

# LED Driver

## Lighting in better ways



Spring 2017 guide to LED products



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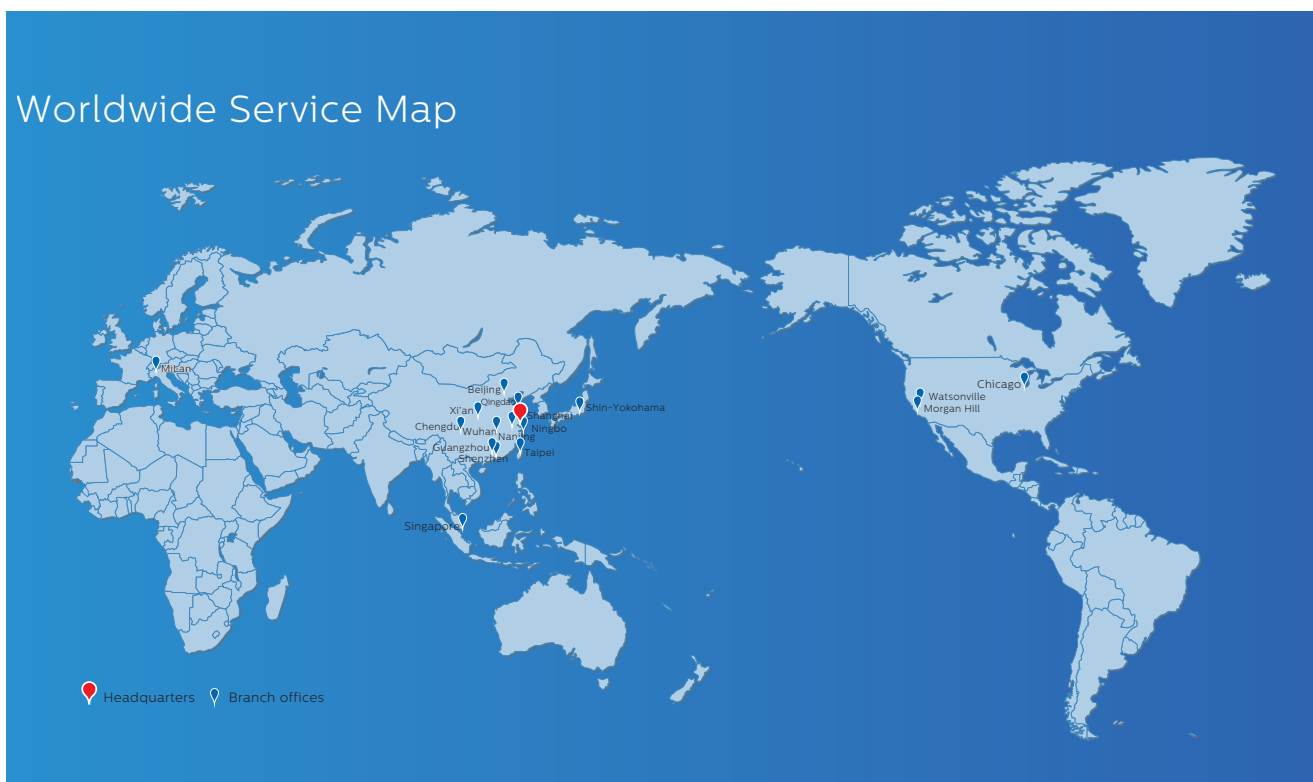
## MOONS'

*moving in better ways*

Shanghai MOONS' was founded in February, 1994 with registered capital exceeding 10 million U.S. dollars and with the total investment exceeding 25 million U.S. dollars. Our business campus covers an area of over 50, 000 square meters with a work force of over 2,000 employees with the majority being technical and sales professionals. MOONS' currently has nine branches within China and established a global sales network and technique support centre in North America, Europe, East Asia and Southeast Asia.

Shanghai MOONS' Automation Control Co., Ltd. is a professional Hi-Tech manufacturing organization producing Intelligent Control Systems, System Integration Technology, Drivers, and Communication Devices. Our quality systems and processes are ISO 9001, ISO 14001, BS OHSAS 18001 certified and met the most stringent software qualification and system integration requirements. The majority of our products have been listed and/or approved by CCC, UL, CUL, TÜV, CB, CE, PSE or ETL.

MOONS' water proof drivers are widely used in outdoor, highway, roadway & landscape lighting, as well as with indoor building automation systems. MOONS' goal is to provide the "Intelligent Control and Driver Solutions" for our customers.



# Quick Selection Chart

LED Drivers  
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Quick Selection Chart  
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| Driver Type        | Input Range | Description                                                                         | Power (Watt) | Series Designation       | PFC          |           | Dimming                            | IP Level | Page  |
|--------------------|-------------|-------------------------------------------------------------------------------------|--------------|--------------------------|--------------|-----------|------------------------------------|----------|-------|
|                    |             |                                                                                     |              |                          | Single Stage | Two Stage |                                    |          |       |
| General Driver     | 176-305VAC  | Constant Current Mode<br>Metal Case Series<br>Constant Power<br>Programmable Series | 75           | ME075MxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       | 8-10  |
|                    |             |                                                                                     | 100          | ME100MxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 150          | ME150HxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 200          | ME200HxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 250          | ME250HxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    | 249-528VAC  | Constant Current Mode<br>Metal Case Series<br>Constant Power<br>Programmable Series | 50           | MT050AxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       | 11-13 |
|                    |             |                                                                                     | 100          | MT100AxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 150          | MT150AxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 240          | MT240HxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 320          | MT320HxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    | 90-305VAC   | Constant Current Mode<br>Metal Case Series<br>Constant Power<br>Programmable Series | 50           | MU050HxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       | 14-18 |
|                    |             |                                                                                     | 75           | MU075MxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 100          | MU100MxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 150          | MU150HxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 240          | MU240HxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 320          | MU320HxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 260          | MU260HxxxAQ_CP           |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 260          | MU260HxxxAQ1_CP          |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             | Constant Current Mode<br>Plastic Case Series                                        | 12           | PU012HxxxAQ              | √            |           | /                                  | 66       | 19-20 |
|                    |             |                                                                                     | 25           | PU025HxxxAQ_XXX          | √            |           | 0-10V/PWM/Resistance/Clock Dimming | 66       |       |
|                    |             |                                                                                     | 40           | PU040HxxxAQ_XXX          | √            |           | 0-10V/PWM/Resistance/Clock Dimming | 66       |       |
|                    |             | Constant Current Mode<br>Metal Case Series                                          | 60           | MU060CxxxAQ_XXX          |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       | 21-24 |
|                    |             |                                                                                     | 75           | MU075CxxxAQ_XXX          |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 100          | MU100CxxxAQ_XXX          |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 120          | MU120CxxxAQ_XXX          |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 150          | MU150HxxxAQ_XXX          |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 200          | MU200HxxxAQ_XXX          |              | √         | 0-10V/PWM/Resistance/Clock Dimming | 67       |       |
|                    |             |                                                                                     | 200          | MU200AxxxAP              |              | √         | /                                  | 67       |       |
|                    |             | Constant Voltage Mode<br>Plastic Case Series                                        | 12           | PU012AxxxAP              | √            |           | /                                  | 66       | 25-26 |
|                    |             |                                                                                     | 40           | PU040AxxxAP              | √            |           | /                                  | 66       |       |
|                    |             | Constant Voltage Mode<br>Metal Case Series                                          | 60           | MU060CxxxAP              |              | √         | /                                  | 67       | 27-29 |
|                    |             |                                                                                     | 75           | MU075CxxxAP              |              | √         | /                                  | 67       |       |
|                    |             |                                                                                     | 100          | MU100CxxxAP              |              | √         | /                                  | 67       |       |
|                    |             |                                                                                     | 120          | MU120CxxxAP              |              | √         | /                                  | 67       |       |
|                    |             |                                                                                     | 150          | MU150AxxxAP              |              | √         | /                                  | 67       |       |
|                    |             |                                                                                     | 200          | MU200AxxxAP              |              | √         | /                                  | 67       |       |
|                    |             |                                                                                     | 200          | MU200AxxxAP              |              | √         | /                                  | 67       |       |
| Intelligent Driver | 90-305VAC   | DALI Series                                                                         | 50           | DALI Intelligent Driver  |              | √         | DALI                               | 20       | 30    |
|                    |             | DMX Series                                                                          | 50           | DMX Intelligent Driver   |              | √         | DMX                                | 20       | 32    |
|                    |             | 0-10V Series                                                                        | 50           | 0-10V Intelligent Driver |              | √         | 0-10V                              | 20       | 34    |
|                    | 20-60VDC    | Other Series                                                                        | 85           | PR085N070DQ_DMX          |              | √         | DMX                                | 66       | 38    |



# Certificates Selection Chart

LED Drivers  
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Certificates Selection Chart  
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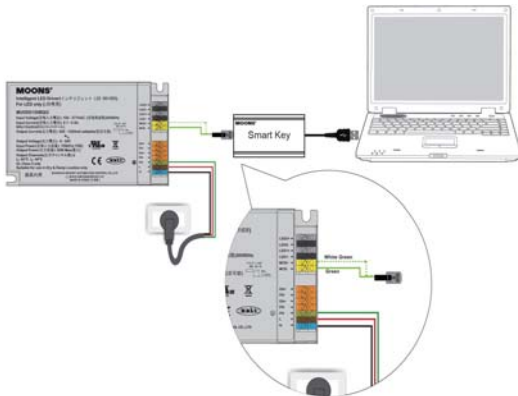
| Driver Type        | Input Range | Description                                                                         | Power(Watt) | Series Designation       | Certificate                |
|--------------------|-------------|-------------------------------------------------------------------------------------|-------------|--------------------------|----------------------------|
| General Driver     | 176~305VAC  | Constant Current Mode<br>Metal Case Series<br>Constant Power<br>Programmable Series | 75          | ME075MxxxAQ_CP           | CCC, CE, ENEC              |
|                    |             |                                                                                     | 100         | ME100MxxxAQ_CP           | CCC, CE, ENEC              |
|                    |             |                                                                                     | 150         | ME150HxxxAQ_CP           | CCC, CE, TUV, ENEC         |
|                    |             |                                                                                     | 200         | ME200HxxxAQ_CP           | CCC, ENEC                  |
|                    |             |                                                                                     | 250         | ME250HxxxAQ_CP           | CCC, CE, TUV               |
|                    | 249~528VAC  | Constant Current Mode<br>Metal Case Series<br>Constant Power<br>Programmable Series | 50          | MT050AxxxAQ_CP           | UL                         |
|                    |             |                                                                                     | 100         | MT100AxxxAQ_CP           | UL                         |
|                    |             |                                                                                     | 150         | MT150AxxxAQ_CP           | UL                         |
|                    |             |                                                                                     | 240         | MT240HxxxAQ_CP           | UL                         |
|                    |             |                                                                                     | 320         | MT320HxxxAQ_CP           | UL                         |
|                    | 90~305VAC   | Constant Current Mode<br>Metal Case Series<br>Constant Power<br>Programmable Series | 50          | MU050HxxxAQ_CP           | UL, In Process: CE, CB     |
|                    |             |                                                                                     | 75          | MU075MxxxAQ_CP           | UL, CE                     |
|                    |             |                                                                                     | 100         | MU100MxxxAQ_CP           | UL, CB, CE                 |
|                    |             |                                                                                     | 150         | MU150HxxxAQ_CP           | UL, CB, CE                 |
|                    |             |                                                                                     | 240         | MU240HxxxAQ_CP           | UL, CCC, CB, CE            |
|                    |             |                                                                                     | 320         | MU320HxxxAQ_CP           | UL, CCC, CB, CE            |
|                    |             |                                                                                     | 260         | MU260HxxxAQ_CP           | UL, CB, CE                 |
|                    |             |                                                                                     | 260         | MU260HxxxAQ1_CP          | UL, CE                     |
|                    |             | Constant Current Mode<br>Plastic Case Series                                        | 12          | PU012HxxxAQ              | UL, CB, CE, TUV            |
|                    |             |                                                                                     | 25          | PU025HxxxAQ_XXX          | UL, CCC, CB, CE, ENEC      |
|                    |             |                                                                                     | 40          | PU040HxxxAQ_XXX          | UL, CB, CE, ENEC           |
|                    |             | Constant Current Mode<br>Metal Case Series                                          | 60          | MU060CxxxAQ_XXX          | UL, CCC, CB, CE            |
|                    |             |                                                                                     | 75          | MU075CxxxAQ_XXX          | UL, CCC, CB, CE            |
|                    |             |                                                                                     | 100         | MU100CxxxAQ_XXX          | UL, CCC, CB, CE            |
|                    |             |                                                                                     | 120         | MU120CxxxAQ_XXX          | UL, CCC, CB, CE            |
|                    |             |                                                                                     | 150         | MU150HxxxAQ_XXX          | PSE, UL, CCC, CB, CE, ENEC |
|                    |             |                                                                                     | 200         | MU200HxxxAQ_XXX          | PSE, UL, CCC, CB, CE, ENEC |
|                    |             | Constant Voltage Mode<br>Plastic Case Series                                        | 12          | PU012AxxxAP              | CE                         |
|                    |             |                                                                                     | 40          | PU040AxxxAP              | CE                         |
|                    |             | Constant Voltage Mode<br>Metal Case Series                                          | 60          | MU060CxxxAP              | UL, CB, CE                 |
|                    |             |                                                                                     | 75          | MU075CxxxAP              | UL, CB, CE                 |
|                    |             |                                                                                     | 100         | MU100CxxxAP              | UL, CB, CE                 |
|                    |             |                                                                                     | 120         | MU120CxxxAP              | UL, CB, CE                 |
|                    |             |                                                                                     | 150         | MU150AxxxAP              | CB, CE                     |
|                    |             |                                                                                     | 200         | MU200AxxxAP              | CE                         |
| Intelligent Driver | 90~305VAC   | DALI Series                                                                         | 50          | DALI Intelligent Driver  | In Process: UL, CE         |
|                    |             | DMX Series                                                                          | 50          | DMX Intelligent Driver   | In Process: UL, CE         |
|                    |             | 0-10V Series                                                                        | 50          | 0-10V Intelligent Driver | In Process: UL, CE         |
|                    | 20~60VDC    | Other Series                                                                        | 85          | PR085N070DQ_DMX          | UL, CE, ENEC               |



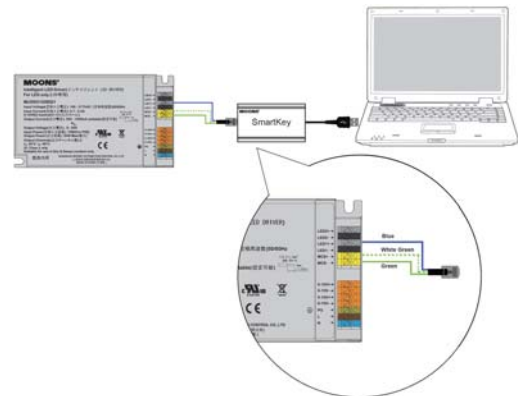


SmartKey is the programmer of Intelligent driver.

SmartKey Network and SmartKey are compatible with MOONS' DALI, 0-10V, DMX Intelligent drivers. They can be used to set the configuration parameters of MOONS' DALI, 0-10V, DMX intelligent drivers.



The hardware connection of charged programming mode.



The hardware connection of uncharged programming mode.

The main software interface of SmartKey Network Software.

- Set drivers' Type.
- Check driver's firmware version.
- Set driver's dimming curve.
- Set driver's minimum dimming level.
- Set drivers' other parameters, e.g. CCT, fade time.
- Set driver's output current value. ([Learn more](#))



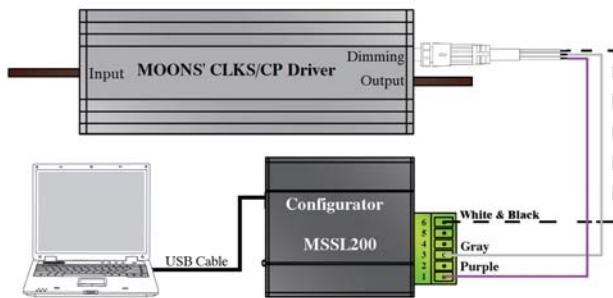
# Accessories-MSSL200

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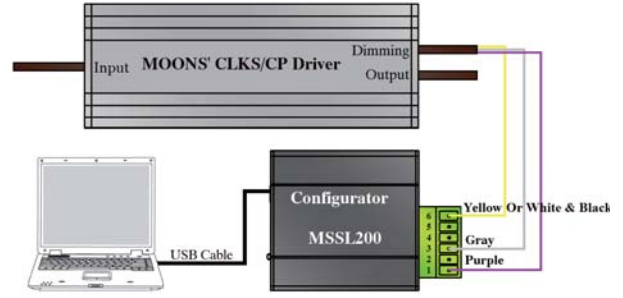


MSSL200 is the programmer of CLKS or CP Series driver

The Programmable Driver Configurator Software and Configurator are compatible with MOONS' CLKS and CP drivers. They can be used to set the configuration parameters of MOONS' CLKS and CP drivers.



The hardware connection of configuring MOONS' CLKS/C or CP/C driver.



