

Thermoelectric dehumidifier

# BOX DRY

## SERIES



Thermoelectric dehumidifier | Forced cooling PAT.

## ODE-F110-AW

## ODE-F122-AW

### Capability

F110: 10ml/h  
F122: 22ml/h



### Supply includes

- BOXDRY : 1 pc.
- Drain hose :  $\phi 8 \times \phi 11$ , 1pc (1.5m)
- Harness for alarm output : 1pc (0.5m)
- Instruction manual : 1 copy

Net weight: 1.2kg

Net weight: 1.8kg

RoHS2



Site of use



Method



Features



Energy saving mode

### Model/Specification

Model		ODE-F110-AW	ODE-F122-AW
Dehumidification capacity *1		10ml/h	22ml/h
Rated voltage		Single phase, 100 - 240V AC 50/60Hz	
Current consumption *2	In dehumidifying operation	0.2A(100VAC) 0.15A(240VAC)	0.7A(100VAC) 0.4A(240VAC)
	When dehumidifying operation stops	0.02A(100VAC) 0.03A(240VAC)	0.05A(100VAC) 0.06A(240VAC)
Starting current		2.5A	4.5A
Rated power consumption	Dehumidification ON	14W	50W
	Dehumidification OFF	2W	5W
Working temperature		0 to 55 °C, ice-free	
Working humidity		Max. 95%RH	
Operation mode		Continuous/Automatic (Energy-saving)	
Setting for automatic operation		To run in 50% or higher and stop below 50%	
Function		<ul style="list-style-type: none"> <li>•Detection of high temperature at radiation part...When radiation part has reached +80°C</li> <li>•Detection of thermoelectric module error ..... When current value of the thermoelectric module has dropped</li> <li>•Detection of abnormal working temperature...When operation has stopped beyond the working temperature range (Below 0°C or beyond +60°C)</li> <li>•Detection of temperature sensor disconnection... When temperature sensor caused wire disconnection</li> </ul>	
Error output		Contact capacity 24V DC 300mA 1a	
Power connection		Power cable Triplex, 2m	
		42.5dB(A)	49dB(A)
Conformity	EMC Directive	EN61000-3-2, EN61000-3-3, EN61000-6-2, EN61000-6-4	
	Low Voltage Directive	EN-60335-1, EN60335-2-40	
	Environment	RoHS2	
Dimensions (mm) *3		W131×H161.5×D65	W131×H250.5×D65
Weight		1.2kg	1.8kg

\*1 Nominal value at +30°C ambient temperature and 80%RHhumidity

\*2 Nominal value +30°C ambient temperature

\*3 Drain pipe, cable and mounting stay are excluded.

Supply voltage should be within the specified range with fluctuation not exceeding  $\pm 10\%$ .

### Communication cable/Software designed for BOXDRY

- Enables to retrieve the sampling data to be taken in a PC.
- The factory setting can be changed. See our website for the detailed specification.

### Maintenance parts

#### Replacement fan

for ODE-F110	for ODE-F122
FM-F110	FM-F122

### Related product

#### Drain evaporator

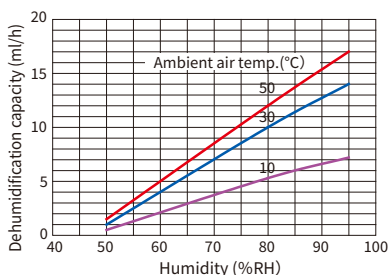


■ Performance chart

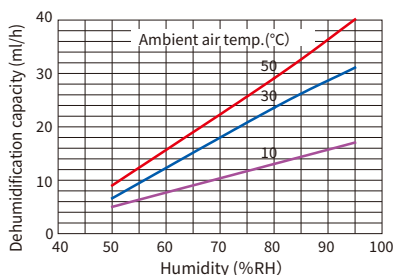
Dehumidification capability of BOXDRY is determined by the volume of the enclosure to which it is applied. The intersection of the vertical axis and the performance curve show the dehumidification capability.

