8.6A                            |                                 |
| BLD-610-C600-XYZ | 100-305Vac          | 610 W        | 60-143Vdc      | 4.2A                            | 6A                              |                                 |
| BLD-610-C420-XYZ | 100-305Vac          | 610 W        | 86-214Vdc      | 2.8A                            | 4.2A                            |                                 |
| BLD-610-C280-XYZ | 100-305Vac          | 610 W        | 129-286Vdc     | 2.1A                            | 2.8A                            |                                 |
| BLD-610-C210-XYZ | 100-305Vac          | 610 W        | 171-428Vdc     | 1.4A                            | 2.1A                            |                                 |

| XY= | Dimming Method   | Programmable | 12Vaux | Dim-off                                                  |
|-----|------------------|--------------|--------|----------------------------------------------------------|
| NN  | -                | -            | -      | -                                                        |
| DN  | 0-10V            | Cable        | -      | No Dim-off as default status, programmed to have Dim-off |
| EN  | 0-10V            | Cable        | 300mA  | √                                                        |
| TR  | Time/Set Current | NFC Wireless | -      | -                                                        |
| DR  | 0-10V            | NFC Wireless | -      | No Dim-off as default status, programmed to have Dim-off |
| ER  | 0-10V/PWM/Time   | NFC Wireless | 300mA  | √                                                        |
| AR  | DALI2.0          | NFC Wireless | -      | √                                                        |
| MR  | DMX512 or RDM    | NFC Wireless | -      | √                                                        |

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

**Note:** See the **Output Operation Range Section** for programmable model details

## 610W, 120-277Vac Input, Long Life High Quality Driver

## ■ Technical Data

|                        |                                                                                                                                                     |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Input Voltage          | 108-305Vac or 127-420Vdc, 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          | 5.4Amax@120Vac & Full-Load,<br>2.4Amax@277Vac & Full-Load                                                                                           |
| Inrush Current         | See Inrush Current Section in the datasheet                                                                                                         |
| Leakage Current        | 1mA max @277Vac 60Hz, UL8750, 0.75mA max @220Vac 50Hz, IEC61347-1                                                                                   |
| Input Under Voltage    | Shut down and auto-restart                                                                                                                          |
| Surge Protection       | Line to line 4kV, line to ground 4kV, IEC 61000-4-5                                                                                                 |
| Current Accuracy       | ±2%Io for programmable model, ±5%Io for non-programmable model                                                                                      |
| Ripple Current         | Ip-p:5%Io max                                                                                                                                       |
| Setup Time             | 1.2s max                                                                                                                                            |
| Overshoot              | 10% Io max & LED Load                                                                                                                               |
| Output Over Voltage    | 110% 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                   | $\geq 320,000$ hours, $75^\circ\text{C}$ case temperature (MIL-HDBK-217F)                                                                           |
| Lifetime               | $\geq 100,000$ hours, $75^\circ\text{C}$ case temperature, refer to life vs. $T_c$ curve                                                            |
| Case Temperature       | $90^\circ\text{C}$ max, marked in the $T_c$ point of label                                                                                          |
| Dimensions (Standard)  | 13.22x3.54x1.63 by inch (body), 14.29x3.54x1.63 by inch (endcaps included)<br>336x 90 x 41.5 by mm (body), 363 x 90 x 41.5 by mm (endcaps included) |
| Net Weight             | 2600g                                                                                                                                               |
| Packing                | See Package Information Section in the datasheet                                                                                                    |

Notes: Unless specified, all the test results are measured in  $25^\circ\text{C}$  room temperature.

## ■ 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                                                   |

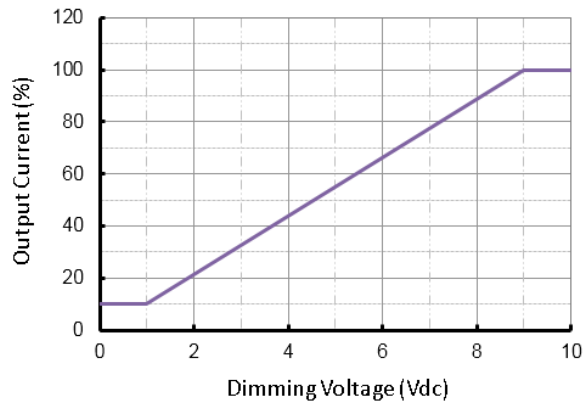
## ■ Dimming

| Parameter                                          | Min.                       | Typ.       | Max.                |
|----------------------------------------------------|----------------------------|------------|---------------------|
| Vdim Sourcing Current                              | 100uA                      | 150uA      | 200uA               |
| Vdim Allowed Input Voltage                         | -20 V                      |            | 20 V                |
| 0-10V Dimming Range                                | 10% (Vdim=1V)              | Linear     | 100% (Vdim=9~10V)   |
| PWM Dimming Range                                  | 10% (Duty=10%)             | Linear     | 100% (Duty=90-100%) |
| Dim off threshold                                  | 0.4V or 4%                 | 0.5V or 5% | 0.6V or 6%          |
| Dim on threshold                                   | 0.6V or 6%                 | 0.7V or 7% | 0.8V or 8%          |
| PWM High                                           | 3.8V                       |            | 10V                 |
| PWM Low                                            | 0V                         |            | 0.6V                |
| PWM Frequency                                      | 300Hz                      |            | 2kHz                |
| External PWM Controller Current Sinking Capability | 300uA                      |            |                     |
| DALI Interface Standard                            | IEC62386, part 101,102,207 |            |                     |
| DA1,DA2 High Level                                 | 9.5                        | 16         | 22.5                |
| DA1,DA2 Low Level                                  | -6.5                       | 0          | 6.5                 |
| DA1,DA2 Current                                    | 0                          |            | 2mA                 |

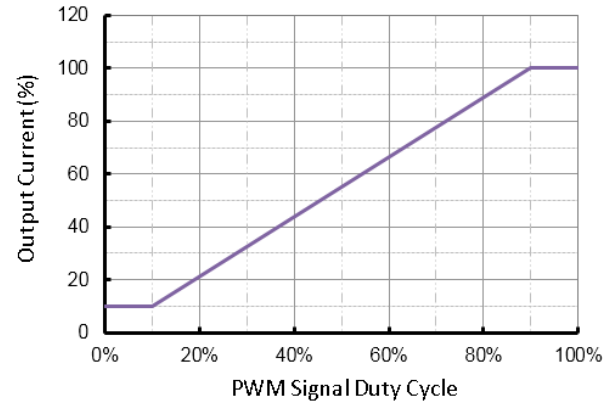
## - Dimming Curve

### a. Without dim-off

0-10V Dimming Curve

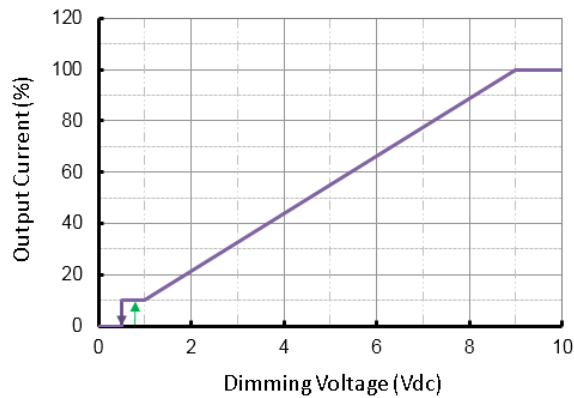


PWM Dimming Curve

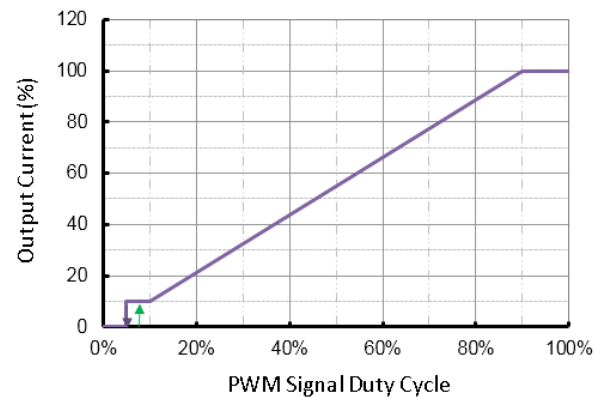


### b. With dim-off

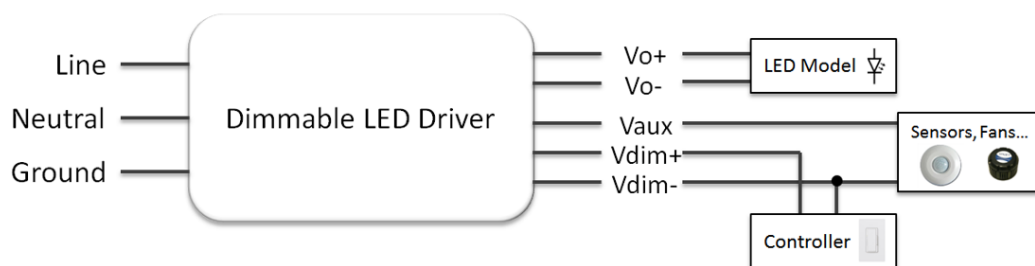
0-10V Dimming Curve



PWM Dimming Curve



## - Dimming Wiring

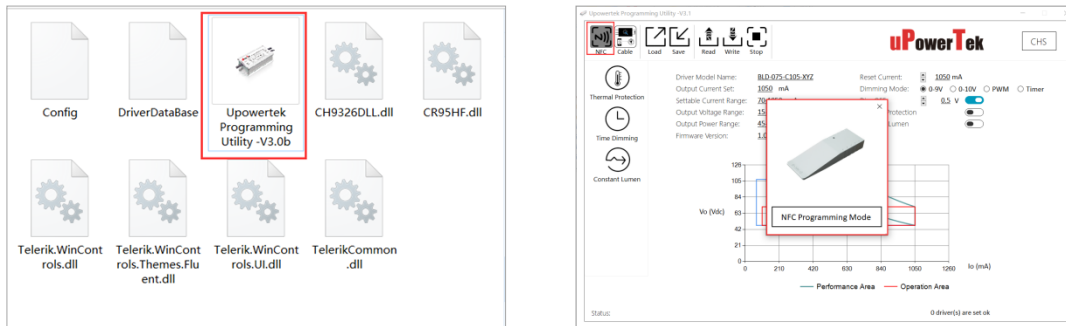


## ■ Programming

### - NFC Programming by PC/Laptop

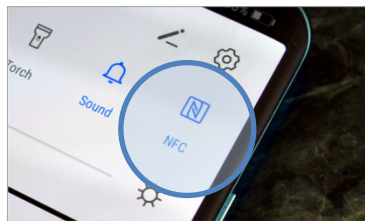


- Download PC Software at <https://www.upowertek.com/download-2/>
- Click Upowertek Programming Utility.exe
- The GUI start and notify you the programming mode (cable programming or NFC programming)
- Click "NFC" button if it's not NFC programming mode.



