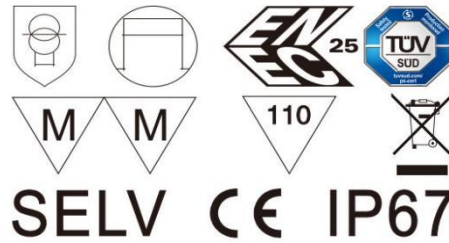


## Constant Voltage LED Driver

### Constant Voltage Driver

Model:XSV Series



| Model        | Item Code | Rated Input Voltage | Output current | Input current | Input power | Output power range | PF    | Efficiency | Output voltage |
|--------------|-----------|---------------------|----------------|---------------|-------------|--------------------|-------|------------|----------------|
| XSV60W48-NX  | 159070    | 220-240VAC          | 1.25A          | 1.25A         | ≤72.00W     | 0.00-60.00W        | ≥0.95 | 88%        | 48V            |
| XSV100W48-NX | 159080    |                     | 2.10A          | 2.10A         | ≤115.00W    | 0.00-100.00W       |       | 90%        |                |
| XSV160W48-NX | 159090    |                     | 3.34A          | 3.34A         | ≤180.00W    | 0.00-160.00W       |       | 92%        |                |
| XSV240W48-NX | 159100    |                     | 5.00A          | 5.00A         | ≤265.00W    | 0.00-240.00W       |       | 92%        |                |
| XSV400W48-NX | 159110    |                     | 8.34A          | 8.34A         | ≤435.00W    | 0.00-400.00W       |       | 93%        |                |

\* Test result @230V, 50Hz, Full Load.

### 1. Parameters

| Category | Item                      | Technical Norm                            |       |           |               |                                                                                                     |
|----------|---------------------------|-------------------------------------------|-------|-----------|---------------|-----------------------------------------------------------------------------------------------------|
| Features | Output Type               | Constant Voltage                          |       |           |               |                                                                                                     |
|          | Dimming Type              | NA                                        |       |           |               |                                                                                                     |
|          | Output Features           | Isolation SELV                            |       |           |               |                                                                                                     |
|          | IP Grade                  | IP67                                      |       |           |               |                                                                                                     |
|          | Installation              | Independent                               |       |           |               |                                                                                                     |
|          | Insulation Class          | Class I                                   |       |           |               |                                                                                                     |
| Input    | Rated Input Voltage       | 220-240VAC                                |       |           |               |                                                                                                     |
|          | Range of AC Input Voltage | 176-264VAC                                |       |           |               |                                                                                                     |
|          | Range of DC Input Voltage | 175-280VDC (EMI not evaluated)            |       |           |               |                                                                                                     |
|          | Frequency                 | Rate:50/60Hz, Range:47~63Hz               |       |           |               |                                                                                                     |
|          | Power Factor              | ≥0.95, 220-240VAC, Rated Load, see graphs |       |           |               |                                                                                                     |
|          | THD                       | ≤10%, 230VAC, Rated Load, see graphs      |       |           |               |                                                                                                     |
|          | No Load Power Consumption | ≤0.5W, @230VAC                            |       |           |               |                                                                                                     |
|          | Inrush Current            | Model                                     | IP    | IP (typ.) | Duration time | 240Vac/50Hz, 90-degree phase, full load, cold start-up, duration time measure from 50%Ipk to 50%Ipk |
|          |                           | 60W                                       | <30A  | 26A       | 220us         |                                                                                                     |
|          |                           | 100W                                      | <50A  | 45A       | 250us         |                                                                                                     |
|          |                           | 160W                                      | <60A  | 56A       | 250us         |                                                                                                     |
|          |                           | 240W                                      | <80A  | 76A       | 320us         |                                                                                                     |
|          |                           | 400W                                      | <100A | 88A       | 430us         |                                                                                                     |

