

DIMMABLE LED DRIVER

PQ-KV

- Constant Voltage.
- 100-277VAC
- Built-in active PFC function.
- Short circuit/ over load/ over temperature.
- Cooling by free air convection.
- For dry, damp & wet location.
- 0-10V dimming: 0-10V/1-10V/ Potentiometer/10V PWM 4 in 1 0-100%
- Suitable for LED lighting and moving sign applications.
- 5 years warranty.



| DIMMABLE LED DRIVER | | | |
|---------------------|----------------------|-------------|-----------|
| MODEL | Output Voltage (VDC) | | Power (W) |
| PQ-KV | 12VDC = 120 | 24VDC = 240 | 30 |
| | | | 60 |
| | N/A | | 96 |

Catalog Number for Example: PQ-KV-24030-DIMJ

CERTIFICATIONS



Class 2 Class P TYPE HL SELV



RoHS



LED DRIVER

PQ-KV

SPECIFICATIONS

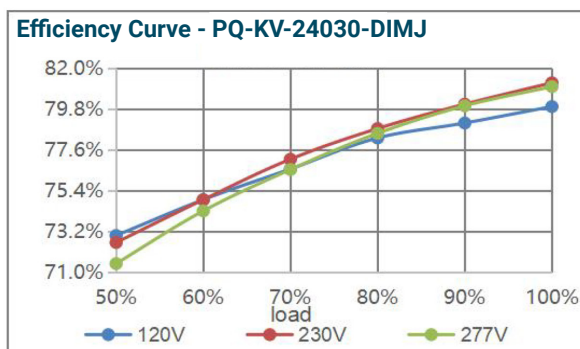
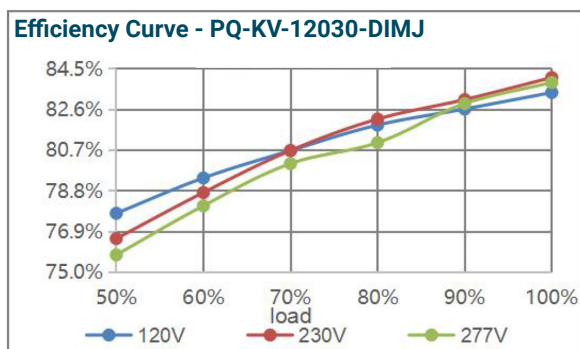
| Models | PQ-KV-12030-DIMJ | PQ-KV-24030-DIMJ | PQ-KV-12060-DIMJ | PQ-KV-24060-DIMJ | PQ-KV-24096-DIMJ |
|--------------------------|--|----------------------------|--|--------------------------|--|
| Output | | | | | |
| DC Voltage | 12V | 24V | 12V | 24V | 24V |
| Voltage Tolerance | ±0.5V | | | | |
| Voltage Regulation | ≤0.5% | | | | |
| Rated current | 2.5A | 1.25A | 5A | 2.5A | 4A |
| Rated power | 30W | | 60W | | 96W |
| Load Regulation | ≤2% | ≤1% | ≤2% | ≤1% | ≤1% |
| Input | | | | | |
| Voltage Range | 100-277VAC | | | | |
| Frequency Range | 47 - 63Hz | | | | |
| Power Factor @ full load | 0.99@120VAC 0.98@277VAC | 0.99@120VAC 0.95@277VAC | 0.98@120VAC 0.95@277VAC | | |
| THD(Typ.) @ full load | <20% | | | | |
| Efficiency @ full load | 79%@120VAC | 80%@277VAC | 83%@120VAC 85%@277VAC | 83%@120VAC 84%@277VAC | 83%@120VAC 86%@277VAC |
| AC Current (Max.) | 0.5A@100VAC | | | | 1.3A@100VAC |
| Inrush Current (Typ.) | 7A,420us @50%Ipeak 120VAC 12A,480us @50%Ipeak 277VAC | | 14A,780us @50%Ipeak 120VAC 15A,660us @50%Ipeak 277VAC | | 20A,1.6ms @50%Ipeak 120VAC @50%Ipeak 277VAC |
| Leakage current | <0.5mA | | | | |
| Protection | | | | | |
| Short Circuit | Shut down o/p voltage, re-power on to recover after fault condition is removed | | | | |
| Over Load | ≤120% shut down o/p voltage, re-power on to recover after fault condition is removed | | ≤120% Hiccup mode, recovers automatically after fault condition is removed | | ≤120% shut down o/p voltage, recovers automatically after fault condition is removed |
| Over temperature | Shell surface temp.100°C±10°C shut down o/p voltage, automatically recover after cooling | | | | |
| Environment | | | | | |
| Working TEMP | -40 to +60°C (see below derating curve) | | | | |
| Working Humidity | 20 -95%RH non-condensing | | | | |
| Storage TEM.,Humidity | -40 - +80°C, 10 - 95% RH non-condensing | | | | |
| TEMP.coefficient | ±0.03%/°C (0 - 50°C) | | | | |
| Vibration | 10~500Hz, 5G 12min./1 cycle, period for 72min. each along X,Y,Z axes | | | | |
| Safety & EMC | | | | | |
| Safety standards | UL8750 CAN/CSA-C22.2 No.250.13 (US) | | | | |
| Withstand voltage | I/P-O/P:1.8KVAC I/P-FG:1.8KVAC O/P-FG:1.8KVAC (US) | | | | |
| Isolation resistance | I/P-O/P:100MΩ / 500VDC / 25°C / 70%RH | | | | |
| EMC Emission | FCC 47 CFR Part 15, Subpart B(US) | | | | |
| Dimensions (L*W*H) | 165*94.5*43.8mm | | 188*94.5*43.8mm | | 220*94.5*43.8mm |