The hardware connection of configuring MOONS' CLKS/W or CP/W driver

The main software interface of Programmable Driver Configurator Software

- Set driver's output current value, the minimum adjustable unit equals 1mA
- Get driver's maximum output power and current value.
- Set driver's "Start Fade up Time". It means how much time the driver costs to achieve the "Module Current" that the user set.
- Set driver's "Fade up Time". This function is available in the Smart Midnight ClockDIM and Fixed ClockDIM mode; It means how much time the driver costs to achieve another dimming level from previous dimming level.
- Set driver's dimming mode. There are five dimming modes: No dimming, Smart Midnight ClockDIM, Fixed ClockDIM mode, 0-10V dimming and PWM dimming.
- Set the configuration of CLO function. The CLO (Constant Light Output) function can solve the issue of Lumens depreciation. ([Learn more](#))



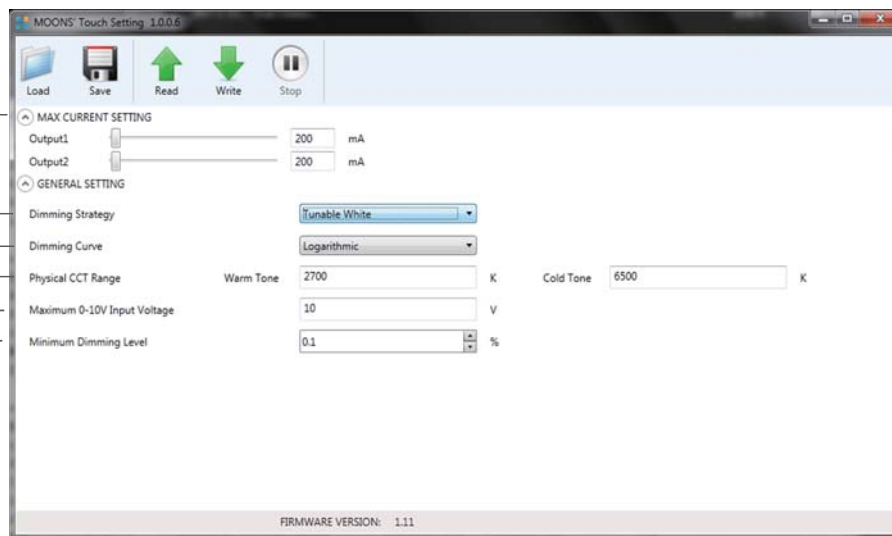
# Accessories–NFC(Touch Setting)

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NFC(Touch Setting)  
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NFC Tool is the programmer of MOONS' DALI, 0-10V, DMX Intelligent drivers.

Touch Setting software and NFC Tool are compatible with MOONS' DALI, 0-10V, DMX Intelligent driver. They can be used to set the configuration parameters of MOONS' DALI, 0-10V, DMX Intelligent driver through NFC( Near Field Communication).

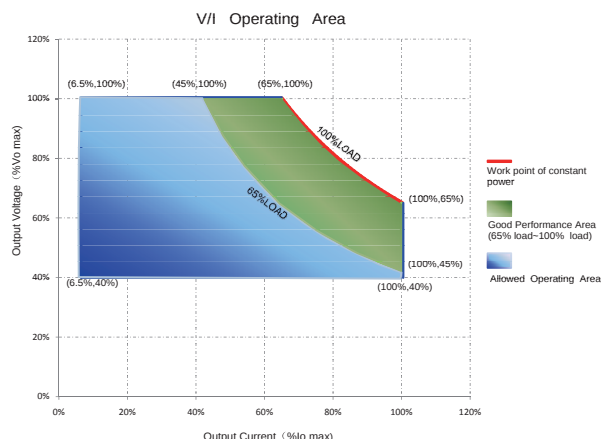


The main interface of Touch Setting Software

- Set driver's output current value.
- Set driver's Type.
- Set driver's dimming curve.
- Set driver's color temperature range.
- Set driver's other parameters, e.g. Max 0-10V Input Voltage.
- Set driver's minimum dimming level. [\(Learn more\)](#)



# Constant Current Mode\_Metal Case\_Constant Power\_Programmable Series



## Features

- Input voltage:176~305 Vac
- Built-in active PFC function: 0.98 Typ
- High efficiency: up to 94.0%
- Full Power at Wide Output Current Range (Constant Power)
- Settable output current value: 7%~100% rated current
- Optional dimming mode: Constant current, 0-10V, PWM ,Smart Midnight ClockDIM, Fixed ClockDIM
- Waterproof: IP67
- EMC Immunity: EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547, Surge: L-N: 10KV, L/N-FG:10KV
- 5-year warranty

## 75-Watt ME075MxxxAQ\_CP

| Designation    | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency | Certificate |
|----------------|---------------------------|---------------------|----------------------------|-----------------|------------|-------------|
| ME075M105AQ_CP | 700-1050                  | 70-1050             | 43-108                     | 173 x 67.5 x 37 | 230Vac     |             |
| ME075M150AQ_CP | 1000-1500                 | 100-1500            | 30-75                      |                 | 90.0%      |             |
| ME075M210AQ_CP | 1400-2100                 | 140-2100            | 22-54                      |                 | 89.0%      |             |
| ME075M300AQ_CP | 2000-3000                 | 200-3000            | 15-38                      |                 | 88.0%      |             |
| ME075M420AQ_CP | 2800-4200                 | 280-4200            | 11-27                      |                 | 87.0%      |             |

## 100-Watt ME100MxxxAQ\_CP

| Designation    | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency | Certificate |
|----------------|---------------------------|---------------------|----------------------------|-----------------|------------|-------------|
| ME100M105AQ_CP | 700-1050                  | 70-1050             | 57-143                     | 183 x 67.5 x 37 | 230Vac     |             |
| ME100M150AQ_CP | 1000-1500                 | 100-1500            | 40-100                     |                 | 90.0%      |             |
| ME100M210AQ_CP | 1400-2100                 | 140-2100            | 29-71                      |                 | 90.0%      |             |
| ME100M320AQ_CP | 2000-3200                 | 200-3200            | 19-50                      |                 | 89.0%      |             |
| ME100M480AQ_CP | 3000-4800                 | 300-4800            | 13-33                      |                 | 88.0%      |             |



## 150-Watt ME150HxxxAQ\_CP

| Designation    | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency | Certificate                                                                         |
|----------------|---------------------------|---------------------|----------------------------|-----------------|------------|-------------------------------------------------------------------------------------|
|                |                           |                     |                            |                 | 230Vac     |                                                                                     |
| ME150H080AQ_CP | 530-800                   | 53-800              | 113-283                    | 202 x 67.5 x 40 | 93.0%      |  |
| ME150H105AQ_CP | 700-1050                  | 70-1050             | 86-214                     |                 | 93.0%      |                                                                                     |
| ME150H150AQ_CP | 1000-1500                 | 100-1500            | 60-150                     |                 | 92.0%      |                                                                                     |
| ME150H210AQ_CP | 1400-2100                 | 140-2100            | 43-107                     |                 | 91.0%      |                                                                                     |
| ME150H300AQ_CP | 2000-3000                 | 200-3000            | 30-75                      |                 | 91.0%      |                                                                                     |
| ME150H420AQ_CP | 2800-4200                 | 280-4200            | 21-54                      |                 | 90.0%      |                                                                                     |
| ME150H600AQ_CP | 4000-6000                 | 400-6000            | 15-38                      |                 | 89.0%      |                                                                                     |

## 200-Watt ME200HxxxAQ\_CP

| Designation    | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency | Certificate                                                                          |
|----------------|---------------------------|---------------------|----------------------------|-----------------|------------|--------------------------------------------------------------------------------------|
|                |                           |                     |                            |                 | 230Vac     |                                                                                      |
| ME200H080AQ_CP | 530-800                   | 53-800              | 150-377                    | 221 x 67.5 x 40 | 94.0%      |  |
| ME200H105AQ_CP | 700-1050                  | 70-1050             | 114-286                    |                 | 94.0%      |                                                                                      |
| ME200H150AQ_CP | 1000-1500                 | 100-1500            | 80-200                     |                 | 94.0%      |                                                                                      |
| ME200H210AQ_CP | 1400-2100                 | 140-2100            | 57-143                     |                 | 93.5%      |                                                                                      |
| ME200H300AQ_CP | 2000-3000                 | 200-3000            | 40-100                     |                 | 93.0%      |                                                                                      |
| ME200H420AQ_CP | 2800-4200                 | 280-4200            | 29-71                      |                 | 92.5%      |                                                                                      |
| ME200H600AQ_CP | 4000-6000                 | 400-6000            | 20-50                      |                 | 92.0%      |                                                                                      |

## 250-Watt ME250HxxxAQ\_CP

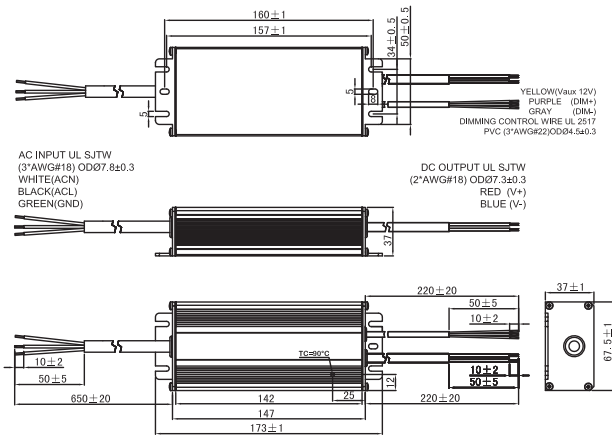
| Designation    | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)      | Efficiency | Certificate                                                                           |
|----------------|---------------------------|---------------------|----------------------------|----------------|------------|---------------------------------------------------------------------------------------|
|                |                           |                     |                            |                | 230Vac     |                                                                                       |
| ME250H080AQ_CP | 530-800                   | 53-800              | 189-472                    | 234x 74.5 x 40 | 94.0%      |  |
| ME250H105AQ_CP | 700-1050                  | 70-1050             | 143-357                    |                | 94.0%      |                                                                                       |
| ME250H150AQ_CP | 1000-1500                 | 100-1500            | 100-250                    |                | 94.0%      |                                                                                       |

### Note

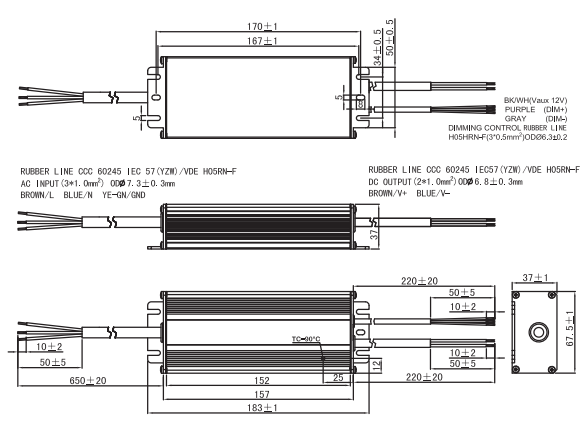
Programmable\_Constant Power\_ME-CP Series has two versions MExxxXxxxAQ\_CP/W and MExxxXxxxAQ\_CP/C  
 MExxxXxxxAQ\_CP/W using 3 wires dimming port ( programming port )  
 MExxxXxxxAQ\_CP/C using 3 pins water proof connector dimming port ( programming port )



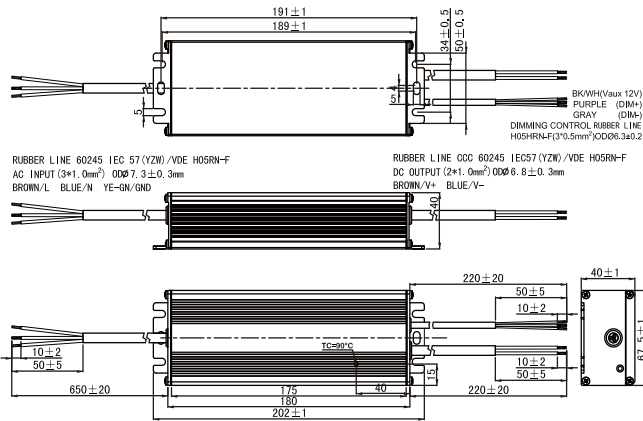
## 75-Watt ME075MxxxAQ\_CP



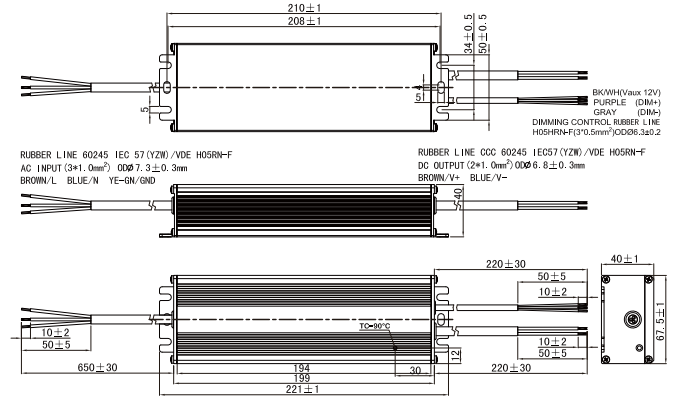
## 100-Watt ME100MxxxAQ\_CP



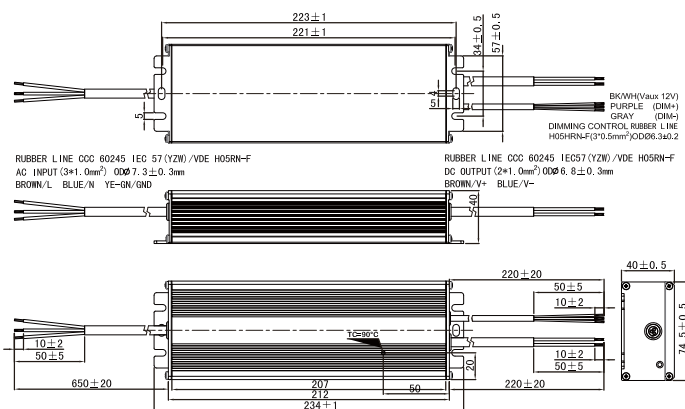
## 150-Watt ME150HxxxAQ\_CP



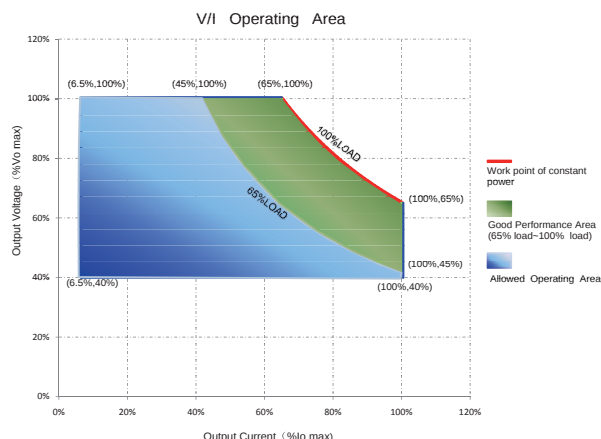
## 200-Watt ME200HxxxAQ\_CP



## 250-Watt ME250HxxxAQ\_CP



# Constant Current Mode\_Metal Case\_Constant Power\_Programmable Series



## Features

- Input voltage: 249~528 Vac
- Built-in active PFC function: 0.98 Typ
- High efficiency: up to 94.0%
- Full Power at Wide Output Current Range (Constant Power)
- Settable output current value: 7%~100% rated current
- Optional dimming mode: Constant current, 0-10V, PWM ,Smart Midnight ClockDIM, Fixed ClockDIM
- Waterproof: IP67
- EMC Immunity: EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547
- Type HL for use in a class I, Division 2 hazardous (Classified) location luminaires
- 5-year warranty

50-Watt MT050AxxxAQ\_CP Surge: L-N: 6KV, L/N-FG:6KV

| Designation    | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)     | Efficiency (typical) |        | Certificate                                                                           |
|----------------|---------------------------|---------------------|----------------------------|---------------|----------------------|--------|---------------------------------------------------------------------------------------|
|                |                           |                     |                            |               | 277Vac               | 480Vac |                                                                                       |
| MT050A053AQ_CP | 350-530                   | 35-530              | 57-143                     | 102 x 80 x 48 | 86.0%                | 88.0%  |  |
| MT050A080AQ_CP | 500-800                   | 50-800              | 37-100                     |               | 86.0%                | 88.0%  |                                                                                       |
| MT050A105AQ_CP | 700-1050                  | 70-1050             | 25-71                      |               | 85.0%                | 87.0%  |                                                                                       |
| MT050A135AQ_CP | 900-1350                  | 90-1350             | 22-56                      |               | 85.0%                | 87.0%  |                                                                                       |
| MT050A200AQ_CP | 1300-2000                 | 130-2000            | 15-38                      |               | 84.0%                | 86.0%  |                                                                                       |
| MT050A280AQ_CP | 1800-2800                 | 180-2800            | 11-27                      |               | 84.0%                | 86.0%  |                                                                                       |



## 100-Watt MT100AxxxAQ\_CP Surge: L-N: 6KV, L/N-FG:6KV

| Designation    | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                         |
|----------------|---------------------------|---------------------|----------------------------|-----------------|----------------------|--------|-------------------------------------------------------------------------------------|
|                |                           |                     |                            |                 | 277Vac               | 480Vac |                                                                                     |
| MT100A080AQ_CP | 530-800                   | 53-800              | 75-189                     | 221 x 67.5 x 37 | 89.0%                | 91.0%  |  |
| MT100A105AQ_CP | 700-1050                  | 70-1050             | 57-143                     |                 | 88.0%                | 90.0%  |                                                                                     |
| MT100A150AQ_CP | 1000-1500                 | 100-1500            | 40-100                     |                 | 88.0%                | 90.0%  |                                                                                     |
| MT100A210AQ_CP | 1400-2100                 | 140-2100            | 29-71                      |                 | 87.0%                | 89.0%  |                                                                                     |
| MT100A320AQ_CP | 2000-3200                 | 200-3200            | 19-50                      |                 | 87.0%                | 89.0%  |                                                                                     |
| MT100A480AQ_CP | 3000-4800                 | 300-4800            | 13-33                      |                 | 86.0%                | 88.0%  |                                                                                     |

