

Bar type ionizer type ZJ-BA Series

Product Discontinuation

Recommended Replacement



Type ZJ-BA Series



Type ZJ-BAS Series

Discontinuation date : The end of June, 2009

Caution on recommended replacement

Please refer to the discontinued list for the detail.
Exclusive remote control, power cable, I/O cable and exclusive power supply needs to be changed with an ionizer.
There is not compatibility in discharge needles either. Please check the discontinued product list.

Difference from discontinued product

Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
ZJ-BAS□□□	--	--	--	--	--	*	--
ZJ-BAS-R01	**	**	-	-	*	*	--
ZJ-BAS-R02	--	--	--	--	*	*	--
ZJ-BAS-MC□□B	--	--	--	--	*	*	--
ZJ-BAS-FC□□A	--	--	--	--	*	*	--
ZJ-BAS-PS01	--	--	--	--	*	*	--
ZJ9-BAS-NT1□□	--	--	--	--	*	*	--

** : Fully compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

Product Discontinuation and recommended replacement

Item	Product discontinuation	Recommended replacement
Ionizer (tungsten needles)	Type ZJ-BA049	Type ZJ-BAS058
	Type ZJ-BA073	Type ZJ-BAS074 or Type ZJ-BAS090
	Type ZJ-BA097	Type ZJ-BAS090 or Type ZJ-BAS130
	Type ZJ-BA121	Type ZJ-BAS130
	Type ZJ-BA145	Type ZJ-BAS154
	Type ZJ-BA169	Use of two type ZJ-BAS090
	Type ZJ-BA193	Use of type ZJ-BAS130 and type ZJ-BAS074
	Type ZJ-BA217	Use of type ZJ-BAS130 and type ZJ-BAS090
	Type ZJ-BA241	Use of two type ZJ-BAS130
	Type ZJ-BA265	Use of type ZJ-BAS154 and type ZJ-BAS130
Ionizer (polysilicone needles)	Type ZJ-BA049S	There is no replacement.
	Type ZJ-BA073S	There is no replacement.
	Type ZJ-BA097S	There is no replacement.
	Type ZJ-BA121S	There is no replacement.
	Type ZJ-BA145S	There is no replacement.
	Type ZJ-BA169S	There is no replacement.
	Type ZJ-BA193S	There is no replacement.
	Type ZJ-BA217S	There is no replacement.
	Type ZJ-BA241S	There is no replacement.
	Type ZJ-BA265S	There is no replacement.
Type ZJ-BA073S-F1	There is no replacement.	

