

Ionizer (Area Fan Type) ZJ-FW

CSM_ZJ-FW_DS_E_1_3

3 slim, lightweight types to choose from. Easy installation.



- Easy installation on narrow workbenches and in high locations.
- Slim and lightweight body with a thickness of only 6 cm and a weight of only 1 kg.*
(*ZJ-FW029)



Refer to Safety Precautions on page 2.

For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

Ordering Information

Ionizer

Size	Model	AC Adapter
130 mm	ZJ-FW013	Not included
290 mm	ZJ-FW029	
530 mm	ZJ-FW053	

Accessories

Accessory	Model
Replacement filter (6-pack)	ZJ9-FL40FW
Replacement discharge electrode (4-electrode set) *	ZJ9-NDT04FW
Stand (Included with ZJ-FW029/053)	ZJ9-BRS1FW
L-mounting bracket (Included with ZJ-FW013)	ZJ9-BRL1FW
Pipe-mounting bracket (For mounting a 28-mm dia. pipe)	ZJ9-BRP1FW

* ZJ-FW013: 1 set, ZJ-FW029: 3 sets, ZJ-FW053: 6 sets

Ratings and Specifications

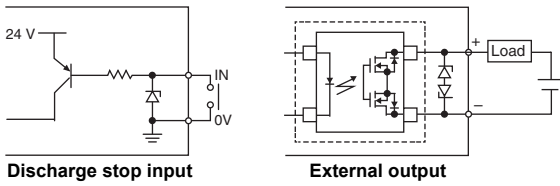
Ionizer

Item	Model	ZJ-FW013	ZJ-FW029	ZJ-FW053
Power supply voltage		24 VDC±10%, Ripple (p-p): 10%		
Current consumption		0.9 A max.	1.2 A max.	3.0 A max.
Discharge voltage		±7.5 kV		
Discharge method		Variable DC		
Ionization time *		1.5 s	1 s	
Ion balance *		±10 V max.		
Amount of ozone generated		0.01 ppm (Measured at a distance of 50 mm from air outlet)		
Indicators		Power (green), Fan running (green), Cleaning (yellow), Alarm (red)		
Main functions		Ion balance adjustment (Automatic and manual)		
External output (for both cleaning and alarm outputs)		Photo MOS relay output (NPN or PNP) • Applied voltage: 30 VDC max., load current: 100 mA max. • Residual voltage: 1 V max.		
Discharge stop input		No-voltage contact input • ON: 0 V short circuit • OFF: Open (leakage current: 0.1 mA max.)		
Ambient temperature range		0 to 50°C (with no icing or condensation)		
Ambient humidity range		35% to 65% (with no icing or condensation)		
Weight (packed state)		Approx. 0.6 kg (Approx. 1.2 kg)	Approx. 1 kg (Approx. 1.8 kg)	Approx. 2 kg (Approx. 3 kg)
Material		Body: Aluminum, ABS Electrode needle: Tungsten		
Accessories		Instruction sheet, I/O connector, L-mounting bracket, Streamer	Instruction sheet, I/O connector, Stand, Streamer	

*Typical default settings at the time of shipping from the factory

- Measurement conditions Measurement point and distance: 300 mm from body center, Airflow: Max, Plate monitor: 150 × 150 mm, 20 pF
- Ionization time: Time required to lower the charge from ±1,000 V to ±100 V
- Ion balance measurement time: 10 s