## Constant Voltage LED Driver

|             |                                     |                                                                                                            |                                     |          |                                                     |
|-------------|-------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------|----------|-----------------------------------------------------|
|             | Connected quantity of 10A Breaker   | 60W                                                                                                        | 10pcs,10A type B / 16pcs 10A type C |          |                                                     |
|             |                                     | 100W                                                                                                       | 6pcs,10A type B / 10pcs 10A type C  |          |                                                     |
|             |                                     | 160W                                                                                                       | 5pcs,10A type B / 8pcs 10A type C   |          |                                                     |
|             |                                     | 240W                                                                                                       | 4pcs,10A type B / 6pcs 10A type C   |          |                                                     |
|             |                                     | 400W                                                                                                       | 3pcs,10A type B / 4pcs 10A type C   |          |                                                     |
|             | Connected quantity of 16A Breaker   | 60W                                                                                                        | 16pcs,16A type B / 26pcs 16A type C |          |                                                     |
|             |                                     | 100W                                                                                                       | 10pcs,16A type B / 16pcs 16A type C |          |                                                     |
|             |                                     | 160W                                                                                                       | 8pcs,16A type B / 13pcs 16A type C  |          |                                                     |
|             |                                     | 240W                                                                                                       | 6pcs,16A type B / 8pcs 16A type C   |          |                                                     |
|             |                                     | 400W                                                                                                       | 4pcs,16A type B / 5pcs 16A type C   |          |                                                     |
| Output      | Output Voltage                      | 48VDC±3%                                                                                                   |                                     |          |                                                     |
|             | Rated Load Range                    | 60W                                                                                                        | 24-60W                              |          |                                                     |
|             |                                     | 100W                                                                                                       | 30-100W                             |          |                                                     |
|             |                                     | 160W                                                                                                       | 48-160W                             |          |                                                     |
|             |                                     | 240W                                                                                                       | 72-240W                             |          |                                                     |
|             |                                     | 400W                                                                                                       | 120-400W                            |          |                                                     |
|             | Output Voltage Ripple               | <480mVPK-PK (0.5%)                                                                                         |                                     |          |                                                     |
|             | Line Regulation                     | ±1%                                                                                                        |                                     |          |                                                     |
|             | Load Regulation                     | ±2%                                                                                                        |                                     |          |                                                     |
|             | Overshoot                           | <105%Vo                                                                                                    |                                     |          |                                                     |
|             | Start-up Time                       | <0.5S (220-240VAC)                                                                                         |                                     |          |                                                     |
|             | Efficiency                          | 60W                                                                                                        | ≥86%                                | 88% typ. | 230VAC, Rated Load, at output terminals, see graphs |
|             |                                     | 100W                                                                                                       | ≥90%                                | 92% typ. |                                                     |
|             |                                     | 160W                                                                                                       | ≥90%                                | 92% typ. |                                                     |
| 240W        |                                     | ≥90%                                                                                                       | 92% typ.                            |          |                                                     |
| 400W        |                                     | ≥91%                                                                                                       | 93% typ.                            |          |                                                     |
| Protection  | Short Circuit Protection            | Auto Recovery                                                                                              |                                     |          |                                                     |
|             | Over Current Protection             | 120%-200%Io, Auto Recovery                                                                                 |                                     |          |                                                     |
|             | Over Voltage Protection             | 120%-150%Vo, Auto Recovery                                                                                 |                                     |          |                                                     |
|             | Over Temperature Protection         | 90<Tc<110℃, Auto Recovery                                                                                  |                                     |          |                                                     |
|             | Insulation voltage                  | I/P to O/P,3KVac/5mA/1min                                                                                  |                                     |          |                                                     |
|             | Insulation resistance               | >100M ohm @ 500VDC                                                                                         |                                     |          |                                                     |
|             | Leakage current                     | I/P to O/P < 250μA                                                                                         |                                     |          |                                                     |
| Environment | Ta/Operation Temperature            | -25....+50℃                                                                                                |                                     |          |                                                     |
|             | Ts/Storage Temperature              | -40....+85℃                                                                                                |                                     |          |                                                     |
|             | Tc/Enclosure Temperature For Safety | 60W/100W                                                                                                   | 75℃                                 |          |                                                     |
|             |                                     | 160W                                                                                                       | 85℃                                 |          |                                                     |
|             |                                     | 240W/400W                                                                                                  | 90℃                                 |          |                                                     |
|             | Humidity                            | 5%....85%RH                                                                                                |                                     |          |                                                     |
| Atmosphere  | 86-108KPa                           |                                                                                                            |                                     |          |                                                     |
| Standards   | Certification                       | CE/ENEC                                                                                                    |                                     |          |                                                     |
|             | Safety Standards                    | EN61347-1:2015,<br>EN61347-2-13:2014/A1:2017,EN62493:2015,<br>AS61347.2.13:2018,AS/NZS 61347.1:2016 Inc A1 |                                     |          |                                                     |

## Constant Voltage LED Driver

|        |                     |                                                                           |                                                                |
|--------|---------------------|---------------------------------------------------------------------------|----------------------------------------------------------------|
|        | EMC Standards       | EN55015:2013/A1:2015,<br>EN61000-3-2:2014, EN61000-3-3:2013, EN61547:2009 |                                                                |
|        | Performance         | EN62384                                                                   |                                                                |
|        | Surge               | L-N:4KV, L/N-PE:6KV                                                       |                                                                |
| Others | RoHS                | 2011/65/EU                                                                |                                                                |
|        | MTBF                | ≥250KHours, Ta=25°C(MIL-HDBK-217F)                                        |                                                                |
|        | Audible Noise       | <25dB @ 10cm distance, 20dB background                                    |                                                                |
|        | Life Time           | 60W/100W/160W                                                             | ≥100K Hrs 65°C case temperature,<br>refer to life vs. Tc curve |
|        |                     | 240W/400W                                                                 | ≥100K Hrs 75°C case temperature,<br>refer to life vs. Tc curve |
|        | Warranty            | 5years                                                                    |                                                                |
|        | Dimensions (L*W*H)  | 60W                                                                       | 275*30*21MM (body),<br>290*30*21MM (endcaps included)          |
|        |                     | 100W                                                                      | 305*30*21MM (body),<br>320*30*21MM (endcaps included)          |
|        |                     | 160W                                                                      | 335*30*21MM (body),<br>350*30*21MM (endcaps included)          |
|        |                     | 240W                                                                      | 385*30*21MM (body),<br>400*30*21MM (endcaps included)          |
|        |                     | 400W                                                                      | 385*60*22MM (body),<br>400*60*22MM (endcaps included)          |
|        | Wiring              | Input                                                                     | H05RN-F/3X1.0mm2,<br>Brown/Blue/(Yellow/Green)                 |
|        |                     | Output                                                                    | H05RN-F/2X1.0mm2, Red/Black                                    |
|        | Output Cable Length | Max. 3M                                                                   |                                                                |