### - NFC Programming by Smartphone

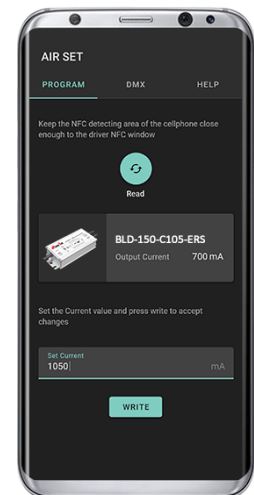
- Download Android APP at <https://www.upowertek.com/download-2/>
- Only available on Android cellphone (iPhone is not supported)
- The cellphone should have NFC function and make sure it is enabled.



- Turn on NFC switch of cellphone, then open the APP by icon below.



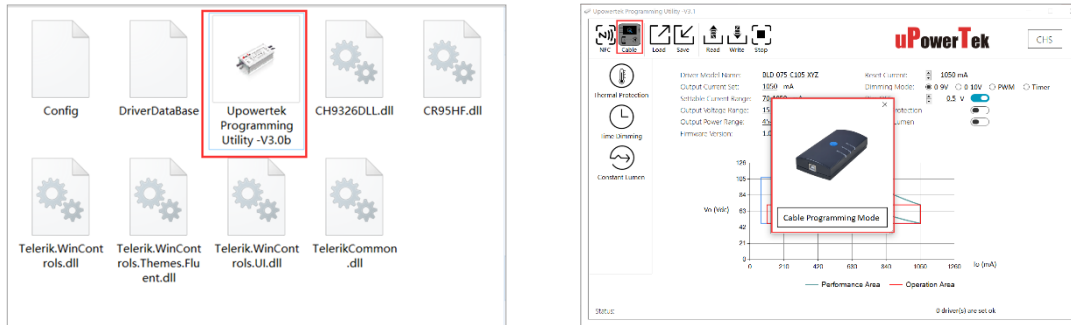
uPowerTek  
Airset



## - Cable Programming



- Download PC Software at <https://www.upowertek.com/download-2/>
- Click Upowertek Programming Utility.exe
- The GUI start and notify you the programming mode (cable programming or NFC programming)

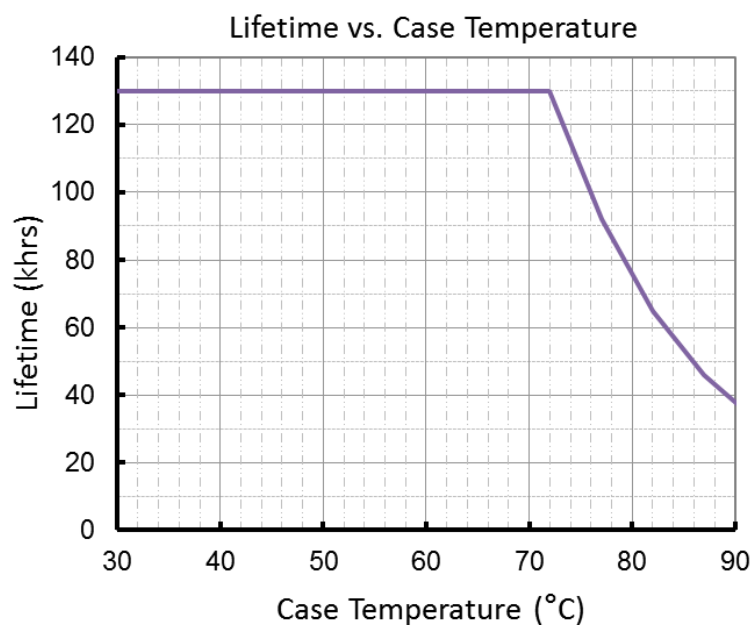


- Click "Cable" button if it's not cable programming mode.
- Connect the Vdim+ and Vdim- wires to the right ones (the same color) of the programmer.

## - Please contact with us for product user manual and more information such as:

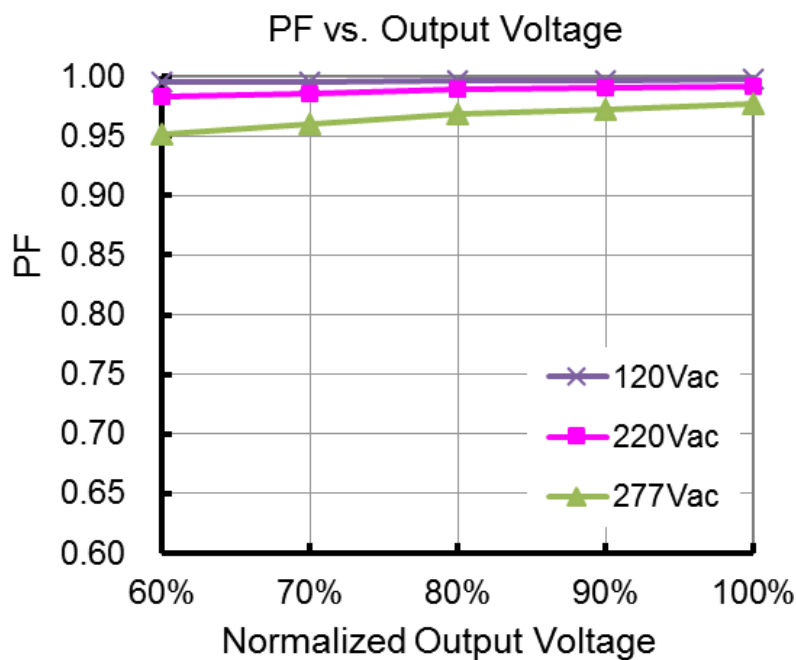
- Output Lumen Compensation
- Luminaire Thermal Protection by External NTC (with extra cable)
- Dimming Curve Customization (dim off threshold, minimum dimming level, maximum dimming voltage etc.)
- Adjustable Startup Time
- Time Dimming (adaptive mid-night, percentage, etc.)
- Customized Control Protocol

## ■ Lifetime vs. Case Temperature



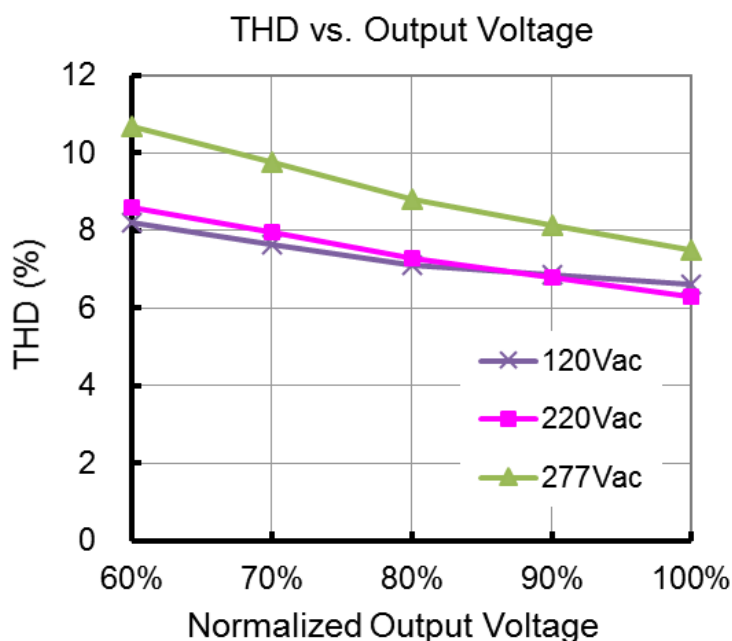
(End of Life: Maximum Failure Rate=10%)

## ■ Power Factor vs. Load

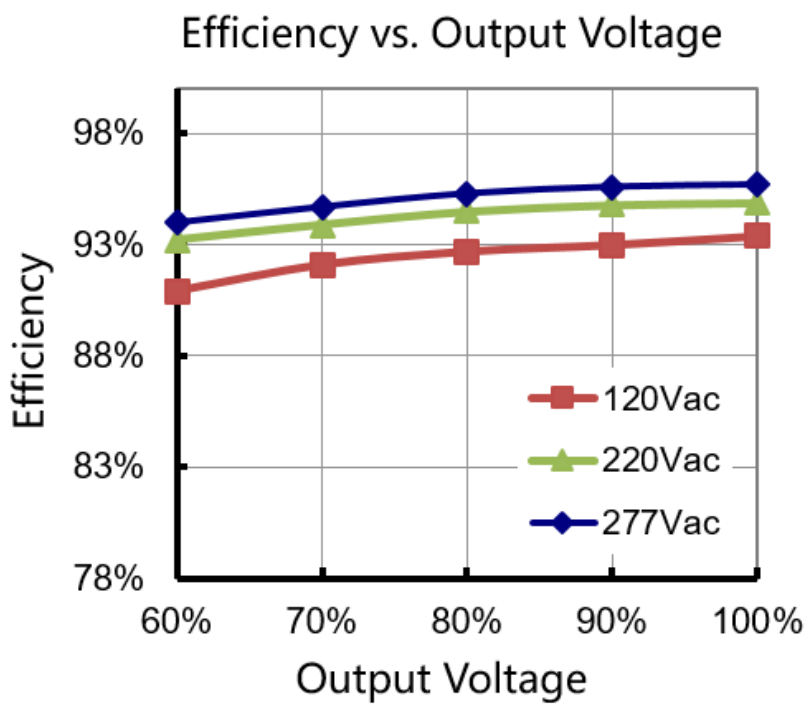




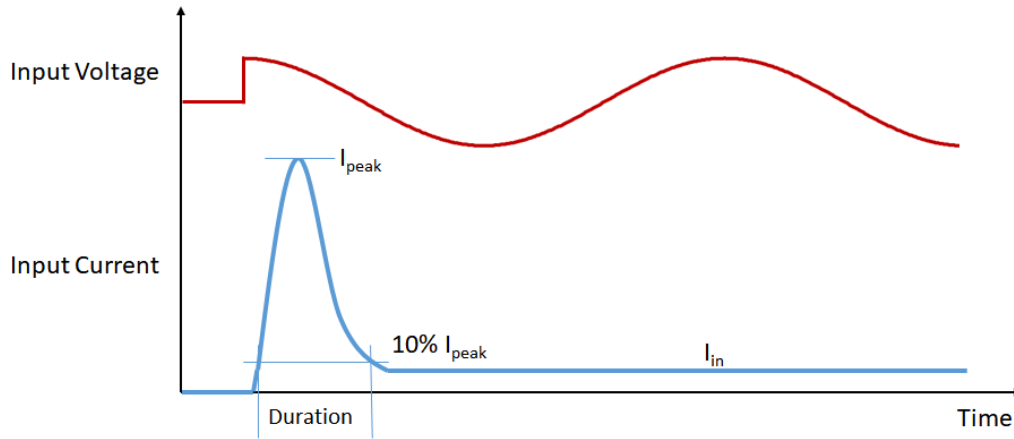
■ THD vs. Load



■ Efficiency vs. Load (14A Model)