I/O Circuit Diagrams



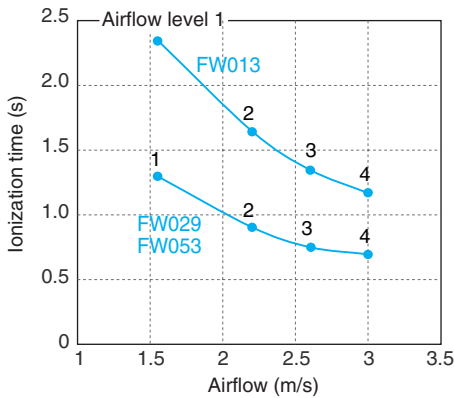
- (1) Discharge stop input**
When the discharge stop input is turned ON, the discharge from needles and rotation of fans stops and external output turns OFF (Open).
- (2) External output**
External output is ON(Close) state when ZJ-FW is working normally.
External output is OFF(Open) state as one of the below conditions occurs.
Front cover open, Cleaning, Fan rotation error, Malfunction error and Discharge stop input ON

Input and Output logic

Operating state	Power OFF	Normal operation	At an error, cleaning or Front cover open
Discharge stop input	ON OFF		
External output	ON (Closed) OFF (Open)		

Engineering Data (Reference Value)

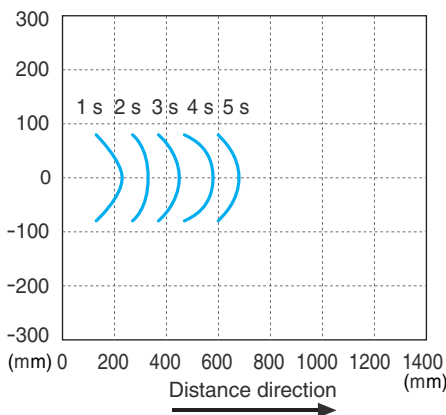
Airflow vs. Ionization time



Measurement conditions
Distance from measurement point: 300 mm
Ionization time: $\pm 1,000$ V to ± 100 V
Plate monitor: 150 × 150 mm, 20 pF

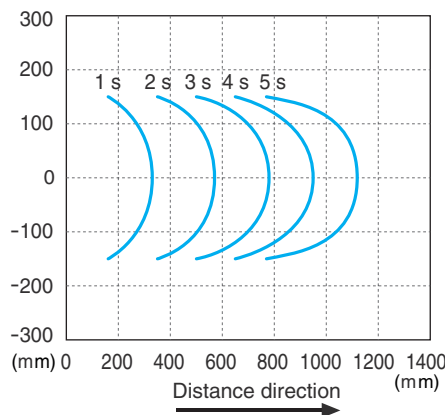
Ionization area vs. Ionization time

ZJ-FW013

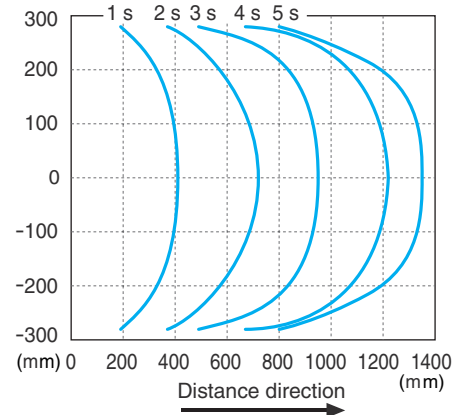


Measurement conditions
Airflow: Max.
Ionization time: $\pm 1,000$ V to ± 100 V
Plate monitor: 150 × 150 mm, 20 pF

ZJ-FW029



ZJ-FW053



Safety Precautions

⚠ WARNING

This product is not designed or rated for ensuring safety of persons. Do not use it for such purpose.



Precautions for Correct Use

Do not use the product in atmospheres or environments that exceed product ratings.