LED DRIVER

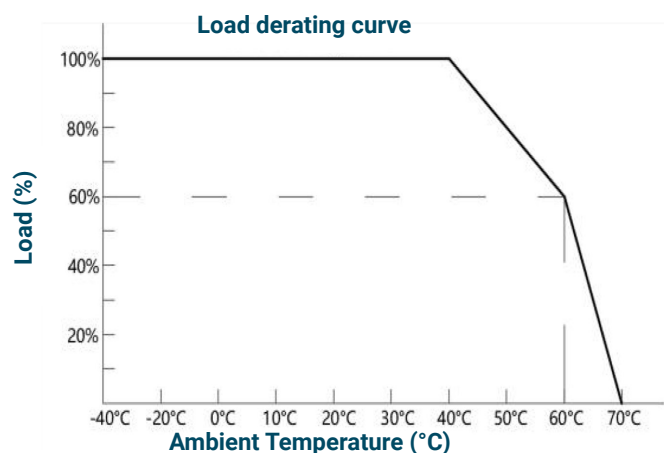
PQ-KV

MODEL: 30W

Efficiency Curve (efficiency vs output load)

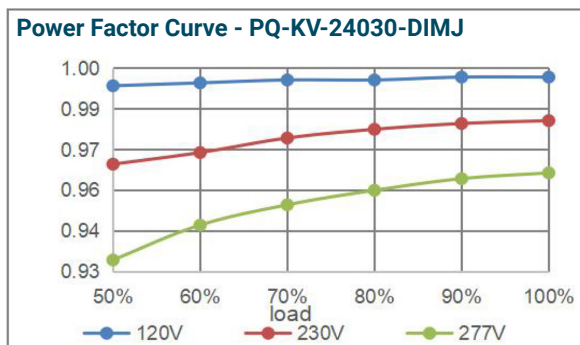
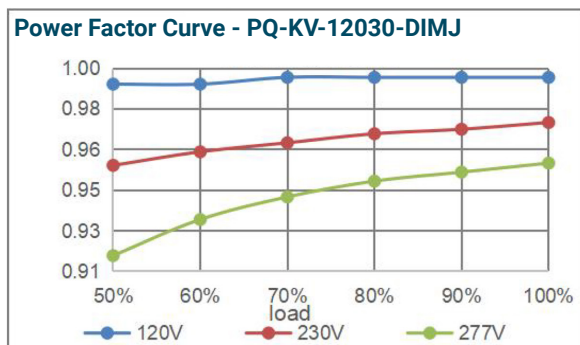


Derating Curve (output load vs TEMP.)



1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.