## 150-Watt MT150AxxxAQ\_CP Surge: L-N: 6KV, L/N-FG:6KV

| Designation    | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                         |
|----------------|---------------------------|---------------------|----------------------------|-----------------|----------------------|--------|-------------------------------------------------------------------------------------|
|                |                           |                     |                            |                 | 277Vac               | 480Vac |                                                                                     |
| MT150A080AQ_CP | 530-800                   | 53-800              | 113-283                    | 245 x 67.5 x 37 | 89.0%                | 91.0%  |  |
| MT150A105AQ_CP | 700-1050                  | 70-1050             | 86-214                     |                 | 88.0%                | 90.0%  |                                                                                     |
| MT150A150AQ_CP | 1000-1500                 | 100-1500            | 60-150                     |                 | 88.0%                | 90.0%  |                                                                                     |
| MT150A210AQ_CP | 1400-2100                 | 140-2100            | 43-107                     |                 | 87.0%                | 89.0%  |                                                                                     |
| MT150A300AQ_CP | 2000-3000                 | 200-3000            | 30-75                      |                 | 87.0%                | 89.0%  |                                                                                     |
| MT150A420AQ_CP | 2800-4200                 | 280-4200            | 21-54                      |                 | 86.0%                | 88.0%  |                                                                                     |
| MT150A600AQ_CP | 4000-6000                 | 400-6000            | 15-38                      |                 | 85.0%                | 87.0%  |                                                                                     |

## 240-Watt MT240HxxxAQ\_CP Surge: L-N: 4KV, L/N-FG:6KV

| Designation     | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)     | Efficiency (typical) |        | Certificate                                                                           |
|-----------------|---------------------------|---------------------|----------------------------|---------------|----------------------|--------|---------------------------------------------------------------------------------------|
|                 |                           |                     |                            |               | 277Vac               | 480Vac |                                                                                       |
| MT240H105AQ_CP  | 700-1050                  | 70-1050             | 137-343                    | 223 x 90 x 45 | 90.5%                | 93.5%  |  |
| MT240H150AQ_CP  | 1000-1500                 | 100-1500            | 96-240                     |               | 90.5%                | 93.5%  |                                                                                       |
| MT240H210AQ_CP  | 1400-2100                 | 140-2100            | 68-171                     |               | 90.5%                | 93.5%  |                                                                                       |
| MT240H300AQ_CP  | 2000-3000                 | 200-3000            | 48-120                     |               | 90.5%                | 93.5%  |                                                                                       |
| MT240H420AQ_CP  | 2800-4200                 | 280-4200            | 34-86                      |               | 90.5%                | 93.5%  |                                                                                       |
| MT240H600AQ_CP  | 4000-6000                 | 400-6000            | 24-60                      |               | 90.0%                | 93.0%  |                                                                                       |
| MT240H800AQ_CP  | 6000-8000                 | 600-8000            | 18-40                      |               | 90.5%                | 93.5%  |                                                                                       |
| MT240H1000AQ_CP | 8000-10000                | 800-10000           | 14.4-30                    |               | 90.5%                | 93.5%  |                                                                                       |
| MT240H1200AQ_CP | 10000-12000               | 1000-12000          | 12-24                      |               | 90.5%                | 93.5%  |                                                                                       |

## 320-Watt MT320HxxxAQ\_CP Surge: L-N: 6KV, L/N-FG:10KV

| Designation     | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                           |
|-----------------|---------------------------|---------------------|----------------------------|-----------------|----------------------|--------|---------------------------------------------------------------------------------------|
|                 |                           |                     |                            |                 | 277Vac               | 480Vac |                                                                                       |
| MT320H105AQ_CP  | 700-1050                  | 70-1050             | 183-457                    | 251 x 90 x 44.5 | 91.0%                | 94.0%  |  |
| MT320H150AQ_CP  | 1000-1500                 | 100-1500            | 128-320                    |                 | 91.0%                | 94.0%  |                                                                                       |
| MT320H210AQ_CP  | 1400-2100                 | 140-2100            | 91-228                     |                 | 90.0%                | 93.0%  |                                                                                       |
| MT320H300AQ_CP  | 2000-3000                 | 200-3000            | 64-160                     |                 | 90.0%                | 93.0%  |                                                                                       |
| MT320H420AQ_CP  | 2800-4200                 | 280-4200            | 46-114                     |                 | 90.0%                | 93.0%  |                                                                                       |
| MT320H600AQ_CP  | 4000-6000                 | 400-6000            | 32-80                      |                 | 90.0%                | 93.0%  |                                                                                       |
| MT320H800AQ_CP  | 6000-8000                 | 600-8000            | 24-53.5                    |                 | 90.5%                | 93.5%  |                                                                                       |
| MT320H1050AQ_CP | 7900-10500                | 790-10500           | 18-40.5                    |                 | 90.5%                | 93.5%  |                                                                                       |
| MT320H1330AQ_CP | 10000-13300               | 100-13300           | 14-32                      |                 | 90.5%                | 93.5%  |                                                                                       |

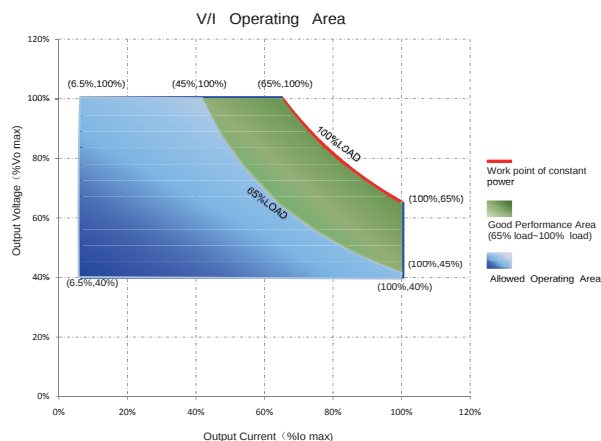
### Note

Programmable \_ Constant Power \_ ME-CP Series has two versions MUxxxXxxxAQ\_CP/W and MUxxxXxxxAQ\_CP/C  
MUxxxXxxxAQ\_CP/W using 3 wires dimming port ( programming port )  
MUxxxXxxxAQ\_CP/C using 3 pins water proof connector dimming port ( programming port )





# Constant Current Mode\_Metal Case\_Constant Power\_Programmable Series



## Features

- Input voltage: 90~305 Vac
- Built-in active PFC function: 0.98 Typ
- High efficiency: up to 93.0%
- Full Power at Wide Output Current Range (Constant Power)
- Settable output current value: 7%~100% rated current
- Optional dimming mode: Constant current, 0-10V, PWM ,Smart Midnight ClockDIM, Fixed ClockDIM
- Waterproof: IP67
- EMC Immunity: EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547
- Type HL for use in a class I, Division 2 hazardous (Classified) location luminaires
- 5-year warranty

## 50-Watt MU050HxxxAQ\_CP

Surge: L-N: 6KV, L/N-FG:6KV

| Designation    | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)     | Efficiency (typical) |        | Certificate |
|----------------|---------------------------|---------------------|----------------------------|---------------|----------------------|--------|-------------|
|                |                           |                     |                            |               | 110Vac               | 220Vac |             |
| MU050H053AQ_CP | 350-530                   | 35-530              | 57-143                     | 102 x 80 x 43 | 87.0%                | 88.0%  | In process  |
| MU050H080AQ_CP | 500-800                   | 50-800              | 38-100                     |               | 87.0%                | 88.0%  |             |
| MU050H105AQ_CP | 700-1050                  | 70-1050             | 29-71                      |               | 86.0%                | 87.0%  |             |
| MU050H135AQ_CP | 900-1350                  | 90-1350             | 22-56                      |               | 86.0%                | 87.0%  |             |
| MU050H200AQ_CP | 1300-2000                 | 130-2000            | 15-38                      |               | 85.5%                | 86.5%  |             |
| MU050H280AQ_CP | 1800-2800                 | 180-2800            | 11-27                      |               | 85.5%                | 86.5%  |             |

## 75-Watt MU075MxxxAQ\_CP

Surge: L-N: 10KV, L/N-FG:10KV

| Designation    | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate |
|----------------|---------------------------|---------------------|----------------------------|-----------------|----------------------|--------|-------------|
|                |                           |                     |                            |                 | 110Vac               | 230Vac |             |
| MU075M105AQ_CP | 700-1050                  | 70-1050             | 43-108                     | 173 x 67.5 x 37 | 88.0%                | 90.0%  |             |
| MU075M150AQ_CP | 1000-1500                 | 100-1500            | 30-75                      |                 | 87.0%                | 89.0%  |             |
| MU075M210AQ_CP | 1400-2100                 | 140-2100            | 22-54                      |                 | 86.0%                | 88.0%  |             |
| MU075M300AQ_CP | 2000-3000                 | 200-3000            | 15-38                      |                 | 86.0%                | 88.0%  |             |
| MU075M420AQ_CP | 2800-4200                 | 280-4200            | 11-27                      |                 | 85.0%                | 87.0%  |             |



### 100-Watt MU100MxxxAQ\_CP

Surge: L-N: 10KV, L/N-FG:10KV

| Designation    | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                         |
|----------------|---------------------------|---------------------|----------------------------|-----------------|----------------------|--------|-------------------------------------------------------------------------------------|
|                |                           |                     |                            |                 | 120Vac               | 230Vac |                                                                                     |
| MU100M080AQ_CP | 530-800                   | 53-800              | 75-189                     | 183 x 67.5 x 37 | 89.0%                | 91.0%  |  |
| MU100M105AQ_CP | 700-1050                  | 70-1050             | 57-143                     |                 | 88.0%                | 90.0%  |                                                                                     |
| MU100M150AQ_CP | 1000-1500                 | 100-1500            | 40-100                     |                 | 88.0%                | 90.0%  |                                                                                     |
| MU100M210AQ_CP | 1400-2100                 | 140-2100            | 29-71                      |                 | 87.0%                | 89.0%  |                                                                                     |
| MU100M320AQ_CP | 2000-3200                 | 200-3200            | 19-50                      |                 | 86.0%                | 88.0%  |                                                                                     |
| MU100M480AQ_CP | 3000-4800                 | 300-4800            | 13-33                      |                 | 85.0%                | 87.0%  |                                                                                     |

### 150-Watt MU150HxxxAQ\_CP

Surge: L-N: 10KV, L/N-FG:10KV

| Designation    | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                         |
|----------------|---------------------------|---------------------|----------------------------|-----------------|----------------------|--------|-------------------------------------------------------------------------------------|
|                |                           |                     |                            |                 | 120Vac               | 230Vac |                                                                                     |
| MU150H080AQ_CP | 530-800                   | 53-800              | 113-283                    | 221 x 67.5 x 40 | 90.0%                | 93.0%  |  |
| MU150H105AQ_CP | 700-1050                  | 70-1050             | 86-214                     |                 | 90.0%                | 93.0%  |                                                                                     |
| MU150H150AQ_CP | 1000-1500                 | 100-1500            | 60-150                     |                 | 90.0%                | 93.0%  |                                                                                     |
| MU150H210AQ_CP | 1400-2100                 | 140-2100            | 43-107                     |                 | 90.0%                | 93.0%  |                                                                                     |
| MU150H300AQ_CP | 2000-3000                 | 200-3000            | 30-75                      |                 | 90.0%                | 93.0%  |                                                                                     |
| MU150H420AQ_CP | 2800-4200                 | 280-4200            | 21-54                      |                 | 90.0%                | 93.0%  |                                                                                     |
| MU150H600AQ_CP | 4000-6000                 | 400-6000            | 15-38                      |                 | 89.5%                | 92.5%  |                                                                                     |

### 240-Watt MU240HxxxAQ\_CP

Surge: L-N: 4KV, L/N-FG:6KV

| Designation     | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                           |
|-----------------|---------------------------|---------------------|----------------------------|-----------------|----------------------|--------|---------------------------------------------------------------------------------------|
|                 |                           |                     |                            |                 | 120Vac               | 230Vac |                                                                                       |
| MU240H080AQ_CP  | 530-800                   | 53-800              | 181-453                    | 251 x 67.5 x 40 | 90.0%                | 93.0%  |  |
| MU240H105AQ_CP  | 700-1050                  | 70-1050             | 137-343                    |                 | 90.0%                | 93.0%  |                                                                                       |
| MU240H150AQ_CP  | 1000-1500                 | 100-1500            | 96-240                     |                 | 90.0%                | 93.0%  |                                                                                       |
| MU240H210AQ_CP  | 1400-2100                 | 140-2100            | 68-171                     |                 | 90.0%                | 93.0%  |                                                                                       |
| MU240H300AQ_CP  | 2000-3000                 | 200-3000            | 48-120                     |                 | 90.0%                | 93.0%  |                                                                                       |
| MU240H420AQ_CP  | 2800-4200                 | 280-4200            | 34-86                      |                 | 90.0%                | 93.0%  |                                                                                       |
| MU240H600AQ_CP  | 4000-6000                 | 400-6000            | 24-60                      |                 | 89.5%                | 92.5%  |                                                                                       |
| MU240H800AQ_CP  | 6000-8000                 | 600-8000            | 16-40                      |                 | 90.0%                | 93.0%  |                                                                                       |
| MU240H1000AQ_CP | 8000-10000                | 800-10000           | 12-30                      |                 | 90.0%                | 93.0%  |                                                                                       |
| MU240H1200AQ_CP | 10000-12000               | 1000-12000          | 12-24                      |                 | 90.0%                | 93.0%  |                                                                                       |

### 320-Watt MU320HxxxAQ\_CP

Surge: L-N: 4KV, L/N-FG:6KV

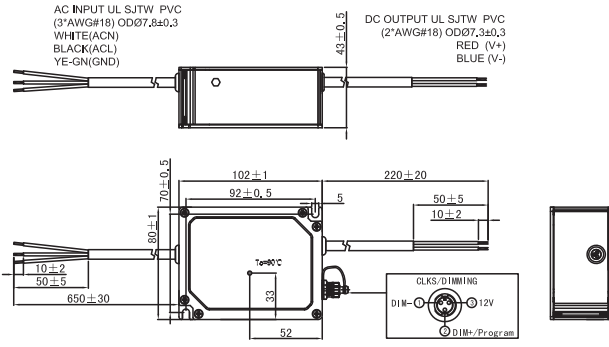
| Designation     | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                           |
|-----------------|---------------------------|---------------------|----------------------------|-----------------|----------------------|--------|---------------------------------------------------------------------------------------|
|                 |                           |                     |                            |                 | 120Vac               | 230Vac |                                                                                       |
| MU320H105AQ_CP  | 700-1050                  | 70-1050             | 183-457                    | 251 x 90 x 44.5 | 91.0%                | 94.0%  |  |
| MU320H150AQ_CP  | 1000-1500                 | 100-1500            | 128-320                    |                 | 91.0%                | 94.0%  |                                                                                       |
| MU320H210AQ_CP  | 1400-2100                 | 140-2100            | 91-228                     |                 | 90.0%                | 93.0%  |                                                                                       |
| MU320H300AQ_CP  | 2000-3000                 | 200-3000            | 64-160                     |                 | 90.0%                | 93.0%  |                                                                                       |
| MU320H420AQ_CP  | 2800-4200                 | 280-4200            | 46-114                     |                 | 90.0%                | 93.0%  |                                                                                       |
| MU320H600AQ_CP  | 4000-6000                 | 400-6000            | 32-80                      |                 | 90.0%                | 93.0%  |                                                                                       |
| MU320H800AQ_CP  | 6000-8000                 | 600-8000            | 24-53.5                    |                 | 90.0%                | 93.0%  |                                                                                       |
| MU320H1050AQ_CP | 7900-10500                | 790-10500           | 18-40.5                    |                 | 90.0%                | 93.0%  |                                                                                       |
| MU320H1330AQ_CP | 10000-13300               | 1000-13300          | 14-32                      |                 | 90.0%                | 93.0%  |                                                                                       |

#### Remarks

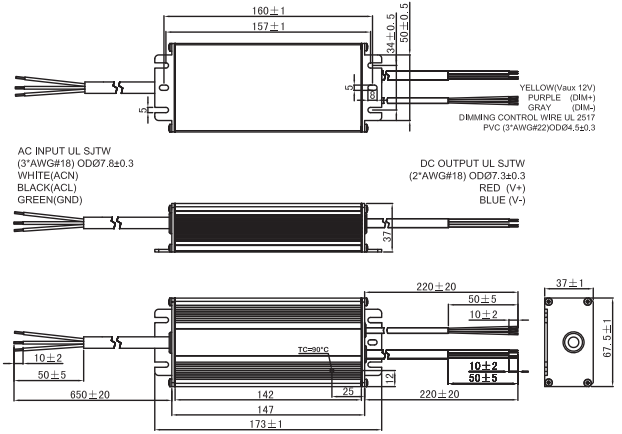
Programmable\_Constant Power\_ME-CP Series has two versions MUxxxXxxxAQ\_CP/W and MUxxxXxxxAQ\_CP/C  
 MUxxxXxxxAQ\_CP/W using 3 wires dimming port ( programming port )  
 MUxxxXxxxAQ\_CP/C using 3 pins water proof connector dimming port ( programming port )



