

Foot Switched For medical beauty product

HRF Series



Part Number Description

HRF - 1 2 3 4

| | | | | |
|--|--|---------------------|--------------------------------|-------------------------|
| 1 Type | M : Medium Duty Type | H : Heavy Duty Type | | |
| 2 Material | No mark : Plastic | D : Die-Casting | X : Rolled Steel (Only 1, 8) | |
| 3 Safety Cover (H type only) | N : top LX : top + side + safety kick lever | F : no cover | NX : top + side | NS : top + side + front |
| 4 Operator Type | No mark : Momentary | 3: Maintained | | |

HRF-M5 1 - **L** 2 - 3 - 4

| | | | |
|---|---|--------------------------------|-----------------|
| 1 Pedal | None : 1 Pedal | 2 : 2 Pedal | 3 : 3 Pedal |
| 2 Pedal Color (Body Color : Milk White) | None : Standard(Pastel yellow)* R : Pastel red | Y : Pastel yellow W : White | B : Pastel blue |
| 3 Connection method | None : Standard | J : Bend | |
| 4 Cable outlet | None : Standard | U : USB(주문형) | |

* Pedal Color : When ordering the basic color, it is available in pastel yellow.

※ Example :

- HRF-M5-LR: 1 Pedal / Body Color Milky / Pedal Color Pastel Tone Red
- HRF-M52-LBR: 2 Pedal / Body Color Milky / Pedal Color Pastel Tone Blue + Pastel Tone Red
- HRF-M53-LYBW: 3 Pedal / Body Color Milky / Pedal Color Pastel Tone Yellow + Pastel Tone Blue + White
- HRF-M53-L: 3 Pedal / Body Color Milky / Pedal Color Pastel Tone Yellow

General Specification

| M type | M1 | M2 | M6 | M7C | M8 | MX1 | MD2 | MD3 | MD4 |
|-----------------|--|----|------|------|-----------|--------------------------------|----------------------|-----|-----|
| Contact Form | 1N/O | 1C | 2N/O | 1N/O | | 1C | | | |
| Material | Plastic | | | | | Rolled Steel | Aluminum Die-casting | | |
| Rated Current | 16A 250VAC RES. (KC criterion) | | | | 5A 250VAC | 16A 250VAC RES. (KC criterion) | | | |
| Built-in Switch | V type Micro Switch (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plate | | | | | | | | |





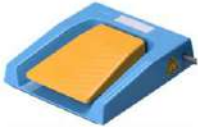

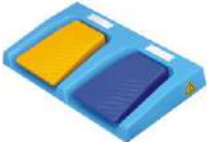



| M5 type | M5 | M52 | M53 | M5-L | M52-L | M53-L | M52-L-J | M53-L-J |
|-----------------|--|------|------|------|-------|-------|---------|---------|
| Contact Form | 1N/O | 2N/O | 3N/O | 1N/O | 2N/O | 3N/O | 2N/O | 3N/O |
| Material | Plastic | | | | | | | |
| Rated Current | 16A 250VAC RES. (KC criterion) | | | | | | | |
| Built-in Switch | V type Micro Switch (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plate | | | | | | | |

* Option : USB type

* M5 ~ M8 : Molding type Micro Switch

| H type | HD3 | HD3F | HD3N | HD3NX | HD3NS | HD3LX | HD5N | HD5NX | HD5NS |
|-----------------|--|------|------|-------|-------|-------|--------------|-------|-------|
| Contact Form | 1C | | | | | | 2C (2Pedals) | | |
| Rated Current | 15A 125/250VAC | | | | | | | | |
| Built-in Switch | Z type Micro Switch (CE, UL, CUL, CCC, KC certified) | | | | | | | | |
| Material | Aluminum Die-casting | | | | | | | | |
| Cable Outlet | By using 1/2 Inch Tap, the flexible cable can be attached (Zn connector 10 ~ 16) | | | | | | | | |