Power Factor Curve

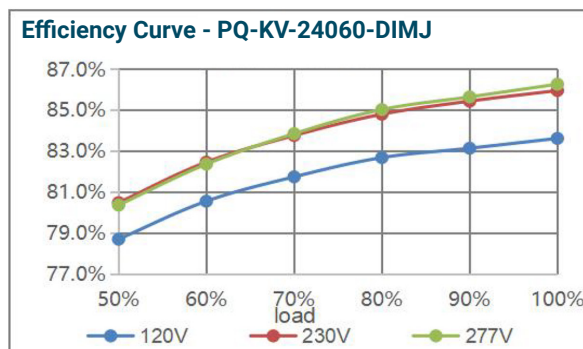
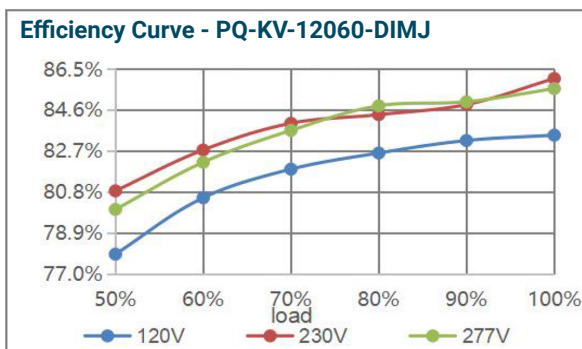


LED DRIVER

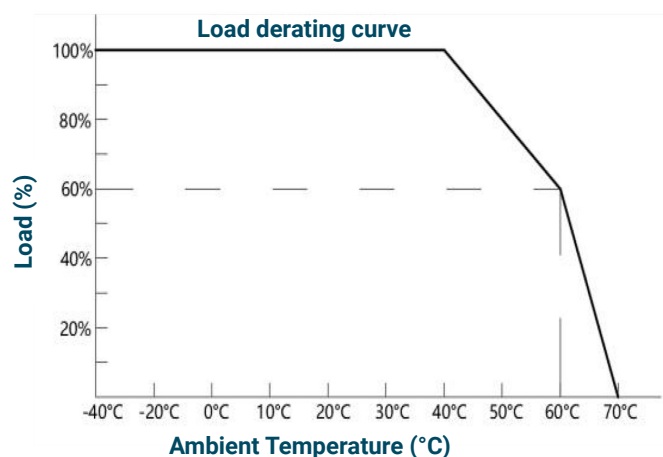
PQ-KV

MODEL: 60W

Efficiency Curve (efficiency vs output load)

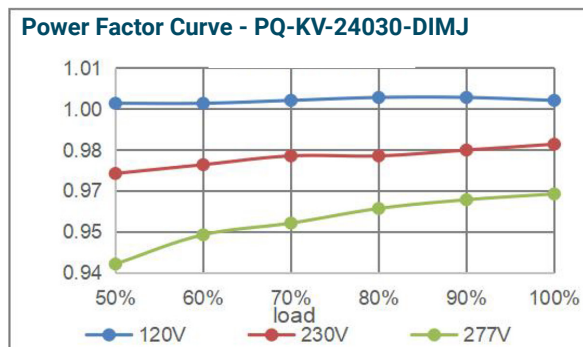
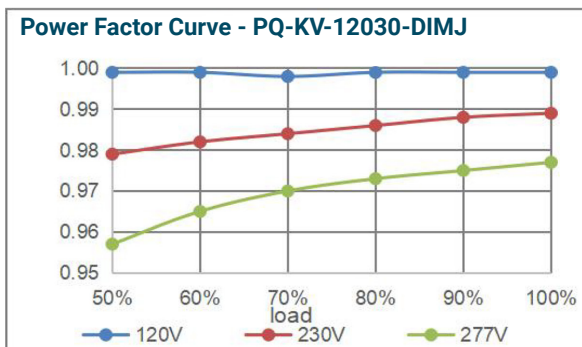


Derating Curve (output load vs TEMP.)



1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.

