



It is recommended that only persons who have sufficient knowledge and experience such as system designers and responsible persons deal with this product after carefully reading the product manual.

## 1 The matters of safety

### WARNING

- \* If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- \* This bar is IP 66 rating and able to be installed in occasional washing area. Once the bar is wet, please dry the wet part completely.
- \* When you check or maintain the product, make it sure you turn off the power. It may cause electric shock or fire due to malfunction.
- \* Secure the product firmly when you want to secure it. There is a possibility of accident due to fall-over or malfunction, etc.
- \* Secure working space when you install the product. If working space is not secured, the checking or maintenance of the product is made impossible leading to failure of the product.
- \* Do not use the product at the place where dangerous material such as inflammable or ignitable material exists. This product is not the product of anti-explosive type.
- \* This device is made only for industrial uses. You need to ground the device beforehand. Otherwise, there are in case of malfunction, electric shock, or fire damage.
- \* For dispose of this bar, a qualified authority must handle this. If you do not dispose it properly, harmful substances from electronic/electric components can bring about problems for human and environment.

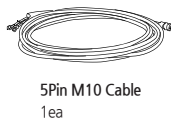
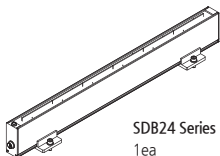
### CAUTION

- \* This bar is shockless type and no sparkle from it. For your safety, do not contact emitter tips and socket when its power is on. Watch out for electric shock and abnormal operation.
- \* Handle the discharge needle with care as its tip is very sharp.
- \* Connect wires referring to the product manual. Wrong connection can cause failures.
- \* Watch out for broken cable. If power cable is broken, immediate replacement is required. Broken cable can cause product breakdown or fire.
- \* Do not use the product for the purpose outside of the range of the product use. If the product is used for the purpose outside of the range of the use, it can result in the trouble or the shortened service life. Or an unexpected problem may occur.
- \* The ionizer generates ozone (below 0.05ppm) If you sense the smell of ozone when you use more than two units, ventilate the air.
- \* When installing or transporting the ion bar, be prepare not to bend the item during the process.

## 2 Check the package contents

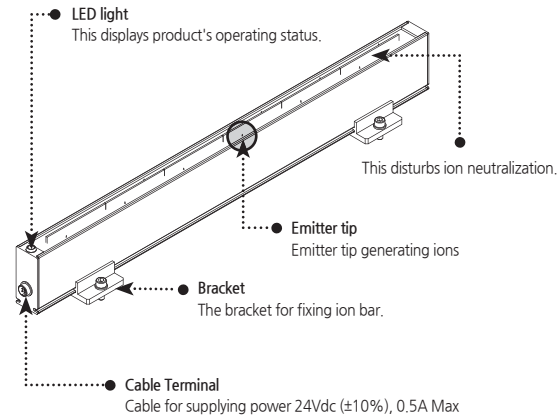
### Product compositions

The package includes the following products composition.



## 3 Nomenclatures of parts

### SDB24 Series



#### <Normal operation>

##### Red / Green LED blink in turn

Power is applied (Red LED : +24kV, Green LED : -24kV) and the product is running

#### <Abnormal signal>

##### Red LED Light on

Supplied voltage is higher than 27V

##### Green LED Light on

Supplied voltage is lower than 21V

##### Red LED blinking

Current value is over the maximum (overload)

##### Green LED blinking

Current value is lower than the minimum

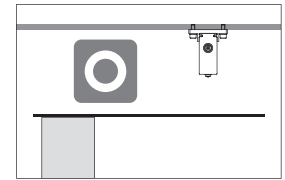
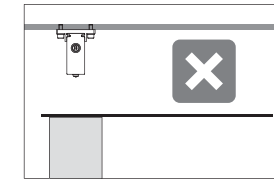
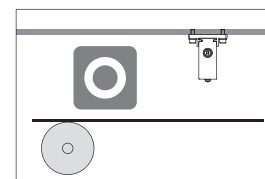
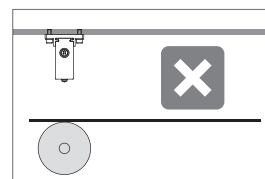
## 4 Installation and connection

### Ion bar installation

For installation of ion bar, please refer to the following.

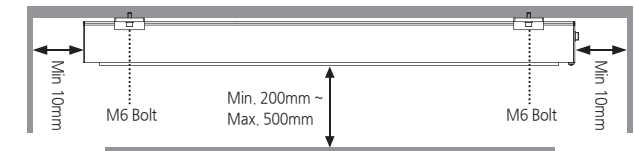
#### Mechanical Installation

It is very important to place the product in correct position. Any metal must not be placed between the product and the target to be discharged. To discharge film or plate, make sure that the bar is installed away from cylinder or other metal parts like the picture below.



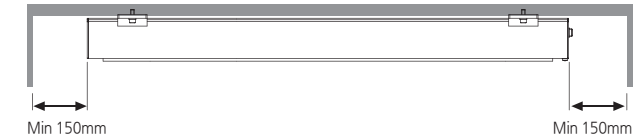
#### Basic Installation

SDB24 Series must be used for a distance between 200mm and 500mm. Using M6 bolt, tighten it up.



