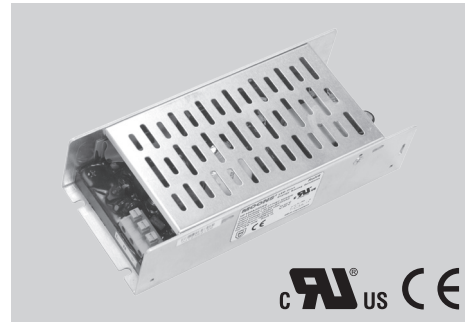


# UF100A/UU120A Series - Constant Current Output & Dimming Control

## Features

- Input voltage range 90-305VAC
- High efficiency: 91% typical
- Active PFC: 0.99 typical
- Surge protection
- Constant Current/0-10V Dimming/Clock Dimming(CCLKS)
- Protections: OVP, OTP, SCP
- Compliance to worldwide safety regulations for lighting
- Suitable for dry/damp locations
- CUL / CE
- 5-year warranty



162 × 71 × 40mm

## Electrical Specifications

Input voltage range	90~305 VAC
Frequency	47~63 Hz
Power factor	0.99 (typical)
Inrush current	40A Max (at 230 VAC, 25°C, cold start)
Input current	1.2A Max at 110VAC, 0.6A Max at 220Vac
Efficiency	89% (typical) at 110 VAC maximum load, 91% (typical) at 220 VAC maximum load
Maximum power	100W/120W
Turn on delay	< 1.5S at 220VAC maximum load, < 3S at 110VAC maximum load
Leakage current	1mA Max (277VAC 50Hz input)
Protections	Over Voltage, Over Temperature, Short Circuit

## Environmental Specifications

Operating temperature	-35°C ~ +60°C
Storage temperature	-40°C ~ +85°C
Operating humidity	10% ~ 90%RH
Storage humidity	5% ~ 95%RH
Cooling method	Convection
MTBF	300,000 hours at full load and 25°C ambient
Life time	50,000 hours at 40°C ambient
Reference dimension(L × W × H)	162 x 71 x 40 (mm)

## Safety & EMC Compliance

CUL	UL8750
CE	EN61347-1, EN61347-2-13
Conducted Emissions	EN55015
Radiated Emissions	EN55015
Harmonic Current Emissions	EN61000-3-2
Voltage Fluctuations and Flicker	EN61000-3-3
Electrostatic Discharge	EN61000-4-2
RFE Field Susceptibility	EN61000-4-3
Electrical Fast Transient	EN61000-4-4
Surge Immunity Test	EN61000-4-5, L-Earth: ± 4kV; N-Earth: ± 4kV; L-N: ± 2kV
Conducted Radio Frequency	EN61000-4-6
Power Frequency Magnetic Field Test	EN61000-4-8
Voltage Dips	EN61000-4-11
Electromagnetic Immunity	EN61547

## Model Specifications - Constant Current

Part Number	Output Power	Output Current	Output Voltage	Current Accuracy	Efficiency (typical)		Output Current Adj. Range*1
					110VAC	220VAC	
UF100A100AQ	100W	1000mA	60-100VDC	± 5%	90%	92%	600-1200mA
UF100A150AQ		1500mA	43-67VDC	± 5%	90%	92%	500-1750mA
UF100A210AQ		2100mA	30-48VDC	± 5%	89%	91%	1400-2300mA
UF100A250AQ		2500mA	24-40VDC	± 5%	89%	91%	1600-3000mA
UF100A300AQ		3000mA	24-35VDC	± 5%	89%	91%	1000-3500mA
UU120A150AQ	120W	1500mA	48-80VDC	± 5%	89%	91%	500-1750mA
UU120A210AQ		2100mA	34-57VDC	± 5%	89%	91%	1400-2300mA
UU120A300AQ		3000mA	24-40VDC	± 5%	89%	91%	1600-3200mA

\*1: Current can be set by adjusting the potentiometer, the maximum output power can not exceed 100W.