Dehumidification characteristics chart

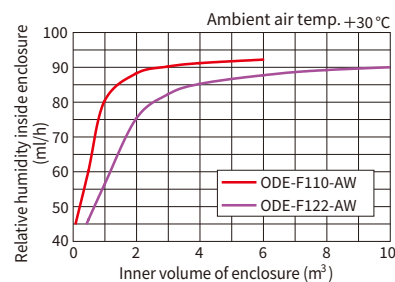
ODE-F110-AW



ODE-F122-AW

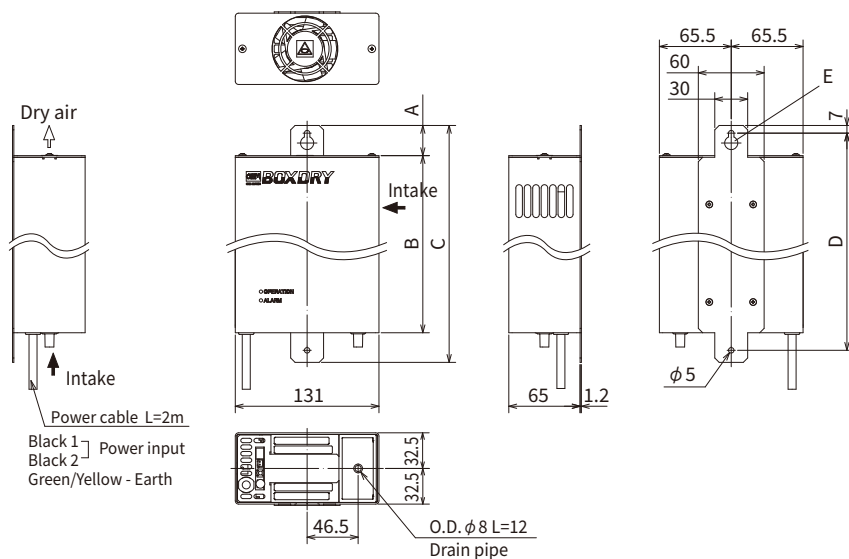


Performance by volume (in cont. run)



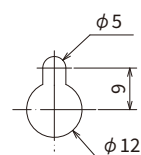
Note: The chart shows correlation of internal humidity and enclosure inner volume under the condition at 100%RH and 30°C temperature outside the enclosure provided that the enclosure has no vent having a hermetically sealed door which is not opened more than one time a day.