Product Selection

| | Contact Form | Rated Load | Built-in Switch | Certification | Material | Cable outlet | Degree of Protection | Part Number |
|--|-------------------|-----------------------------------|---|---|----------|--|----------------------|-------------|
|  | 1N/0 | 16A 250VAC RES. (KC criterion) | V15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | plastic | VFF 0.75mm ² × 2Line Cable × 1.5m | IP54 | HRF-M1 |
|  | 1C | 16A 250VAC RES. (KC criterion) | V15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | plastic | 0.5mm ² × 3Line Cable × 2m | IP54 | HRF-M2 |
|  | 1N/0 | 16A 250VAC RES. (KC criterion) | VV15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | plastic | 0.5mm ² × 2Line Cable × 2m | IP68 | HRF-M5 |
|  | 2N/0 (2pedals) | 16A 250VAC RES. (KC criterion) | VV15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | plastic | 0.5mm ² × 4Line Cable × 2m | IP68 | HRF-M52 |
|  | 3N/0 (3pedals) | 16A 250VAC RES. (KC criterion) | VV15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | plastic | 0.5mm X 6Line cable X 2m | IP68 | HRF-M53 |

※ Please refer to 63p for additional specifications of V15F-01C, VV15F-01C.

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Product Selection

| | Contact Form | Rated Load | Built-in Switch | Certification | Material | Cable outlet | Degree of Protection | Part Number |
|--|-------------------|-----------------------------------|---|---|----------|--|----------------------|-------------|
|  | 1N/O | 16A 250VAC RES. (KC criterion) | VV15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | 플라스틱 | 0.5mm ² × 2Line Cable × 2m | IP68 | HRF-M5-L |
|  | 2N/O (2페달) | 16A 250VAC RES. (KC criterion) | VV15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | 플라스틱 | 0.5mm ² × 4Line Cable × 2m | IP68 | HRF-M52-L |
|  | 3N/O (3페달) | 16A 250VAC RES. (KC criterion) | VV15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | 플라스틱 | 0.5mm X 6Line cable X 2m | IP68 | HRF-M53-L |
|  | 2N/O (2페달) | 16A 250VAC RES. (KC criterion) | VV15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | 플라스틱 | 0.5mm ² × 4Line Cable × 2m | IP68 | HRF-M52-L-J |
|  | 3N/O (3페달) | 16A 250VAC RES. (KC criterion) | VV15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | 플라스틱 | 0.5mm X 6Line cable X 2m | IP68 | HRF-M53-L-J |
|  | 2N/O (2pedals) | 10A 250VAC | VV15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | plastic | 0.5mm ² × 4Line Cable × 2m | IP65 | HRF-M6 |

※ Please refer to 63p for additional specifications of V15F-01C, VV15F-01C.

Product Selection

| | Contact Form | Rated Load | Built-in Switch | Certification | Material | Cable outlet | Degree of Protection | Part Number |
|--|--------------|---------------------------|--|---|-------------------------|--|----------------------|-------------------------------------|
|  | 1N/O | 16A 250VAC RES. (KC기준) | V15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | plastic | VFF 0.75mm ² × 2Line Cable × 1.5m | IP54 | HRF-M7C |
|  | 1N/O | 5A 250VAC | KMS-F Molding type |  | plastic | 0.5mm ² × 2Line Cable × 2m | IP68 | HRF-M8 |
|  | 1C | 10A 250VAC | V15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | rolled steel sheets | 0.5mm ² × 3Line Cable × 2m | IP54 | HRF-MX1 |
|  | 1C | 10A 250VAC | V15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | aluminum die-casting | 0.5mm ² × 3Line Cable × 2m | IP54 | HRF-MD2 HRF-MD23 (Maintained) |
|  | 1C | 10A 250VAC | V15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | aluminum die-casting | 0.5mm ² × 3Line Cable × 2m | IP54 | HRF-MD2S |
|  | 1C | 10A 250VAC | V15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | aluminum die-casting | 0.5mm ² × 3Line Cable × 2m | IP54 | HRF-MD3 |
|  | 1C | 10A 250VAC | V15F-01C (UL, CUL, VDE, CE, KC, CQC certified) + 24k gold plat |  | aluminum die-casting | 0.5mm ² × 3Line Cable × 2m | IP54 | HRF-MD4 |

※ Please refer to 63p for additional specifications of V15F-01C, VV15F-01C.