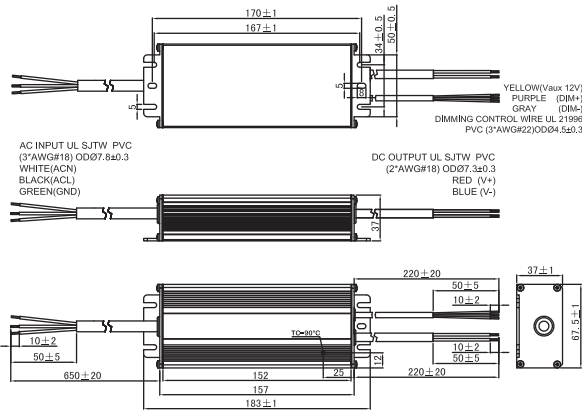
## 50-Watt MU050HxxxAQ\_CP



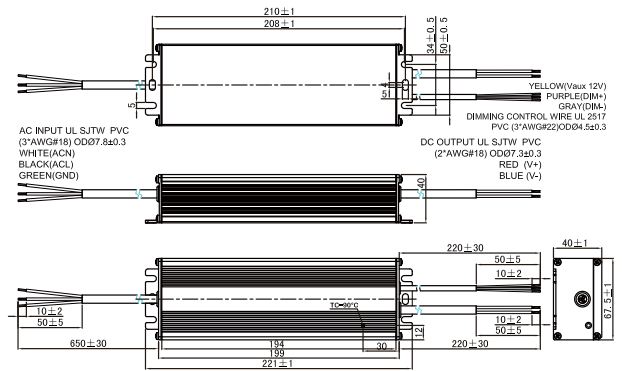
## 75-Watt MU075MxxxAQ\_CP



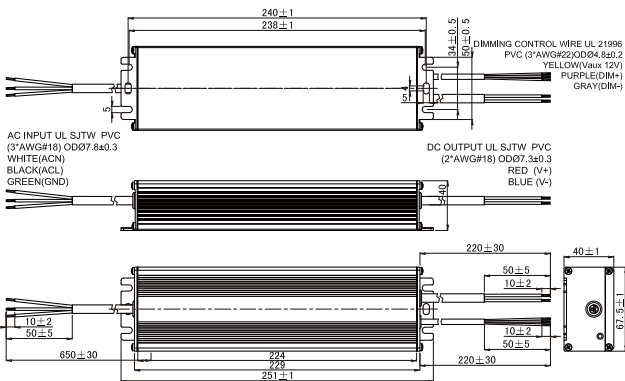
## 100-Watt MU100MxxxAQ\_CP



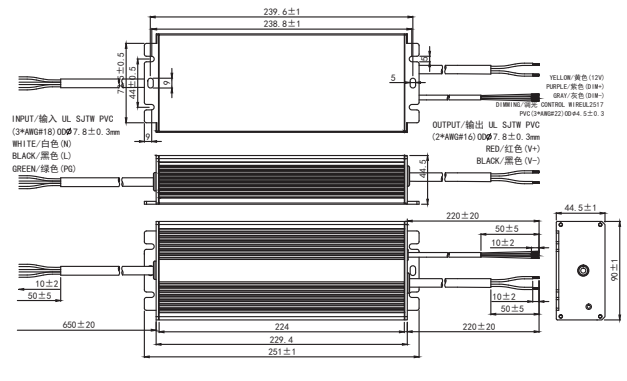
## 150-Watt MU150HxxxAQ\_CP



## 240-Watt MU240HxxxAQ\_CP



## 320-Watt MU320HxxxAQ\_CP



# Constant Current Mode\_Metal Case\_Constant Power\_Programmable Series



### Features

- Input voltage: 90-305Vac
- Built-in active PFC function: 0.98 Typ.
- High efficiency: up to 93.0%
- Full Power at Wide Output Current Range (Constant Power)
- Constant current/ 0-10V dimming/ clock dimming/ PWM dimming/Dim off
- IP67 design for indoor or outdoor installations
- High surge immunity: L-N: 4KV, L/N-FG:6KV
- Compliance to worldwide safety regulations for lighting
- Suitable for dry/damp locations
- Type HL for use in a class I, Division 2 hazardous (Classified) location luminaires
- 5-year warranty

### 260-Watt MU260HxxxAQ1\_CP

| Designation     | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) | Certificate |
|-----------------|---------------------------|---------------------|----------------------------|-----------------|----------------------|-------------|
|                 |                           |                     |                            |                 | 230Vac               |             |
| MU260H105AQ1_CP | 700-1050                  | 1050                | 371-149                    | 191 x 191x 76.5 | 93.0%                |             |
| MU260H150AQ1_CP | 1000-1500                 | 1500                | 260-104                    |                 | 93.0%                |             |
| MU260H210AQ1_CP | 1400-2100                 | 2100                | 186-74                     |                 | 93.0%                |             |
| MU260H300AQ1_CP | 2000-3000                 | 3000                | 130-52                     |                 | 93.0%                |             |
| MU260H420AQ1_CP | 2800-4200                 | 4200                | 93-37                      |                 | 93.0%                |             |
| MU260H600AQ1_CP | 4000-6000                 | 6000                | 65-26                      |                 | 93.0%                |             |
| MU260H720AQ1_CP | 4800-7200                 | 7200                | 54-22                      |                 | 93.0%                |             |

### 260-Watt MU260HxxxAQ\_CP

| Designation    | Rated Output Current (mA) | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) | Certificate |
|----------------|---------------------------|---------------------|----------------------------|-----------------|----------------------|-------------|
|                |                           |                     |                            |                 | 230Vac               |             |
| MU260H105AQ_CP | 700-1050                  | 1050                | 371-149                    | 190 x 190x 76.5 | 93.0%                |             |
| MU260H150AQ_CP | 1000-1500                 | 1500                | 260-104                    |                 | 93.0%                |             |
| MU260H210AQ_CP | 1400-2100                 | 2100                | 186-74                     |                 | 93.0%                |             |
| MU260H300AQ_CP | 2000-3000                 | 3000                | 130-52                     |                 | 93.0%                |             |
| MU260H420AQ_CP | 2800-4200                 | 4200                | 93-37                      |                 | 93.0%                |             |
| MU260H600AQ_CP | 4000-6000                 | 6000                | 65-26                      |                 | 93.0%                |             |
| MU260H720AQ_CP | 4800-7200                 | 7200                | 54-22                      |                 | 93.0%                |             |

AC INPUT UL STW  
PVC 105°C VW-1  
(3\*AWG#18)  
WHITE(ACN)  
BLACK(ACL)  
GREEN(GND)

50 ± 5  
10 ± 2

650 ± 20

M5

DIMMING CONTROL WIRE UL 2517  
PVC (3\*AWG#22)ODØ4.5±0.3  
YELLOW(Vaux12V)  
PURPLE(DIM+)  
GRAY(DIM-)

10 ± 2  
50 ± 5

180 ± 20

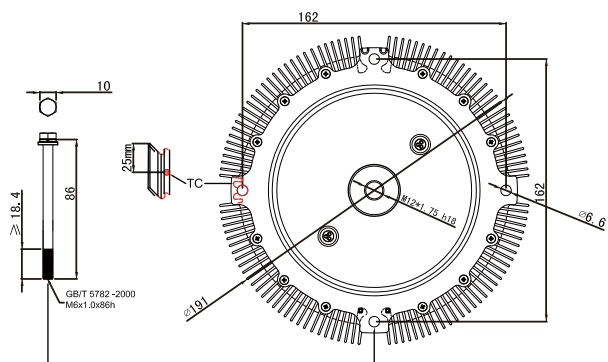
DC OUTPUT UL STW  
PVC 300V 105°C VW-1  
(2\*AWG#16) ODØ8.0±0.3  
RED (V+)  
BLACK (V-)

10 ± 2  
60 ± 10

220 ± 20

55

76.5



AC INPUT UL SJTW  
PVC 300V 105°C VW-1  
(3\*AWG#18) OD $\varnothing$ 7.8 $\pm$ 0.3  
WHITE(ACN)  
BLACK(ACL)  
GREEN(GND)

50 $\pm$ 5  
10 $\pm$ 2

650 $\pm$ 20

DIMMING CONTROL WIRE UL 2517  
PVC (3\*AWG#22)OD $\varnothing$ 4.5 $\pm$ 0.3  
YELLOW(Vaux12V)  
PURPLE(DIM+)  
GRAY(DIM-)

10 $\pm$ 2  
50 $\pm$ 5

180 $\pm$ 20

M5

DC OUTPUT UL SJTW  
PVC 300V 105°C VW-1  
(2\*AWG#16) OD $\varnothing$ 8.0 $\pm$ 0.3  
RED (V+)  
BLACK (V-)

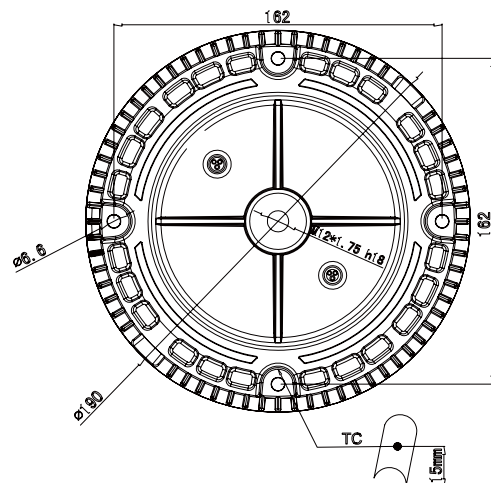
10 $\pm$ 2  
60 $\pm$ 10

220 $\pm$ 20

10

61.9

77.5



# Constant Current Mode\_Plastic Case Series



## Features

- Input voltage: 90-305VAC
- High efficiency: up to 91.0%
- Active PFC: 0.99 typical
- Surge protection: L-N: 2kv
- IP66 compliant
- Protections: OVP, OCP, SCP
- Constant Current/ 0-10V Dimming/ PWM Dimming/ Clock Dimming(CLKS)
- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp locations
- Type HL for use in a class I, Division 2 hazardous (Classified) location luminaires
- 5-year warranty

## 12-Watt PU012HxxxAQ

| Designation | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)    | Efficiency (typical) |        | Certificate |
|-------------|---------------------|----------------------------|--------------|----------------------|--------|-------------|
|             |                     |                            |              | 110Vac               | 220Vac |             |
| PU012H025AQ | 250                 | 24-48                      | 85 x 36 x 23 | 85.0%                | 86.0%  |             |
| PU012H030AQ | 300                 | 18-36                      |              | 84.0%                | 85.0%  |             |
| PU012H035AQ | 350                 | 18-36                      |              | 84.0%                | 85.0%  |             |
| PU012H045AQ | 450                 | 13-27                      |              | 83.0%                | 84.0%  |             |
| PU012H053AQ | 530                 | 11-23                      |              | 83.0%                | 84.0%  |             |
| PU012H070AQ | 700                 | 8-17                       |              | 82.0%                | 83.0%  |             |
| PU012H085AQ | 850                 | 7-14                       |              | 81.0%                | 82.0%  |             |
| PU012H100AQ | 1000                | 6-12                       |              | 80.0%                | 81.0%  |             |

## 25-Watt PU025HxxxAQ\_XXX

| Designation     | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)    | Efficiency (typical) |        | Certificate |
|-----------------|---------------------|----------------------------|--------------|----------------------|--------|-------------|
|                 |                     |                            |              | 110Vac               | 220Vac |             |
| PU025H035AQ_xxx | 350                 | 36-72                      | 80 x 78 x 27 | 88.0%                | 89.0%  |             |
| PU025H045AQ_xxx | 450                 | 28-55                      |              | 87.0%                | 88.0%  |             |
| PU025H053AQ_xxx | 530                 | 24-48                      |              | 86.0%                | 87.0%  |             |
| PU025H070AQ_xxx | 700                 | 18-36                      |              | 86.0%                | 87.0%  |             |
| PU025H105AQ_xxx | 1050                | 12-24                      |              | 85.0%                | 86.0%  |             |
| PU025H120AQ_xxx | 1200                | 10-21                      |              | 84.0%                | 85.0%  |             |
| PU025H140AQ_xxx | 1400                | 9-18                       |              | 83.0%                | 84.0%  |             |
| PU025H175AQ_xxx | 1750                | 7-14                       |              | 82.0%                | 83.0%  |             |
| PU025H210AQ_xxx | 2100                | 6-12                       |              | 81.0%                | 82.0%  |             |

### ◆ Remarks

xxx= Blank : Constant current  
 xxx = 0-10V : 0-10V / PWM dimming  
 xxx= CLKS: 0-10V , PWM Dimming, Constant Current, Clock Dimming



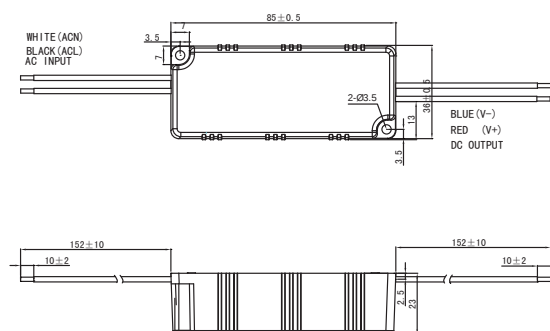
| Designation     | Output Current<br>(mA) | Output Voltage Range<br>(VDC) | Size (mm)    | Efficiency (typical) |        | Certificate                                                                                                                                                                                                                                                 |
|-----------------|------------------------|-------------------------------|--------------|----------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |                        |                               |              | 110Vac               | 220Vac |                                                                                                                                                                                                                                                             |
| PU040H035AQ_XXX | 350                    | 57-114                        | 95 x 70 x 32 | 90.0%                | 91.0%  |    |
| PU040H045AQ_XXX | 450                    | 44-89                         |              | 89.0%                | 90.0%  |                                                                                                                                                                                                                                                             |
| PU040H070AQ_XXX | 700                    | 28-54                         |              | 88.0%                | 89.0%  |                                                                                                                                                                                                                                                             |
| PU040H105AQ_XXX | 1050                   | 19-37                         |              | 87.0%                | 88.0%  |                                                                                                                                                                                                                                                             |
| PU040H140AQ_XXX | 1400                   | 14-29                         |              | 87.0%                | 88.0%  |                                                                                                                                                                                                                                                             |
| PU040H175AQ_XXX | 1750                   | 11-23                         |              | 87.0%                | 88.0%  |                                                                                                                                                                                                                                                             |
| PU040H210AQ_XXX | 2100                   | 9-19                          |              | 87.0%                | 88.0%  |                                                                                                                                                                                                                                                             |
| PU040H245AQ_XXX | 2450                   | 8-16                          |              | 86.0%                | 87.0%  |                                                                                                                                                                                                                                                             |
| PU040H280AQ_XXX | 2800                   | 7-14                          |              | 86.0%                | 87.0%  |                                                                                                                                                                                                                                                             |
| PU040H315AQ_XXX | 3150                   | 6-12                          |              | 85.0%                | 86.0%  |                                                                                                                                                                                                                                                             |

◆ Remarks

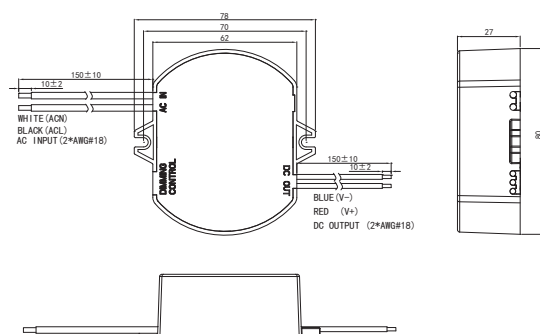
xxx= Blank : Constant current  
xxx = 0-10V : 0-10V / PWM dimming  
xxx= CLKS: 0-10V , PWM Dimming, Constant Current, Clock Dimming