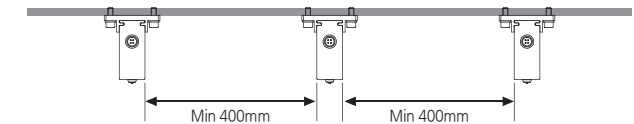
#### Interference by Grounding Matters

If there is any conductive object close to ion bar, SDB24 Series may not operate properly. Please install it with reference to figure below.



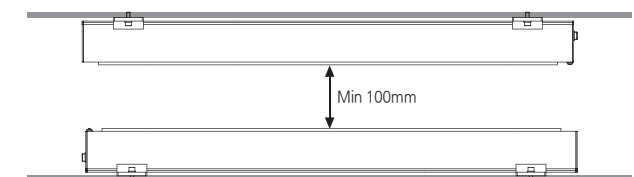
#### Side to Side Installation

When the more than two ion bars are installed, to avoid interference, the range between two ion bars should be more than 400mm.



#### Face to Face Installation

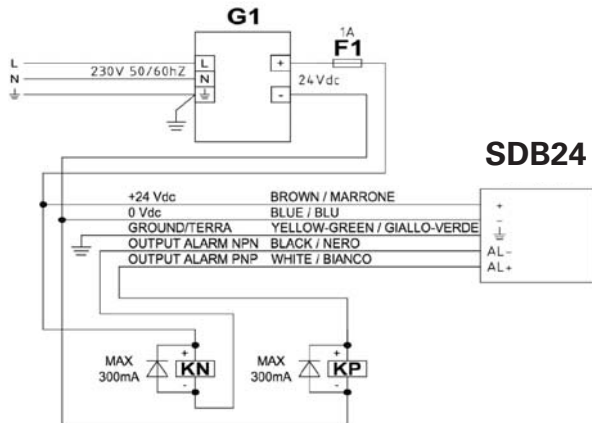
When two ion bars are installed face to face, to avoid interference, the range between two ion bars should be more than 100mm.



Electrical installation

**CAUTION**

- \* Do not use the product unless you connect ground wire to Pin 5.
- \* Using a quick 1A fuse, put the power in.
- \* Use proper Power supply for 24Vdc.



**SDB24**

Like the table above, connect the voltage to the product. 0V (terminal 1), 24V (terminal 2), ground (terminal 4). To connect 24Vdc power supply to the product, you should connect ground wire. (Pin 4 from female connector)

**5 Maintenance**

Maintenance is important to keep performance. When you use the product for a long time, it can be easily contaminated and by the dust performance can be lowered. To maintain good performance please follow the next.

- Clean the bar regularly.
- Before cleaning, check out the bar is off.
- You can clean the product using brush.



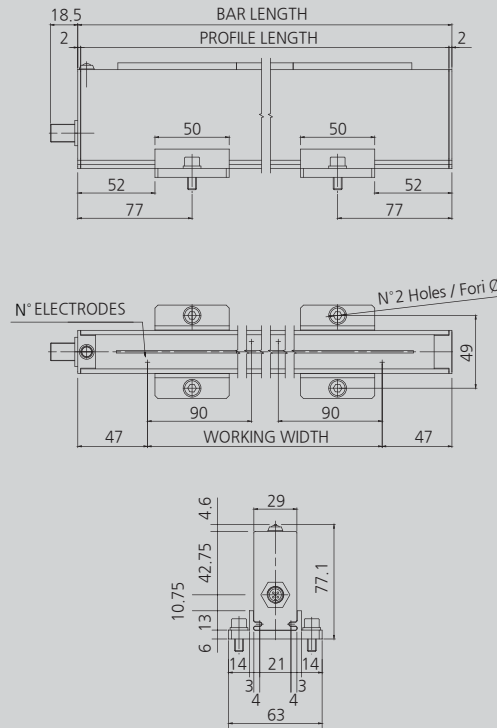
- You can clean the product using cotton with alcohol or cloth.



For a few minutes, dry it or blow it with pressed air. After the bar is completely dried you can connect the power to it.

**6 Dimensions**

► SDB24 Series



No.	Tip Q'TY	Useful Length	Profile Length	Total Length
1	6	450	540	544
2	8	630	720	724
3	10	810	900	904
4	12	990	1080	1084
5	14	1170	1260	1264
6	16	1350	1440	1444
7	18	1530	1620	1624
8	20	1710	1800	1804
9	22	1890	1980	1984
10	24	2070	2160	2164
11	26	2250	2340	2344
12	28	2430	2520	2524
13	30	2610	2700	2704
14	32	2790	2880	2884
15	34	2970	3060	3064

**7 Specification**

► SDB24 Series

Parameter	Description / Value	Remarks
Input Power	DC 24Vdc (±10%)	
Current Consumption	0.5A	Max
Output Voltage	DC ±25kV	
Overload Protection	2mA	
Primary Current	1.5mA	
Output frequency	1.6Hz (±1%)	
Working Distance	200 ~ 500mm	
Construction Material	Teflon and PVC	
Electrodes	Tungsten	
Fixing Holes	6Φ	
Dimension	29 x 66 mm (W and H)	
Max Width	3000mm	
Weight	0.7kg / meter	
Connection Operating	5-pole connector M10	
Circumstance	0 ~ 50°C, 35 ~ 85%	
Protection	IP 66	based on DOC
Warranty	1 year	

※ The appearance and specification of the product may be changed without prior notice for the improvement of the product.

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