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| | Contact Form | Rated Load | Built-in Switch | Certification | Material | Cable outlet | Degree of Protection | Part Number |
|--|--------------|----------------|--|---|----------------------|---|----------------------|-------------|
|  | 1C | 15A 125/250VAC | Z15G10B (CE, UL, CUL, CCC, KC certified) |  | aluminum die-casting | 1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 ~ 16) | IP65 | HRF-HD3 |
|  | 1C | 15A 125/250VAC | Z15G10B (CE, UL, CUL, CCC, KC certified) |  | aluminum die-casting | 1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 ~ 16) | IP65 | HRF-HD3N |
|  | 1C | 15A 125/250VAC | Z15G10B (CE, UL, CUL, CCC, KC certified) |  | aluminum die-casting | 1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 ~ 16) | IP54 | HRF-HD3NX |
|  | 1C | 15A 125/250VAC | Z15G10B (CE, UL, CUL, CCC, KC certified) |  | aluminum die-casting | 1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 ~ 16) | IP54 | HRF-HD3NS |
|  | 1C | 15A 125/250VAC | Z15G10B (CE, UL, CUL, CCC, KC certified) |  | aluminum die-casting | 1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 ~ 16) | IP54 | HRF-HD3LX |
|  | 1C | 15A 125/250VAC | Z15G10B (CE, UL, CUL, CCC, KC certified) |  | aluminum die-casting | 1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 ~ 16) | IP65 | HRF-HD3F |

※ Please refer to 54p for additional specifications of Z15G10B.

Product Selection

| | Contact Form | Rated Load | Built-in Switch | Certification | Material | Cable outlet | Degree of Protection | Part Number |
|--|-----------------|----------------|--|---|-------------------------|---|----------------------|-------------|
|  | 2C (2pedals) | 15A 125/250VAC | Z15G10B (CE, UL, CUL, CCC, KC certified) |  | aluminum die-casting | 1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 ~ 16) | IP54 | HRF-HD5NX |
|  | 2C (2pedals) | 15A 125/250VAC | Z15G10B (CE, UL, CUL, CCC, KC certified) |  | aluminum die-casting | 1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 ~ 16) | IP54 | HRF-HD5NS |
|  | 2C (2pedals) | 15A 125/250VAC | Z15G10B (CE, UL, CUL, CCC, KC certified) |  | aluminum die-casting | 1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 ~ 16) | IP54 | HRF-HD202P |
|  | 3C (3pedals) | 15A 125/250VAC | Z15G10B (CE, UL, CUL, CCC, KC certified) |  | aluminum die-casting | 1/2 Inch Tap, the flexible cable can be attached (zinc connector 10 ~ 16) | IP54 | HRF-HD301P |

※ Please refer to 54p for additional specifications of Z15G10B.

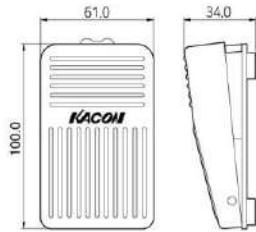
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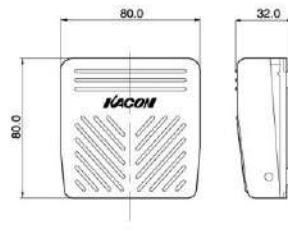
Dimension