### Mechanical Outline (unit: mm)

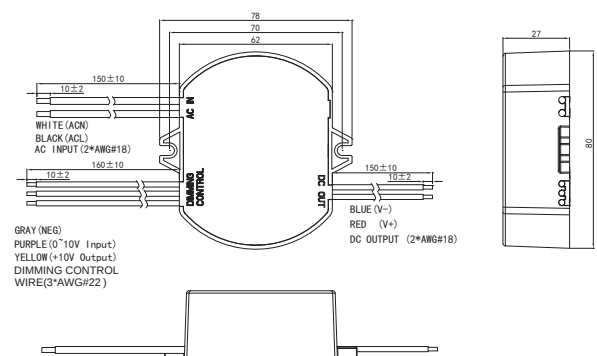
## 12-Watt PU012HxxxAQ



25-Watt PU025HxxxAQ\_XXX

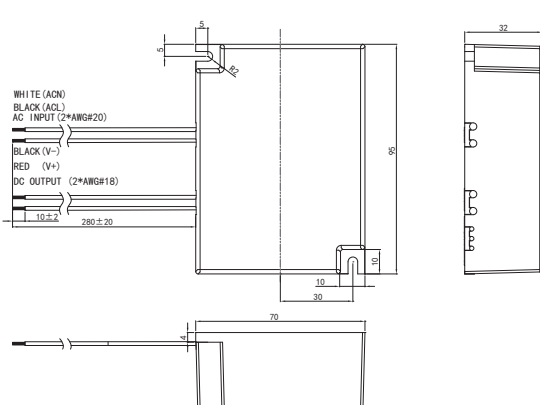


## Constant Current

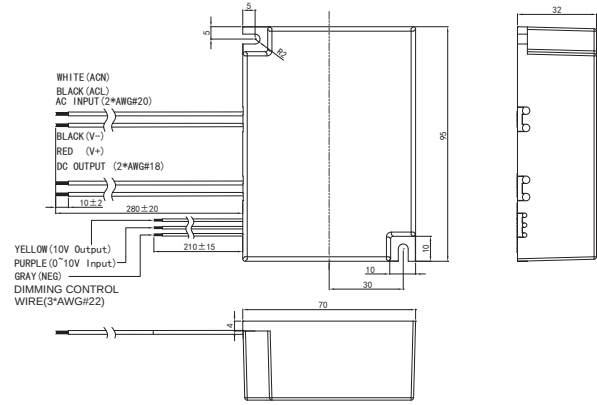


0-10V Dimming/ CLKS

40-Watt PU040HxxxAQ\_XXX



### Constant Current



0-10V Dimming/CLKS



# Constant Current Mode\_ Metal Case Series



## Features

- Input voltage: 90-305VAC
- High efficiency: up to 93.0%
- Active PFC: 0.99 typical
- High surge immunity: L-N:4KV, L/N-FG:6KV
- IP67 compliant
- Protections: OVP,OTP,SCP
- Constant Current / 0-10V Dimming / PWM Dimming/ Clock Dimming(CLKS)
- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp locations
- Type HL for use in a class I, Division 2 hazardous (Classified) location luminaires
- 5-year warranty

## 60-Watt MU060CxxxAQ\_XXX

| Designation     | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate |
|-----------------|---------------------|----------------------------|-----------------|----------------------|--------|-------------|
|                 |                     |                            |                 | 110Vac               | 220Vac |             |
| MU060C035AQ_xxx | 350                 | 85-170                     | 177 x 67.5 x 37 | 88.0%                | 91.0%  |             |
| MU060C045AQ_xxx | 450                 | 67-134                     |                 | 88.0%                | 91.0%  |             |
| MU060C053AQ_xxx | 530                 | 56-113                     |                 | 88.0%                | 91.0%  |             |
| MU060C070AQ_xxx | 700                 | 43-86                      |                 | 87.0%                | 90.0%  |             |
| MU060C085AQ_xxx | 850                 | 36-71                      |                 | 87.0%                | 90.0%  |             |
| MU060C105AQ_xxx | 1050                | 29-58                      |                 | 87.0%                | 90.0%  |             |
| MU060C120AQ_xxx | 1200                | 20-50                      |                 | 87.0%                | 90.0%  |             |
| MU060C140AQ_xxx | 1400                | 21-43                      |                 | 86.0%                | 89.0%  |             |
| MU060C175AQ_xxx | 1750                | 17-35                      |                 | 86.0%                | 89.0%  |             |
| MU060C210AQ_xxx | 2100                | 14-29                      |                 | 86.0%                | 89.0%  |             |
| MU060C245AQ_xxx | 2450                | 12-25                      |                 | 86.0%                | 89.0%  |             |
| MU060C280AQ_xxx | 2800                | 11-21                      |                 | 85.0%                | 88.0%  |             |
| MU060C300AQ_xxx | 3000                | 10-20                      |                 | 85.0%                | 88.0%  |             |
| MU060C315AQ_xxx | 3150                | 9-19                       |                 | 85.0%                | 88.0%  |             |
| MU060C350AQ_xxx | 3500                | 8-17                       |                 | 84.0%                | 87.0%  |             |
| MU060C375AQ_xxx | 3750                | 8-16                       |                 | 84.0%                | 87.0%  |             |
| MU060C420AQ_xxx | 4200                | 7-14                       |                 | 83.0%                | 86.0%  |             |
| MU060C500AQ_xxx | 5000                | 6-12                       |                 | 83.0%                | 86.0%  |             |

### ◆ Remarks

xxx = Blank : Constant Current  
 xxx = 0-10V : 0-10V / PWM Dimming  
 xxx = CLKS : 0-10V, PWM Dimming, Constant Current, Clock Dimming



## 75-Watt MU075CxxxAQ\_XXX

| Designation      | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                         |
|------------------|---------------------|----------------------------|-----------------|----------------------|--------|-------------------------------------------------------------------------------------|
|                  |                     |                            |                 | 110Vac               | 220Vac |                                                                                     |
| MU075C035AQ_ xxx | 350                 | 107-214                    | 177 x 67.5 x 37 | 88.0%                | 91.0%  |  |
| MU075C045AQ_ xxx | 450                 | 83-166                     |                 | 88.0%                | 91.0%  |                                                                                     |
| MU075C053AQ_ xxx | 530                 | 71-142                     |                 | 88.0%                | 91.0%  |                                                                                     |
| MU075C070AQ_ xxx | 700                 | 54-108                     |                 | 87.0%                | 90.0%  |                                                                                     |
| MU075C085AQ_ xxx | 850                 | 44-88                      |                 | 87.0%                | 90.0%  |                                                                                     |
| MU075C105AQ_ xxx | 1050                | 36-72                      |                 | 87.0%                | 90.0%  |                                                                                     |
| MU075C120AQ_ xxx | 1200                | 32-63                      |                 | 87.0%                | 90.0%  |                                                                                     |
| MU075C140AQ_ xxx | 1400                | 27-54                      |                 | 86.0%                | 89.0%  |                                                                                     |
| MU075C175AQ_ xxx | 1750                | 21-43                      |                 | 86.0%                | 89.0%  |                                                                                     |
| MU075C210AQ_ xxx | 2100                | 18-36                      |                 | 86.0%                | 89.0%  |                                                                                     |
| MU075C245AQ_ xxx | 2450                | 15-31                      |                 | 86.0%                | 89.0%  |                                                                                     |
| MU075C280AQ_ xxx | 2800                | 13-27                      |                 | 85.0%                | 88.0%  |                                                                                     |
| MU075C300AQ_ xxx | 3000                | 13-25                      |                 | 85.0%                | 88.0%  |                                                                                     |
| MU075C315AQ_ xxx | 3150                | 12-24                      |                 | 85.0%                | 88.0%  |                                                                                     |
| MU075C350AQ_ xxx | 3500                | 11-21                      |                 | 84.0%                | 87.0%  |                                                                                     |
| MU075C375AQ_ xxx | 3750                | 10-20                      |                 | 84.0%                | 87.0%  |                                                                                     |
| MU075C420AQ_ xxx | 4200                | 9-18                       |                 | 83.0%                | 86.0%  |                                                                                     |
| MU075C500AQ_ xxx | 5000                | 7-15                       |                 | 83.0%                | 86.0%  |                                                                                     |

## 100-Watt MU100CxxxAQ\_XXX

| Designation      | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                           |
|------------------|---------------------|----------------------------|-----------------|----------------------|--------|---------------------------------------------------------------------------------------|
|                  |                     |                            |                 | 110Vac               | 220Vac |                                                                                       |
| MU100C035AQ_ xxx | 350                 | 143-286                    | 221 x 67.5 x 37 | 90.0%                | 92.0%  |  |
| MU100C045AQ_ xxx | 450                 | 111-222                    |                 | 90.0%                | 92.0%  |                                                                                       |
| MU100C053AQ_ xxx | 530                 | 94-189                     |                 | 90.0%                | 92.0%  |                                                                                       |
| MU100C070AQ_ xxx | 700                 | 71-143                     |                 | 89.0%                | 91.0%  |                                                                                       |
| MU100C085AQ_ xxx | 850                 | 59-118                     |                 | 89.0%                | 91.0%  |                                                                                       |
| MU100C105AQ_ xxx | 1050                | 47-95                      |                 | 89.0%                | 91.0%  |                                                                                       |
| MU100C140AQ_ xxx | 1400                | 35-71                      |                 | 89.0%                | 91.0%  |                                                                                       |
| MU100C175AQ_ xxx | 1750                | 28-57                      |                 | 89.0%                | 91.0%  |                                                                                       |
| MU100C210AQ_ xxx | 2100                | 24-48                      |                 | 89.0%                | 91.0%  |                                                                                       |
| MU100C245AQ_ xxx | 2450                | 20-41                      |                 | 88.0%                | 90.0%  |                                                                                       |
| MU100C280AQ_ xxx | 2800                | 18-36                      |                 | 88.0%                | 90.0%  |                                                                                       |
| MU100C315AQ_ xxx | 3150                | 16-32                      |                 | 88.0%                | 90.0%  |                                                                                       |
| MU100C357AQ_ xxx | 3570                | 14-28                      |                 | 88.0%                | 90.0%  |                                                                                       |
| MU100C420AQ_ xxx | 4200                | 12-24                      |                 | 88.0%                | 90.0%  |                                                                                       |

## 120-Watt MU120CxxxAQ\_XXX

| Designation      | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                           |
|------------------|---------------------|----------------------------|-----------------|----------------------|--------|---------------------------------------------------------------------------------------|
|                  |                     |                            |                 | 110Vac               | 220Vac |                                                                                       |
| MU120C035AQ_ xxx | 350                 | 171- 343                   | 221 x 67.5 x 37 | 90.0%                | 92.0%  |  |
| MU120C045AQ_ xxx | 450                 | 133-267                    |                 | 90.0%                | 92.0%  |                                                                                       |
| MU120C053AQ_ xxx | 530                 | 113- 226                   |                 | 90.0%                | 92.0%  |                                                                                       |
| MU120C070AQ_ xxx | 700                 | 85- 170                    |                 | 89.0%                | 91.0%  |                                                                                       |
| MU120C085AQ_ xxx | 850                 | 70-141                     |                 | 89.0%                | 91.0%  |                                                                                       |
| MU120C105AQ_ xxx | 1050                | 57- 114                    |                 | 89.0%                | 91.0%  |                                                                                       |
| MU120C140AQ_ xxx | 1400                | 43-86                      |                 | 89.0%                | 91.0%  |                                                                                       |
| MU120C175AQ_ xxx | 1750                | 34-69                      |                 | 89.0%                | 91.0%  |                                                                                       |
| MU120C210AQ_ xxx | 2100                | 28-57                      |                 | 89.0%                | 91.0%  |                                                                                       |
| MU120C245AQ_ xxx | 2450                | 24-49                      |                 | 88.0%                | 90.0%  |                                                                                       |
| MU120C280AQ_ xxx | 2800                | 21-43                      |                 | 88.0%                | 90.0%  |                                                                                       |
| MU120C315AQ_ xxx | 3150                | 19- 38                     |                 | 88.0%                | 90.0%  |                                                                                       |
| MU120C350AQ_ xxx | 3500                | 17-34                      |                 | 88.0%                | 90.0%  |                                                                                       |
| MU120C420AQ_ xxx | 4200                | 14-29                      |                 | 88.0%                | 90.0%  |                                                                                       |
| MU120C500AQ_ xxx | 5000                | 12-24                      |                 | 87.0%                | 89.0%  |                                                                                       |

### ◆ Remarks

xxx = Blank : Constant Current  
xxx = 0-10V : 0-10V / PWM Dimming  
xxx = CLKS : 0-10V, PWM Dimming, Constant Current, Clock Dimming  
xxx = STB : PWM Dimming



## 150-Watt MU150HxxxAQ\_ xxx ( Class II optional )

| Designation      | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                         |
|------------------|---------------------|----------------------------|-----------------|----------------------|--------|-------------------------------------------------------------------------------------|
|                  |                     |                            |                 | 110Vac               | 220Vac |                                                                                     |
| MU150H035AQ_ xxx | 350                 | 214-428                    | 221 x 67.5 x 40 | 90.0%                | 93.0%  |  |
| MU150H045AQ_ xxx | 450                 | 167-333                    |                 | 90.0%                | 93.0%  |                                                                                     |
| MU150H053AQ_ xxx | 530                 | 142-283                    |                 | 90.0%                | 93.0%  |                                                                                     |
| MU150H070AQ_ xxx | 700                 | 107-214                    |                 | 90.0%                | 93.0%  |                                                                                     |
| MU150H085AQ_ xxx | 850                 | 88-176                     |                 | 90.0%                | 93.0%  |                                                                                     |
| MU150H105AQ_ xxx | 1050                | 71-142                     |                 | 89.0%                | 92.0%  |                                                                                     |
| MU150H120AQ_ xxx | 1200                | 63-125                     |                 | 89.0%                | 92.0%  |                                                                                     |
| MU150H140AQ_ xxx | 1400                | 54-107                     |                 | 89.0%                | 92.0%  |                                                                                     |
| MU150H150AQ_ xxx | 1500                | 50-100                     |                 | 89.0%                | 92.0%  |                                                                                     |
| MU150H175AQ_ xxx | 1750                | 43-85                      |                 | 89.0%                | 92.0%  |                                                                                     |
| MU150H185AQ_ xxx | 1850                | 41-81                      |                 | 89.0%                | 92.0%  |                                                                                     |
| MU150H210AQ_ xxx | 2100                | 36-71                      |                 | 89.0%                | 92.0%  |                                                                                     |
| MU150H245AQ_ xxx | 2450                | 31-61                      |                 | 89.0%                | 92.0%  |                                                                                     |
| MU150H280AQ_ xxx | 2800                | 27-53                      |                 | 89.0%                | 92.0%  |                                                                                     |
| MU150H300AQ_ xxx | 3000                | 25-50                      |                 | 88.0%                | 91.0%  |                                                                                     |
| MU150H315AQ_ xxx | 3150                | 24-48                      |                 | 88.0%                | 91.0%  |                                                                                     |
| MU150H350AQ_ xxx | 3500                | 21-42                      |                 | 88.0%                | 91.0%  |                                                                                     |
| MU150H420AQ_ xxx | 4200                | 18-36                      |                 | 88.0%                | 91.0%  |                                                                                     |
| MU150H500AQ_ xxx | 5000                | 15-30                      |                 | 88.0%                | 91.0%  |                                                                                     |

## 200-Watt MU200HxxxAQ\_ XXX ( Class II optional )

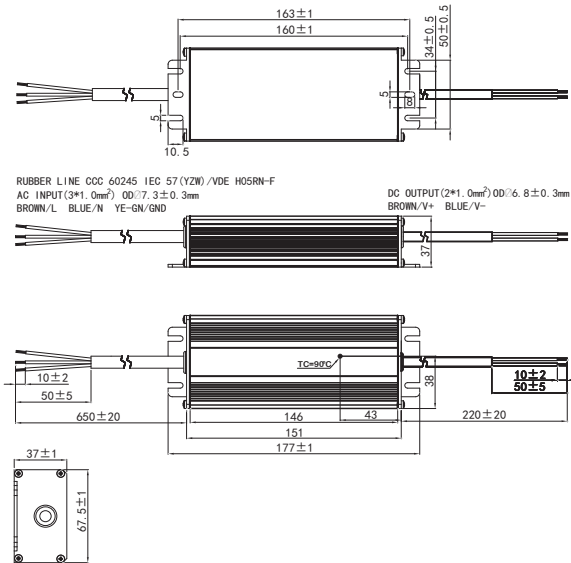
| Designation      | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                           |
|------------------|---------------------|----------------------------|-----------------|----------------------|--------|---------------------------------------------------------------------------------------|
|                  |                     |                            |                 | 110Vac               | 220Vac |                                                                                       |
| MU200H035AQ_ xxx | 350                 | 286-571                    | 251 x 67.5 x 40 | 90.5%                | 93.5%  |  |
| MU200H045AQ_ xxx | 450                 | 222-444                    |                 | 90.5%                | 93.5%  |                                                                                       |
| MU200H053AQ_ xxx | 530                 | 189-377                    |                 | 90.5%                | 93.5%  |                                                                                       |
| MU200H070AQ_ xxx | 700                 | 143-285                    |                 | 90.5%                | 93.5%  |                                                                                       |
| MU200H085AQ_ xxx | 850                 | 118-235                    |                 | 90.0%                | 93.0%  |                                                                                       |
| MU200H105AQ_ xxx | 1050                | 95-190                     |                 | 90.0%                | 93.0%  |                                                                                       |
| MU200H120AQ_ xxx | 1200                | 83-166                     |                 | 90.0%                | 93.0%  |                                                                                       |
| MU200H140AQ_ xxx | 1400                | 71-142                     |                 | 90.0%                | 93.0%  |                                                                                       |
| MU200H150AQ_ xxx | 1500                | 67-133                     |                 | 90.0%                | 92.0%  |                                                                                       |
| MU200H175AQ_ xxx | 1750                | 57-114                     |                 | 89.0%                | 92.0%  |                                                                                       |
| MU200H210AQ_ xxx | 2100                | 48-95                      |                 | 89.0%                | 92.0%  |                                                                                       |
| MU200H245AQ_ xxx | 2450                | 41-81                      |                 | 89.0%                | 92.0%  |                                                                                       |
| MU200H280AQ_ xxx | 2800                | 36-71                      |                 | 89.0%                | 92.0%  |                                                                                       |
| MU200H300AQ_ xxx | 3000                | 34-67                      |                 | 89.0%                | 92.0%  |                                                                                       |
| MU200H315AQ_ xxx | 3150                | 32-63                      |                 | 88.5%                | 91.5%  |                                                                                       |
| MU200H350AQ_ xxx | 3500                | 29-57                      |                 | 88.5%                | 91.5%  |                                                                                       |
| MU200H420AQ_ xxx | 4200                | 24-48                      |                 | 88.5%                | 91.5%  |                                                                                       |
| MU200H490AQ_ xxx | 4900                | 20-40                      |                 | 88.0%                | 91.0%  |                                                                                       |
| MU200H560AQ_ xxx | 5600                | 18-36                      |                 | 88.0%                | 91.0%  |                                                                                       |
| MU200H600AQ_ xxx | 6000                | 17-33                      |                 | 88.0%                | 91.0%  |                                                                                       |