■ Dimensional drawing

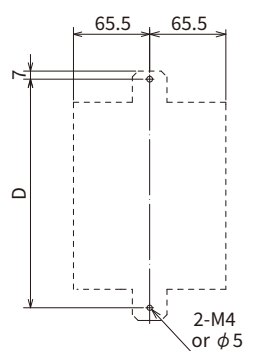


Model	A	B	C	D
ODE-F110-AW	27.5	161.5	216	198
ODE-F122-AW	37.5	250.5	328	310

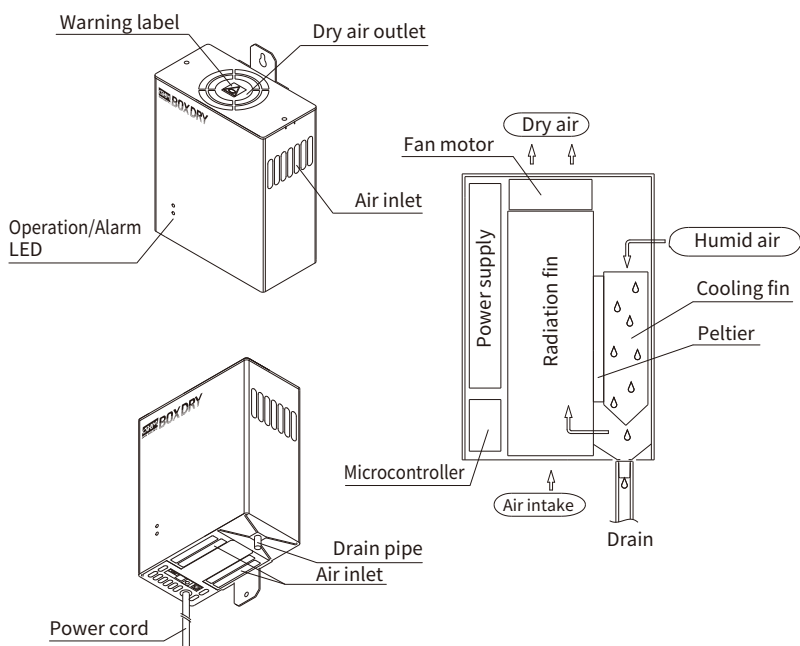
■ Enlarged view of E



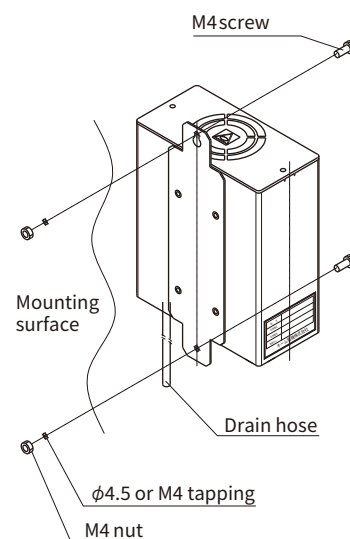
■ Panel cutout



■ Structural drawing



■ Installation drawing



Thermoelectric dehumidifier | Natural cooling | PAT.

## ODE-N103-AW

## ODE-N105-AW

### Capability

N103: 3mℓ/h  
N105: 5mℓ/h



### Supply includes

BOXDRY : 1 pc.  
Drain hose :  $\phi 8 \times \phi 11$ , 1pc (1.5m)  
Harness for alarm output : 1pc (0.5m)  
Instruction manual : 1 copy

Net weight: 1.1kg

Net weight: 1.7kg

RoHS2



Site of use



Method



Features



Energy saving mode

### Model/Specification

Model	ODE-N103-AW	ODE-N105-AW
Dehumidification capacity *1	3mℓ/h	5mℓ/h
Rated voltage	Single phase, 100 - 240V AC 50/60Hz	
Current consumption *2	In dehumidifying operation	0.15A (100VAC) 0.09A (200VAC)
	When dehumidifying operation stops	0.02A (100VAC) 0.03A (200VAC)
Starting current	2.5A	4.5A
Rated power consumption	Dehumidification ON	10W
	Dehumidification OFF	2W
Working temperature	0 to 45 °C, ice-free	
Working humidity	Max. 95%RH	
Operation mode	Continuous/Automatic (Energy-saving)	
Setting for automatic operation	To run in 50% or higher and stop below 50%	
Function	<ul style="list-style-type: none"> <li>•Detection of high temperature at radiation part...When radiation part has reached +80°C</li> <li>•Detection of thermoelectric module error ..... When current value of the thermoelectric module has dropped</li> <li>•Detection of abnormal working temperature...When operation has stopped beyond the working temperature range (Below 0°C or beyond +60°C)</li> <li>•Detection of temperature sensor disconnection... When temperature sensor caused wire disconnection</li> </ul>	
Error output	Contact capacity 24V DC 300mA 1a	
Power connection	Power cable Triplex, 2m	
Conformity Environment	RoHS2	
Dimensions (mm)	W131×H161.5×D65	W131×H250.5×D65
Weight *3	1.2kg	1.8kg

\*1 Nominal value at +30°C ambient temperature and 80%RHhumidity

\*2 Nominal value +30°C ambient temperature

\*3 Drain pipe, cable and mounting stay are excluded.

Supply voltage should be within the specified range with fluctuation not exceeding  $\pm 10\%$ .