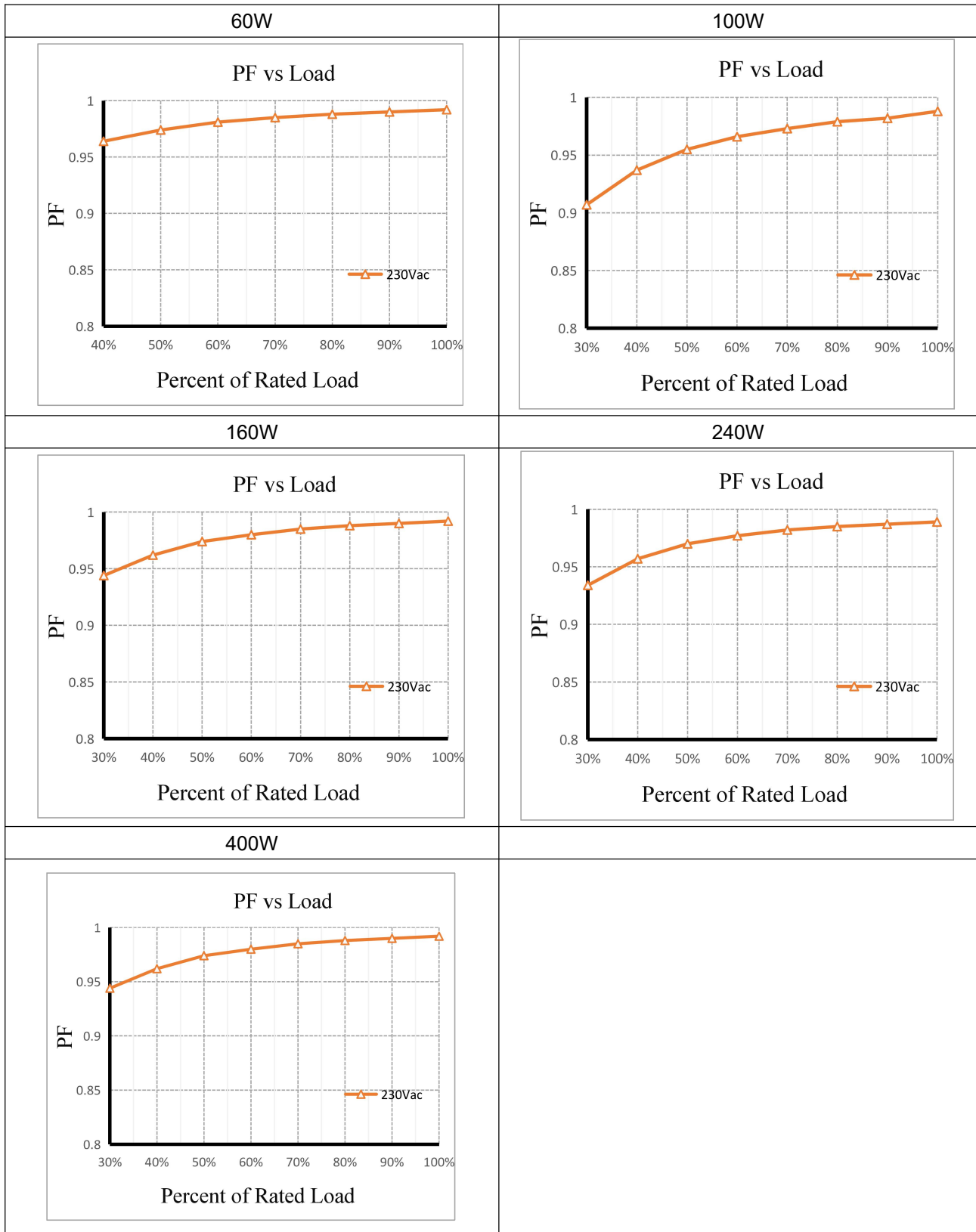
### Remark:

1. All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C ambient temperature.
2. LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again.
3. Output ripple should be measured at the output end which has with 0.1uF/100V ceramic capacitance and 10uF/100V Aluminum capacitance connected in parallel. Measured using oscilloscope with bandwidth limited to 20MHz.