Unit : mm

HRF-M1



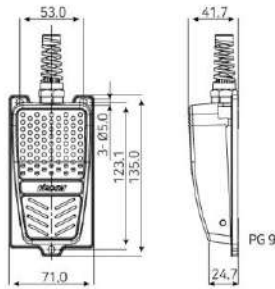
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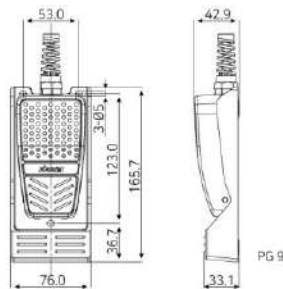
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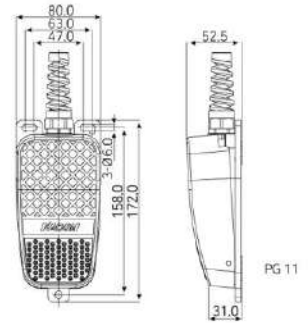
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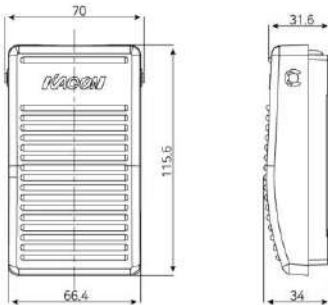
HRF-MD2S



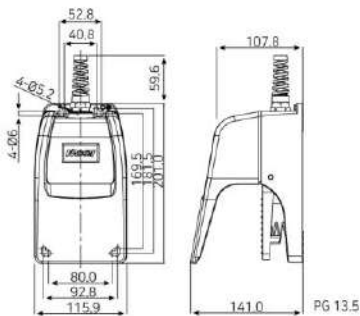
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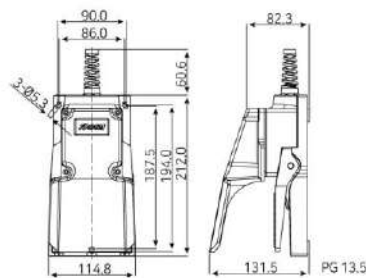
HRF-MD4



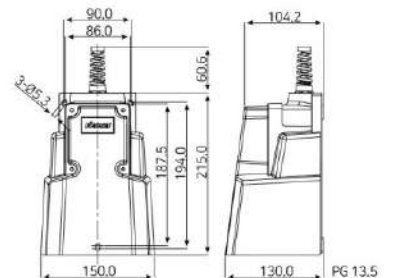
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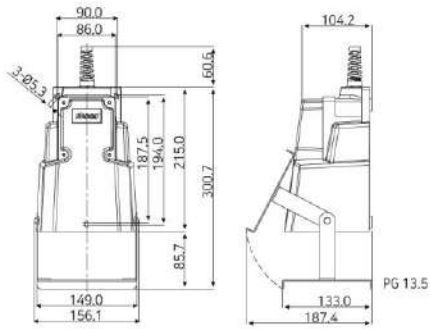
HRF-HD3N



