



■ **Features**

- Input voltage: 90-305VAC
- Built-in active PFC function: 0.99 Typ.
- High efficiency: 92% Typ.
- IP67 design for indoor or outdoor installations
- High surge immunity
- Compliance to worldwide safety regulations for lighting
- Suitable for dry/damp locations

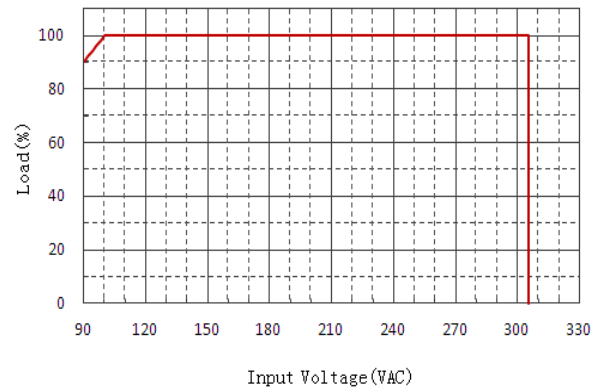
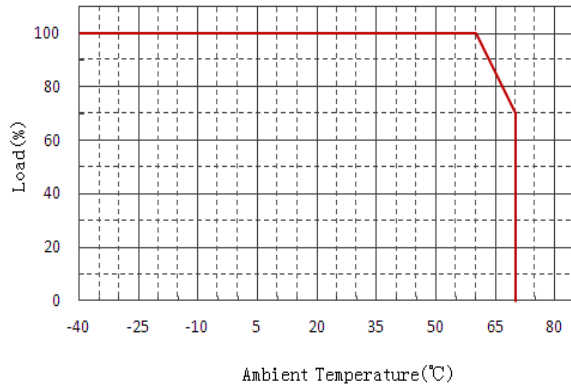
■ **Specification**

| Model<br>(MU060CxxxAP) |                                     | 012                                                                                                        | 024    | 036    | 042    | 048    | 054    | 081   | 105   |
|------------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|-------|-------|
| Input                  | Efficiency (Typ.)110VAC             | 88.0%                                                                                                      | 88.0%  | 90.0%  | 90.0%  | 90.0%  | 90.0%  | 90.0% | 90.0% |
|                        | Efficiency (Typ.)220VAC             | 90.0%                                                                                                      | 90.0%  | 92.0%  | 92.0%  | 92.0%  | 92.0%  | 92.0% | 92.0% |
|                        | Voltage Range (VAC)                 | 90 ~ 305                                                                                                   |        |        |        |        |        |       |       |
|                        | Frequency Range (Hz)                | 47~63                                                                                                      |        |        |        |        |        |       |       |
|                        | Power Factor(Typ.)                  | 0.99 at 110VAC input , 0.98 at 220VAC input , 100% load                                                    |        |        |        |        |        |       |       |
|                        | THD                                 | < 20%, at 100~277VAC input, with 80%~100% load conditions                                                  |        |        |        |        |        |       |       |
|                        | AC Current                          | 0.9A MAX at 110VAC , 0.45A MAX at 220VAC                                                                   |        |        |        |        |        |       |       |
|                        | Inrush Current                      | 65A MAX(25°C , at 230VAC , cold start)                                                                     |        |        |        |        |        |       |       |
|                        | Leakage Current                     | 0.75mA at 277VAC 50Hz input                                                                                |        |        |        |        |        |       |       |
| Output                 | DC Voltage (V)                      | 12                                                                                                         | 24     | 36     | 42     | 48     | 54     | 81    | 105   |
|                        | Rated Current(mA)                   | 5000                                                                                                       | 2500   | 1667   | 1429   | 1250   | 1111   | 741   | 571   |
|                        | Rated Power (W)                     | 60                                                                                                         | 60     | 60     | 60     | 60     | 60     | 60    | 60    |
|                        | Ripple Current(Vp-p)                | ≤10%                                                                                                       | ≤10%   | ≤10%   | ≤10%   | ≤10%   | ≤10%   | ≤10%  | ≤10%  |
|                        | Current ADJ. Range(mA)              | 0~5000                                                                                                     | 0~2500 | 0~1667 | 0~1429 | 0~1250 | 0~1111 | 0~741 | 0~571 |
|                        | Voltage Tolerance <sup>Note.1</sup> | ±5%                                                                                                        | ±5%    | ±5%    | ±5%    | ±5%    | ±5%    | ±5%   | ±5%   |
|                        | Line Regulation                     | ±1%                                                                                                        | ±1%    | ±1%    | ±1%    | ±1%    | ±1%    | ±1%   | ±1%   |