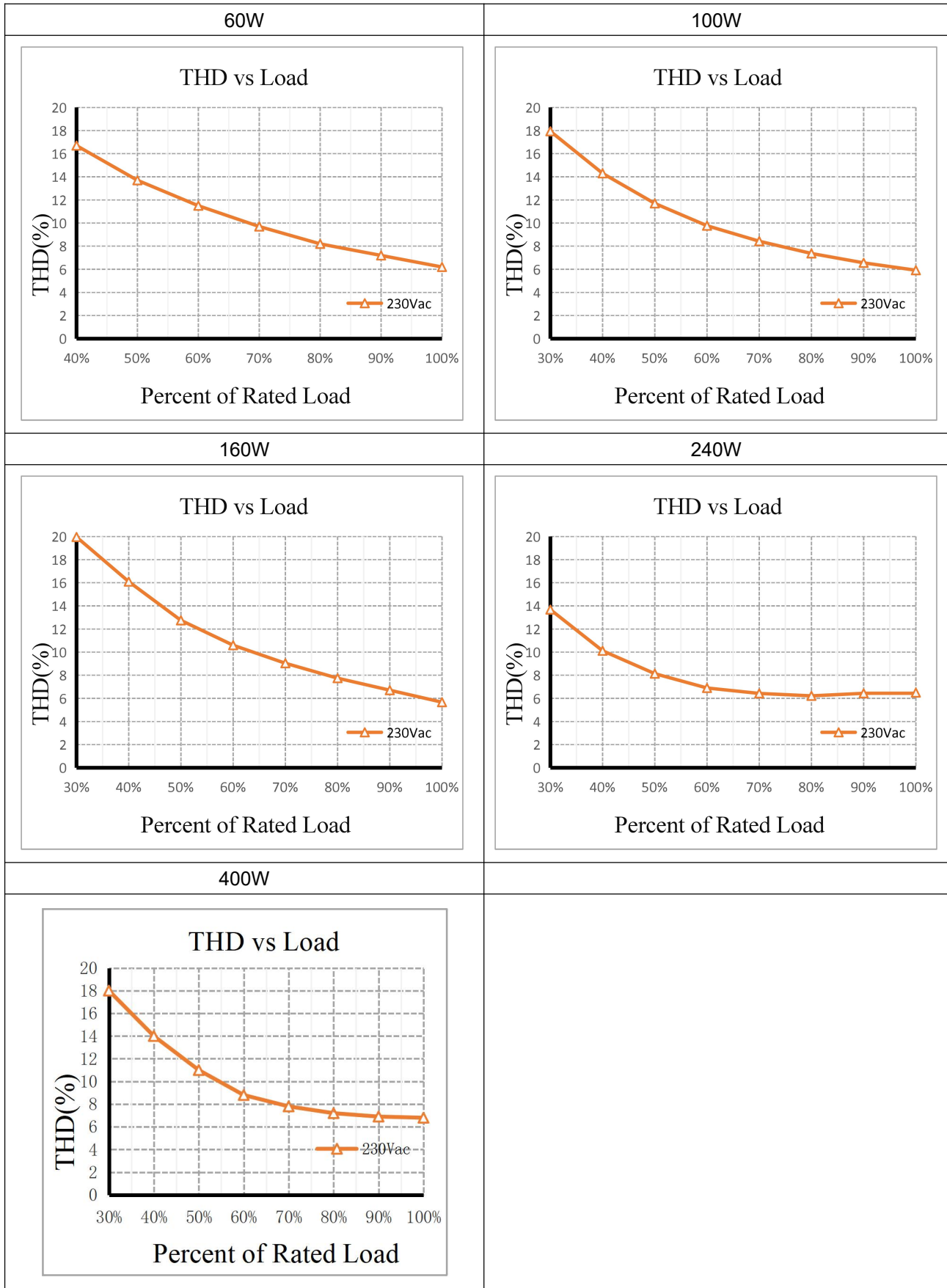
| Model        | Cable selection     | Distance |
|--------------|---------------------|----------|
| XSV60W48-NX  | 0.75mm <sup>2</sup> | 30M      |
|              | 1.00mm <sup>2</sup> | 50M      |
| XSV100W48-NX | 1.00mm <sup>2</sup> | 50M      |
| XSV160W48-NX | 1.00mm <sup>2</sup> | 50M      |
| XSV240W48-NX | 1.00mm <sup>2</sup> | 50M      |
| XSV400W48-NX | 1.50mm <sup>2</sup> | 50M      |

