



## Model name

# KS 15-5

Name of series

Nominal output voltage

Nominal output power

## Features

- Compact on-board type AC-DC power supply  
Input 85 ~ 132VAC
- Wide Variation  
Output power: 5W, 10W, 15W types  
Output voltage: 5V, 12V, 15V types
- Over current and Over voltage protection
- 1 year warranty

## Specifications

|                                              |                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Input voltage range                       | 85 ~ 132VAC(47 ~ 440Hz), 110 ~ 175VDC                                                                                                                                                                                                                                                                          |
| 2. Output voltage range                      | Fixed                                                                                                                                                                                                                                                                                                          |
| 3. Cooling                                   | Convection cooling                                                                                                                                                                                                                                                                                             |
| 4. Operating temperature (Standard mounting) | -10 ~ +70°C<br>-10°C: 80%, 0 ~ +50°C: 100%, +60°C: 60%, +70°C: 25%                                                                                                                                                                                                                                             |
| 5. Withstand voltage                         | Input-output, input-FG: 2kVAC, output-FG: 500VAC for 1 min.                                                                                                                                                                                                                                                    |
| 6. Safety standard                           | Approved by UL1950  , CSA950  (KS10: Approved by CSA234  ) |
| 7. EMI                                       | Conforms to FCC class B and VCCI-class A                                                                                                                                                                                                                                                                       |
| 8. Functions                                 | Over voltage protection (Zener diode clamp), Over current protection                                                                                                                                                                                                                                           |

## Product lineup

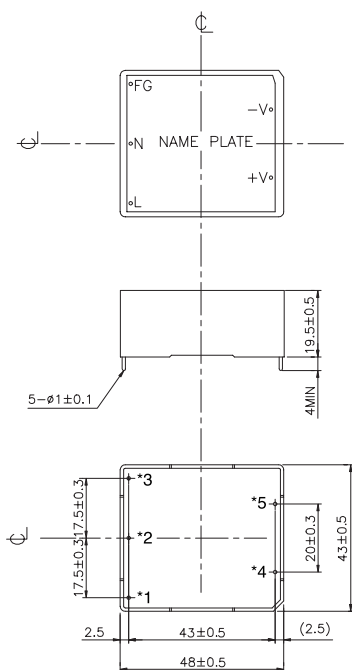
| Model | Type    | Output voltage | Output current | Output power | UL | CSA |
|-------|---------|----------------|----------------|--------------|----|-----|
| KS5   | KS5-5   | 5V             | 1.0A           | 5.0W         | ○  | ○   |
|       | KS5-12  | 12V            | 0.45A          | 5.4W         | ○  | ○   |
| KS10  | KS10-5  | 5V             | 2.0A           | 10.0W        | ○  | ○   |
|       | KS10-12 | 12V            | 0.9A           | 10.8W        | ○  | ○   |
| KS15  | KS15-5  | 5V             | 3.0A           | 15.0W        | ○  | ○   |
|       | KS15-12 | 12V            | 1.3A           | 15.6W        | ○  | ○   |

- Request customer specification for further details of specifications, outline, characteristics, etc.  
Read the instruction manual before usage.
- Contact us about delivery before ordering.