|                        | Load Regulation                     | ±2%                                                                                                        | ±2%    | ±2%    | ±2%    | ±2%    | ±2%    | ±2%   | ±2%   |
|                        | Setup, Rise Time                    | 3s, measured at 110VAC input; 1.5s, measured at 220VAC input                                               |        |        |        |        |        |       |       |
|                        | Hold Up Time                        | 10ms at 220VAC 100% load                                                                                   |        |        |        |        |        |       |       |
| Protection             | Over Voltage(Vmax.)                 | 16                                                                                                         | 32     | 48     | 56     | 64     | 72     | 108   | 140   |
|                        | Short Circuit                       | Protection type : constant current limiting, recovers automatically after fault condition is removed.      |        |        |        |        |        |       |       |
|                        | Over Temperature                    | Protection type : The power supply shall return to normal operation only after the power is turn-on again. |        |        |        |        |        |       |       |
| Environment            | Working Temp.                       | -40~+70°C, refer to the derating curve for detail                                                          |        |        |        |        |        |       |       |
|                        | Working Humidity                    | 20~95%RH                                                                                                   |        |        |        |        |        |       |       |
|                        | Storage Temp., Humidity             | -40~+80°C, 10~95%RH                                                                                        |        |        |        |        |        |       |       |
|                        | Temp. Coefficient                   | 0.03%/°C ( 0~50°C )                                                                                        |        |        |        |        |        |       |       |
| Safety & EMC           | Vibration                           | 10-55-500Hz, 2G(10~55Hz),5G(55~500Hz) 1 octave/minute, period for 1hour each along X、Y、Z axes              |        |        |        |        |        |       |       |
|                        | Safety Standard                     | UL 8750,UL1012,UL Class 2 UL1310,IEC61347-1,IEC61347-2-13                                                  |        |        |        |        |        |       |       |
|                        | Withstand Voltage                   | I/P-O/P:3.75KVac I/P-FG:1.875KV O/P-FG:0.5KV                                                               |        |        |        |        |        |       |       |
|                        | Isolation Resistance                | I/P-O/P ,I/P-FG,O/P-FG:100M Ohms/500VDC/25°C/70%RH                                                         |        |        |        |        |        |       |       |
|                        | EMC Emission                        | IEC55015/FCC Part 15 Class B, IEC61000-3-2 Class C,IEC61000-3-3                                            |        |        |        |        |        |       |       |
| Others                 | EMC Immunity                        | IEC61000-4-2,3,4,5,6,8,11 , IEC61547 ( Surge L,N-FG 6KV , L-N 4KV )                                        |        |        |        |        |        |       |       |
|                        | MTBF                                | 300,000 hours, measured at full load, 25°C ambient temperature, MIL-HDBK-217F                              |        |        |        |        |        |       |       |
|                        | Dimension                           | 191 x 67.5 x 37 ( mm )                                                                                     |        |        |        |        |        |       |       |
|                        | Weight                              | 0.81kg                                                                                                     |        |        |        |        |        |       |       |