### ◆ Remarks

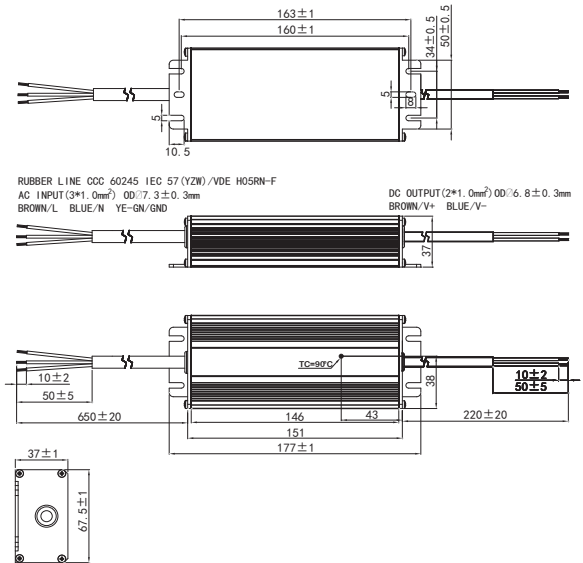
xxx = Blank : Constant Current  
xxx = 0-10V : 0-10V / PWM dimming  
xxx = CLKS : 0-10V, PWM dimming, Constant Current, Clock Dimming  
xxx = STB : PWM Dimming



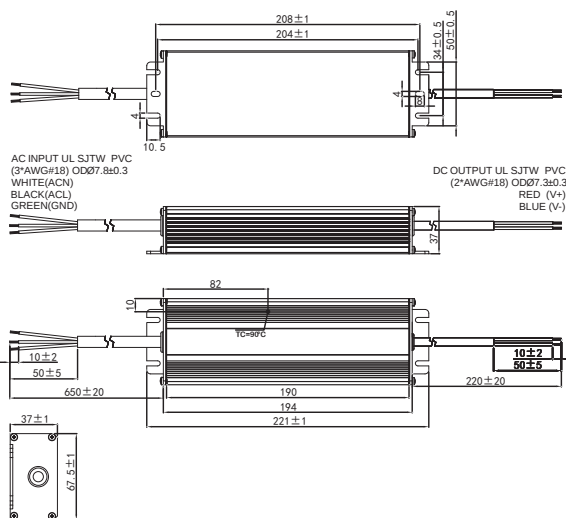
## 60-Watt MU060CxxxAQ\_XXX



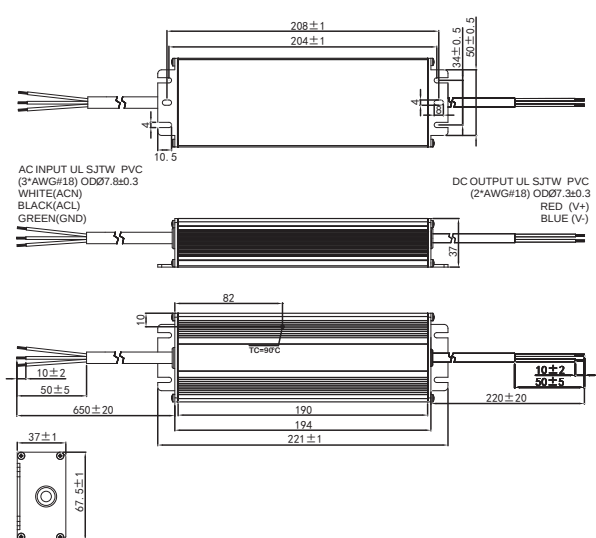
## 75-Watt MU075CxxxAQ\_XXX



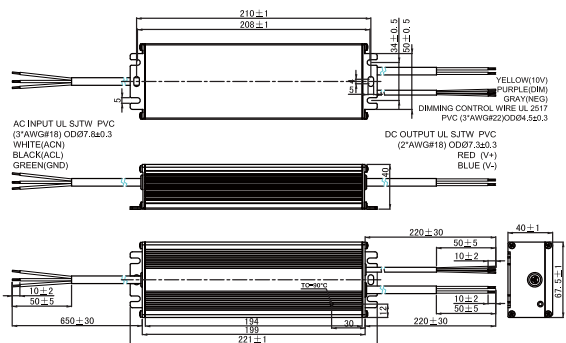
## 100-Watt MU100CxxxAQ\_XXX



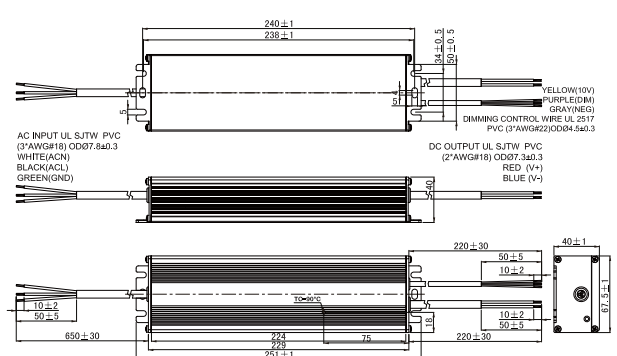
## 120-Watt MU120CxxxAQ\_XXX



## 150-Watt MU150HxxxAQ\_XXX ( Class II optional )



## 200-Watt MU200HxxxAQ\_XXX ( Class II optional )



# Constant Voltage Mode \_ Plastic Case Series



## Features

- Input voltage range: 90–305VAC
- High efficiency: up to 87.0%
- Active PFC: 0.97 typical
- Surge protection
- IP66 compliant
- Protections: OVP,OCP,SCP
- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp locations
- Type HL for use in a class I, Division 2 hazardous (Classified) location luminaires
- 5-year warranty

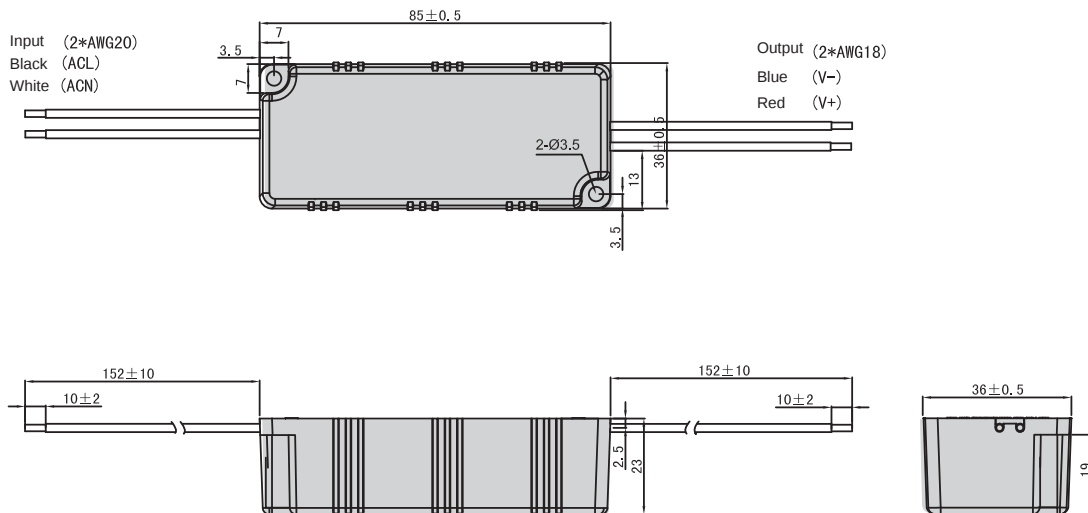
## 12-Watt PU012AxxxAP Surge:L-N:1KV

| Designation | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)    | Efficiency (typical) |        | Certificate |
|-------------|---------------------|----------------------------|--------------|----------------------|--------|-------------|
|             |                     |                            |              | 110VAC               | 220VAC |             |
| PU012A048AP | 250                 | 48                         | 85 x 36 x 23 | 85.0%                | 85.0%  |             |
| PU012A036AP | 350                 | 36                         |              | 84.0%                | 84.0%  |             |
| PU012A024AP | 500                 | 24                         |              | 83.0%                | 83.0%  |             |
| PU012A016AP | 800                 | 16                         |              | 82.0%                | 82.0%  |             |
| PU012A012AP | 1000                | 12                         |              | 80.0%                | 80.0%  |             |

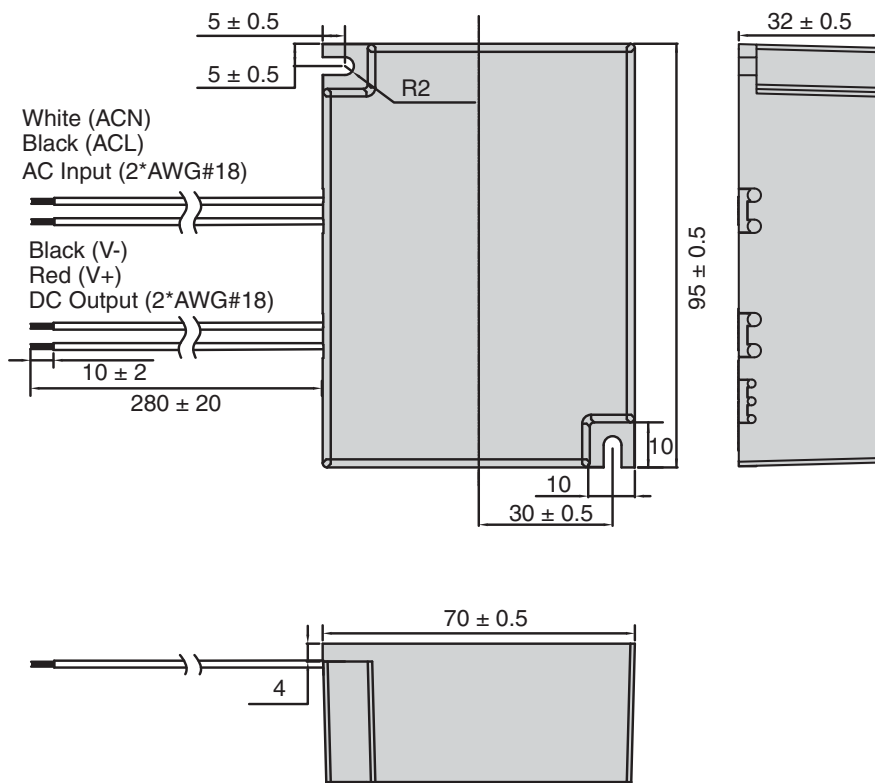
## 40-Watt PU040AxxxAP Surge:L-N:2KV

| Designation | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)    | Efficiency (typical) |        | Certificate |
|-------------|---------------------|----------------------------|--------------|----------------------|--------|-------------|
|             |                     |                            |              | 110VAC               | 220VAC |             |
| PU040A048AP | 830                 | 48                         | 95 x 70 x 32 | 86.0%                | 87.0%  |             |
| PU040A036AP | 1100                | 36                         |              | 86.0%                | 87.0%  |             |
| PU040A024AP | 1670                | 24                         |              | 85.0%                | 86.0%  |             |
| PU040A018AP | 2220                | 18                         |              | 84.0%                | 85.0%  |             |
| PU040A012AP | 3330                | 12                         |              | 83.0%                | 84.0%  |             |
| PU040A009AP | 4450                | 9                          |              | 82.0%                | 83.0%  |             |

## 12-Watt PU012AxxxAP



## 40-Watt PU040AxxxAP



# Constant Voltage Mode\_ Metal Case Series



## Features

- Input voltage range: 90–305VAC
- High efficiency: up to 93.0%
- Active PFC: 0.99 typical
- Surge protection
- IP67 compliant
- Protections: OVP,OCP,SCP,OTP
- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp locations
- Type HL for use in a class I, Division 2 hazardous (Classified) location luminaires
- 5-year warranty

## 60-Watt MU060CxxxAP

Surge: L-N: 4KV, L/N-FG:6KV

| Designation | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate |
|-------------|---------------------|----------------------------|-----------------|----------------------|--------|-------------|
|             |                     |                            |                 | 110VAC               | 220VAC |             |
| MU060C012AP | 5000                | 12                         | 190 x 67.5 x 37 | 87.0%                | 89.0%  |             |
| MU060C024AP | 2500                | 24                         |                 | 88.0%                | 90.0%  |             |
| MU060C036AP | 1670                | 36                         |                 | 89.0%                | 91.0%  |             |
| MU060C042AP | 1430                | 42                         |                 | 89.0%                | 91.0%  |             |
| MU060C048AP | 1250                | 48                         |                 | 89.0%                | 91.0%  |             |
| MU060C054AP | 1110                | 54                         |                 | 89.0%                | 91.0%  |             |
| MU060C081AP | 740                 | 81                         |                 | 89.0%                | 91.0%  |             |
| MU060C105AP | 570                 | 105                        |                 | 89.0%                | 91.0%  |             |

## 75-Watt MU075CxxxAP

Surge: L-N: 4KV, L/N-FG:6KV

| Designation | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate |
|-------------|---------------------|----------------------------|-----------------|----------------------|--------|-------------|
|             |                     |                            |                 | 110VAC               | 220VAC |             |
| MU075C012AP | 6250                | 12                         | 190 x 67.5 x 37 | 88.0%                | 90.0%  |             |
| MU075C024AP | 3130                | 24                         |                 | 90.0%                | 92.0%  |             |
| MU075C036AP | 2080                | 36                         |                 | 90.0%                | 92.0%  |             |
| MU075C042AP | 1790                | 42                         |                 | 90.0%                | 92.0%  |             |
| MU075C048AP | 1560                | 48                         |                 | 90.0%                | 92.0%  |             |
| MU075C054AP | 1390                | 54                         |                 | 90.0%                | 92.0%  |             |
| MU075C081AP | 930                 | 81                         |                 | 90.0%                | 92.0%  |             |
| MU075C105AP | 710                 | 105                        |                 | 90.0%                | 92.0%  |             |



## 100-Watt MU100CxxxAP

Surge: L-N: 4KV, L/N-FG:6KV

| Designation | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                         |
|-------------|---------------------|----------------------------|-----------------|----------------------|--------|-------------------------------------------------------------------------------------|
|             |                     |                            |                 | 110VAC               | 220VAC |                                                                                     |
| MU100C012AP | 8330                | 12                         | 221 x 67.5 x 37 | 89.0%                | 91.0%  |  |
| MU100C024AP | 4170                | 24                         |                 | 90.0%                | 92.0%  |                                                                                     |
| MU100C036AP | 2770                | 36                         |                 | 90.0%                | 92.0%  |                                                                                     |
| MU100C042AP | 2380                | 42                         |                 | 90.0%                | 92.0%  |                                                                                     |
| MU100C048AP | 2080                | 48                         |                 | 90.0%                | 92.0%  |                                                                                     |
| MU100C054AP | 1850                | 54                         |                 | 90.0%                | 92.0%  |                                                                                     |
| MU100C081AP | 1230                | 81                         |                 | 91.0%                | 93.0%  |                                                                                     |
| MU100C105AP | 950                 | 105                        |                 | 91.0%                | 93.0%  |                                                                                     |

## 120-Watt MU120CxxxAP

Surge: L-N: 4KV, L/N-FG:6KV

| Designation | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)       | Efficiency (typical) |        | Certificate                                                                         |
|-------------|---------------------|----------------------------|-----------------|----------------------|--------|-------------------------------------------------------------------------------------|
|             |                     |                            |                 | 110VAC               | 220VAC |                                                                                     |
| MU120C012AP | 100000              | 12                         | 221 x 67.5 x 37 | 87.0%                | 89.0%  |  |
| MU120C024AP | 5000                | 24                         |                 | 87.0%                | 89.0%  |                                                                                     |
| MU120C028AP | 4290                | 28                         |                 | 88.0%                | 90.0%  |                                                                                     |
| MU120C036AP | 3330                | 36                         |                 | 88.0%                | 90.0%  |                                                                                     |
| MU120C042AP | 2860                | 42                         |                 | 88.0%                | 90.0%  |                                                                                     |
| MU120C048AP | 2500                | 48                         |                 | 88.0%                | 90.0%  |                                                                                     |
| MU120C054AP | 2220                | 54                         |                 | 88.0%                | 90.0%  |                                                                                     |
| MU120C081AP | 1480                | 81                         |                 | 89.0%                | 91.0%  |                                                                                     |
| MU120C105AP | 1140                | 105                        |                 | 89.0%                | 91.0%  |                                                                                     |

## 150-Watt MU150AxxxAP

Surge: L-N: 2KV, L/N-FG:4KV

| Designation | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)     | Efficiency (typical) |        | Certificate                                                                           |
|-------------|---------------------|----------------------------|---------------|----------------------|--------|---------------------------------------------------------------------------------------|
|             |                     |                            |               | 110VAC               | 220VAC |                                                                                       |
| MU150A012AP | 12500               | 12                         | 205 x 86 x 43 | 90.0%                | 92.0%  |  |
| MU150A024AP | 6250                | 24                         |               | 91.0%                | 93.0%  |                                                                                       |
| MU150A036AP | 4170                | 36                         |               | 91.0%                | 93.0%  |                                                                                       |
| MU150A042AP | 3570                | 42                         |               | 91.0%                | 93.0%  |                                                                                       |
| MU150A048AP | 3130                | 48                         |               | 91.0%                | 93.0%  |                                                                                       |
| MU150A054AP | 2780                | 54                         |               | 91.0%                | 93.0%  |                                                                                       |
| MU150A081AP | 1850                | 81                         |               | 91.0%                | 93.0%  |                                                                                       |
| MU150A105AP | 1420                | 105                        |               | 91.0%                | 93.0%  |                                                                                       |