Power Factor Curve

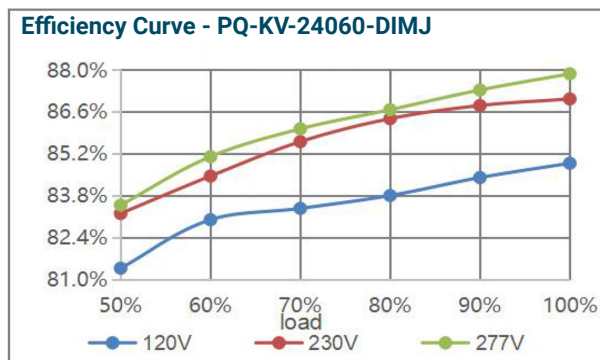


LED DRIVER

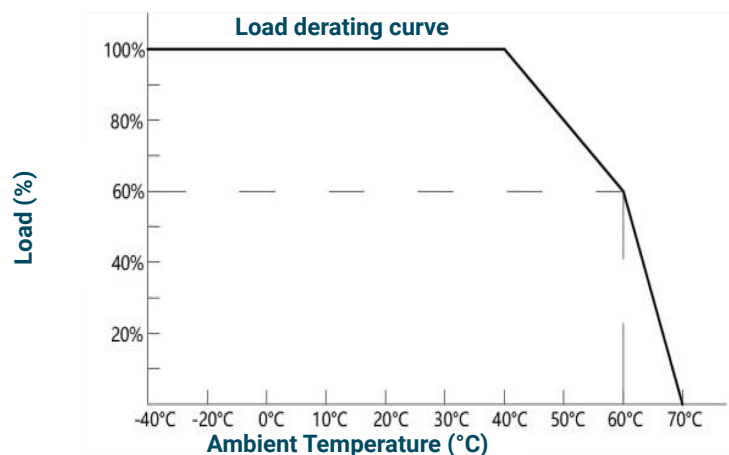
PQ-KV

MODEL: 96W

Efficiency Curve (efficiency vs output load)

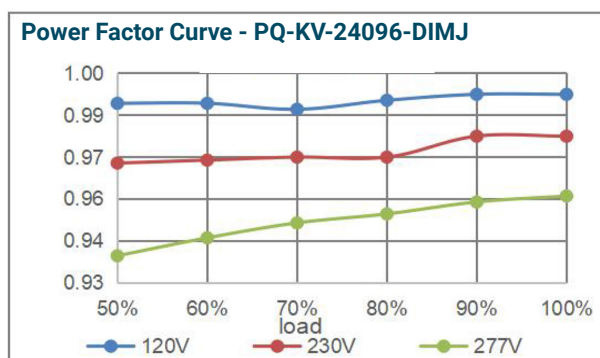


Derating Curve (output load vs TEMP.)



1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.