### 2.Graph

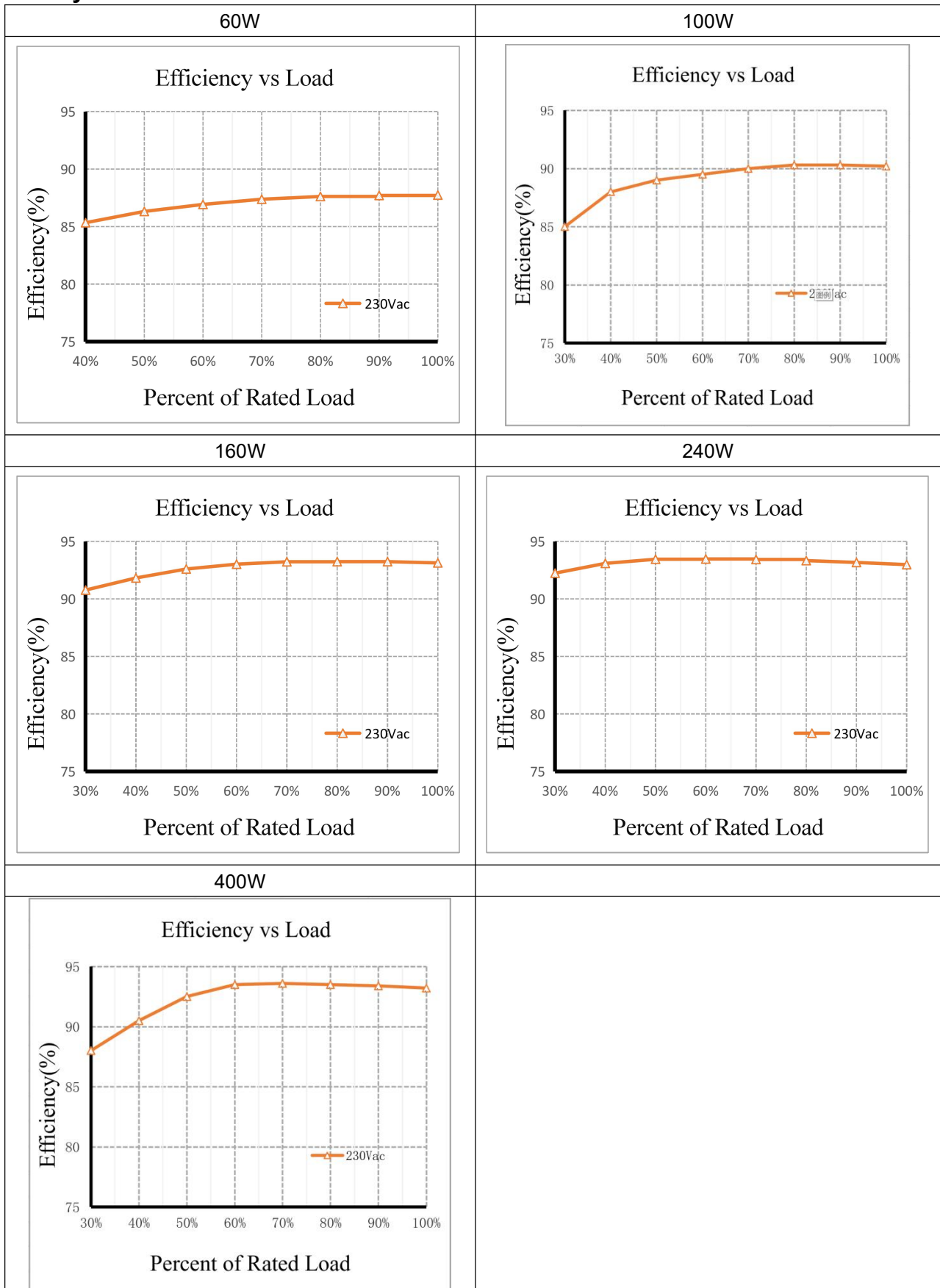
#### PF VS LOAD Curve



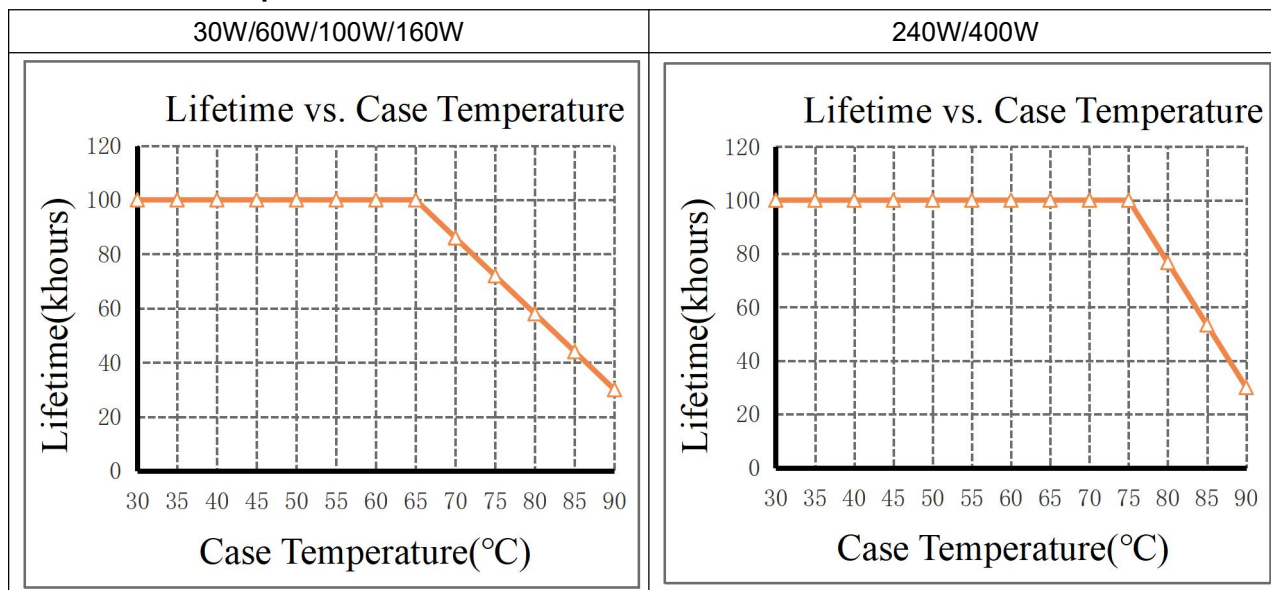
### THD VS LOAD Curve



### Efficiency VS LOAD Curve



### Lifetime vs. Case Temperature



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

### 3.Label

INPUT: ○ L (Brown) ○ N (Blue) ⊕ (Yellow-green)

**NEXIVO**  
by KGP Electronics GmbH  
Hueckstraße 19  
DE-58511 Lüdenscheid

**XSV30W24-DALI-NX**  
159010  
Dimmable LED Driver  
Constant Voltage Type  
For LED modules only

Input: 220-240V~, 50/60Hz, 0.2A, λ:0.95  
Output: 24V- 0-1.25A Max.30W  
•tc Ta: -25 ~ +50°C Tc:75°C

SELV CE ENEC IP67

(Blue) I ○  
(Brown) + ○ OUTPUT  
(Purple) DA ○ DIM  
(Gray) DA ○ DIM

INPUT: ○ L (Brown) ○ N (Blue) ⊕ (Yellow-green)

**NEXIVO**  
by KGP Electronics GmbH  
Hueckstraße 19  
DE-58511 Lüdenscheid

**XSV60W24-DALI-NX**  
159020  
Dimmable LED Driver  
Constant Voltage Type  
For LED modules only

Input: 220-240V~, 50/60Hz, 0.4A, λ:0.95  
Output: 24V- 0-2.5A Max.60W  
•tc Ta: -25 ~ +50°C Tc:75°C

SELV CE ENEC IP67

(Blue) I ○  
(Brown) + ○ OUTPUT  
(Purple) DA ○ DIM  
(Gray) DA ○ DIM

INPUT: ○ L (Brown) ○ N (Blue) ⊕ (Yellow-green)

**NEXIVO**  
by KGP Electronics GmbH  