## 200-Watt MU200AxxxAP

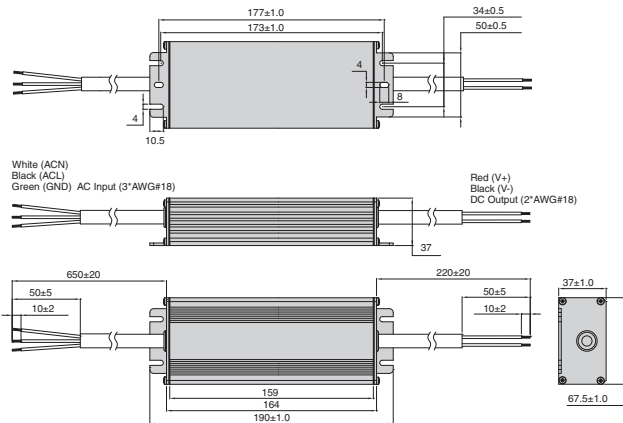
Surge: L-N: 2KV, L/N-FG:4KV

| Designation | Output Current (mA) | Output Voltage Range (VDC) | Size (mm)     | Efficiency (typical) |        | Certificate                                                                           |
|-------------|---------------------|----------------------------|---------------|----------------------|--------|---------------------------------------------------------------------------------------|
|             |                     |                            |               | 110VAC               | 220VAC |                                                                                       |
| MU200A012AP | 16670               | 12                         | 223 x 95 x 46 | 90.0%                | 92.0%  |  |
| MU200A024AP | 8330                | 24                         |               | 90.0%                | 92.0%  |                                                                                       |
| MU200A036AP | 5560                | 36                         |               | 90.5%                | 92.5%  |                                                                                       |
| MU200A042AP | 4760                | 42                         |               | 90.5%                | 92.5%  |                                                                                       |
| MU200A048AP | 4170                | 48                         |               | 90.5%                | 92.5%  |                                                                                       |
| MU200A050AP | 4000                | 50                         |               | 90.5%                | 92.5%  |                                                                                       |
| MU200A052AP | 3840                | 52                         |               | 91.0%                | 93.0%  |                                                                                       |
| MU200A054AP | 3700                | 54                         |               | 91.0%                | 93.0%  |                                                                                       |
| MU200A081AP | 2470                | 81                         |               | 91.0%                | 93.0%  |                                                                                       |
| MU200A105AP | 1900                | 105                        |               | 91.0%                | 93.0%  |                                                                                       |

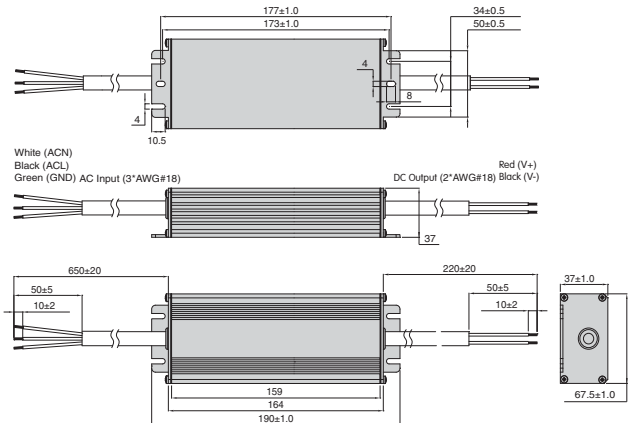


## Mechanical Outline (unit: mm)

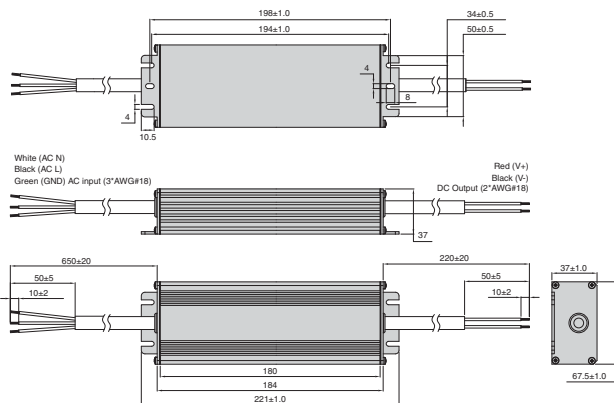
### 60-Watt MU060CxxxAP



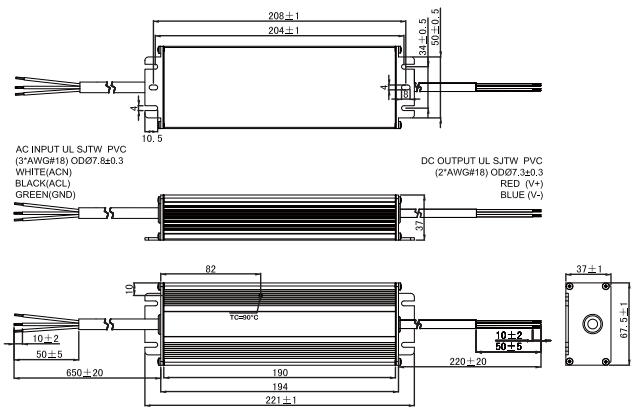
### 75-Watt MU075CxxxAP



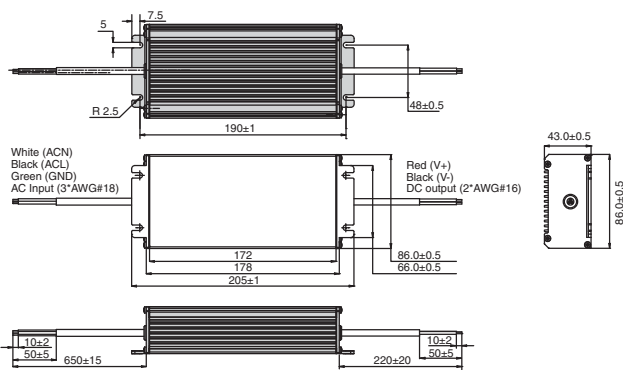
### 100-Watt MU100CxxxAP



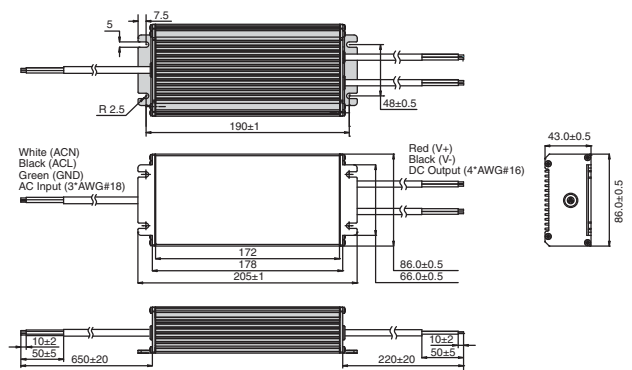
### 120-Watt MU120CxxxAP



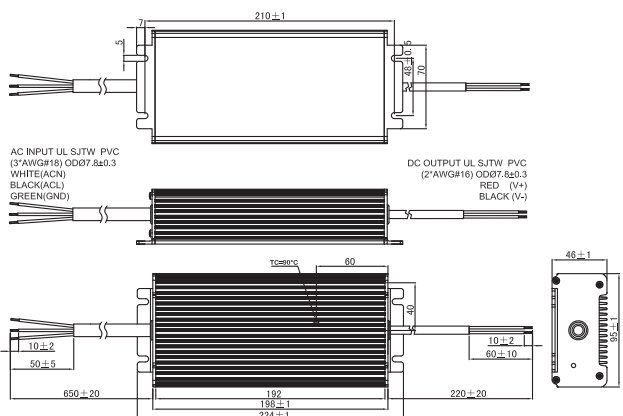
### 150-Watt MU150AxxxAP Constant Voltage



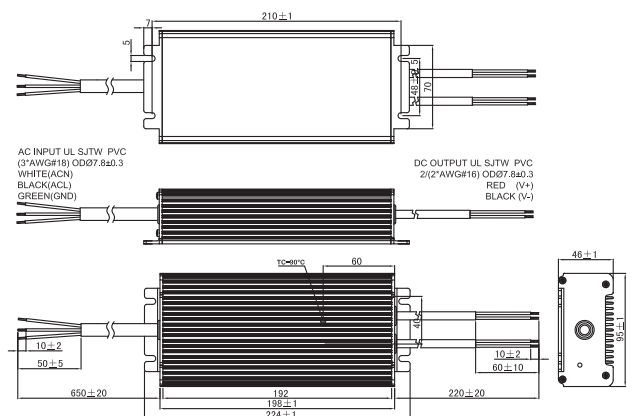
### 150-Watt MU150AxxxAP Constant Voltage with 12V



### 200-Watt MU200AxxxAP Constant Voltage



### 200-Watt MU200AxxxAP Constant Voltage with 12V



# Intelligent Driver\_DALI Series

LED Drivers  
Catalog Spring 2017  
.....  
MOONS'  
DALI Intelligent Driver  
.....



Area, Landscape, Architecture, Horticultural Lighting

## Features

- Input voltage: 90~305 VAC
- Output current range: 150~1500mA (settable), 12V-150mA auxiliary power supply
- Output voltage range: 8~55VDC (self-adapt)
- Dimming performance: 0→0.1%→100% dimming range, Flicker Free, Linear/Logarithmic Curve, 16 bits resolution
- Main functions: DALI dimming, Push Dimming, MCS interface for NTC
- Various programming methods: cable programming, NFC programming
- Surge: L-N: 2.5KV, L/N-FG: 2.5KV
- Waterproof: IP20, Built-in type
- 5-year warranty
- DALI standards: Compliance with IEC62386-102(2.0), IEC62386-207, IEC62386-209( only for DALI DT8 driver )
- Additional function (optional): Independent type, 15V-100mA DALI bus power supply

## 90~305VAC Input, 50W, 8~55VDC, Class 2, SELV, 12V-150mA Aux, Built in, DALI Intelligent Driver

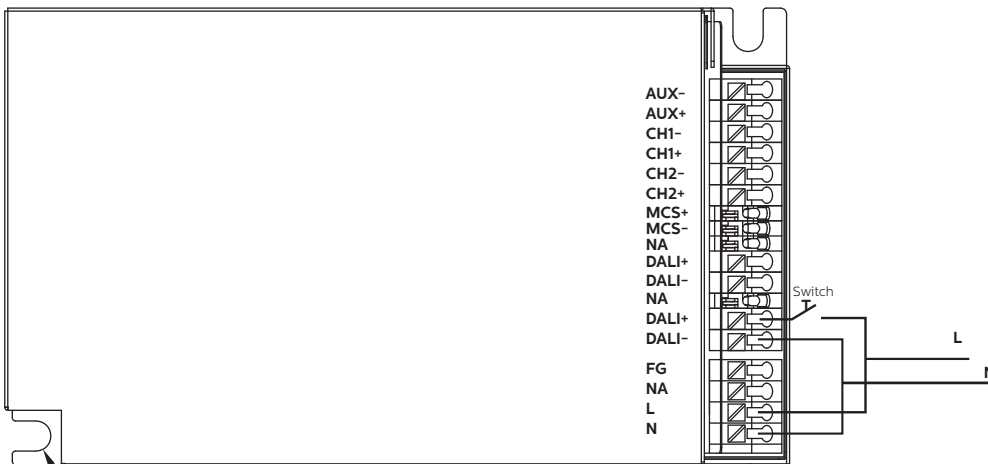
| Designation     | Iout (mA) | Dimming Description    | Number of Output Channels | Case Structure | Size(mm)  |
|-----------------|-----------|------------------------|---------------------------|----------------|-----------|
| MU050S150AQI311 | 150~1500  | DT6 1 address          | 1                         | Brick          | 130*76*30 |
| MU050S150BQI411 | 150~1500  | DT8                    | 2                         |                |           |
| MU050S150BQI511 | 150~1500  | DT8, DT6 1/2 addresses | 2                         |                |           |
| MU050S150AQI301 | 150~1500  | DT6 1 address          | 1                         | Slim           | 408*30*21 |
| MU050S150BQI401 | 150~1500  | DT8                    | 2                         |                |           |
| MU050S150BQI501 | 150~1500  | DT8, DT6 1/2 addresses | 2                         |                |           |
| MU050S150AQI321 | 150~1500  | DT6 1 address          | 1                         | Backfeed       | 153*83*28 |
| MU050S150BQI421 | 150~1500  | DT8                    | 2                         |                |           |
| MU050S150BQI521 | 150~1500  | DT8, DT6 1/2 addresses | 2                         |                |           |
| MU050S150AQI331 | 150~1500  | DT6 1 address          | 1                         | Sidefeed       | 153*83*28 |
| MU050S150BQI431 | 150~1500  | DT8                    | 2                         |                |           |
| MU050S150BQI531 | 150~1500  | DT8, DT6 1/2 addresses | 2                         |                |           |



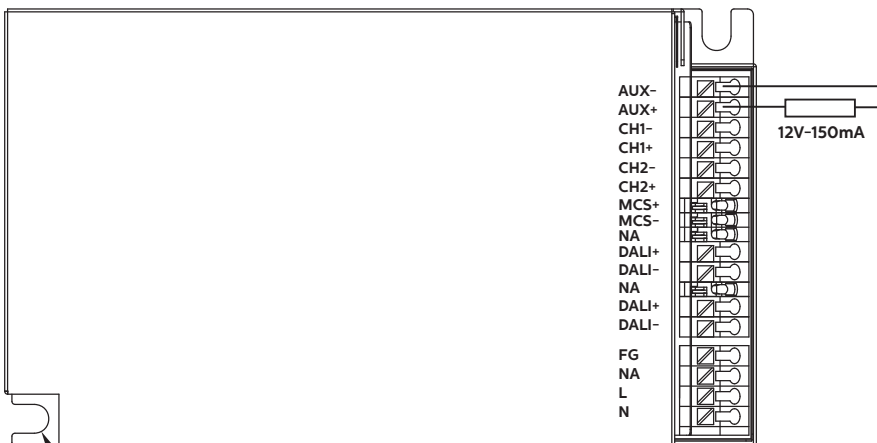
## Function Introduction

### 1. Push Dimming

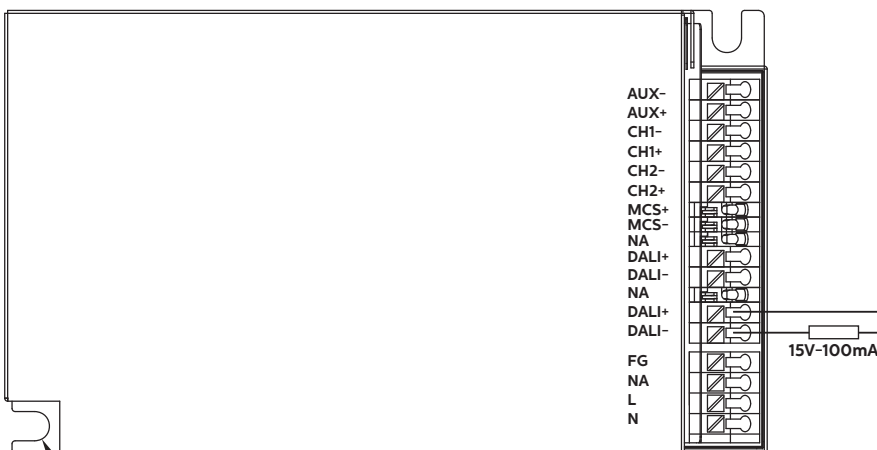
Driver can be dimmed through switch. Push dimming operates by connecting the mains voltage to the DALI input terminals.



### 2. 12V-150mA auxiliary power supply Driver can provide 12V-150mA auxiliary power supply to other device (Sensor, Fan, etc)



### 3. 15V-100mA DALI bus power supply Driver can provide 15V-100mA to DALI BUS/DALI sensor



# Intelligent Driver\_DMX Series

LED Drivers  
Catalog Spring 2017  
.....  
MOONS'  
DMX Intelligent Driver  
.....