## Inrush Current



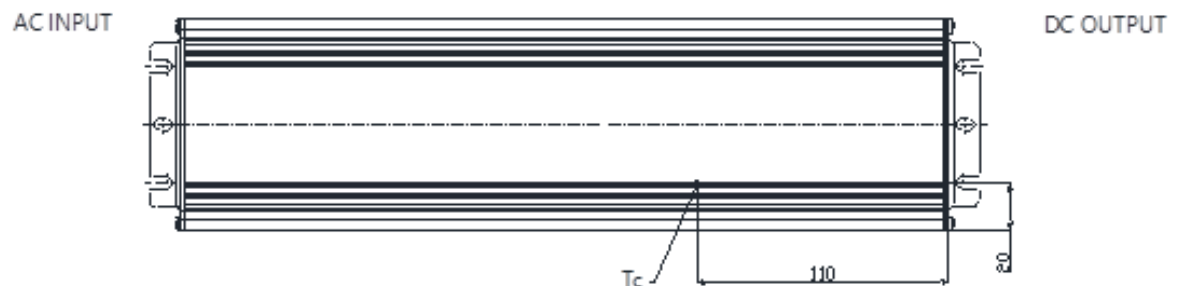
| Input Voltage | $I_{peak}$ | Duration |
|---------------|------------|----------|
| 120Vac        | 3A         | 60mS     |
| 220Vac        | 5A         | 70mS     |
| 277Vac        | 8A         | 70mS     |

Please contact with us for MCB calculation and waveforms.

## Dielectric Strength

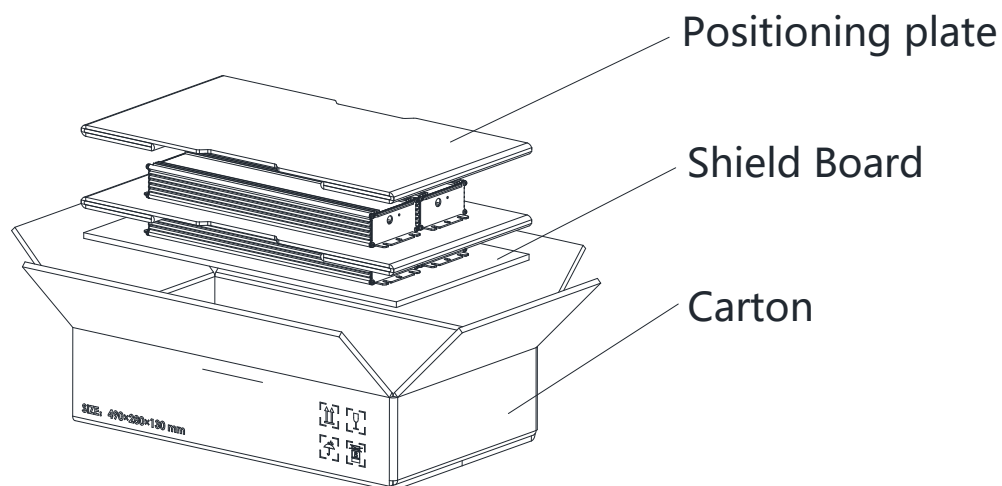
| Unit: Vac | Input | Output | Dimming | Case |
|-----------|-------|--------|---------|------|
| Input     | -     | 3750   | 3750    | 1554 |
| Output    | 3750  | -      | 1554    | 1554 |
| Dimming   | 3750  | 1554   | -       | 1554 |
| Case      | 1554  | 1554   | 1554    | -    |

## Tc Point



## ■ Packaging Information

|                                 |                |
|---------------------------------|----------------|
| Typical Carton Dimension(L×W×H) | 490×280×130 mm |
| Positioning plate               | 2pcs/carton    |
| Shield Board                    | 1pcs/carton    |
| LED Drivers                     | 4pcs/carton    |

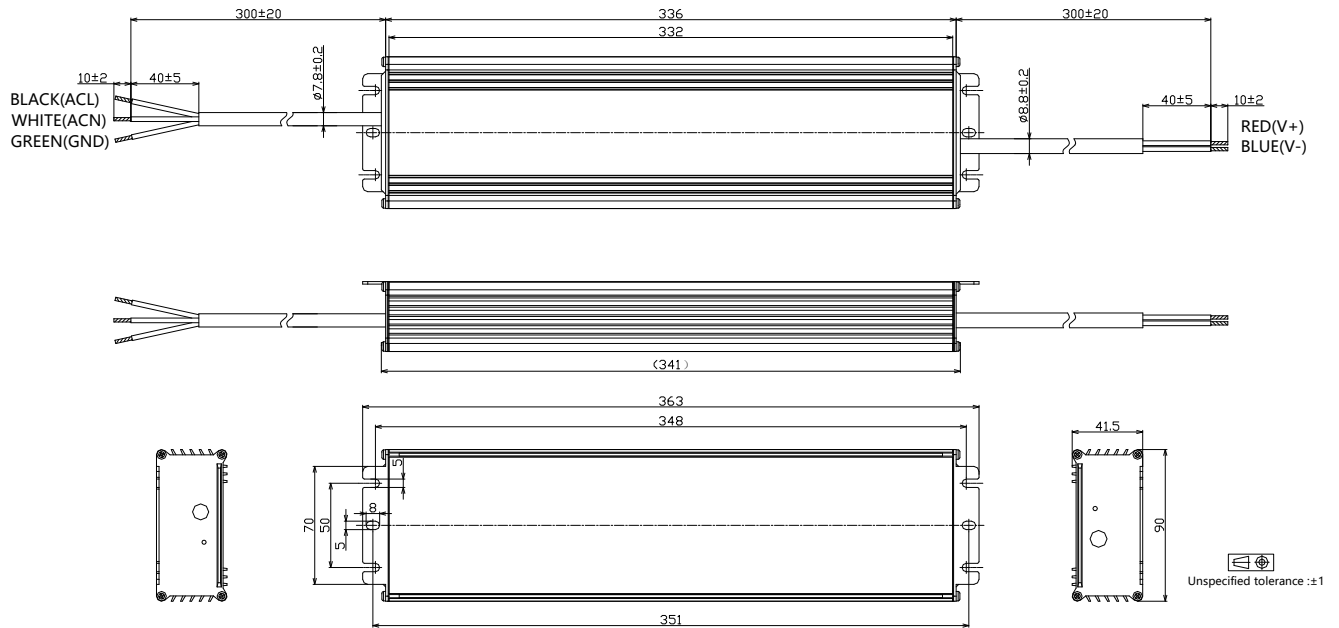


## ■ Mechanical Design

- BLD-610-Cxxx-NN/TRU (UL Cable)

AC INPUT(UL SJTW 3×18AWG)

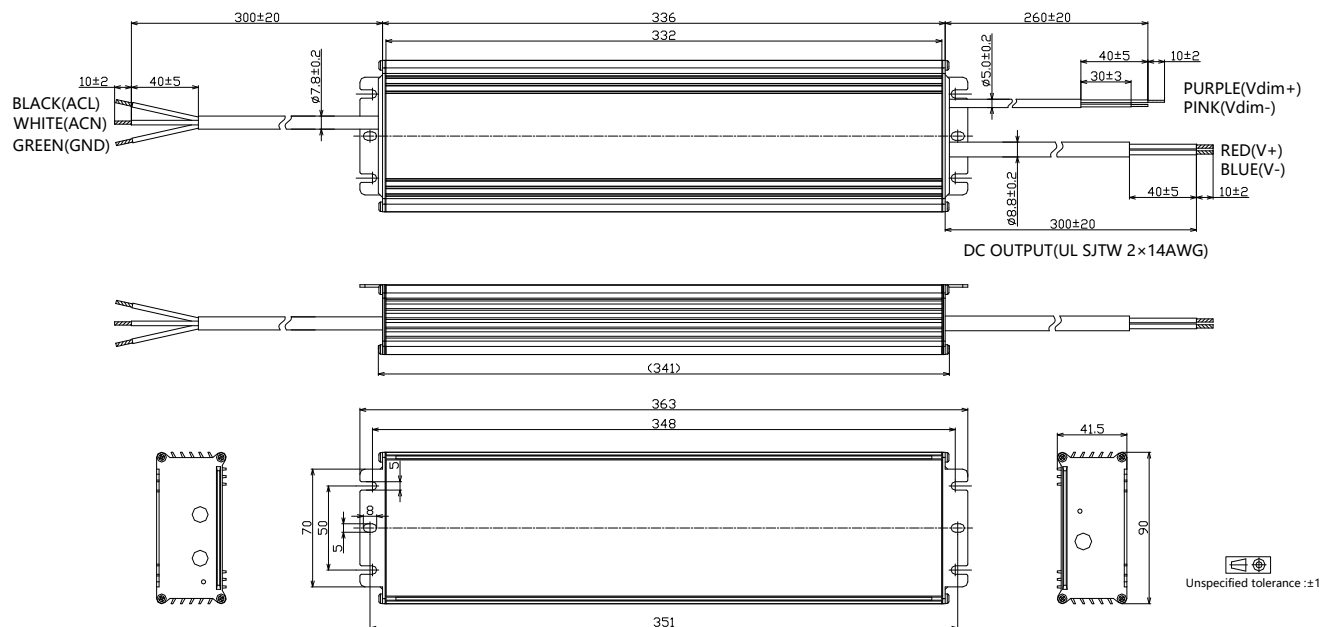
DC OUTPUT(UL SJTW 2×14AWG)