Hueckstraße 19  
DE-58511 Lüdenscheid

**XSV100W24-DALI-NX**  
159030  
Dimmable LED Driver  
Constant Voltage Type  
For LED modules only

Input: 220-240V~, 50/60Hz, 0.6A, λ:0.95  
Output: 24V- 0-4.17A Max.100W  
•tc Ta: -25 ~ +50°C Tc:75°C

SELV CE ENEC IP67

(Blue) I ○  
(Brown) + ○ OUTPUT  
(Purple) DA ○ DIM  
(Gray) DA ○ DIM

INPUT: ○ L (Brown) ○ N (Blue) ⊕ (Yellow-green)

**NEXIVO**  
by KGP Electronics GmbH  
Hueckstraße 19  
DE-58511 Lüdenscheid

**XSV160W24-DALI-NX**  
159040  
Dimmable LED Driver  
Constant Voltage Type  
For LED modules only

Input: 220-240V~, 50/60Hz, 0.9A, λ:0.95  
Output: 24V- 0-6.67A Max.160W  
•tc Ta: -25 ~ +50°C Tc:85°C

SELV CE ENEC IP67

(Blue) I ○  
(Brown) + ○ OUTPUT  
(Purple) DA ○ DIM  
(Gray) DA ○ DIM

INPUT: ○ L (Brown) ○ N (Blue) ⊕ (Yellow-green)

**NEXIVO**  
by KGP Electronics GmbH  
Hueckstraße 19  
DE-58511 Lüdenscheid

**XSV240W24-DALI-NX**  
159050  
Dimmable LED Driver  
Constant Voltage Type  
For LED modules only

Input: 220-240V~, 50/60Hz, 1.5A, λ:0.95  
Output: 24V- 0-10A Max.240W  
•tc Ta: -25 ~ +50°C Tc:90°C

SELV CE ENEC IP67

(Blue) I ○  
(Brown) + ○ OUTPUT  
(Purple) DA ○ DIM  
(Gray) DA ○ DIM

INPUT: ○ L (Brown) ○ N (Blue) ⊕ (Yellow-green)