Power Factor Curve

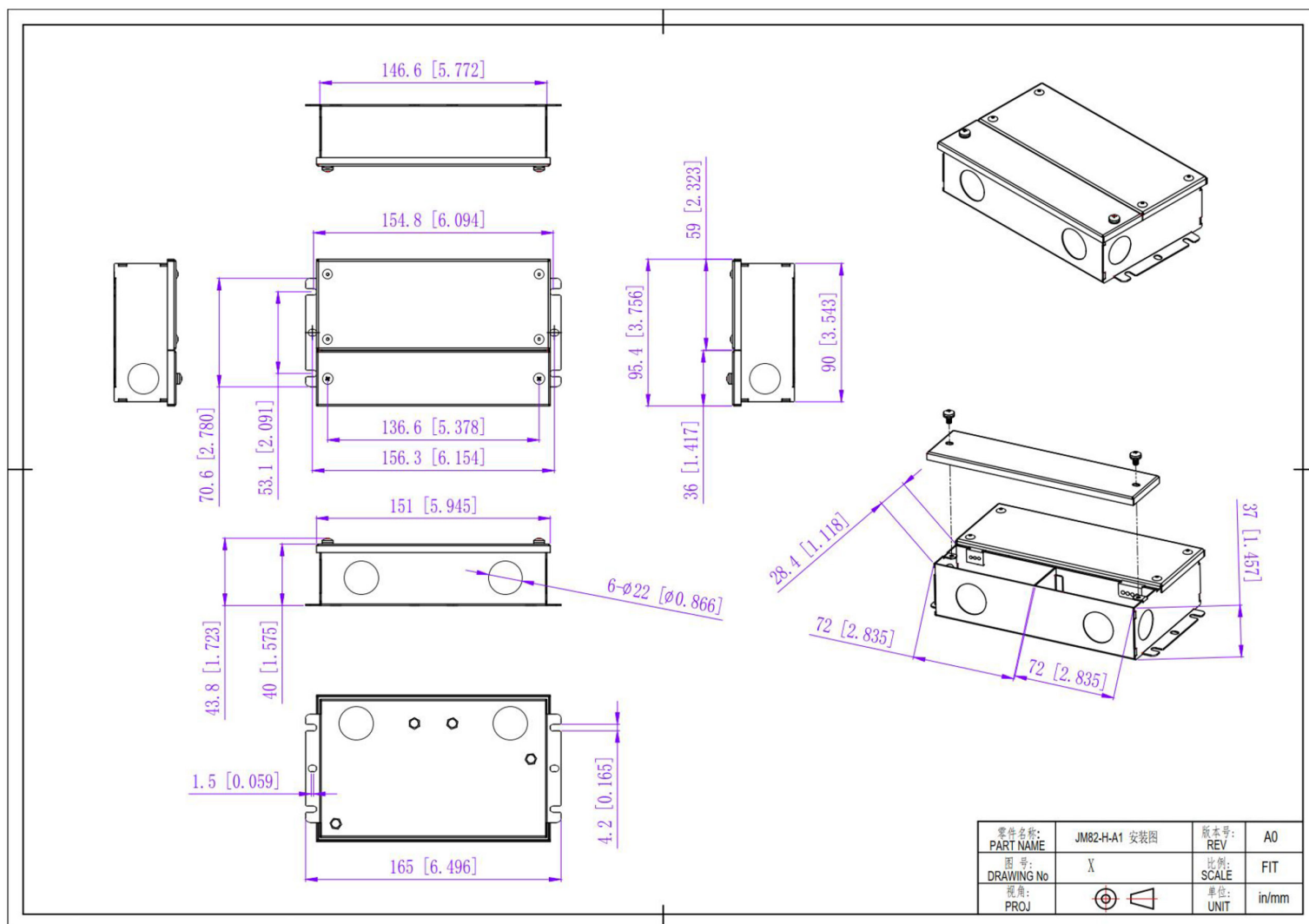


LED DRIVER

PQ-KV

MECHANICAL SPECIFICATIONS

30W



12V & 24V Version

1. Input wire, Black and White to be connected to AC L and N, Green wire go ground .
2. Output wire, Red to LED Positive side (+) , Black to LED Negative side (-).
3. Dimming wire, DIM (+) Purple to 0/1-10V dimmer signal(+), DIM (-) Gray to 0/1-10V dimmer signal (-).
4. Please DO NOT connect "DIM-" to "LED-", "DIM+" to "LED+", or other incorrect connection.
5. Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged. .