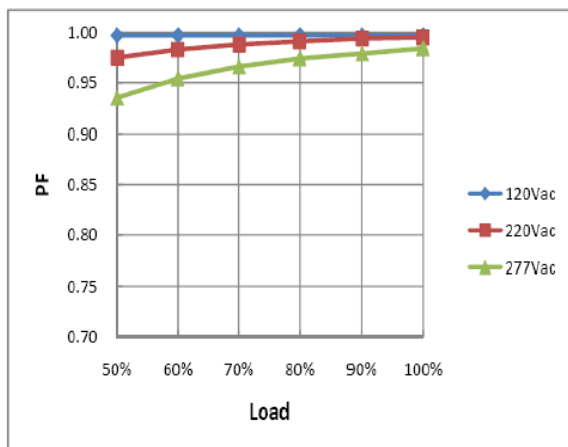
Note.1: Includes set up tolerance, line regulation and load regulation.

■ Test Curve

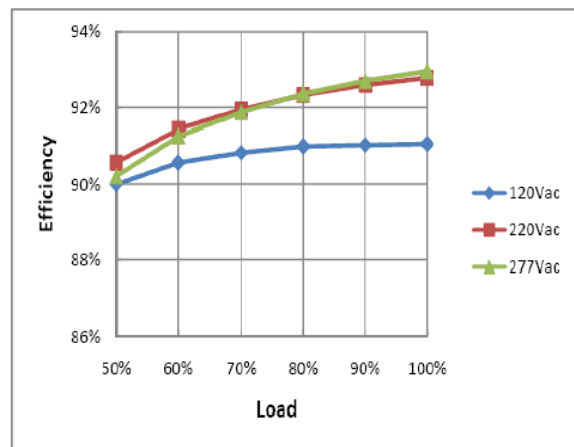
Derationg Curve



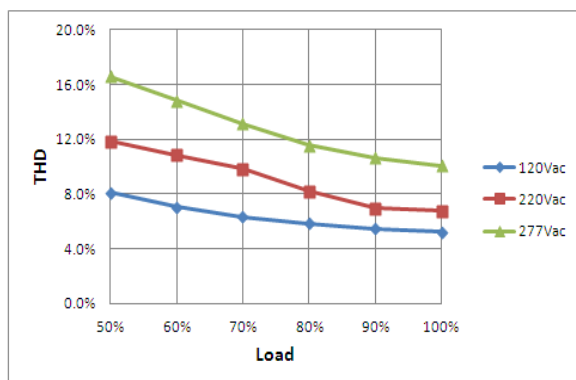
Power Factor Curve



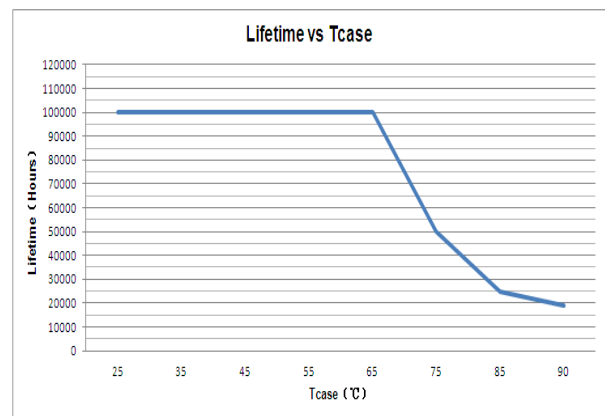
Efficiency VS. Load Curve(Model:48V)



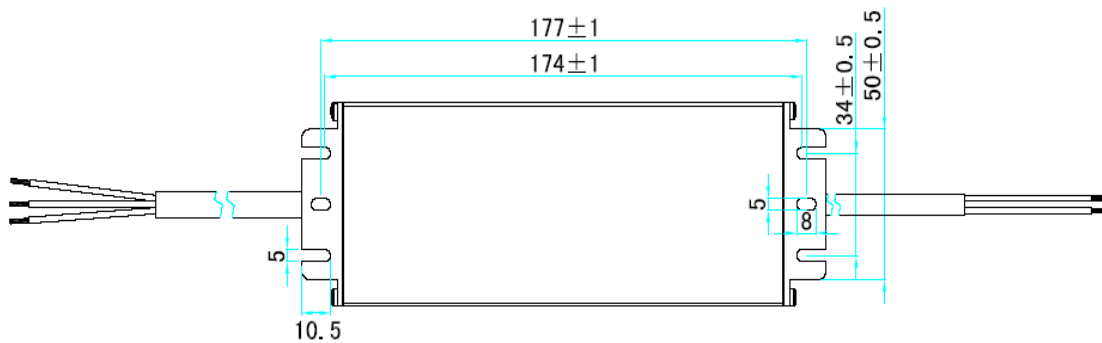
THD Curve



Lifetime vs. Case Temperature

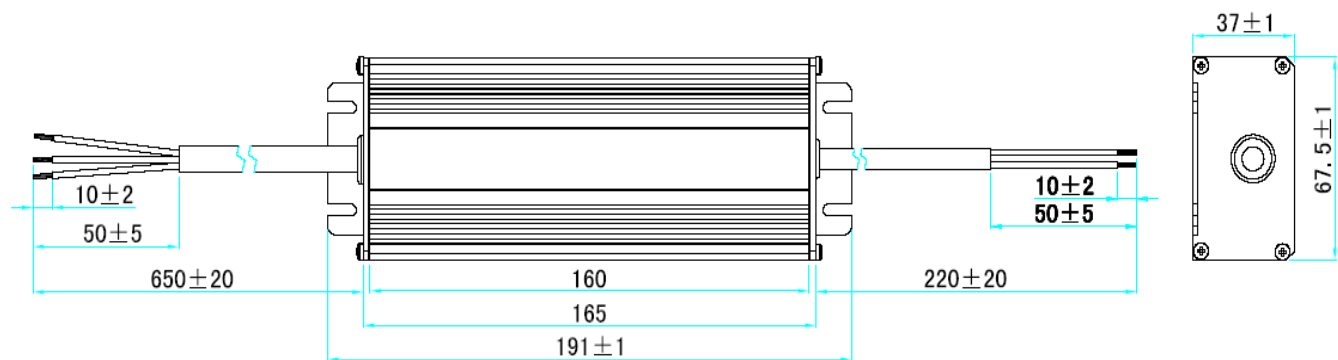
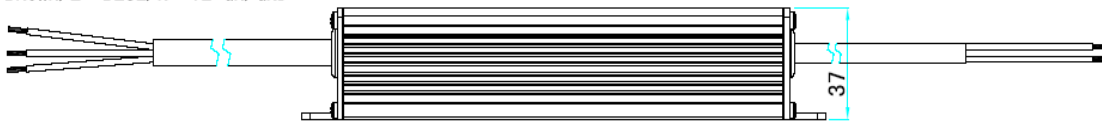


■ Mechanical Specification



RUBBER LINE CCC 60245 IEC 57 (YZW) /VDE H05RN-F  
AC INPUT (3\*1.0mm<sup>2</sup>) OD $\varnothing$  7.3 $\pm$ 0.3mm  
BROWN/L BLUE/N YE-GN/GND

RUBBER LINE CCC 60245 IEC57 (YZW) /VDE H05RN-F  
DC OUTPUT (2\*1.0mm<sup>2</sup>) OD $\varnothing$  6.8 $\pm$ 0.3mm  
BROWN/V+ BLUE/V-



RoHS Compliance:

Our products comply with the European Directive 2002/95/EC, calling for the elimination of lead and other hazardous substances from electronic products.