Product Discontinuation and recommended replacement

Item	Product discontinuation	Recommended replacement
Exclusive remote control *1)	Type ZJ-BA-R01 (The receiver is built in the ionizer body.)	Type ZJ-BAS-R01 Type ZJ-BAS-R02 (remote control receiver)
Power cable *1)	Type ZJ-BA-MC02 (2m)	Type ZJ-BAS-MC02B (2m)
	Type ZJ-BA-MC05 (5m)	Type ZJ-BAS-MC05B (5m)
	Type ZJ-BA-MC10 (10m)	Type ZJ-BAS-MC10B (10m)
	Type ZJ-BA-MC15 (15m)	Type ZJ-BAS-MC15B (15m)
	Type ZJ-BA-MC20 (20m)	Type ZJ-BAS-MC20B (20m)
I/O cable *1)	Type ZJ-BA-FC02 (2m)	Type ZJ-BAS-FC02A (2m)
	Type ZJ-BA-FC05 (5m)	Type ZJ-BAS-FC05A (5m)
	Type ZJ-BA-FC10 (10m)	Type ZJ-BAS-FC10A (10m)
	Type ZJ-BA-FC15 (15m)	Type ZJ-BAS-FC15A (15m)
	Type ZJ-BA-FC20 (20m)	Type ZJ-BAS-FC20A (20m)
Exclusive power supply (AC adapter type) *1)	Type ZJ-BA-PS01	Type ZJ-BAS-PS01
Exclusive power supply (high-output type)	Type ZJ-BA-PS02	There is no replacement.
Exclusive power supply (DC input type)	Type ZJ-BA-PT01	There is no replacement.
Replacement needles (tungsten needles)	Type ZJ9-NDT04 (pack of 4)	There is no replacement.
	Type ZJ9-NDT06 (pack of 6)	There is no replacement.
	Type ZJ9-NDT08 (pack of 8)	There is no replacement.
Replacement needles (polysilicone needles)	Type ZJ9-NDS04 (pack of 4)	There is no replacement.
	Type ZJ9-NDS08 (pack of 8)	There is no replacement.
Discharge needle modules (tungsten needles) *2)	Type ZJ9-BA-NT102 (single-pole specification, pack of 2)	Type ZJ9-BAS-NT105 (pack of 5) Type ZJ9-BAS-NT110 (pack of 10) There is no difference between single-pole and both-pole.
	Type ZJ9-BA-NT202 (both-pole specification, pack of 2)	Type ZJ9-BAS-NT105 (pack of 5) Type ZJ9-BAS-NT110 (pack of 10) There is no difference between single-pole and both-pole.
Discharge needle modules (polysilicone needles)	Type ZJ9-BA-NS102 (single-pole specification, pack of 2)	There is no replacement.
	Type ZJ9-BA-NS202 (both-pole specification, pack of 2)	There is no replacement.

*1) Exclusive remote control, power cable, I/O cable and exclusive power supply needs to be changed with an ionizer.

*2) There is not compatibility in discharge needles either. Please check the discontinued product list.

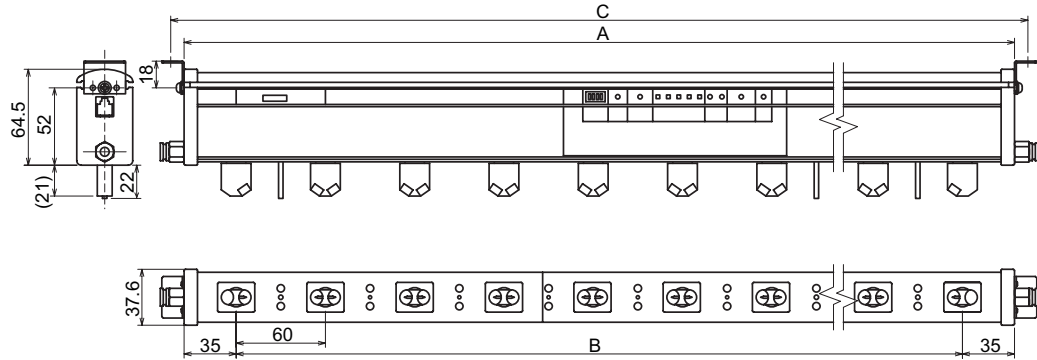
External View

Product discontinuation	Recommended replacement
<p>Ionizer Type ZJ-BA[][][][S]</p> 	<p>Ionizer Type ZJ-BAS[][][]</p> 
<p>Exclusive remote control Type ZJ-BA-R01</p> 	<p>Exclusive remote control Type ZJ-BAS-R01 Type ZJ-BAS-R02 (remote control receiver)</p> 
<p>Power cable Type ZJ-BA-MC[][]</p> 	<p>Power cable Type ZJ-BAS-MC[][]B</p> 
<p>I/O cable Type ZJ-BA-FC[][]</p> 	<p>I/O cable Type ZJ-BAS-FC[][]A</p> 
<p>Exclusive power supply (AC adapter type) Type ZJ-BA-PS01</p> 	<p>Exclusive power supply (AC adapter type) Type ZJ-BAS-PS01</p> 
<p>Discharge needle modules (tungsten needles) Type ZJ9-BA-NT[][]02</p> 	<p>Discharge needle modules (tungsten needles) Type ZJ9-BAS-NT[][][]</p> 