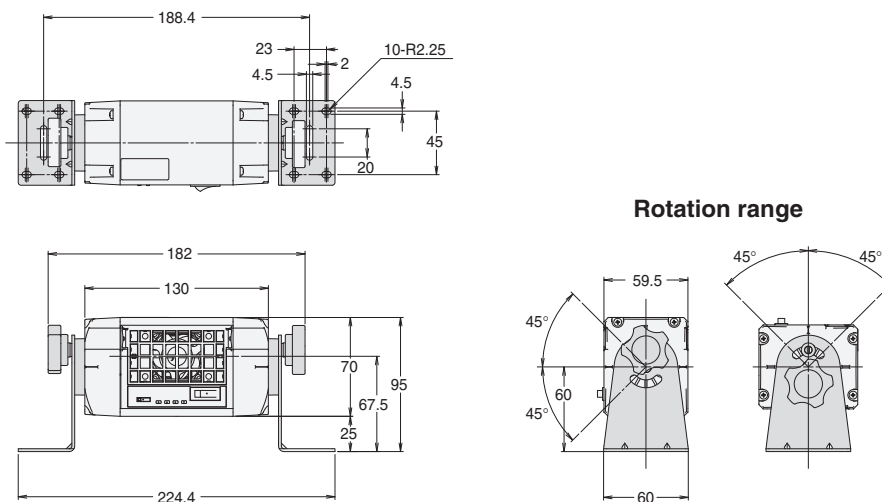
This document provides information mainly for selecting suitable models. Information such as the usage precautions is not contained herein. Be sure to read the instruction manual before using the product.

For technical information and product FAQs, refer to the *Technical Guide* on your OMRON website.

Dimensions

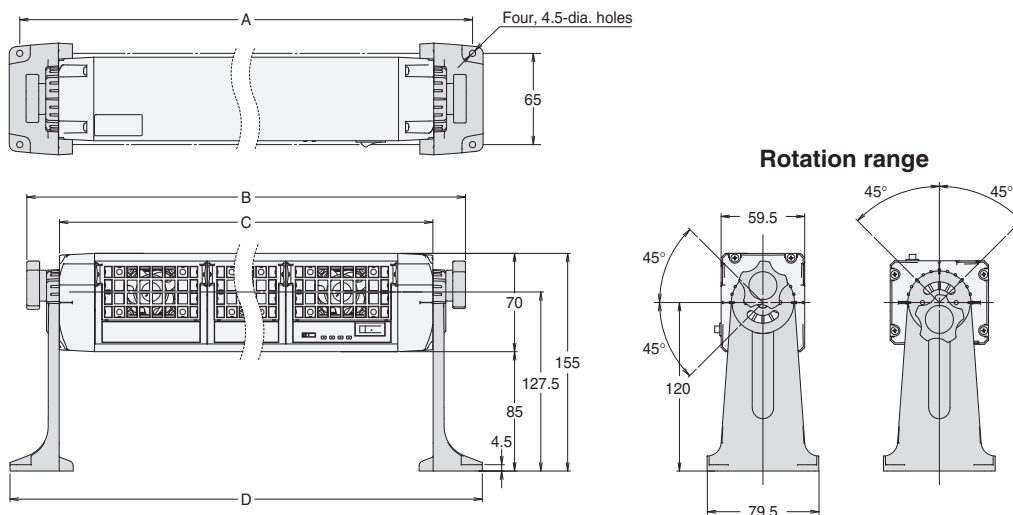
Ionizer

ZJ-FW013



ZJ-FW029/053

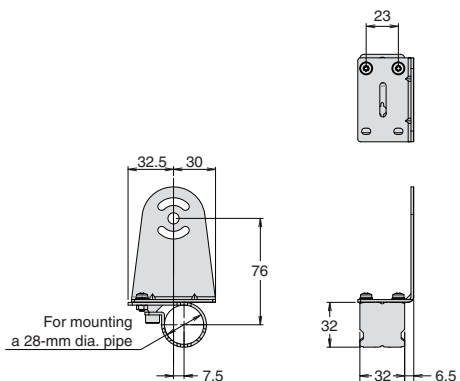
Model	Dimensions			
	A	B	C	D
ZJ-FW029	345.4	336.4	290	360.4
ZJ-FW053	585.4	576.4	530	600.4



Accessories

Pipe-mounting bracket

ZJ9-BRP1FW



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