- BLD-610-Cxxx-DN/DRU (UL Cable)

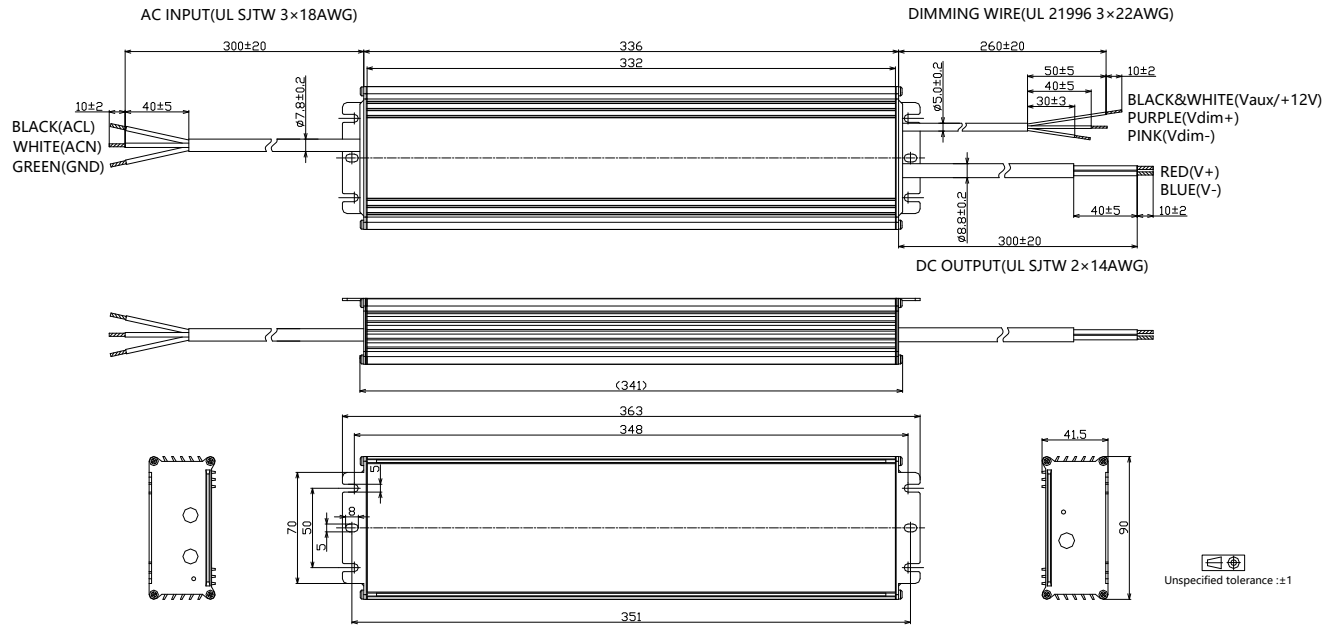
AC INPUT(UL SJTW 3×18AWG)

DIMMING WIRE(UL 2196 2×22AWG)