### Related product

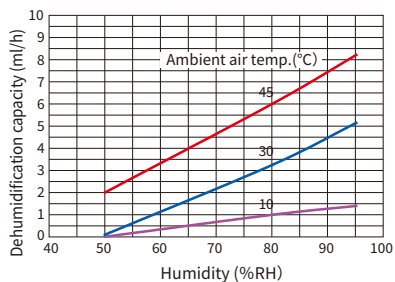
#### Drain evaporator



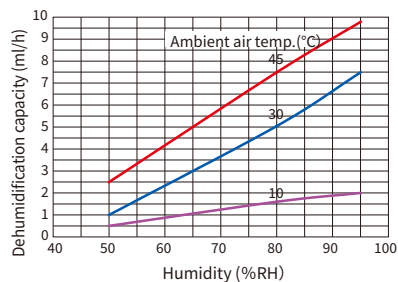
Performance chart

Dehumidification characteristics chart

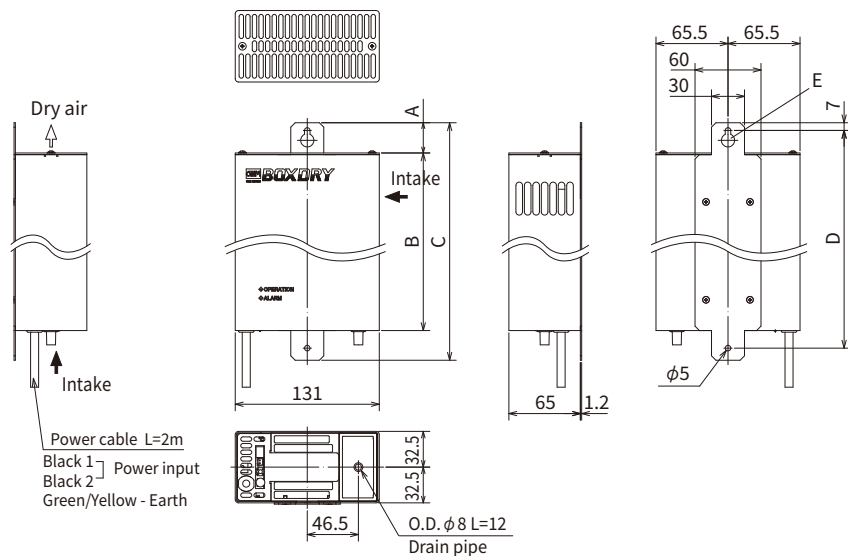
ODE-N103-AW



ODE-N105-AW

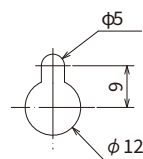


Dimensional drawing

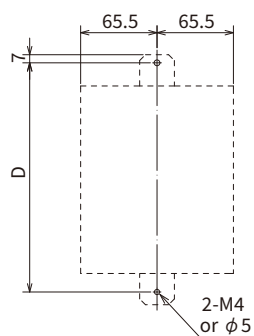


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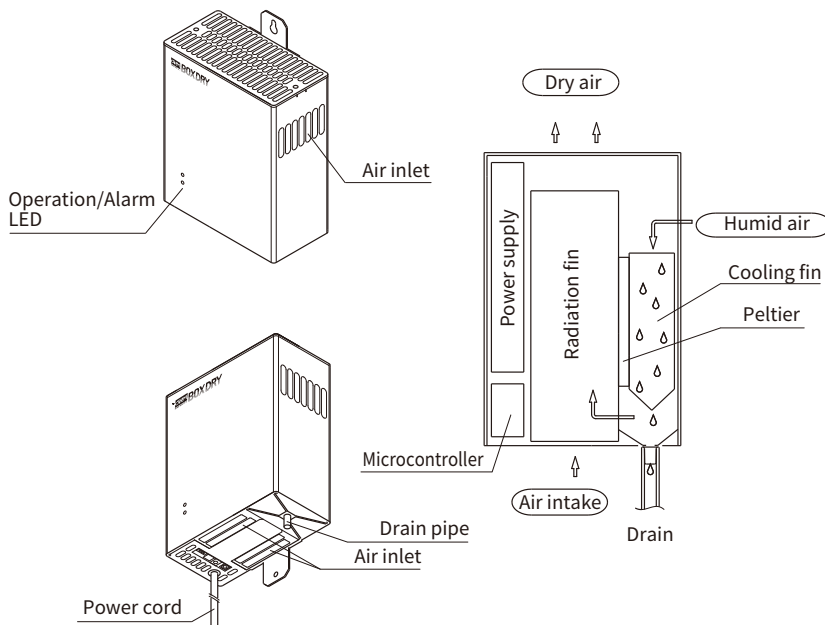
Enlarged view of E