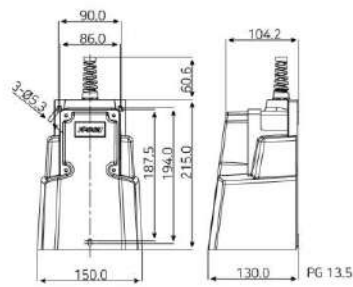
HRF-HD3NX



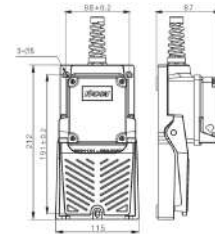
HRF-HD3NS



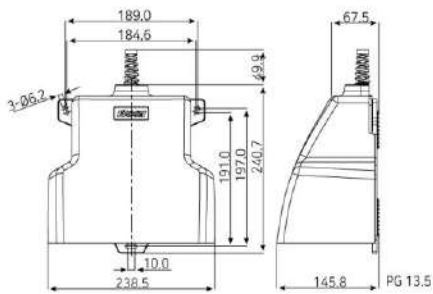
HRF-HD3LX



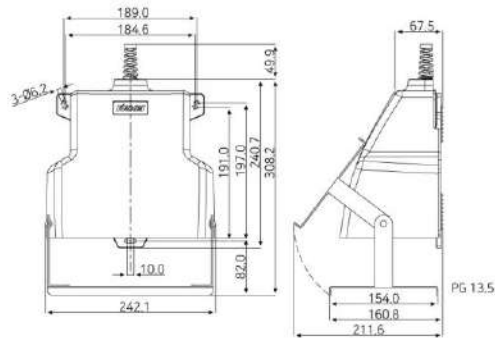
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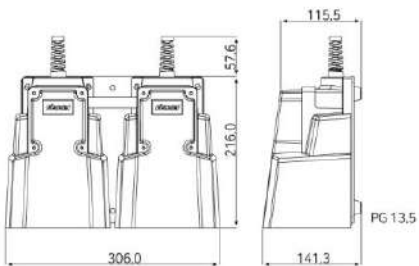
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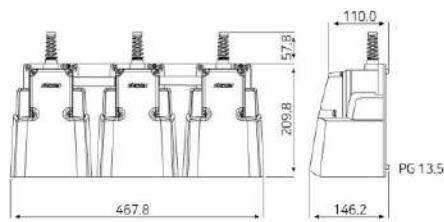
HRF-HD5NS



HRF-HD202P



HRF-HD301P



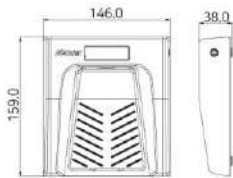
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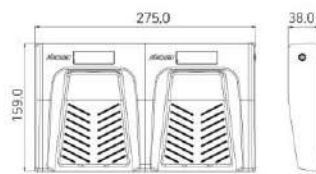
Dimension