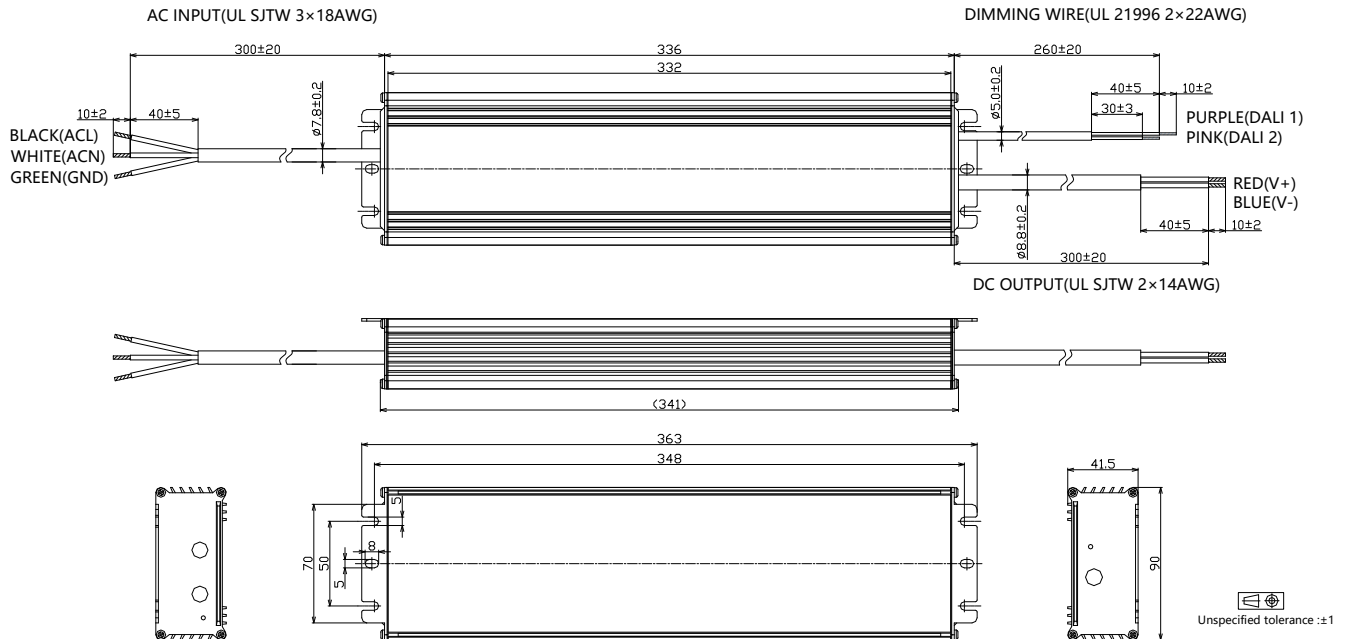


**610W, 120-277Vac Input, Long Life High Quality Driver**

**- BLD-610-Cxxx-EN/ERU (UL Cable)**

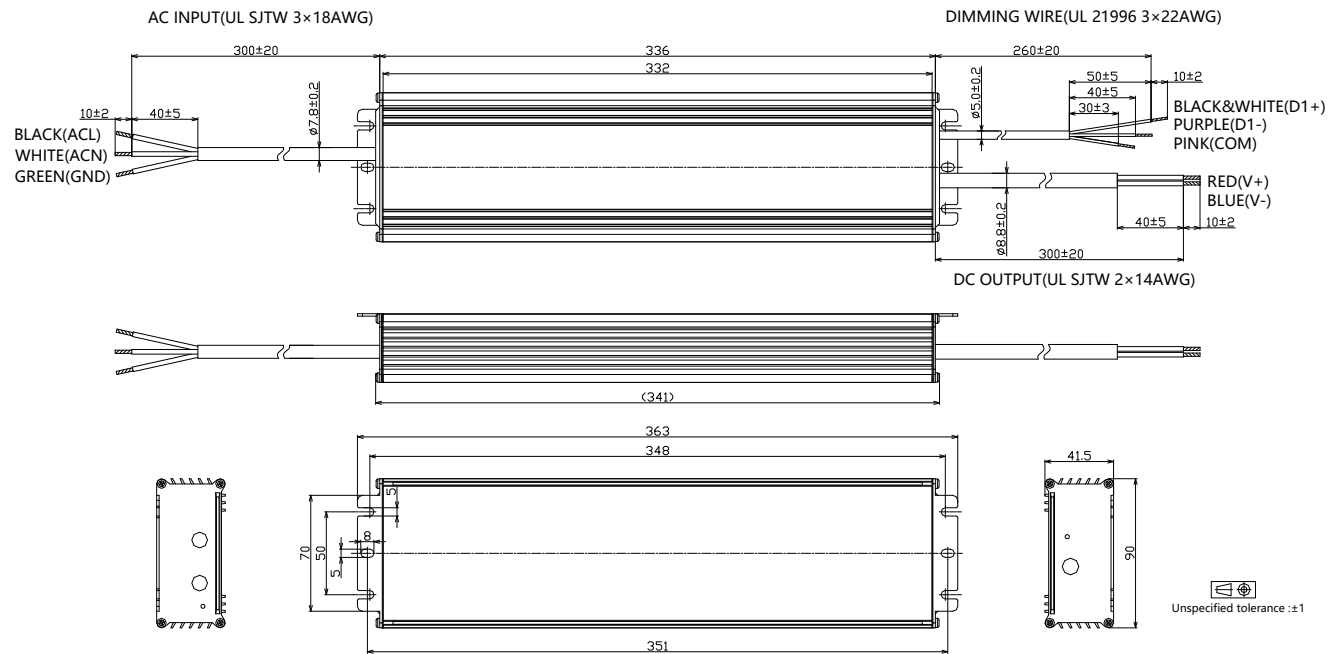


**- BLD-610-Cxxx-ARU (UL Cable)**

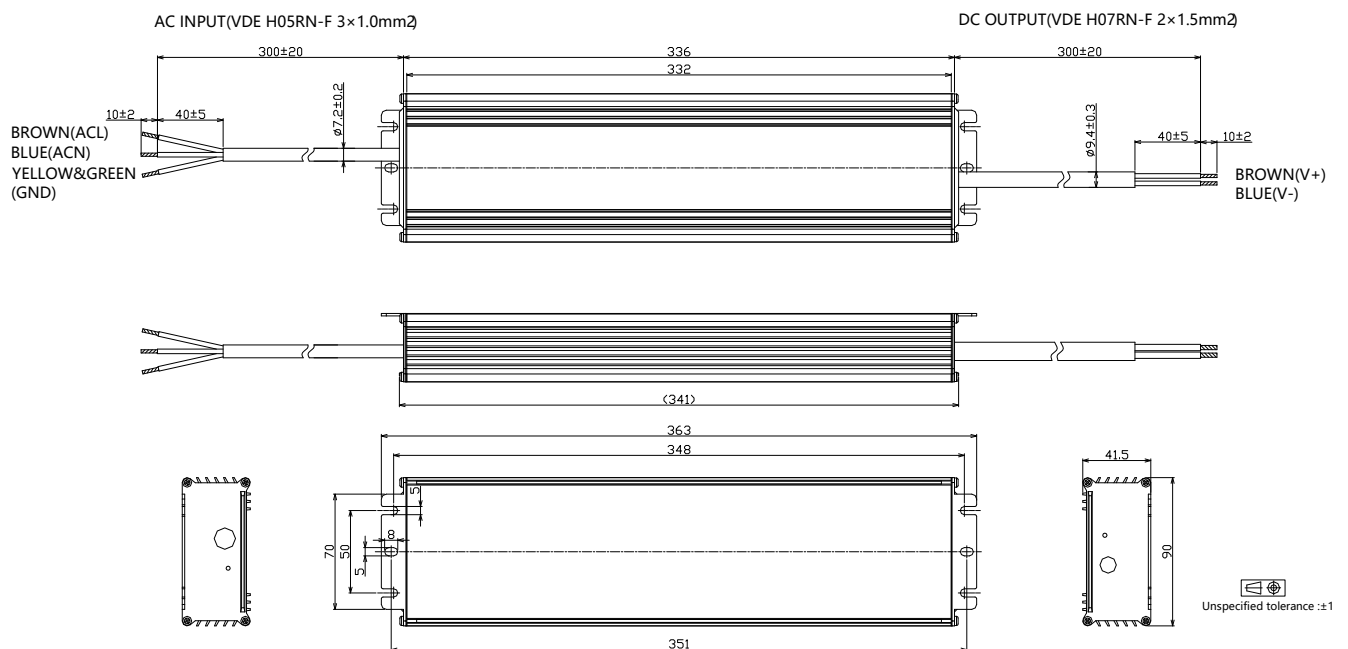


**610W, 120-277Vac Input, Long Life High Quality Driver**

**- BLD-610-Cxxx-MRU (UL Cable)**

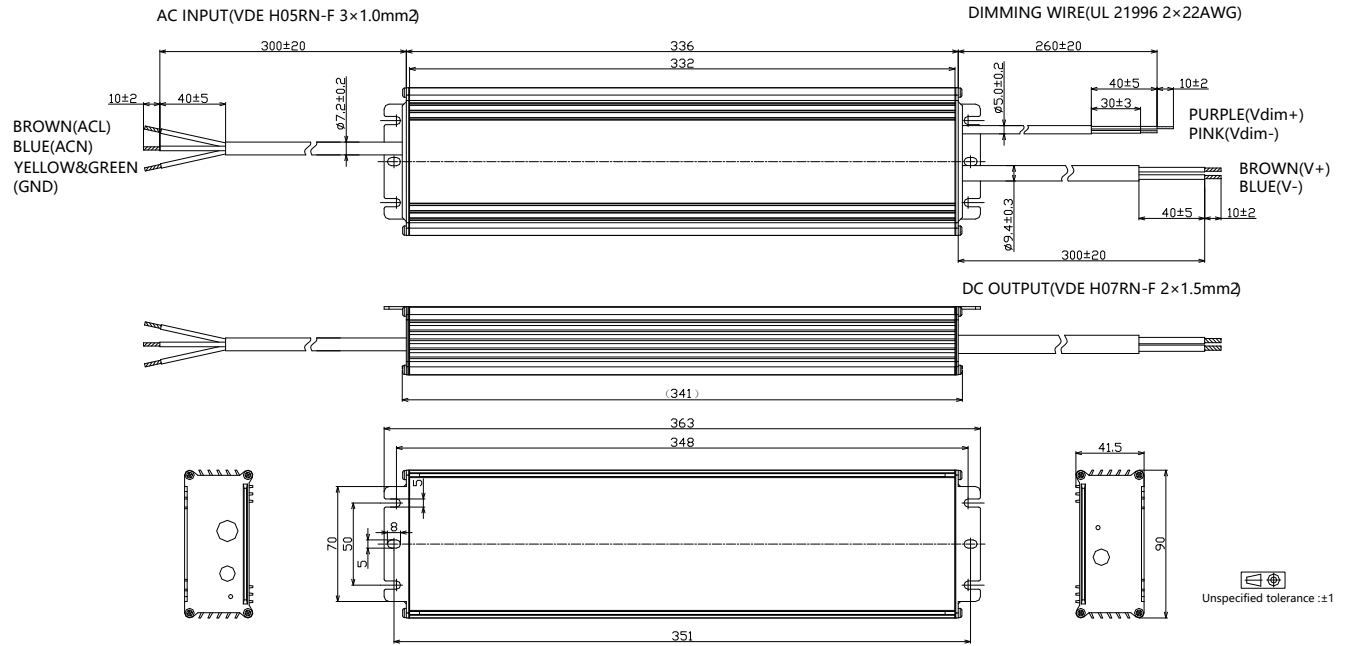


**- BLD-610-Cxxx-NN/TRS (VDE CABLE, MODELS WITH HIGHER THAN 60V OUTPUT VOLTAGE)**

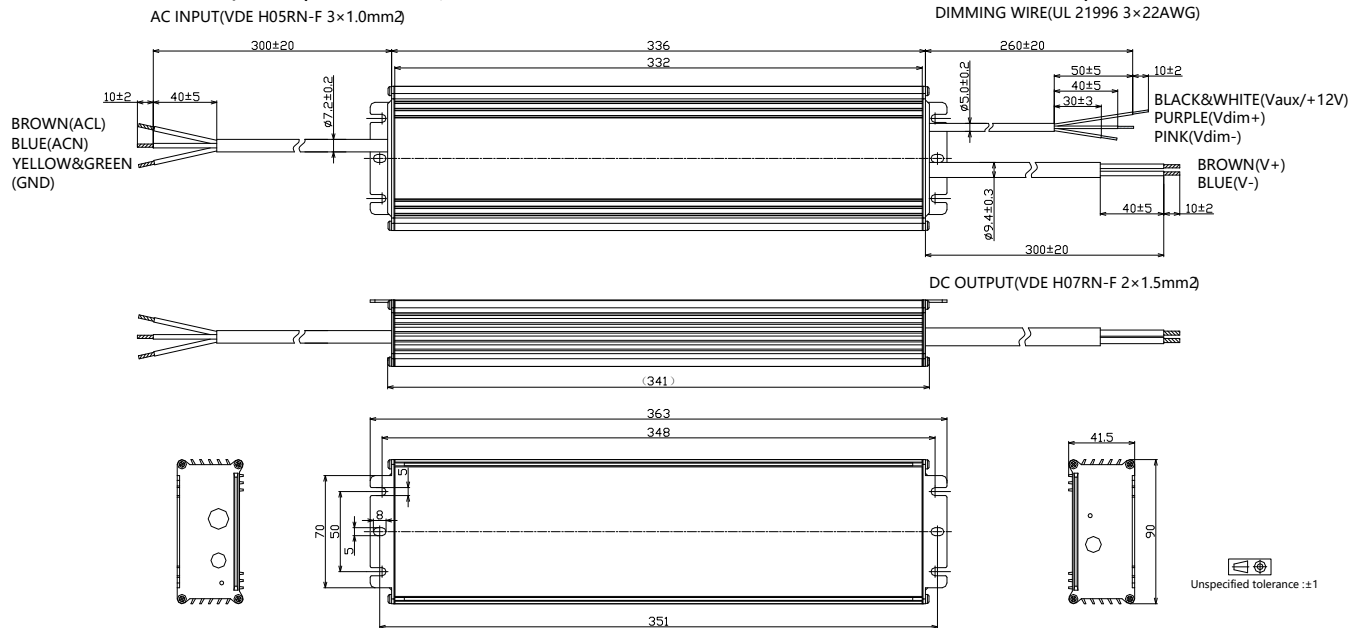


**610W, 120-277Vac Input, Long Life High Quality Driver**

**- BLD-610-Cxxx-DN/DRS (VDE CABLE, MODELS WITH HIGHER THAN 60V OUTPUT VOLTAGE)**

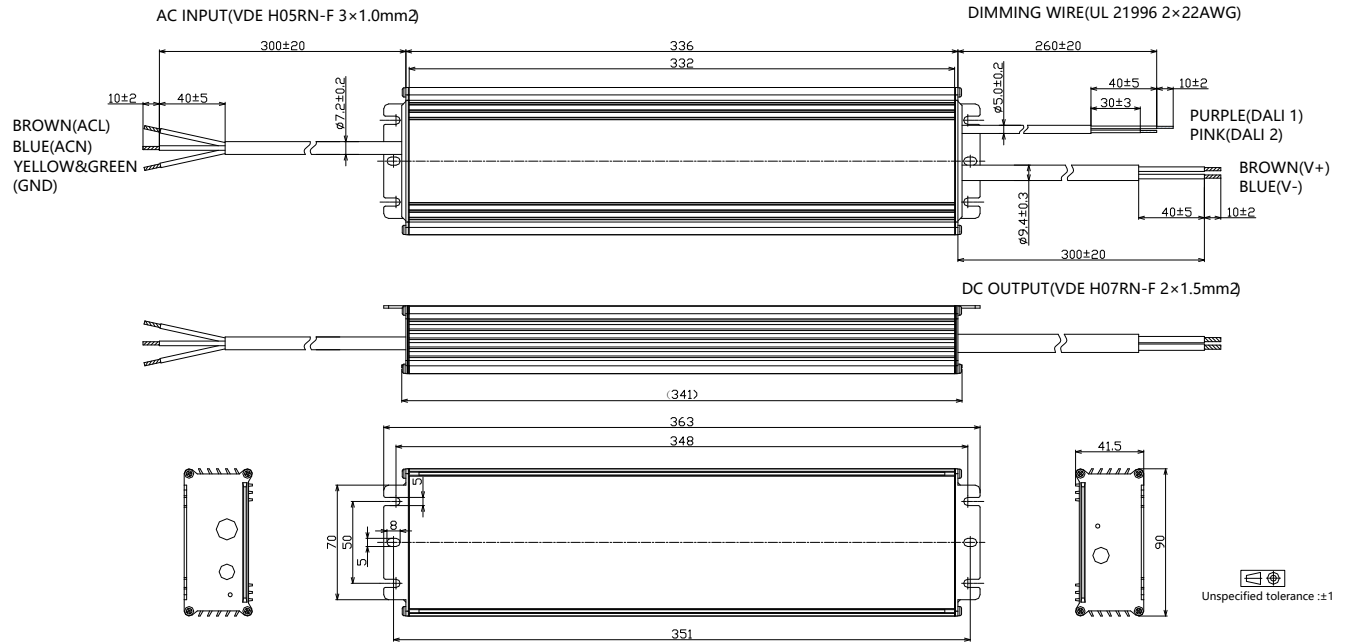