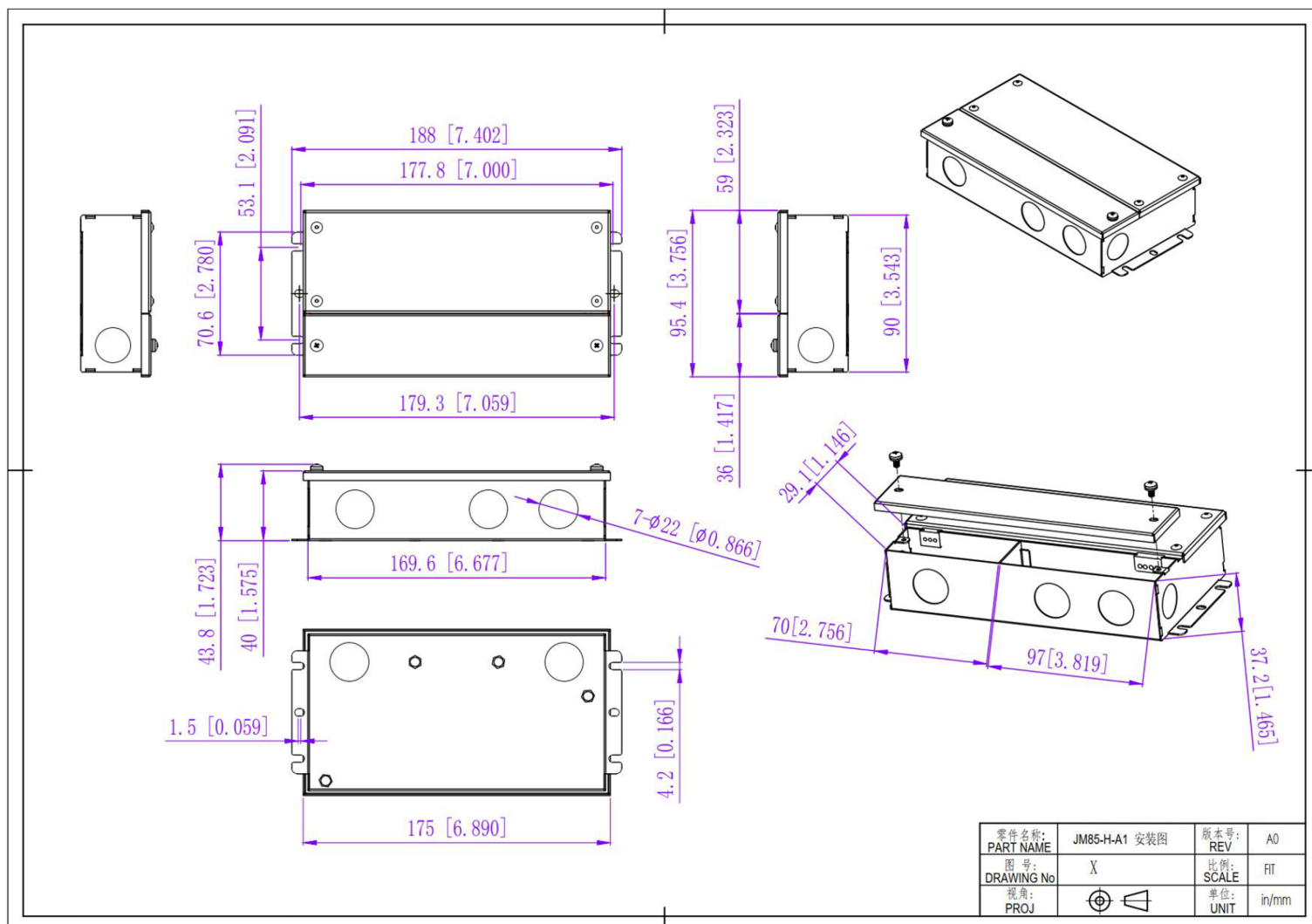
Warm tips: Any other requests for, we can customized.

LED DRIVER

PQ-KV

MECHANICAL SPECIFICATIONS

60W



12V & 24V Version

1. Input wire, Black and White to be connected to AC L and N, Green wire go ground .
2. Output wire, Red to LED Positive side (+) , Black to LED Negative side (-).
3. Dimming wire, DIM (+) Purple to 0/1-10V dimmer signal(+), DIM (-) Gray to 0/1-10V dimmer signal (-).
4. Please DO NOT connect "DIM-" to "LED-", "DIM+" to "LED+", or other incorrect connection.
5. Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged. .