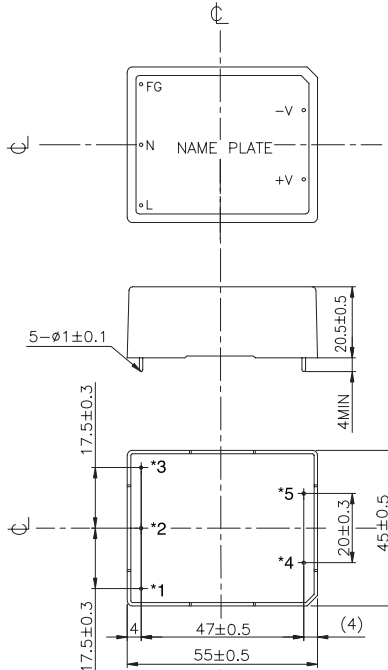
○ : Safety standard approved

## Outline drawing

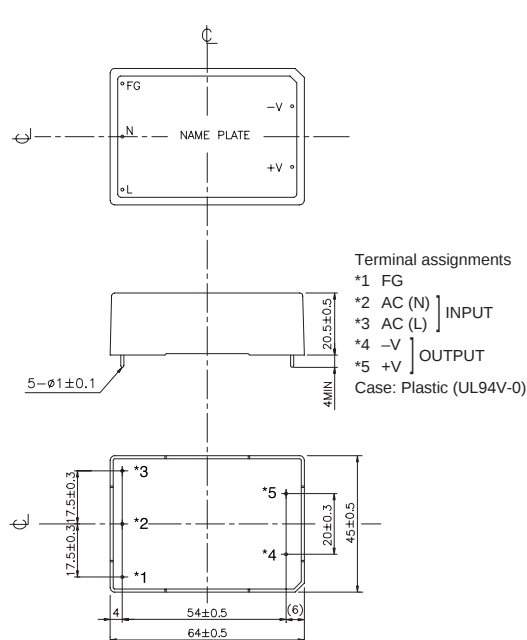
KS5



KS10



KS15



Terminal assignments  
\*1 FG  
\*2 AC (N) INPUT  
\*3 AC (L) INPUT  
\*4 -V OUTPUT  
\*5 +V OUTPUT  
Case: Plastic (UL94V-0)

(Unit: mm)



## Model name KWS 5-5

Name of series      Nominal output voltage  
Nominal output power

## Features

- CE marking (Low Voltage Directive)
- Compact on-board type AC-DC power  
Input 85 ~ 265VAC universal input
- Wide Variation  
Output power: 5W, 10W, 15W types  
Output voltage: 5V, 12V, 15V types
- Over current and Over voltage protection
- 1 year warranty

## Specifications

|                                              |                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Input voltage range                       | 85 ~ 265VAC(47 ~ 440Hz), 110 ~ 340VDC                                                                                                                                                                                                                                                                                                                                                                                |
| 2. Output voltage range                      | Fixed                                                                                                                                                                                                                                                                                                                                                                                                                |
| 3. Cooling                                   | Convection cooling                                                                                                                                                                                                                                                                                                                                                                                                   |
| 4. Operating temperature (Standard mounting) | -10 ~ +70°C<br>-10°C: 80%, 0 ~ +50°C: 100%, +60°C: 60%, +70°C: 25%                                                                                                                                                                                                                                                                                                                                                   |
| 5. Withstand voltage                         | Input-output: 3kVAC, Input-FG: 2kVAC, Output-FG: 500VAC for 1 min.                                                                                                                                                                                                                                                                                                                                                   |
| 6. Safety standard                           | Approved by UL1950  , CSA950  (KWS5: Approved by CSA234  ) and EN60950(TÜV)  |
| 7. EMI                                       | Conforms to FCC class B and VCCI-class A                                                                                                                                                                                                                                                                                                                                                                             |
| 8. Functions                                 | Over voltage protection (Zener diode clamp), Over current protection                                                                                                                                                                                                                                                                                                                                                 |

## Product lineup

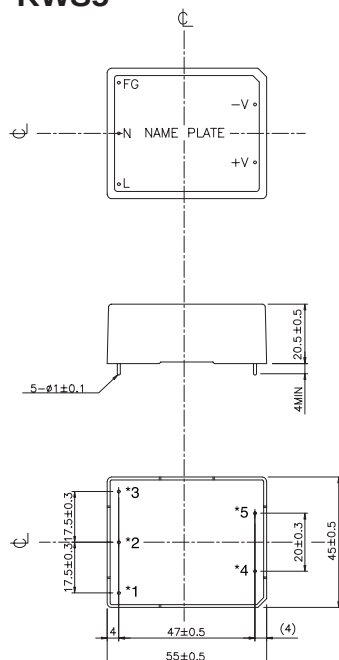
| Model | Type     | Output voltage | Output current | Output power | UL | CSA | EN |
|-------|----------|----------------|----------------|--------------|----|-----|----|
| KWS5  | KWS5-5   | 5V             | 1.0A           | 5.0W         | ○  | ○   | ○  |
|       | KWS5-12  | 12V            | 0.45A          | 5.4W         | ○  | ○   | ○  |
|       | KWS5-15  | 15V            | 0.35A          | 5.25W        | ○  | ○   | ○  |
| KWS10 | KWS10-5  | 5V             | 2.0A           | 10.0W        | ○  | ○   | ○  |
|       | KWS10-12 | 12V            | 0.9A           | 10.8W        | ○  | ○   | ○  |
|       | KWS10-15 | 15V            | 0.7A           | 10.5W        | ○  | ○   | ○  |
| KWS15 | KWS15-5  | 5V             | 3.0A           | 15.0W        | ○  | ○   | ○  |
|       | KWS15-12 | 12V            | 1.3A           | 15.6W        | ○  | ○   | ○  |
|       | KWS15-15 | 15V            | 1.0A           | 15.0W        | ○  | ○   | ○  |