Dimension / Mounting

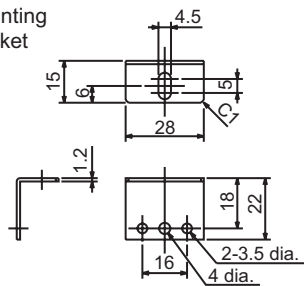
Recommended replacement

Ionizer Type ZJ-BA□□□□

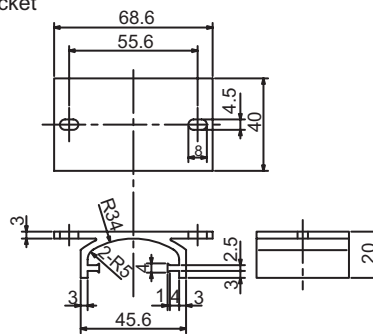


Model	A (mm)	B (mm)	C (mm)	Number of needles
ZJ-BA049	490	420	508	14
ZJ-BA073	730	660	748	22
ZJ-BA097	970	900	988	30
ZJ-BA121	1210	1140	1228	38
ZA-BA145	1450	1380	1468	46
ZJ-BA169	1690	1620	1708	54
ZJ-BA193	1930	1860	1948	62
ZJ-BA217	2170	2100	2188	70
ZJ-BA241	2410	2340	2428	78
ZJ-BA265	2650	2580	2668	86

