



INSTRUCTION SHEET

© OMRON Corporation 2007 All Rights Reserved.

PRECAUTIONS ON SAFETY

⚠ WARNING



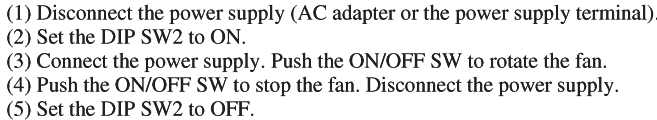
PRECAUTIONS FOR SAFE USE

■ Applicable standards

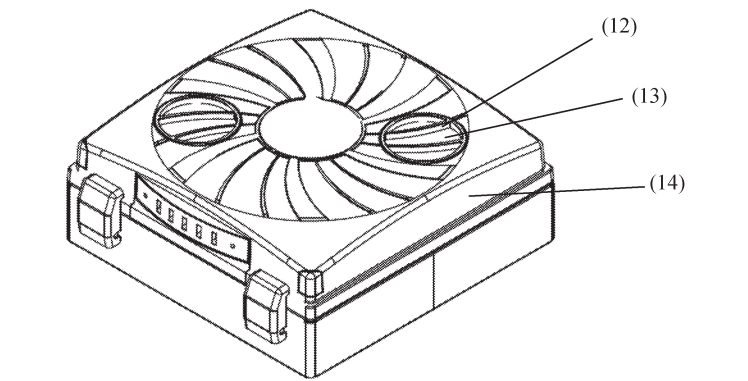
- EN61326-1
- Electromagnetic environment : Industrial electromagnetic environment (EN/IEC 61326-1 Table 2)

*1 Attached AC cord as standard is designed for use with 100 VAC (Japanese specifications). When ZN-A2502 is used in other than Japan, ZN-A2502D should be selected. AC adapter and AC cord is not supplied with it, please connect DC power supply to terminal.

DIP SW	Function	OFF	ON
1	Air volume switching method selection	Air volume is switched manually (air volume switching button on body).	The air volume is automatically controlled by feedback from Air Particle Sensor ZN-PDA and Interface Unit ZN-SF (sold separately).
2	Filter clogging detection	Filter clogging detection : Effective	Filter clogging detection : Invalid
3	Baud rate selection	Baud rate : 38.4kbps	Baud rate : 19.2kbps
4	Communication Settings	RS-422	RS-485



DIP SW	Function	OFF	ON
1	Air volume switching method selection	Air volume is switched manually (air volume switching button on body).	The air volume is automatically controlled by feedback from Air Particle Sensor ZN-PDA and Interface Unit ZN-SF (sold separately).
2	Filter clogging detection	Filter clogging detection : Effective	Filter clogging detection : Invalid
3	Baud rate selection	Baud rate : 38.4kbps	Baud rate : 19.2kbps
4	Communication Settings	RS-422	RS-485



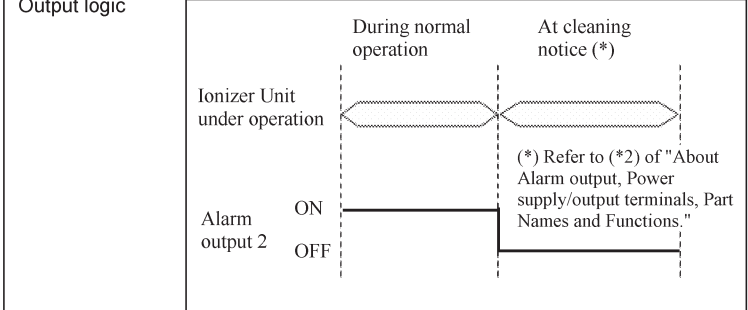
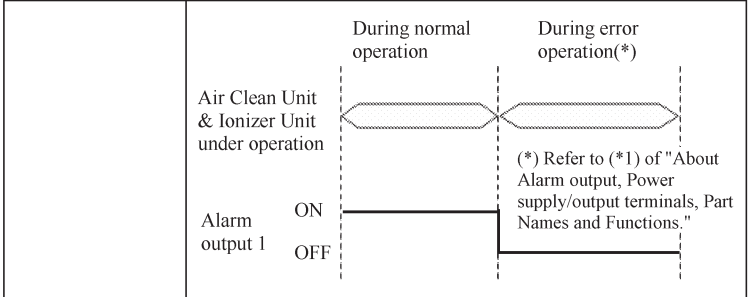
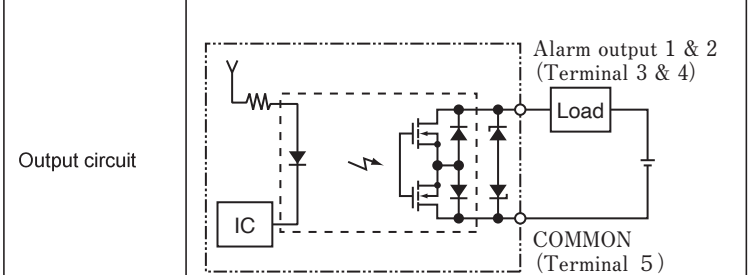
(12) Pre-filter cover
This cover is for fixing the pre-filter. When performing maintenance on the pre-filter, turn this cover to remove it.