Area, Landscape, Architecture, Stage, Horticultural Lighting

## Features

- Input voltage: 90~305 VAC
- Output current range: 150~1500mA (settable), 12V-150mA auxiliary power supply
- Output voltage range: 8~55VDC (self-adapt)
- Dimming performance: 0→0.1%→100% dimming range, Flicker Free, Linear/Gamma Curve, 16 bits resolution
- Main functions: DMX dimming, MCS interface for NTC
- Various programming methods: cable programming, NFC programming
- Surge: L-N: 2.5KV, L/N-FG: 2.5KV
- Waterproof: IP20, Built-in type
- 5-year warranty
- Additional function (optional): Independent type

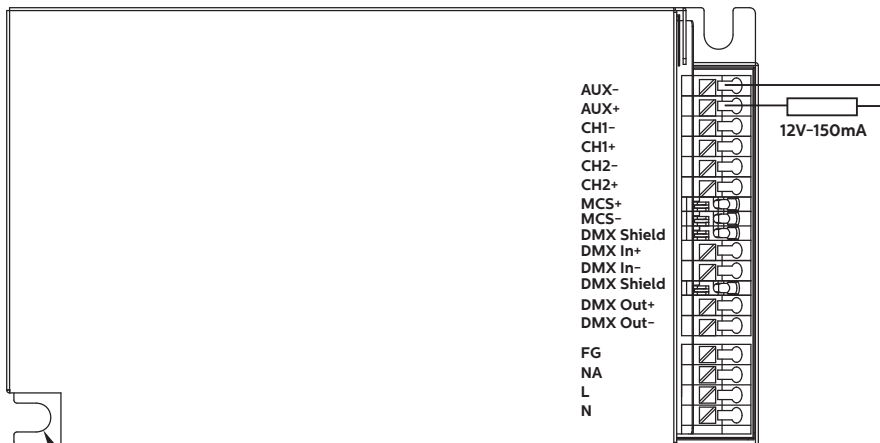
## 90~305VAC Input, 50W, 8~55VDC, Class 2, SELV 12V-150mA Aux, Built in, DMX Intelligent Driver

| Designation     | Iout (mA) | Dimming Description | Number of Output Channels | Case Structure | Size(mm)  |
|-----------------|-----------|---------------------|---------------------------|----------------|-----------|
| MU050S150AQI611 | 150~1500  | DMX                 | 1                         | Brick          | 130*76*30 |
| MU050S150BQI611 | 150~1500  | DMX                 | 2                         |                |           |
| MU050S150AQI601 | 150~1500  | DMX                 | 1                         | Slim           | 408*30*21 |
| MU050S150BQI601 | 150~1500  | DMX                 | 2                         |                |           |
| MU050S150AQI621 | 150~1500  | DMX                 | 1                         | Backfeed       | 153*83*28 |
| MU050S150BQI621 | 150~1500  | DMX                 | 2                         |                |           |
| MU050S150AQI631 | 150~1500  | DMX                 | 1                         | Sidefeed       | 153*83*28 |
| MU050S150BQI631 | 150~1500  | DMX                 | 2                         |                |           |



## Function Introduction

1. 12V-150mA auxiliary power supply Driver can provide 12V-150mA auxiliary power supply to other device (Sensor, Fan, etc)



# Intelligent Driver\_0-10V Series

LED Drivers  
Catalog Spring 2017  
.....  
MOONS'  
0-10V Intelligent Driver  
.....



Area, Landscape, Architecture, Horticultural Lighting

## Features

- Input voltage: 90~305 VAC
- Output current range: 150~1500mA (settable), 12V~150mA auxiliary power supply
- Output voltage range: 8~55VDC (self-adapt)
- Dimming performance: 0→0.1%→100% dimming range, Flicker Free, Linear/Logarithmic Curve, 16 bits resolution
- Main functions: 0-10V Dimming, MCS interface for NTC
- Various programming methods: cable programming, NFC programming
- Surge: L-N: 2.5KV, L/N-FG: 2.5KV
- Waterproof: IP20, Built-in type
- 5-year warranty
- Additional function (optional): Independent type

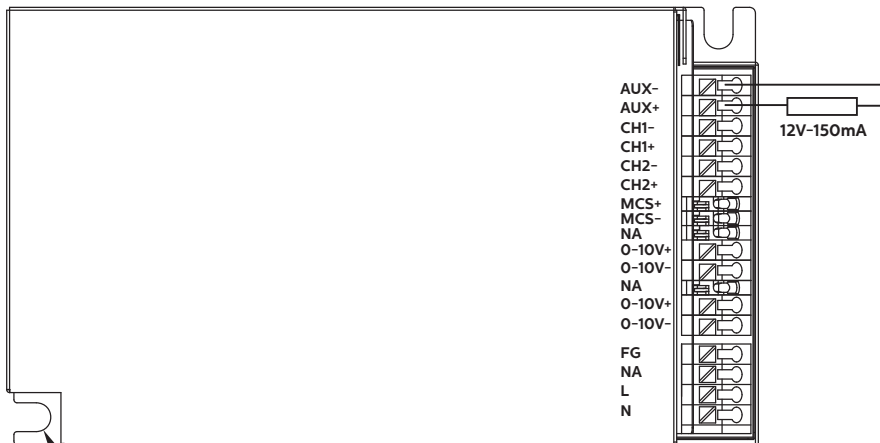
## 90~305VAC Input, 50W, 8~55VDC, Class 2, SELV, 12V~1500mA, Built in, 0-10V Intelligent Driver

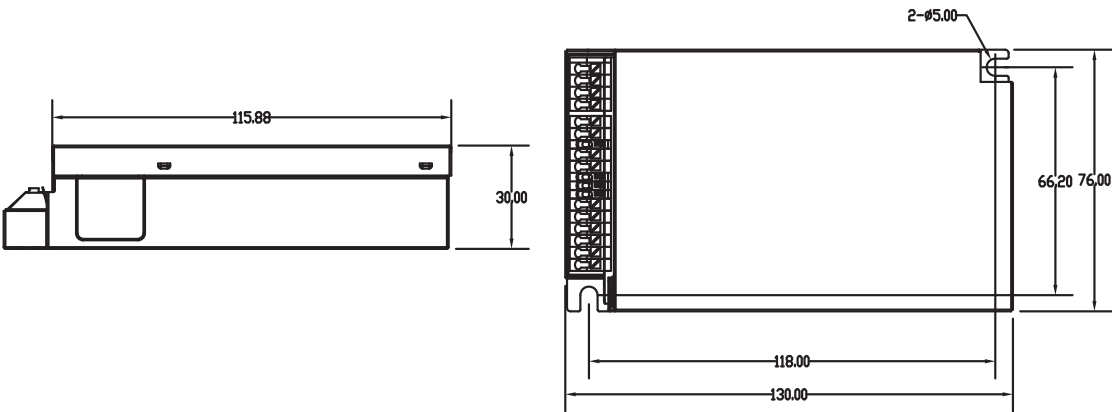
| Designation     | Iout (mA) | Dimming Description                    | Number of Output Channels | Case Structure | Size(mm)  |
|-----------------|-----------|----------------------------------------|---------------------------|----------------|-----------|
| MU050S150AQI011 | 150~1500  | Solo                                   | 1                         | Brick          | 130*76*30 |
| MU050S150BQI211 | 150~1500  | Tunable White, Dim to Warm, Solo, Dual | 2                         |                |           |
| MU050S150AQI001 | 150~1500  | Solo                                   | 1                         | Slim           | 408*30*21 |
| MU050S150BQI201 | 150~1500  | Tunable White, Dim to Warm, Solo, Dual | 2                         |                |           |
| MU050S150AQI021 | 150~1500  | Solo                                   | 1                         | Backfeed       | 153*83*28 |
| MU050S150BQI221 | 150~1500  | Tunable White, Dim to Warm, Solo, Dual | 2                         |                |           |
| MU050S150AQI031 | 150~1500  | Solo                                   | 1                         | Sidefeed       | 153*83*28 |
| MU050S150BQI231 | 150~1500  | Tunable White, Dim to Warm, Solo, Dual | 2                         |                |           |



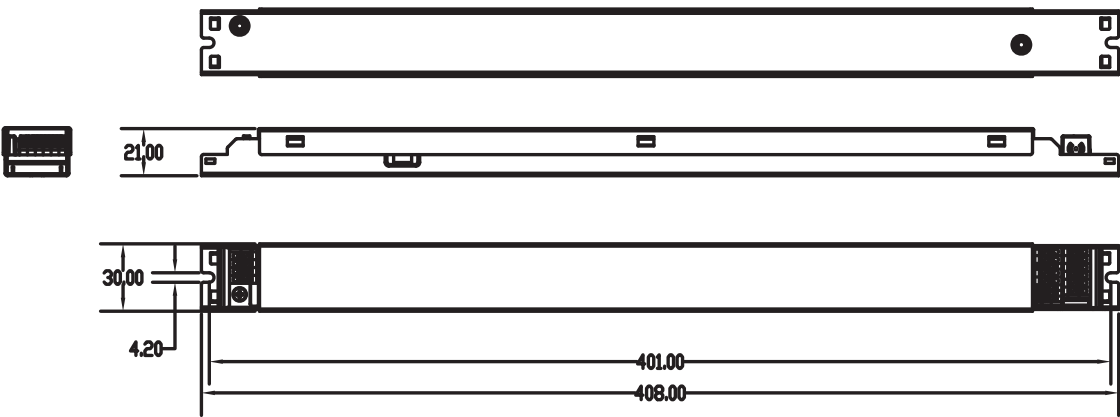
## Function Introduction

1. 12V-150mA auxiliary power supply Driver can provide 12V-150mA auxiliary power supply to other device (Sensor, Fan, etc)

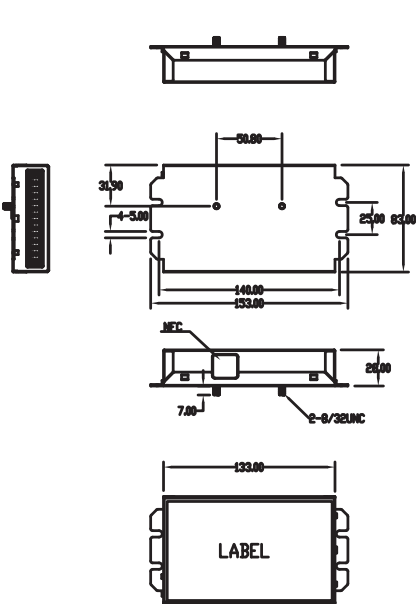




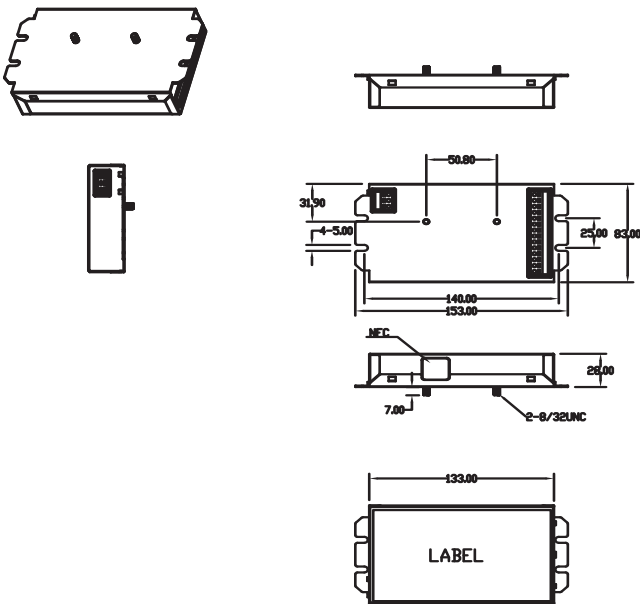
Brick



Slim

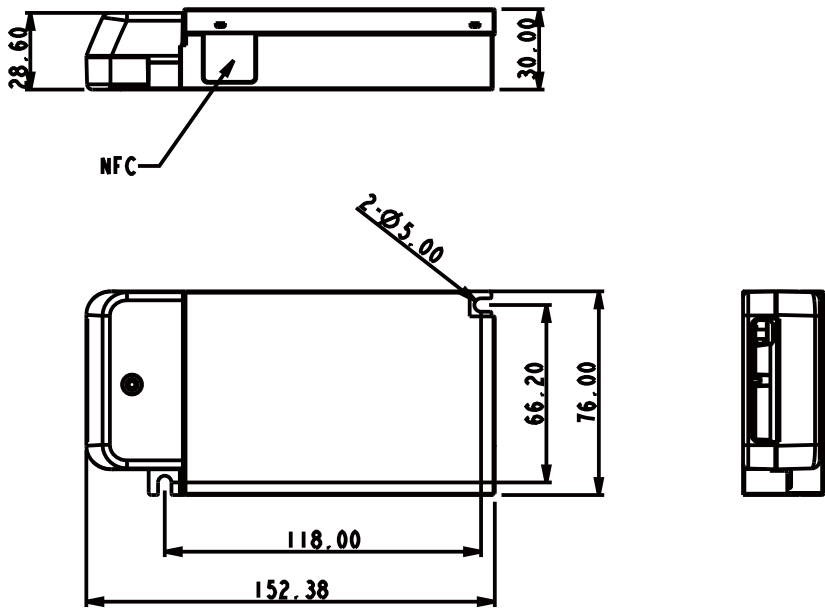


Backfeed

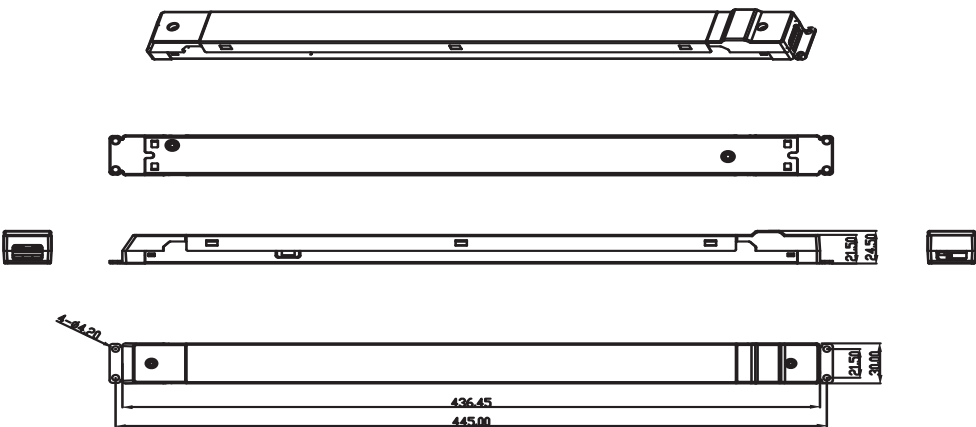


Sidefeed





Brick



Slim

# Intelligent Other Series – PR085N070DQ\_DMX (4chs output)



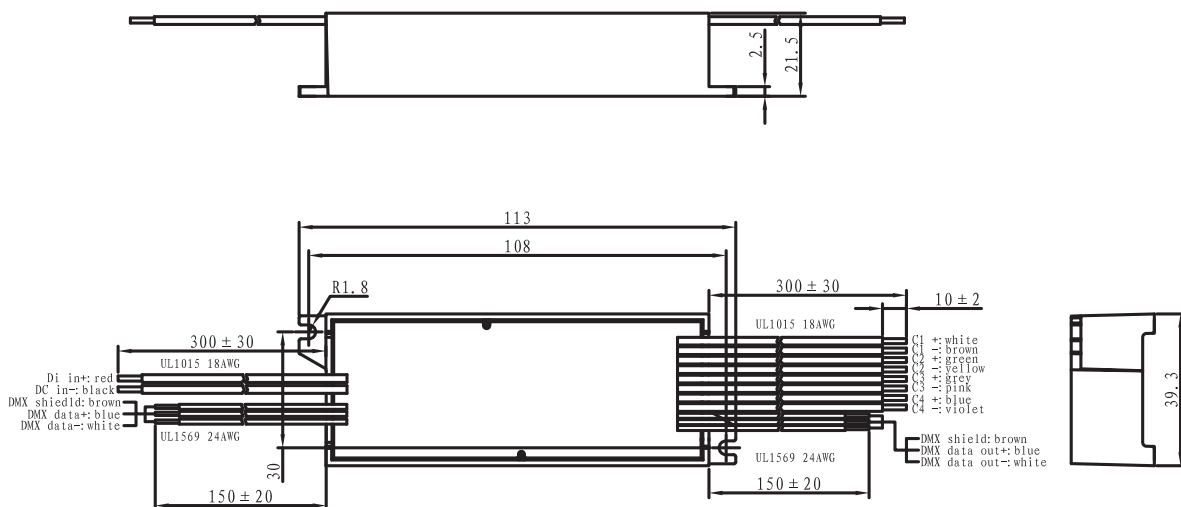
## Features

- DMX/RDM constant current LED driver
- 4 LED channel, output current can be changed from 200mA to 700mA
- Constant power maximum is 85W(4V<Vin-Vo<20V), power per channel maximum is 36W
- Normal life time is 80000 hours ( ambient temperature 50℃ )
- Dimming range 0.1%~100%
- 8-year warranty

## Model Specifications

| Model           | Input Voltage (max) | Output Current (every channel) | Output Voltage (every channel) | Output Power (total) | Efficiency |
|-----------------|---------------------|--------------------------------|--------------------------------|----------------------|------------|
| PR085N070DQ_DMX | 60V                 | 200mA                          | 52V                            | 41.60W               | 93.04%     |
|                 | 60V                 | 250mA                          | 52V                            | 52.00W               | 94.06%     |
|                 | 60V                 | 300mA                          | 52V                            | 62.40W               | 95.12%     |
|                 | 60V                 | 350mA                          | 52V                            | 72.80W               | 95.48%     |
|                 | 60V                 | 400mA                          | 52V                            | 83.20W               | 95.23%     |
|                 | 60V                 | 450mA                          | 47V                            | 84.60W               | 94.98%     |
|                 | 60V                 | 500mA                          | 42V                            | 84.00W               | 94.73%     |
|                 | 58V                 | 550mA                          | 38V                            | 83.60W               | 94.48%     |
|                 | 55V                 | 600mA                          | 35V                            | 84.00W               | 94.03%     |
|                 | 52V                 | 650mA                          | 32V                            | 83.20W               | 93.68%     |
|                 | 50V                 | 700mA                          | 30V                            | 84.00W               | 93.13%     |

## Mechanical Outline (unit: mm)



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