## Model Specifications - 0-10V Dimming Control

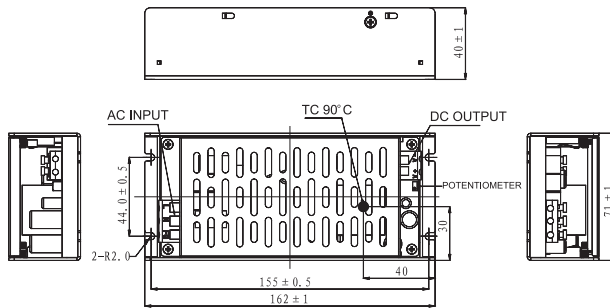
Part Number	Output Power	Output Current	Output Voltage	Current Accuracy	Efficiency (typical)		Output Current Adj. Range*1
					110VAC	220VAC	
UF100A100AQD	100W	1000mA	60-100VDC	± 5%	90%	92%	600-1200mA
UF100A150AQD		1500mA	43-67VDC	± 5%	90%	92%	500-1750mA
UF100A210AQD		2100mA	30-48VDC	± 5%	89%	91%	1400-2300mA
UF100A250AQD		2500mA	24-40VDC	± 5%	89%	91%	1600-3000mA
UF100A300AQD		3000mA	24-35VDC	± 5%	89%	91%	1000-3500mA
UU120A150AQD	120W	1500mA	48-80VDC	± 5%	89%	91%	500-1750mA
UU120A210AQD		2100mA	34-57VDC	± 5%	89%	91%	1400-2300mA
UU120A300AQD		3000mA	24-40VDC	± 5%	89%	91%	1600-3200mA

## Model Specifications - CLOCK Dimming Control (CLKS)

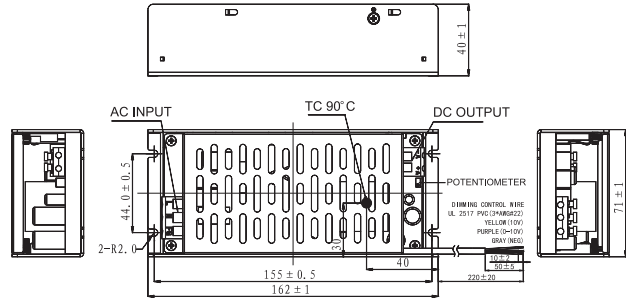
Part Number	Output Power	Output Current	Output Voltage	Current Accuracy	Efficiency (typical)		Output Current Adj. Range*1
					110VAC	220VAC	
UF100A100AQ_CLKS	100W	1000mA	60-100VDC	± 5%	90%	92%	600-1200mA
UF100A150AQ_CLKS		1500mA	43-67VDC	± 5%	90%	92%	500-1750mA
UF100A210AQ_CLKS		2100mA	30-48VDC	± 5%	89%	91%	1400-2300mA
UF100A250AQ_CLKS		2500mA	24-40VDC	± 5%	89%	91%	1600-3000mA
UF100A300AQ_CLKS		3000mA	24-35VDC	± 5%	89%	91%	1000-3500mA
UU120A150AQ_CLKS	120W	1500mA	48-80VDC	± 5%	89%	91%	500-1750mA
UU120A210AQ_CLKS		2100mA	34-57VDC	± 5%	89%	91%	1400-2300mA
UU120A300AQ_CLKS		3000mA	24-40VDC	± 5%	89%	91%	1600-3200mA

## Mechanical Outline (unit:mm)

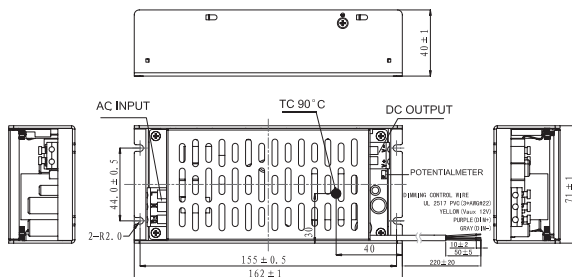
### Constant Current



### Constant Current with Dimming Control (0~10V)



### Clock Dimming(CLKS)



Numbering System

Quick Selection

LED Driver  
- General Series  
- Outdoor Use  
- H Series

LED Driver  
- General Series  
- Outdoor Use  
- Half Potted Series

LED Driver  
- General  
- Outdoor Use  
- A Series

LED Driver  
- General Series  
- Outdoor Use  
- Other Series

LED Driver  
- Intelligent Series  
- 50W Intelligent Series

LED Driver  
- Intelligent Series  
- 40W Intelligent Series

LED Driver  
- Intelligent Series  
- 50W Intelligent Series

LED Driver  
- Intelligent Series  
- 50W Intelligent Series

LED Driver  
- Intelligent Series  
- Other Series

General Power Supplies  
- MP Series

SPD

Appendix