(13) Pre-filter
This filter is for removing large dust particles. Periodically remove dust from the pre-filter. Before performing maintenance, always turn the power supply OFF, and make sure that the fan has stopped rotating.

(14) Upper body section
Remove this part to replace the filter. Before replacing the filter, always turn the power supply OFF, and make sure that the fan has stopped rotating. Before restarting the ZN-A2502, attach the upper body section to the body, and press the ON/OFF switch.

Alarm Output

Output voltage	30 VDC
Load current	50 mA max.
Residual voltage	1 V max. with load current 10 mA, 2 V max. with load current 50 mA



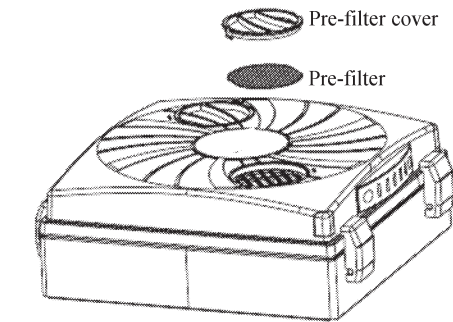
Alarm output is ON, when the power for a ZN-A is OFF.

Maintenance

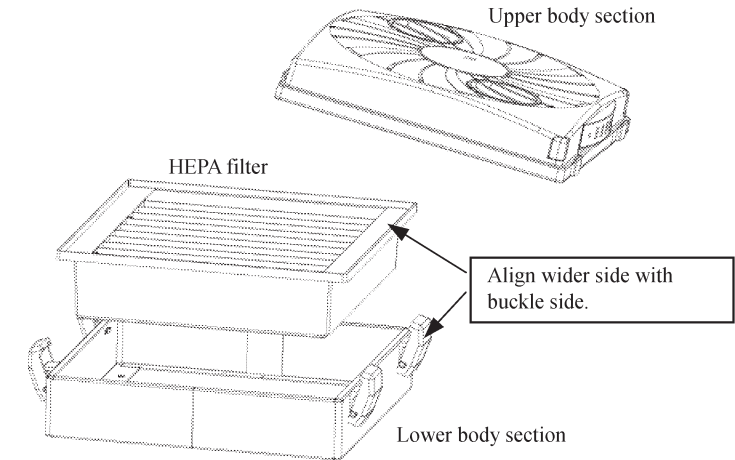
- Before replacing the pre-filter and/or HEPA filter, always turn the power supply OFF, and make sure that the fan has stopped rotating.
- When replacing the filter, do not touch the electrical circuits inside the body.
- Do not support or lift up the body by only its grating on the bottom surface.
- Never touch HEPA filter by its surface. Doing so might damage the filter, resulting in loss of filtering capabilities.
- Do not drop nor subject HEPA filter to shock. Doing so might damage the filter, resulting in a loss of cleaning performance.
- When the filter clogging detection display turns ON (refer to the item 3 of "(11) Indicators, Part Names and Functions"), replace the HEPA filter after confirming whether foreign objects block inlet port or air supply port. Air supply performance will be decreased by using the product with the filter clogged. After cleaning pre-filter and replacing HEPA filter, it takes about one minute until the filter clogging detection display turns OFF.
- Periodically remove dust from the pre-filter.
- Open the upper body section only to replace HEPA filter.

Replacing Filter

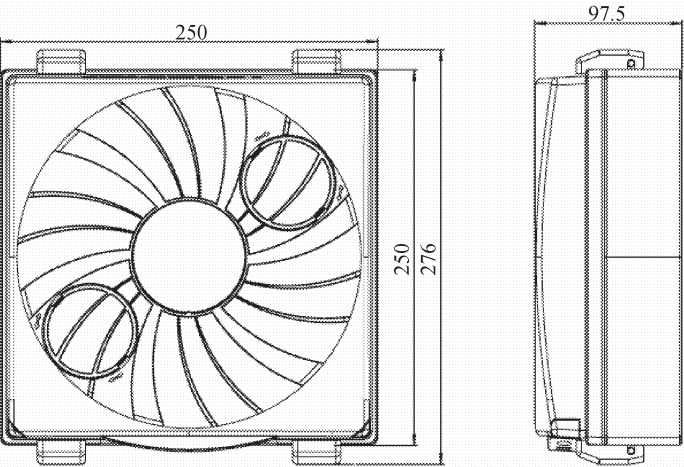
- Removing Pre-filter
 - Replace a damaged pre-filter with a new one (ZN9-APF25).
 - Turn the power supply OFF, and make sure that the fan has stopped rotating.
 - Remove the pre-filter cover from the upper body section by turning it clockwise.
 - Remove the pre-filter.
 - Clean the pre-filter, and return it to its original position. Next, attach the pre-filter cover to the upper body section by turning it anticlockwise, and make sure that it does not come loose.