**NEXIVO**  
by KGP Electronics GmbH  
Hueckstraße 19  
DE-58511 Lüdenscheid

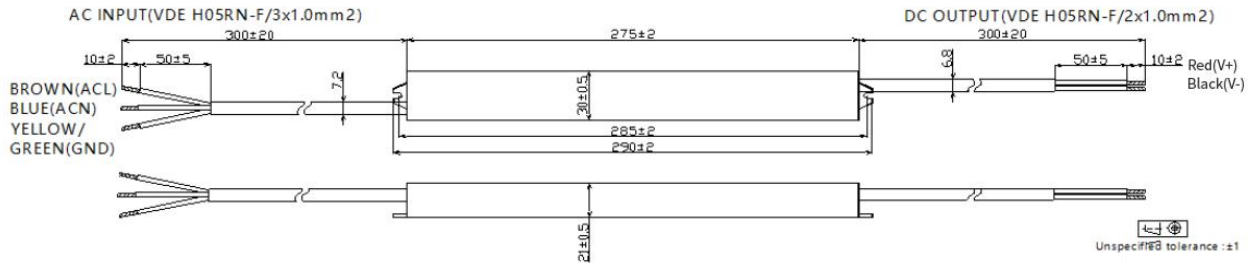
**XSV400W24-DALI-NX**  
159060  
Dimmable LED Driver  
Constant Voltage Type  
For LED modules only

Input: 220-240V~, 50/60Hz, 2.3A, λ:0.95  
Output: 24V- 0-16.67A Max.400W  
•tc Ta: -25 ~ +50°C Tc:90°C

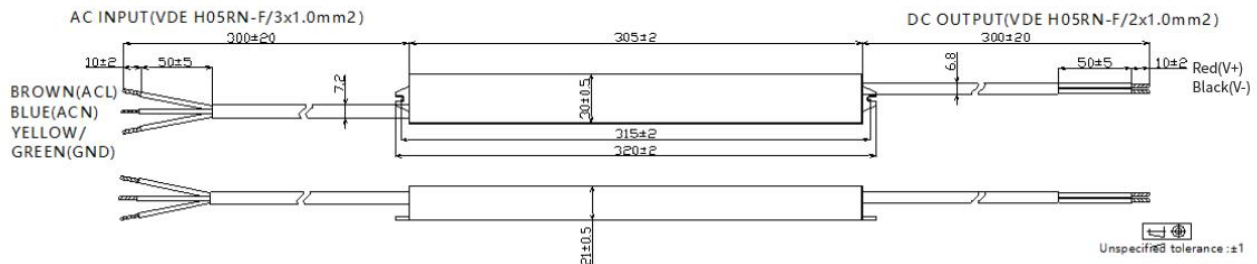
SELV CE ENEC IP67

(Blue) I ○  
(Brown) + ○ OUTPUT  
(Blue) I ○  
(Brown) + ○ OUTPUT  
(Purple) DA ○ DIM  
(Gray) DA ○ DIM