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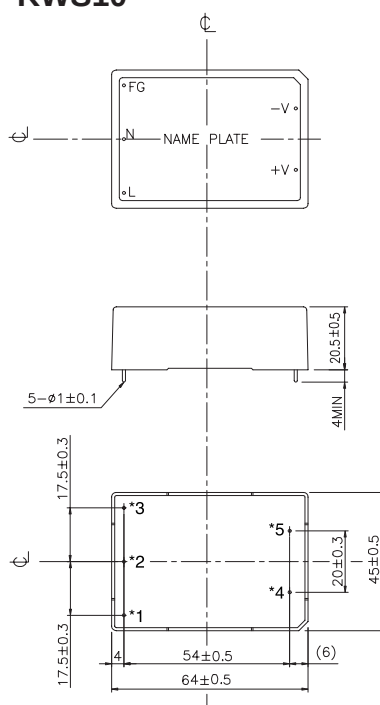
○ : Safety standard approved

## Outline drawing

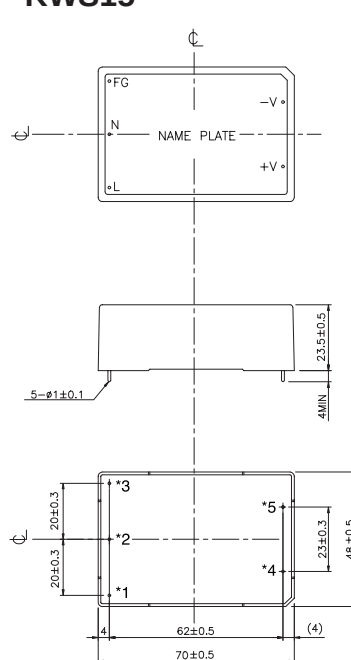
### KWS5



### KWS10



### KWS15



Terminal assignments  
 \*1 FG  
 \*2 AC (N)  
 \*3 AC (L) } INPUT  
 \*4 -V  
 \*5 +V } OUTPUT  
 Case: Plastic (UL94V-0)

(Unit: mm)



CE (Low Voltage Directive)

1 year warranty

## Model name

# KWD 15-1515

Name of series

Nominal output power

Nominal output voltage  
1212:  $\pm 12V$   
1515:  $\pm 15V$

## Features

- CE marking (Low Voltage Directive)
- Compact on-board type AC-DC power  
Input 85 ~ 265VAC universal input
- Wide Variation  
Output power: 5W, 10W, 15W types  
Output voltage:  $\pm 12V$ ,  $\pm 15V$  types
- Over current and Over voltage protection
- 1 year warranty

## Specifications

|                                              |                                                                                                                                                                                                                                                                                                                 |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Input voltage range                       | 85 ~ 265VAC(47 ~ 440Hz), 110 ~ 340VDC                                                                                                                                                                                                                                                                           |
| 2. Output voltage range                      | Fixed                                                                                                                                                                                                                                                                                                           |
| 3. Cooling                                   | Convection cooling                                                                                                                                                                                                                                                                                              |
| 4. Operating temperature (Standard mounting) | -10 ~ +70°C<br>-10°C: 80%, 0 ~ +50°C: 100%, +60°C: 60%, +70°C: 25%                                                                                                                                                                                                                                              |
| 5. Withstand voltage                         | Input-output: 3kVAC, Input-FG: 2kVAC, Output-FG: 500VAC for 1 min.                                                                                                                                                                                                                                              |
| 6. Safety standard                           | Approved by UL1950  , CSA950  (KWD5: Approved by CSA234  ) |
| 7. EMI                                       | Conforms to FCC class B and VCCI-class B                                                                                                                                                                                                                                                                        |
| 8. Functions                                 | Over voltage protection (CH2 only: Zener diode clamp), Over current protection                                                                                                                                                                                                                                  |