● Mounting bracket



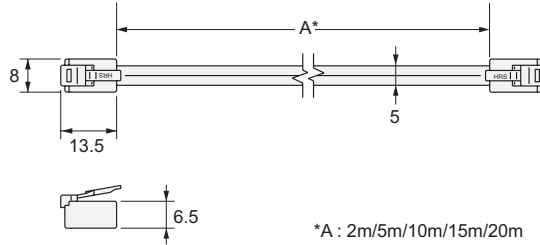
● Bracket



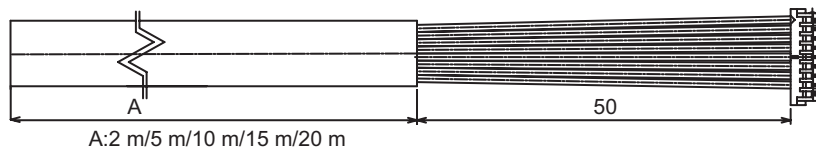
Dimension / Mounting

Recommended replacement

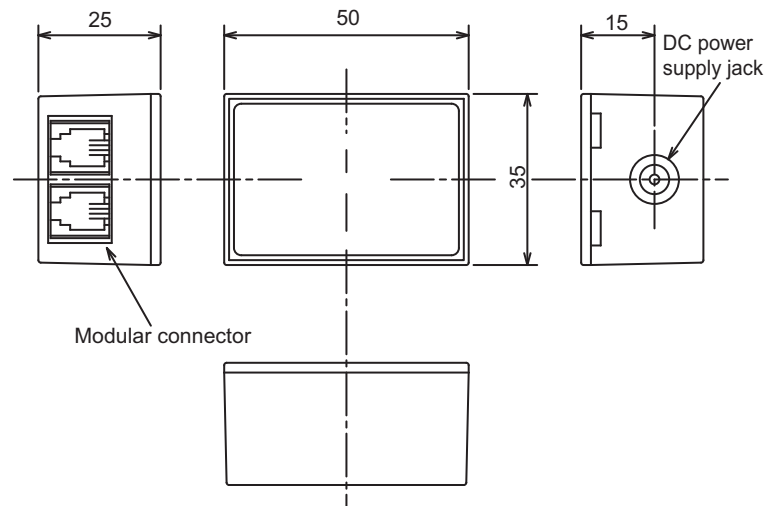
Power cable Type ZJ-BA-MC□□□B



I/O cable Type ZJ-BA-FC□□



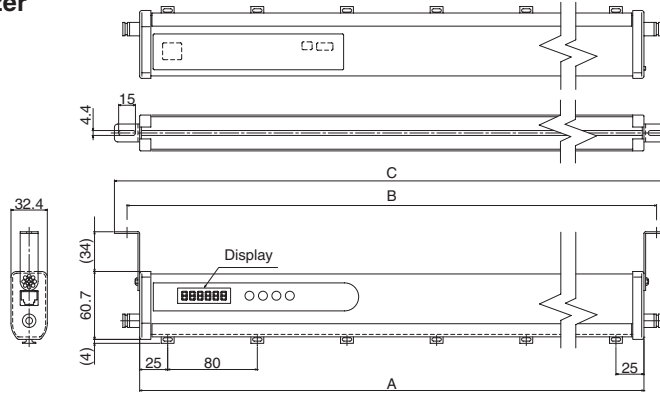
Exclusive power supply (AC adapter type / Adapter box) Type ZJ-BA-PS01



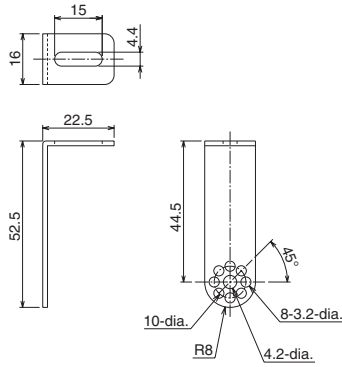
Recommended replacement

Ionizer Type ZJ-BAS□□□

Ionizer



Mounting bracket

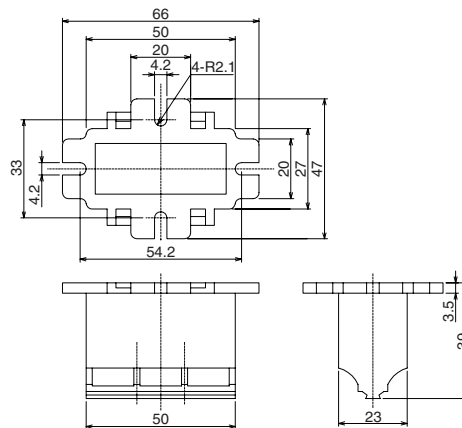


The dimensions and number of Discharge Electrode Modules for each model are shown in the following table.

Model	A (mm)	B (mm)	C (mm)	Discharge Electrode Module
ZJ-BAS050	370	394	416	5
ZJ-BAS058	450	474	496	6
ZJ-BAS074	610	634	656	8
ZJ-BAS090	770	794	816	10
ZJ-BAS130	1170	1194	1216	15
ZJ-BAS154	1410	1434	1456	18