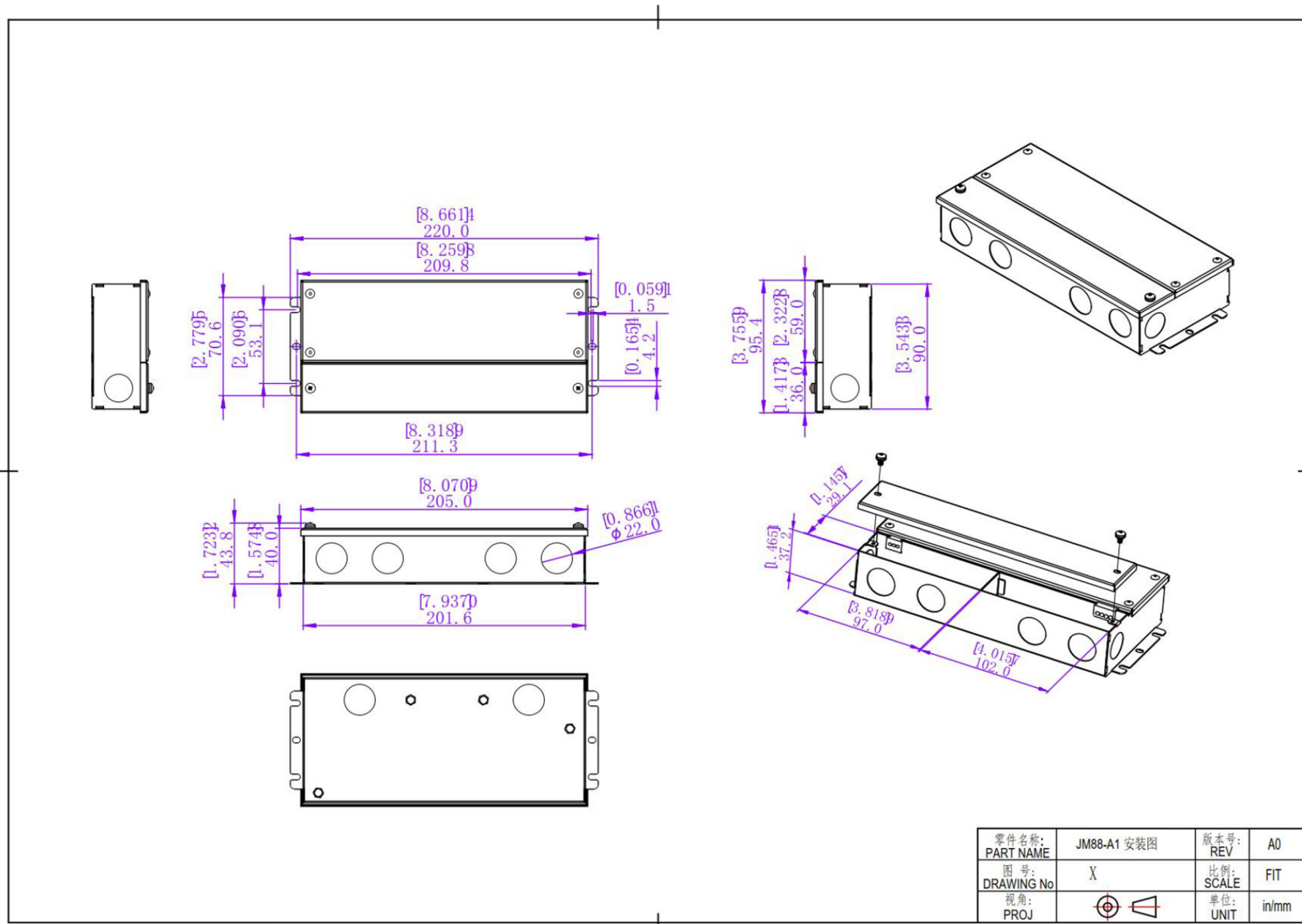
Warm tips: Any other requests for, we can customized.

LED DRIVER

PQ-KV

MECHANICAL SPECIFICATIONS

96W



24V Version

1. Input wire, Black and White to be connected to AC L and N, Green wire go ground .
2. Output wire, Red to LED Positive side (+) , Black to LED Negative side (-).
3. Dimming wire, DIM (+) Purple to 0/1-10V dimmer signal(+), DIM (-) Gray to 0/1-10V dimmer signal (-).
4. Please DO NOT connect "DIM-" to "LED-", "DIM+" to "LED+", or other incorrect connection.
5. Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged. .