**- BLD-610-Cxxx-EN/ERS (VDE CABLE, MODELS WITH HIGHER THAN 60V OUTPUT VOLTAGE)**

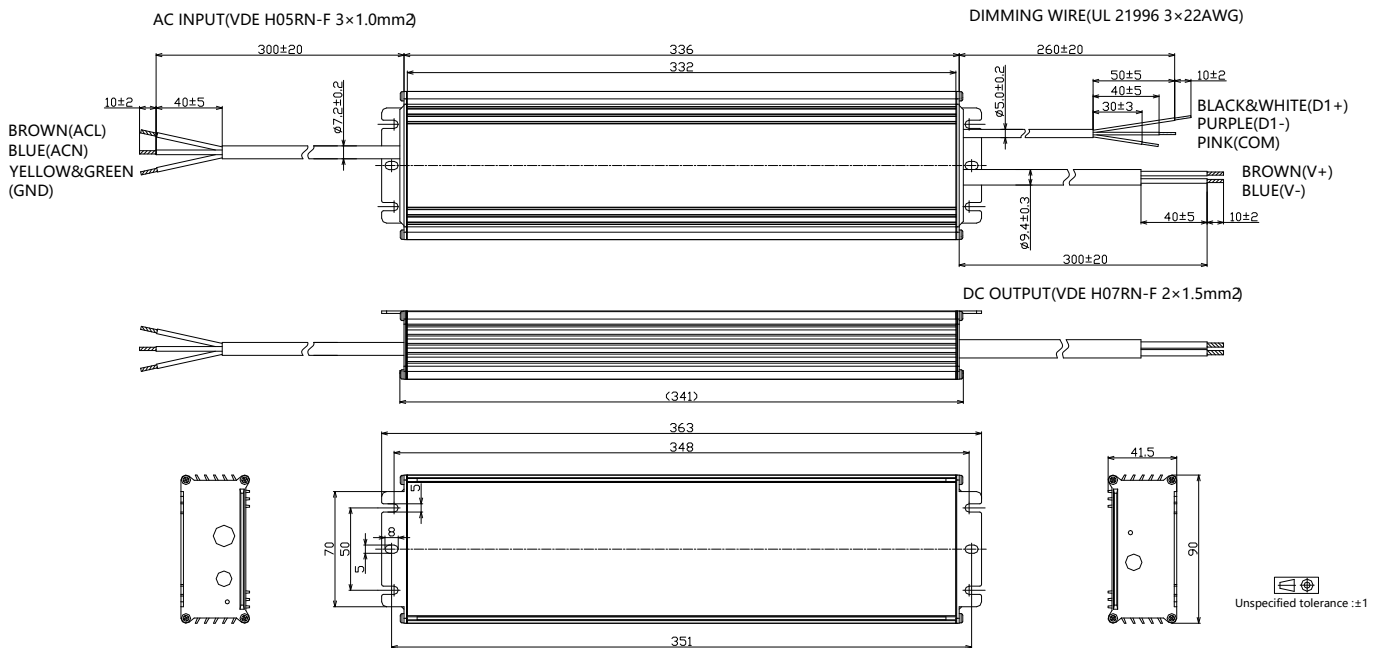


**610W, 120-277Vac Input, Long Life High Quality Driver**

**- BLD-610-Cxxx-ARS (VDE CABLE, MODELS WITH HIGHER THAN 60V OUTPUT VOLTAGE)**



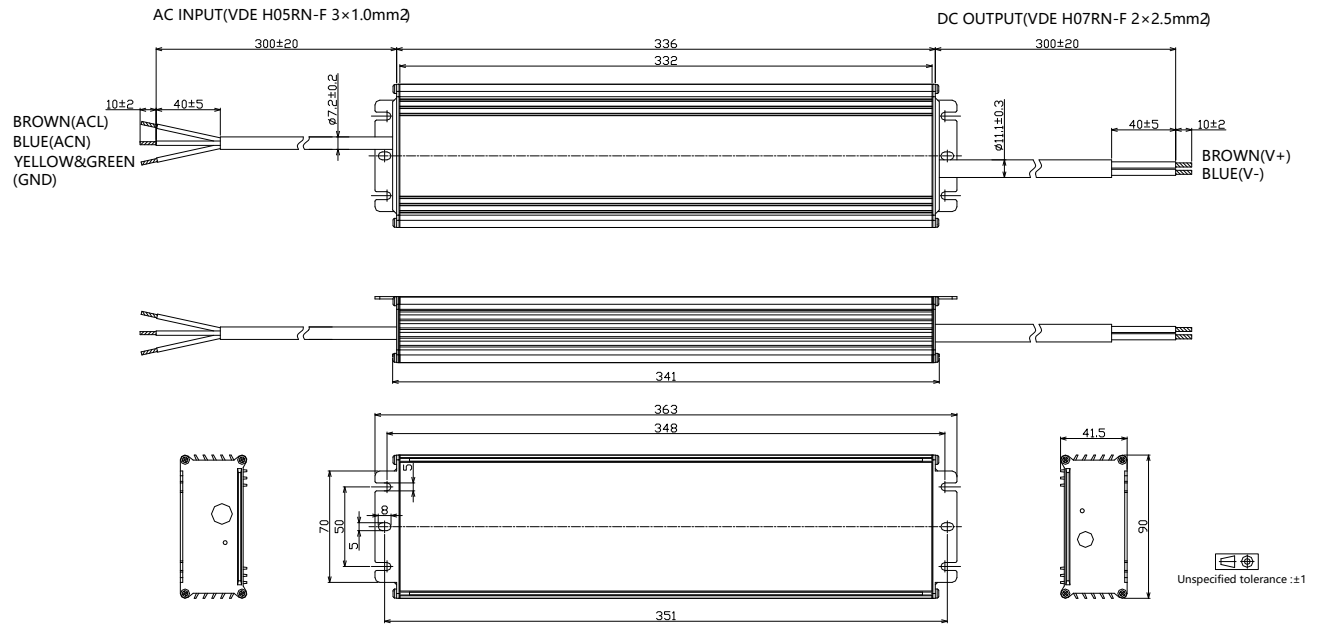
**- BLD-610-Cxxx-MRS (VDE CABLE, MODELS WITH HIGHER THAN 60V OUTPUT VOLTAGE)**



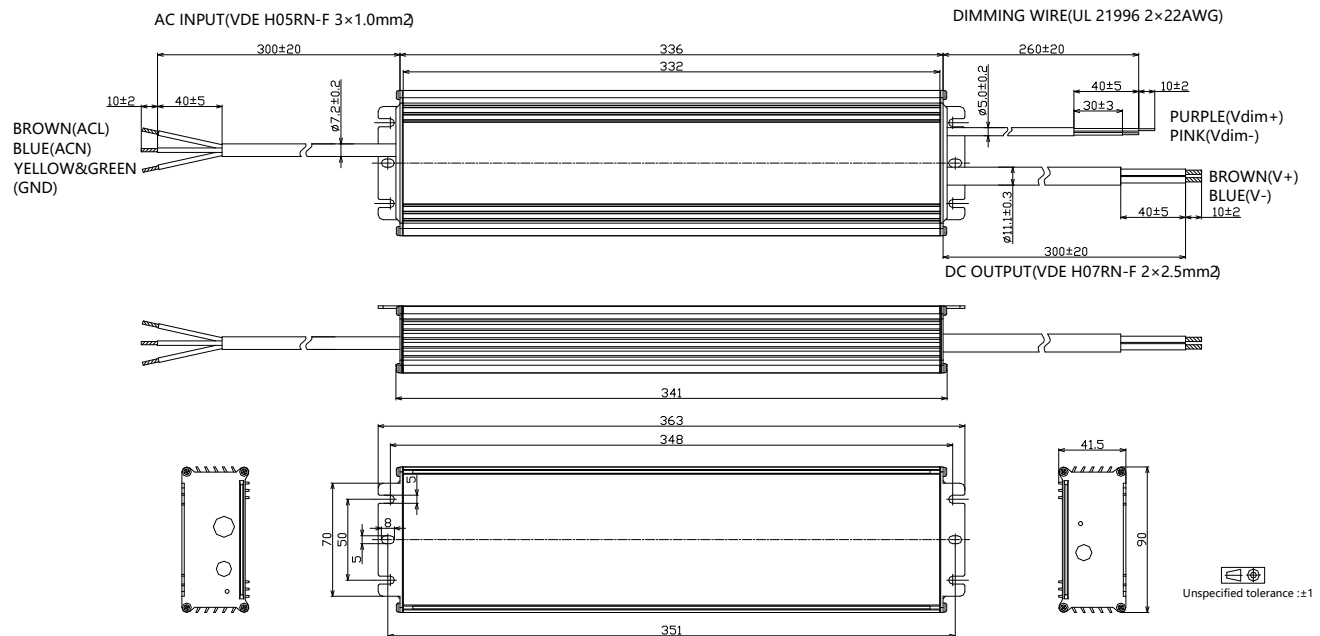


**610W, 120-277Vac Input, Long Life High Quality Driver**

**- BLD-610-Cxxx-NN/TRS (VDE CABLE, MODELS WITH LESS THAN 60V OUTPUT VOLTAGE)**

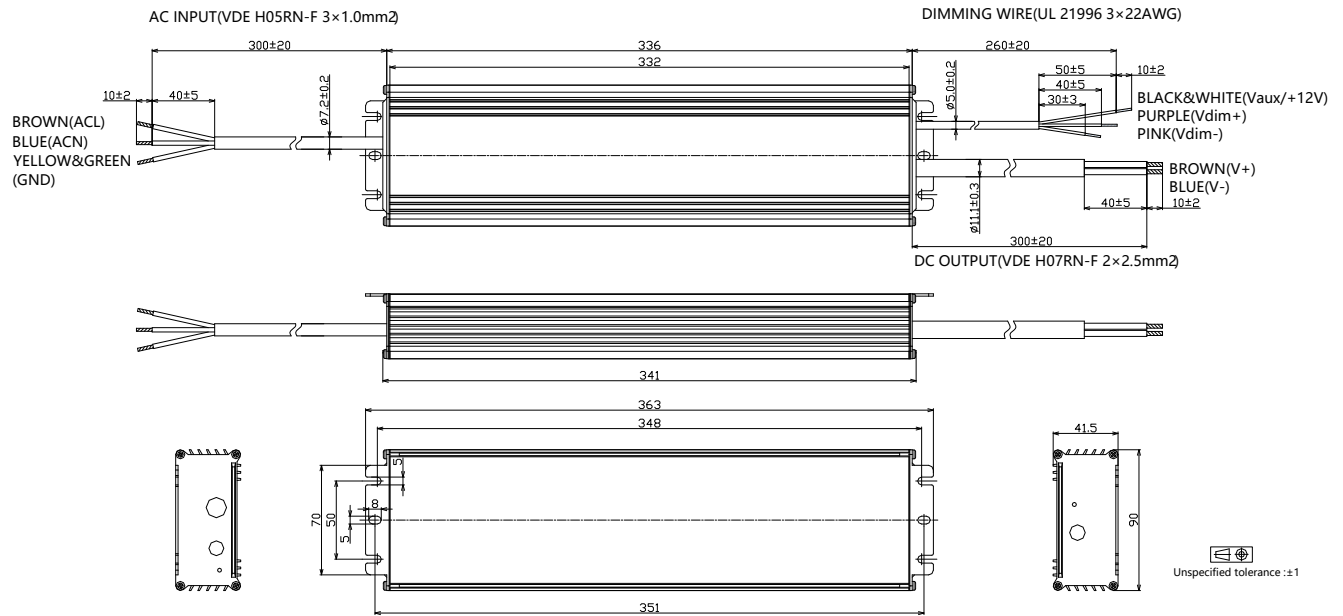


**- BLD-610-Cxxx-DN/DRS (VDE CABLE, MODELS WITH LESS THAN 60V OUTPUT VOLTAGE)**

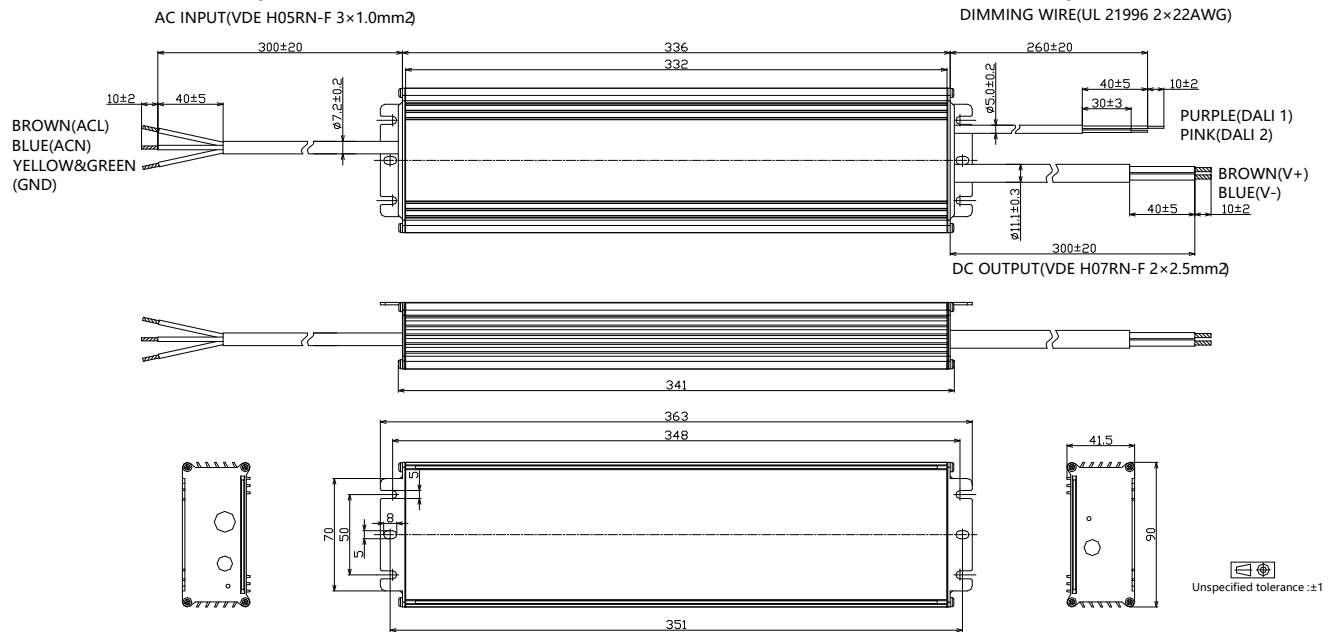