## Product lineup

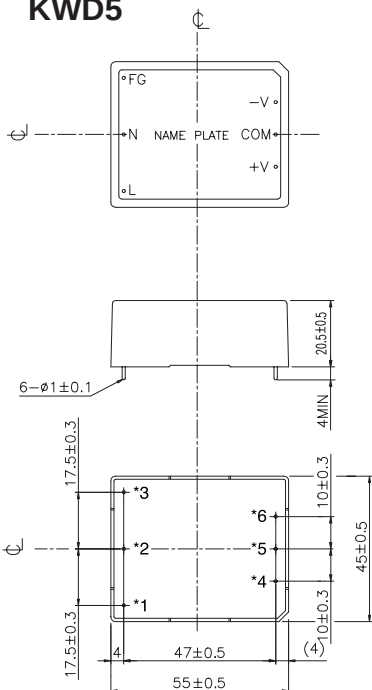
| Model name |            | CH | Output voltage | Output current | Output power | UL | CSA | EN |
|------------|------------|----|----------------|----------------|--------------|----|-----|----|
| KWD5       | KWD5-1212  | 1  | +12V           | 0.22A          | 5.3W         | ○  | ○   | ○  |
|            |            | 2  | -12V           | 0.22A          |              |    |     |    |
|            | KWD5-1515  | 1  | +15V           | 0.18A          | 5.4W         | ○  | ○   | ○  |
|            |            | 2  | -15V           | 0.18A          |              |    |     |    |
| KWD10      | KWD10-1212 | 1  | +12V           | 0.45A          | 10.6W        | ○  | ○   | ○  |
|            |            | 2  | -12V           | 0.45A          |              |    |     |    |
|            | KWD10-1515 | 1  | +15V           | 0.36A          | 10.8W        | ○  | ○   | ○  |
|            |            | 2  | -15V           | 0.36A          |              |    |     |    |
| KWD15      | KWD15-1212 | 1  | +12V           | 0.65A          | 15.6W        | ○  | ○   | ○  |
|            |            | 2  | -12V           | 0.65A          |              |    |     |    |
|            | KWD15-1515 | 1  | +15V           | 0.52A          | 15.6W        | ○  | ○   | ○  |
|            |            | 2  | -15V           | 0.52A          |              |    |     |    |

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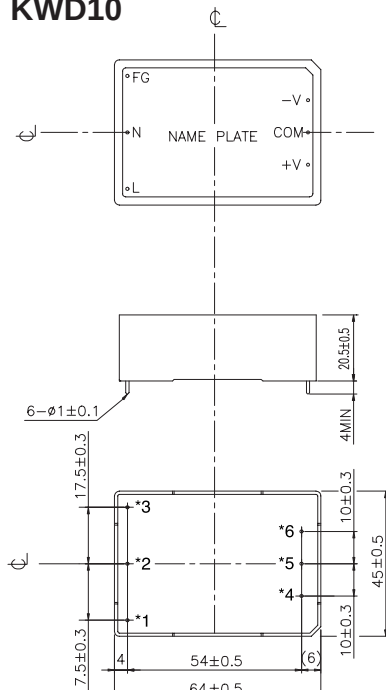
○ : Safety standard approved

## Outline drawing

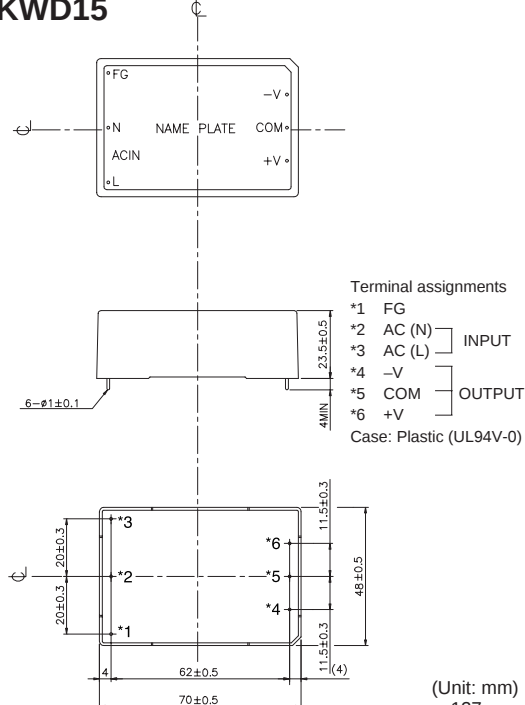
### KWD5



### KWD10



### KWD15



Terminal assignments  
\*1 FG  
\*2 AC (N)  
\*3 AC (L) } INPUT  
\*4 -V  
\*5 COM  
\*6 +V } OUTPUT  
Case: Plastic (UL94V-0)

(Unit: mm)  
127