- Replacing HEPA Filter
 - Replacement filter: ZN9-AHP25
 - Never touch the filter by its surface.
 - Turn the power supply OFF, and make sure that the fan has stopped rotating.
 - Unlock the buckles to open the upper body section.
 - Lift up HEPA filter to remove it from the lower body section. Take care when handling the filter as it may slip.
 - Set a new filter to the lower body section. During this step, pay attention to the filter's orientation. Align the wider side of the filter frame with the buckle side. The filter will lose its filtering capabilities if it is set on the wrong side.
 - Attach the upper body section, and lock the buckles.

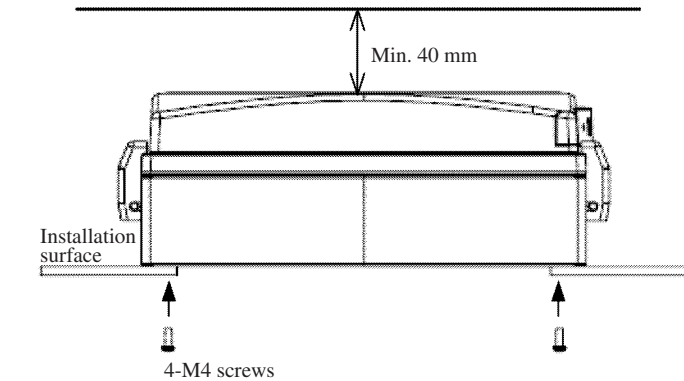


Dimensions



Installation

- When the Unit is mounted on a clean booth surface, firmly mount it using M4 screws. (tightening torque of 1.2 to 1.6 N·m)
- When using the mounting screws (provided), use a mounting panel of thickness 14 mm or less, and thoroughly check the strength of the installation surface.
- The depth of the body mounting holes is 17 mm. When preparing your own mounting screws, take the thickness of the installation surface into consideration when selecting the screws.
- Allow at least 40 mm of space above the air inlet to ensure good intake of air.
- Do not support or lift up the body by only its grating on the bottom surface.
- Do not install the Unit with the air outlet facing up. Doing so may damage the Unit.
- Use the sealing parts (provided) to prevent air from escaping between the body and the installation surface.
- Since this product has a built-in fan, this product and equipment may resonate and vibrate depending on the strength of the installation equipment and the clean booth. When adopting, recommend that verify it with actual equipment. In such cases, may be able to suppress the occurrence of vibration by reinforcing the equipment installed to increase rigidity.



Filter Clogging Detection Function

- (Refer to the item 2, (7) DIP SW, Part Names and Functions)
- When the filter clogging detection display turns ON (refer to the item 3 of "(11) Indicators, Part Names and Functions"), replace the HEPA filter after confirming whether foreign objects block inlet port or air supply port. Air supply performance will be decreased by using the product with the filter clogged. After cleaning pre-filter and replacing HEPA filter, it takes about one minute until the filter clogging detection display turns OFF.
 - The filter clogging detection display is set to turn ON when the air volume becomes about 30% to 60% of the initial value. The threshold level of filter clogging detection display will be changed by the influence of ambient temperature.
 - By setting the terminal 2 of DIP switch (refer to "Part Names and Functions") to ON, it is possible to cancel the filter clogging detection function.

Notice for Korea Radio Law

Please see the following URL for Korean KC mark compliance information.
<http://www.rra.go.kr/selform/OMR-ZN-A>

Suitability for Use

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

OMRON Corporation Industrial Automation Company
Kyoto, JAPAN Contact: www.ia.omron.com

Regional Headquarters

■ **OMRON EUROPE B.V.**
Wegalaan 67-69, 2132 JD Hoofddorp
The Netherlands
Tel: (31)2356-81-300/Fax: (31)2356-81-388

■ **OMRON ELECTRONICS LLC**
2895 Greenspoint Parkway, Suite 200
Hoffman Estates, IL 60169 U.S.A.
Tel: (1) 847-843-7900/Fax: (1) 847-843-7787

■ **OMRON ASIA PACIFIC PTE. LTD.**
438B Alexandra Road, #08-01/02 Alexandra
Technopark, Singapore 119968
Tel: (65) 6835-3011 / Fax: (65) 6835-3011

■ **OMRON (CHINA) CO., LTD.**
Room 2211, Bank of China Tower,
200 Yin Cheng Zhong Road,
PuDong New Area, Shanghai, 200120, China
Tel: (86) 21-6023-0333 / Fax: (86) 21-5037-2388