**610W, 120-277Vac Input, Long Life High Quality Driver**

**- BLD-610-Cxxx-EN/ERS (VDE CABLE, MODELS WITH LESS THAN 60V OUTPUT VOLTAGE)**

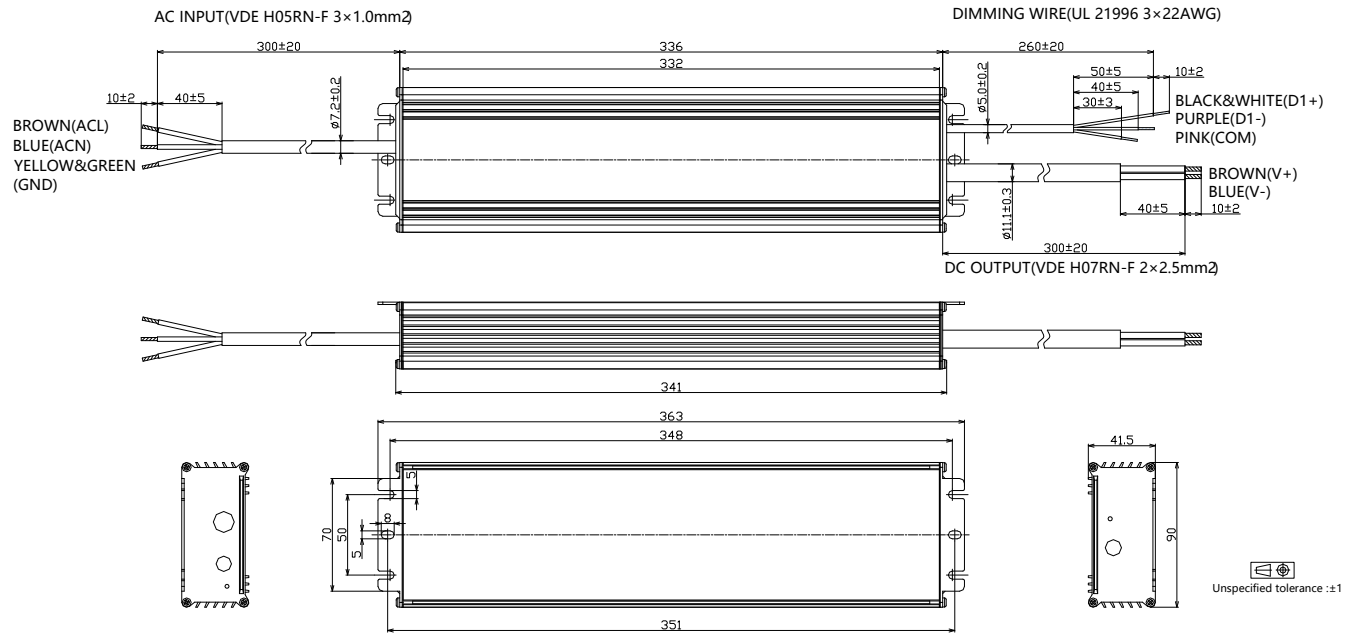


**- BLD-610-Cxxx-ARS (VDE CABLE, MODELS WITH LESS THAN 60V OUTPUT VOLTAGE)**



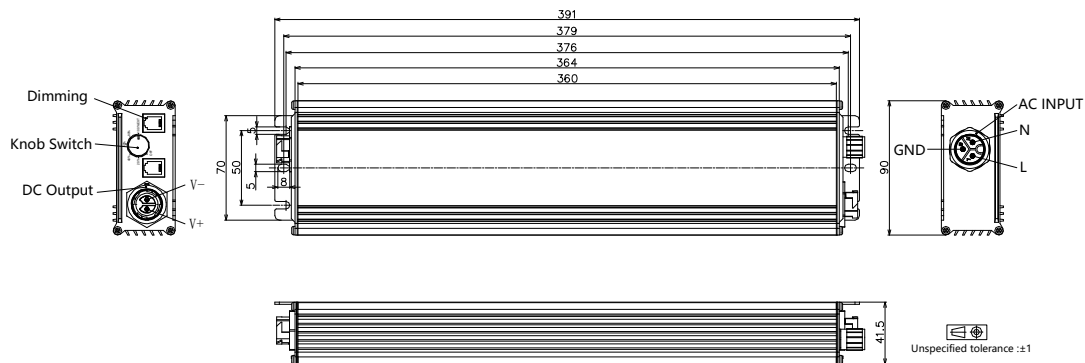
**610W, 120-277Vac Input, Long Life High Quality Driver**

**- BLD-610-Cxxx-MRS (VDE CABLE, MODELS WITH LESS THAN 60V OUTPUT VOLTAGE)**



**610W, 120-277Vac Input, Long Life High Quality Driver**

- Customized Functional End Cap Version

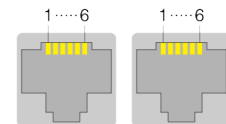


- Add suffix #abcd00 to the end of part number to indicate different configuration. Please refer to product application note AN06 or contact with us for more like **active daisy chain, master mode and button dimming** etc.