Auxiliary mounting bracket

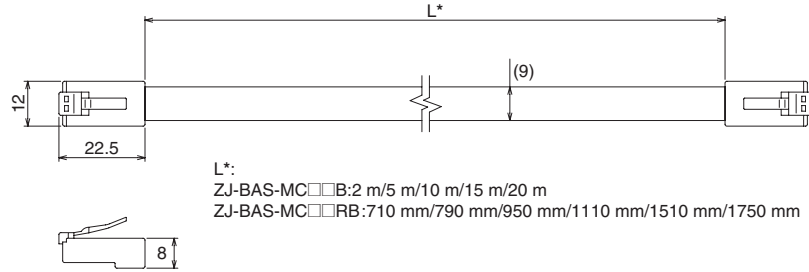
Provided with the ZJ-BAS130/BAS154



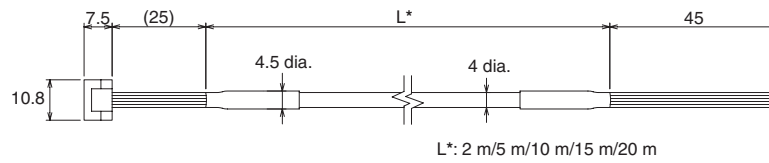
Dimension / Mounting

Recommended replacement

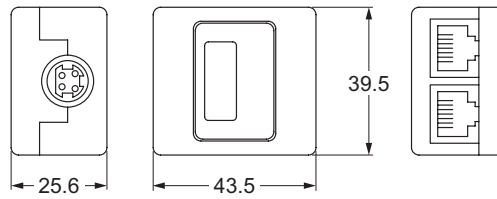
Power cable Type ZJ-BAS-MC□□□B



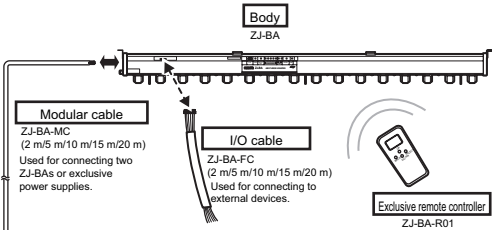
I/O cable Type ZJ-BAS-FC□□□A



Exclusive power supply (AC adapter type / Adapter box) Type ZJ-BAS-PS01



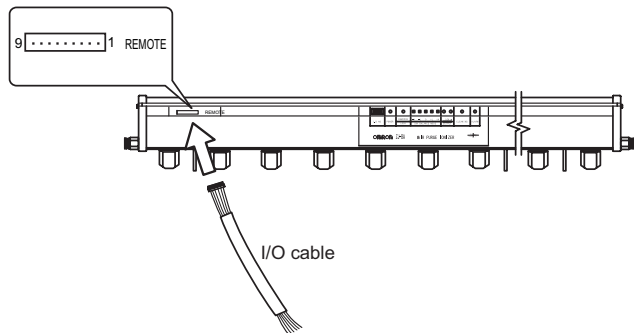
Connection

Model to be discontinued Type ZJ-BA Series	Recommendable replacement Type ZJ-BAS Series
<p>Basic Configuration</p>  <p>Body ZJ-BA</p> <p>Modular cable ZJ-BA-MC (2 m/5 m/10 m/15 m/20 m) Used for connecting two ZJ-BAs or exclusive power supplies.</p> <p>I/O cable ZJ-BA-FC (2 m/5 m/10 m/15 m/20 m) Used for connecting to external devices.</p> <p>Exclusive remote controller ZJ-BA-R01</p> <p>Exclusive power Select from the following three types.</p> <ul style="list-style-type: none"> iAC adapter type ZJ-BA-PS01 Adapter box → AC adapter → AC power supply cable → AC 100 iHigh-output type ZJ-BA-PS02 AC power supply → AC power supply cable → AC 100 iDC input type ZJ-BA-PT01 Voltage conversion box ← DC 24 V <p>The number of connectable units changes according to the type of power supply.</p>	<p>Basic Configuration</p> <p>Ionizer ZJ-BAS</p> <p>I/O Cable ZJ-BAS-FC Used for connecting external devices.</p> <p>Power supply cable Select from the two available types.</p> <ul style="list-style-type: none"> Cable with Connector on One End ZJ-BAS-MC□□A Used when using a DC power supply. Cable with Connectors on Both Ends ZJ-BAS-MC□□B Used when using an AC adapter. <p>AC Adapter ZJ-BAS-PS01</p> <p>Special Remote Control</p> <ul style="list-style-type: none"> Remote Control ZJ-BAS-R01 Remote Control Receiver ZJ-BAS-R02 <p>When Linking Ionizers</p> <p>Linking Bracket Set ZJ-BAS-L01</p> <p>Power Supply Cable (for linking ionizers) ZJ-BAS-MC□□□□□□□□</p> <p>The length of the cables that can be linked depends on the number of Ionizers to be linked together. Contact your OMRON sales representative for details.</p>