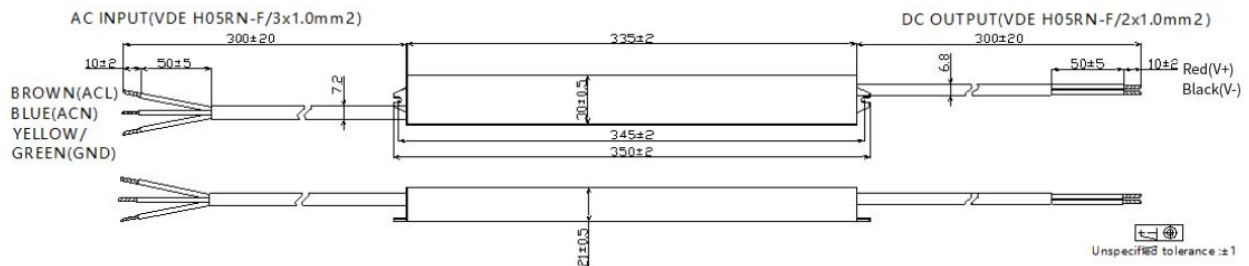
### 4.Dimension (Unit: mm) XSV60W48-NX



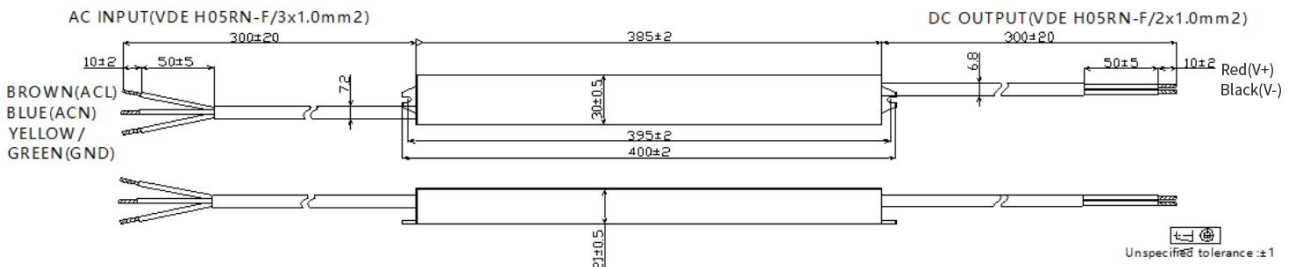
### XSV100W48-NX



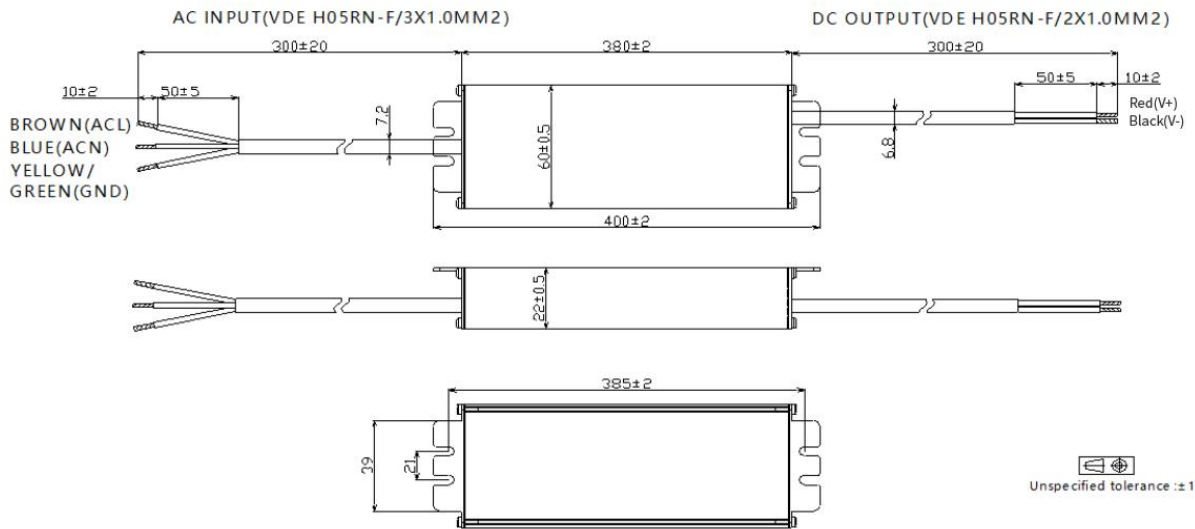
### XSV160W48-NX



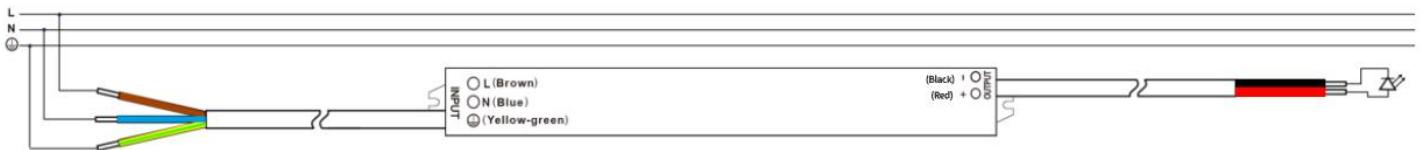
### XSV240W48-NX



### XSV400W48-NX



### 5. Wiring Diagram



### 6. Packing information

| Model        | Carton L*W*H(cm) | Pcs/ Carton | Net weight/ Pcs(g) | Net weight/ Carton(kg) | Gross weight/ Carton(kg) |
|--------------|------------------|-------------|--------------------|------------------------|--------------------------|
| XSV60W48-NX  | 34*29*20         | 30          | 390                | 11.70                  | 13.30                    |
| XSV100W48-NX | 39*29*20         | 30          | 420                | 12.60                  | 14.30                    |
| XSV160W48-NX | 39*29*20         | 30          | 470                | 14.10                  | 15.80                    |
| XSV240W48-NX | 44*29*14         | 20          | 530                | 10.60                  | 11.90                    |
| XSV400W48-NX | 44*29*14         | 12          | 1050               | 12.60                  | 13.60                    |

### 7. Ordering data

| Model No     | Item code |
|--------------|-----------|
| XSV60W48-NX  | 159070    |
| XSV100W48-NX | 159080    |
| XSV160W48-NX | 159090    |
| XSV240W48-NX | 159100    |
| XSV400W48-NX | 159110    |

8. REVISION HISTORY

| Date       | Revision | Remark                                     |
|------------|----------|--------------------------------------------|
| 2026.16.03 | V0.01    | Product release                            |
| 2026.16.06 | V0.02    | Add cable section and distance information |
|            |          |                                            |
|            |          |                                            |
|            |          |                                            |
|            |          |                                            |
|            |          |                                            |