| Item    | Value Definition | Description                                                                                                                             |
|---------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Input   | a                | F: M19 waterproof connector<br>P: C14 plug<br>N: Same cable as standard version                                                         |
| Output  | b                | F: M19 waterproof connector, 2 pin<br>N: Same cable as standard version                                                                 |
| Dimming | c                | F: M12 waterproof connector<br>R: RJxx (xx=25,14,12,11) connector x 2<br>S: 3.5mm multi-media plug<br>N: Same cable as standard version |
| Knob    | d                | K: Knob with steps<br>B: Knob without steps<br>N: No knob                                                                               |

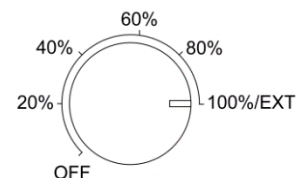
- RJ25 Pin Description (can be customized according to control system)

| Pin | Description   |
|-----|---------------|
| 1,6 | 12V Aux-power |
| 2,5 | Dim+          |
| 3,4 | Dim-/RTN      |



- Knob Description

| Position            | Description                                                                                                             |
|---------------------|-------------------------------------------------------------------------------------------------------------------------|
| 100%/EXT            | If there is no external control, 100% output.<br>If there is external control, output is controlled by external signal. |
| Off,20%,40%,60%,80% | External signal invalid.                                                                                                |



## - 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) |
|-------|---------------------------------|----------------------|------------------------|-----------------------|------------------------------|
| -C14A | 14000                           | 610                  | 30                     | 44                    | 1400                         |
|       | 13000                           | 610                  | 30                     | 47                    | 1300                         |
|       | 12500                           | 610                  | 30                     | 49                    | 1250                         |
|       | 12000                           | 610                  | 31                     | 51                    | 1200                         |
|       | 11500                           | 610                  | 32                     | 53                    | 1150                         |
|       | 11000                           | 610                  | 33                     | 55                    | 1100                         |
|       | 10500                           | 578                  | 33                     | 55                    | 1100                         |
|       | 10000                           | 550                  | 33                     | 55                    | 1100                         |
|       | ...                             | ...                  | ...                    | ...                   | ...                          |
|       | 1100                            | 61                   | 33                     | 55                    | 1100                         |

| Model | Typical Set Output Current (mA) | Max Output Power (W) | Output Voltage Min (V) | Output Voltage Max(V) | Minimum Dimming Current (mA) |
|-------|---------------------------------|----------------------|------------------------|-----------------------|------------------------------|
| -C860 | 8600                            | 610                  | 42                     | 70                    | 860                          |
|       | 8500                            | 610                  | 42                     | 71                    | 850                          |
|       | 8400                            | 610                  | 43                     | 71                    | 840                          |
|       | 8200                            | 610                  | 44                     | 73                    | 820                          |
|       | 8000                            | 610                  | 45                     | 75                    | 800                          |
|       | 7800                            | 610                  | 46                     | 77                    | 780                          |
|       | 7600                            | 610                  | 47                     | 79                    | 760                          |
|       | 7400                            | 610                  | 49                     | 81                    | 740                          |
|       | 7200                            | 610                  | 50                     | 83                    | 720                          |
|       | 7000                            | 610                  | 51                     | 86                    | 700                          |
|       | 6800                            | 610                  | 53                     | 88                    | 680                          |
|       | 6600                            | 610                  | 55                     | 91                    | 660                          |
|       | 6400                            | 610                  | 56                     | 94                    | 640                          |
|       | 6200                            | 610                  | 58                     | 97                    | 620                          |
|       | 6000                            | 610                  | 60                     | 100                   | 600                          |
|       | 5800                            | 580                  | 60                     | 100                   | 600                          |
|       | 5600                            | 560                  | 60                     | 100                   | 600                          |
|       | ...                             | ...                  | ...                    | ...                   | ...                          |
|       | 600                             | 60                   | 60                     | 100                   | 600                          |

**610W, 120-277Vac Input, Long Life High Quality Driver**

| Model | Typical Set Output Current (mA) | Max Output Power (W) | Output Voltage Min (V) | Output Voltage Max(V) | Minimum Dimming Current (mA) |
|-------|---------------------------------|----------------------|------------------------|-----------------------|------------------------------|
| -C600 | 6000                            | 610                  | 60                     | 100                   | 600                          |
|       | 5800                            | 610                  | 62                     | 103                   | 580                          |
|       | 5600                            | 610                  | 64                     | 107                   | 560                          |
|       | 5400                            | 610                  | 67                     | 111                   | 540                          |
|       | 5200                            | 610                  | 69                     | 115                   | 520                          |
|       | 5000                            | 610                  | 72                     | 120                   | 500                          |
|       | 4800                            | 610                  | 75                     | 125                   | 480                          |
|       | 4600                            | 610                  | 78                     | 130                   | 460                          |
|       | 4400                            | 610                  | 82                     | 136                   | 440                          |
|       | 4200                            | 610                  | 86                     | 143                   | 420                          |
|       | 4000                            | 571                  | 86                     | 143                   | 420                          |
|       | 3800                            | 543                  | 86                     | 143                   | 420                          |
|       | 3600                            | 514                  | 86                     | 143                   | 420                          |
|       | 3400                            | 486                  | 86                     | 143                   | 420                          |
|       | 3200                            | 457                  | 86                     | 143                   | 420                          |
|       | 3000                            | 429                  | 86                     | 143                   | 420                          |
|       | ...                             | ...                  | ...                    | ...                   | ...                          |
|       | 420                             | 60                   | 86                     | 143                   | 420                          |

| Model | Typical Set Output Current (mA) | Max Output Power (W) | Output Voltage Min (V) | Output Voltage Max(V) | Minimum Dimming Current (mA) |
|-------|---------------------------------|----------------------|------------------------|-----------------------|------------------------------|
| -C420 | 4200                            | 610                  | 86                     | 143                   | 420                          |
|       | 4100                            | 610                  | 88                     | 146                   | 410                          |
|       | 4000                            | 610                  | 90                     | 150                   | 400                          |
|       | 3900                            | 610                  | 92                     | 154                   | 390                          |
|       | 3800                            | 610                  | 95                     | 158                   | 380                          |
|       | 3700                            | 610                  | 97                     | 162                   | 370                          |
|       | 3600                            | 610                  | 100                    | 167                   | 360                          |
|       | 3500                            | 610                  | 103                    | 171                   | 350                          |
|       | 3300                            | 610                  | 109                    | 182                   | 330                          |
|       | 3200                            | 610                  | 113                    | 188                   | 320                          |
|       | 3100                            | 610                  | 116                    | 194                   | 310                          |
|       | 3000                            | 610                  | 120                    | 200                   | 300                          |
|       | 2900                            | 610                  | 124                    | 207                   | 290                          |
|       | 2800                            | 610                  | 129                    | 214                   | 280                          |
|       | 2700                            | 579                  | 129                    | 214                   | 280                          |
|       | 2600                            | 557                  | 129                    | 214                   | 280                          |
|       | ...                             | ...                  | ...                    | ...                   | ...                          |
|       | 280                             | 60                   | 129                    | 214                   | 280                          |

**610W, 120-277Vac Input, Long Life High Quality Driver**

| Model | Typical Set Output Current (mA) | Max Output Power (W) | Output Voltage Min (V) | Output Voltage Max(V) | Minimum Dimming Current (mA) |
|-------|---------------------------------|----------------------|------------------------|-----------------------|------------------------------|
| -C280 | 2800                            | 610                  | 129                    | 214                   | 280                          |
|       | 2700                            | 610                  | 133                    | 222                   | 270                          |
|       | 2600                            | 610                  | 138                    | 231                   | 260                          |
|       | 2500                            | 610                  | 144                    | 240                   | 250                          |
|       | 2400                            | 610                  | 150                    | 250                   | 240                          |
|       | 2300                            | 610                  | 157                    | 261                   | 230                          |
|       | 2200                            | 610                  | 164                    | 273                   | 220                          |
|       | 2100                            | 610                  | 171                    | 286                   | 210                          |
|       | 2000                            | 571                  | 171                    | 286                   | 210                          |
|       | 1900                            | 543                  | 171                    | 286                   | 210                          |
|       | 1800                            | 514                  | 171                    | 286                   | 210                          |
|       | 1700                            | 486                  | 171                    | 286                   | 210                          |
|       | ...                             | ...                  | ...                    | ...                   | ...                          |
|       | 210                             | 60                   | 171                    | 286                   | 210                          |

| Model | Typical Set Output Current (mA) | Max Output Power (W) | Output Voltage Min (V) | Output Voltage Max(V) | Minimum Dimming Current (mA) |
|-------|---------------------------------|----------------------|------------------------|-----------------------|------------------------------|
| -C210 | 2100                            | 610                  | 171                    | 286                   | 210                          |
|       | 2000                            | 610                  | 180                    | 300                   | 200                          |
|       | 1900                            | 610                  | 189                    | 316                   | 190                          |
|       | 1800                            | 610                  | 200                    | 333                   | 180                          |
|       | 1700                            | 610                  | 212                    | 353                   | 170                          |
|       | 1600                            | 610                  | 225                    | 375                   | 160                          |
|       | 1500                            | 610                  | 240                    | 400                   | 150                          |
|       | 1400                            | 610                  | 257                    | 429                   | 140                          |
|       | 1300                            | 557                  | 257                    | 429                   | 140                          |
|       | 1200                            | 514                  | 257                    | 429                   | 140                          |
|       | 1100                            | 471                  | 257                    | 429                   | 140                          |
|       | 1000                            | 429                  | 257                    | 429                   | 140                          |
|       | ...                             | ...                  | ...                    | ...                   | ...                          |
|       | 140                             | 60                   | 257                    | 429                   | 140                          |

## ■ Revision History

| Revision | Date       | Contents                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| E        | 2022-03-22 | <ol style="list-style-type: none"><li>1. Index page added</li><li>2. Reduced dimming interface sourcing current</li><li>3. DALI 2.0 compatibility added</li><li>4. Programming instruction added</li><li>5. Inrush current data added</li><li>6. Tc point position indication added</li><li>7. Dielectric strength level added</li><li>8. Packaging information added</li><li>9. Mechanical design change with dimming cable color</li><li>10. Revision history added</li></ol> |
| F        | 2022-05-28 | <ol style="list-style-type: none"><li>1. Model C280, C210 added.</li></ol>                                                                                                                                                                                                                                                                                                                                                                                                      |