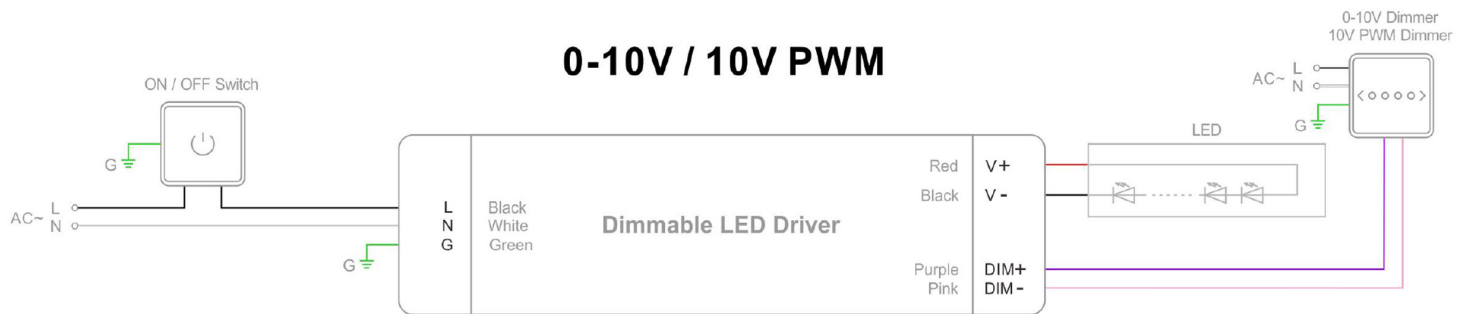
Warm tips: Any other requests for, we can customized.

LED DRIVER

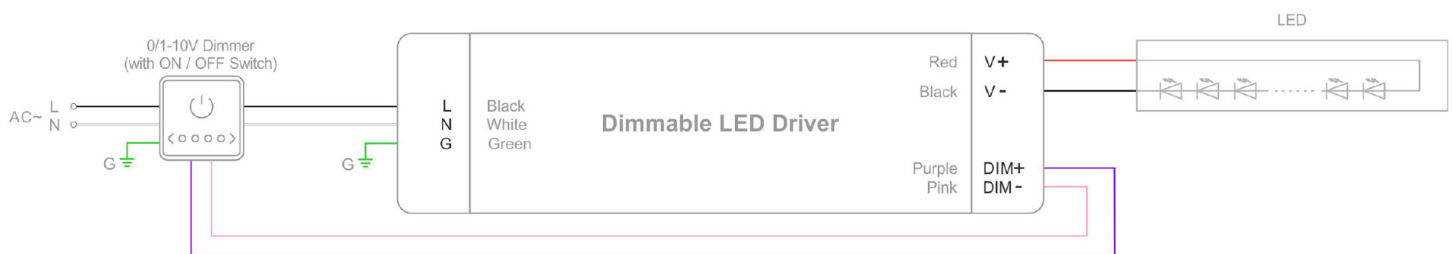
PQ-KV

CONNECTING DIAGRAM

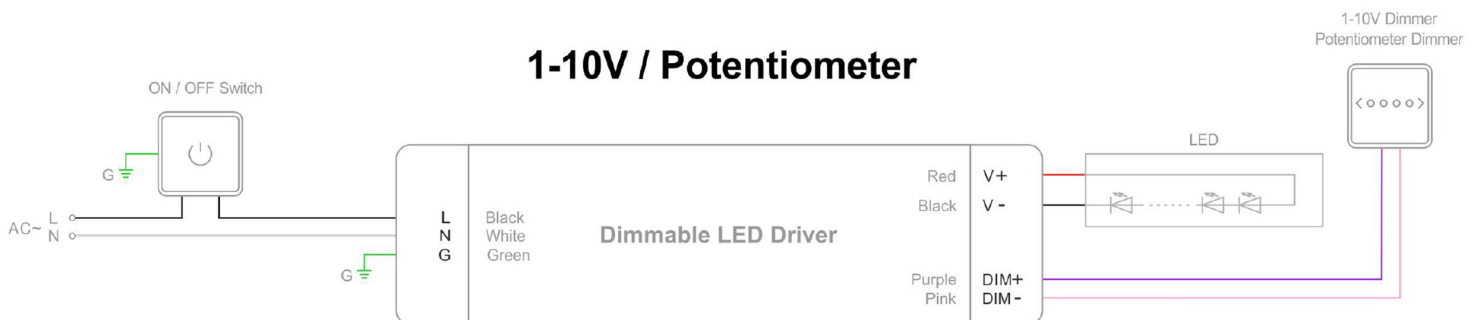
0-10V / 10V PWM



0/1-10V



1-10V / Potentiometer



Instruction

1. This driver should be installed by qualified and professional person.
2. Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
3. Ensure that wiring is correct before test in order to avoid light and power supply damage.
4. If driver Cannot work normally, don't maintain privately.