Connection

Model to be discontinued Type ZJ-BA Series

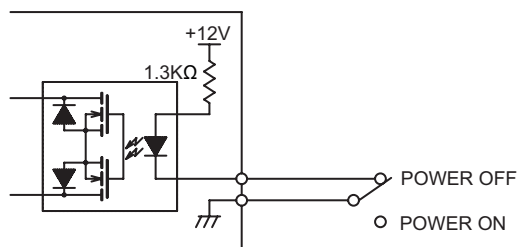
Connecting the I/O Cable



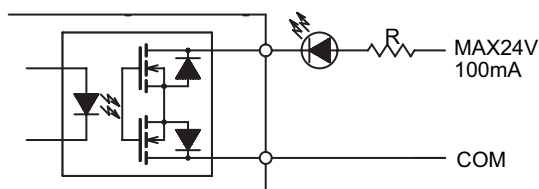
Wiring the I/O cable

Connector Pin No.	Cable Lead color	Name	Function
1	Brown	Power ON / OFF input	Turn the ZJ-BA on / off when Shorted across pins 1 and 2 ; power off when pins are open power on.
2	White		
3	Yellow	Cleaning output	Turns on when the discharge needles are dirty. Which causes a drop in ion output.
4	Green		
5	Red	Alarm output	Turns on when an error has occurred the ZJ-BA.
6	Black	Power output	Turns on when the ZJ-BA is turned on.
7	Blue		
8	Gray		

Input circuit diagram



Output circuit diagram



Recommendable replacement Type ZJ-BAS Series

Connecting the I/O Cable

Connector Pin No.	Label	Function
1	Black	POWER Single Output (MAX 100mA) Turns ON when the power supply is ON, and OFF when the power supply is OFF.
2	Red	Cleaning Signal Output (MAX 100mA) Turns ON when discharge needle is dirty and ion generation deteriorates.
3	Orange	Alarm Signal Output (MAX 100mA) Turns ON when an error has occurred on the product
4	Yellow	High Voltage Output Signal (MAX 100mA) Turns ON during ion generation, and OFF when ion generation stops.
5	Blue	COMMON of each Signal Low voltage side of the common line of each single.
6	White	Discharge Stop Input Discharge stop / resume is turned ON / OFF by the input signal.

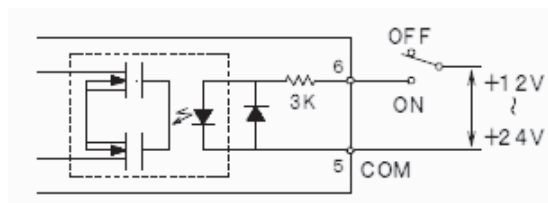
*When I/O cable ZJ-BAS-FC[A] (option) is used, the cable colors are shown in the above chart.

[Compatible Connector]

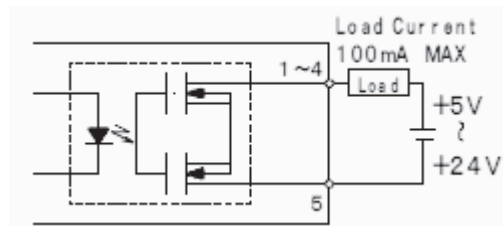
Connector Part Name ; ZER-06V-S (manufacturer ; JST)

Contact Part Name and applicable ; 5ZE-002T-P03, AWG26 to AWG24
; 5ZE-003T-P0.3, AWG28 to AWG26