Unit : mm

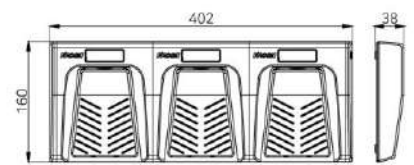
HRF-M5 / HRF-M5-L



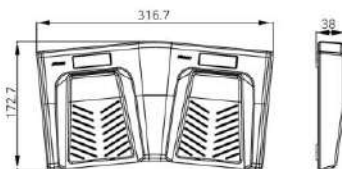
HRF-M52 / HRF-M52-L



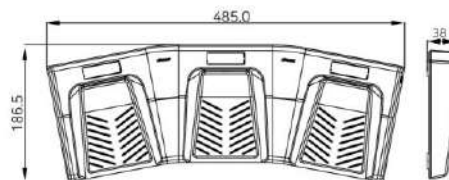
HRF-M53 / HRF-M53-L



HRF-M52-L-J



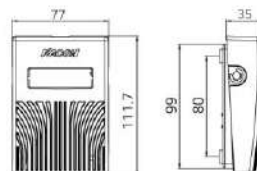
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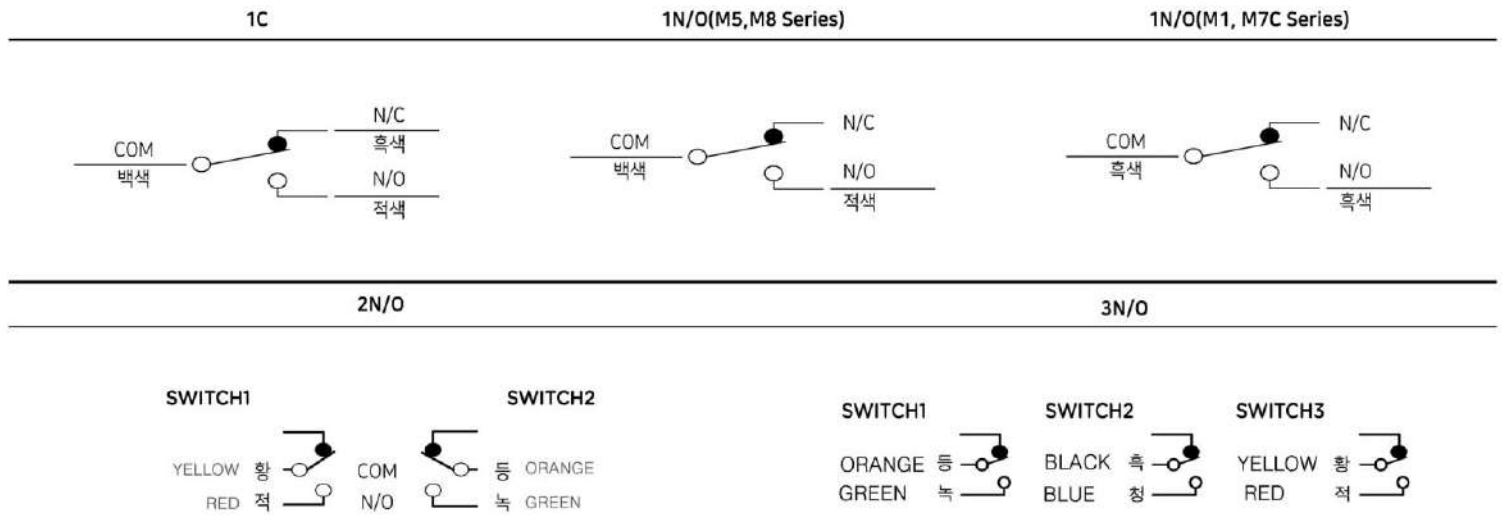
HRF-M6



HRF-M8



Circuit Drawing (Bottom View)



Caution

- Use the large current breaker for the large current above the rating considering the load type.
- Use caution for short or open circuits when the product is transported or moved.
- Consider the ambient environment, e.g., water, oil and dirt.
- Severe impact or falling matters may cause operating errors.

Caution

- ☞ Be sure to observe the safety precautions to prevent accidents and risks by using the product safely and properly.
- ☞ Precautions are classified into three categories: danger, warning, and caution.
 - ⚠ **Danger** : Failure to observe this instruction may lead to an urgent situation including serious injury or significant damage.
 - ⚠ **Warning** : Failure to observe this instruction may lead to serious injury or death.
 - ⚠ **Caution** : Failure to observe this instruction may lead to light injury or damage to the product.
- ☞ The meaning of the symbol in the product and user's guide are as follows.
 - ⚠ is the symbol that a specific condition may generate a danger, which must be avoided.
 - ⚠ **Danger**
Be sure to attach double safety lock to the product when using it for the devices that significantly influence human lives or properties (nuclear, control, healthcare, burning, processing and transport). Otherwise, it may lead to fire, injury and damage to properties.
 - ⚠ **Warning**

1. Do not connect the wire when the power is on
It may cause an electric shock.
2. Only the KACON's technician can modify the product.
It may cause electric shock or fire.
3. Do not use it as a safety device.
It may cause injury or damage to the product.

⚠ Caution

1. Do not use the product outdoors.
It may be the cause of reduced life and lead to an electric shock.
2. Do not use the product in the flammable or explosive environment
It may lead to fire and explosion.
3. Use the product at the rated voltage.
Failure to use the rated voltage may lead to a reduced product life.
4. Do not use the product outside the operating voltage range nor apply AC power to the DC power product.
It may lead to the damage to the product.
5. Do not miswire (e.g., polarity)
It may lead to the damage to the product.
6. Do not use the product in the vibration environment.
It may lead to fire.
7. Do not use organic solvent for cleaning.
It may lead to electric shock and fire.
8. Do not short the load.
It may lead to the damage to the product.
9. For the disposal of this product, classify the product as industrial.