Input circuit diagram



Output circuit diagram



Ratings and Performance

Item	Type ZJ-BA										Type ZJ-BAS					
	049	073	097	121	145	169	193	217	241	265	050	058	074	090	130	154
Power supply voltage	DC 12 V ± 10% ripple (peak-to-peak) 10% or less										DC 24 V ±10 % ripple (peak-to-peak) 10 % or less					
Current consumption	600 mA max.										520 mA max. (discharge frequency 0.08 to 0.5 Hz: 400 mA (typical), 1 to 10 Hz: 350 mA (typical), 20 to 40 Hz: 300 mA (typical))					
Discharge system	Dual mixing variable DC system										Sensing and a Variable-AC System					
Discharge voltage	±6.5 k VP-P										±6.5 k VP-P					
Recommended installation distance	300 to 1,500 mm										50 to 2,000 mm					
Ion balance (*1)	±30 V or less (Zero Balance mode)										±30 V or less (Frequency: 10 Hz)					
Power connector	Modular type 4-pin connector (at both ends of the Unit)										Modular type 8-pin connector (at both ends of Unit)					
Air intake duct	6 mm dia. one-touch joint (at both ends of the Unit)			6 mm dia. one-touch joint (at both ends of the Unit)							6 mm dia one-touch coupling (at both ends of Unit)					
Air flow rate	1 L/min 1 hole (standard) *Air pressure must be max. 0.3 MPa.										1 L/min 1 hole (standard) *Air pressure must be max. 0.3 MPa.					
Discharge needles	Tungsten or polysilicone needles (*2)										Tungsten needles					
External I/O	Input : Power on/off input * Switch input (current at on: approx. 9 mA) Output : Cleaning output / alarm output / power output * Signal output (DC 24 V, max. 100 mA) by photoMOS relay										Input : Discharge stop input Output : Cleaning output / alarm output / power output * Signal output (DC 24 V, max. 100 mA) by photoMOS relay					
Indicators	Power supply / ion output / cleaning / alarm / ion balance mode / balance lock										Seven-segment LED display Cleaning / alarm					
Group No.	0 to 127 (fixed at default setting. Indicated on sticker on body front)										No function					
ID No. setting	0 to 15 (set by 4-digit DIP switch)										001 to 050					
Ion balance modes	Selectable from Zero Balance / Positive High / Positive Low / Negative High / Negative Low										No function					
Ion balance fine-adjustment function	Available										Available					
Ambient temperature	Operating : +5 to +40°C, Storage: 0 to +40°C (with no icing or condensation)										Operating : 10 to 40°C, Storage : 0 to 40°C (with no icing or condensation)					
Ambient humidity	Operating: 35 to 65 %, Storage: 35 to 85 % (with no condensation)										Operating: 35 % to 65 %, Storage: 35 % to 85 % (with no condensation)					
Weight (kg) (body only)	Ap-prox. 0.9	Ap-prox. 1.2	Ap-prox. 1.5	Ap-prox. 1.9	Ap-prox. 2.2	Ap-prox. 2.6	Ap-prox. 2.9	Ap-prox. 3.3	Ap-prox. 3.7	Ap-prox. 4.0	Ap-prox. 0.58	Ap-prox. 0.64	Ap-prox. 0.80	Ap-prox. 0.94	Ap-prox. 1.28	Ap-prox. 1.5
Accessories	Mounting bracket (w / M4 screws): 2 pcs Bracket: 2 pcs Warning label (English) : 1 User's Manual			Mounting bracket (w / M4 screws) : 2 pcs Warning label Bracket: 3 pcs (English) : 1 User's Manual			Mounting bracket (w / M4 screws) : 2 pcs Bracket: 4 pcs Warning label (English) : 1 User's Manual				Mounting brackets : 2 pcs M4 screws : 2 pcs Instruction manual			Mounting brackets : 2 pcs M4 screws : 2 pcs Medium bracket : 1 pcs Instruction manual		

*1 : Measurement conditions : installation distance 300 mm, air flow rate 1 L/min per hole (air pressure: 0.3 MPa)

Ion balance measurement time: 10 sec

Charge plate: 150 x 150 mm 20 pF

*2 : For Ionizers with polysilicone needles, add "S" to the model number (e.g., ZJ-BA□□□S).

*3 : Only ZJ-BAS050, 058, 074, 090

*4 : Only ZJ-BAS130, 154

Operation method

Model to be discontinued Type ZJ-BA Series	Recommendable replacement Type ZJ-BAS Series
<div data-bbox="464 405 1197 483" style="border: 1px solid black; padding: 5px; text-align: center;">The operation method is different. Please refer to the catalog and the manual for the details.</div>	