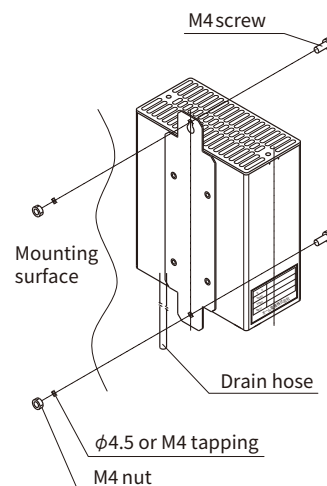
Panel cutout



Structural drawing



Installation drawing

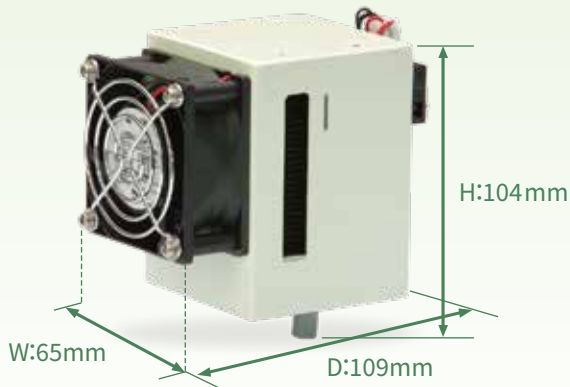


BOXDRY >> ODE-N103-AW / ODE-N105-AW

Thermoelectric dehumidifier | Compact type

## ODE-1512D

Capability  
15mℓ/h



### Supply includes

- BOXDRY : 1 pc., Mounting stay: 1 pc.
- M3 x M6 screw: 2 pcs.
- Drain hose :  $\phi 8 \times \phi 11$ , 1pc (1.5m)
- Instruction manual : 1 copy

RoHS2

Site of use



Method



### Model/Specification

Model	ODE-1512D
Dehumidification capacity *1	15mℓ/h
Rated voltage	12VDC
Current consumption	5.0A
Starting current	5.2A
Working temperature *2	+10 to +60 °C
Working humidity	Max. 95%RH
Overheat protection on hot side	None
Operation mode	Continuous run
Vibration tolerance	Vibration frequency 10 to 55Hz, Total amplitude 0.7mm, Cycle 5 min., X,Y, Z direction 25 min. each
Power connection	Screw terminal board
Conformity	Environment
	RoHS2
Dimensions (mm)	W65×H104×D109
Weight	500g

\*1 Nominal value at +30°C ambient temperature and 80%RHhumidity

\*2 Cooling fin may ice up when ambient temperature is as low as around +10°C, which will decline dehumidification performance of BOXDRY.

This product is for continuous run only and have no function like energy saving mode, low temperature dehumidification or error detection.

Supply voltage should be within the specified range with fluctuation not exceeding  $\pm 10\%$ .

### Related product

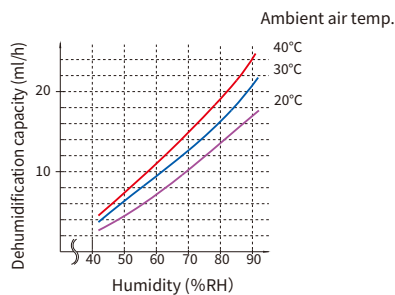
Drain evaporator



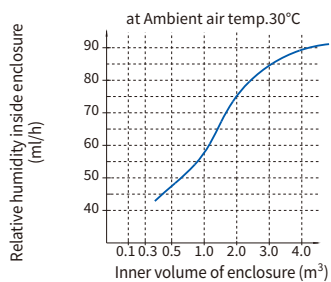
## Performance chart

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Dehumidification characteristics chart

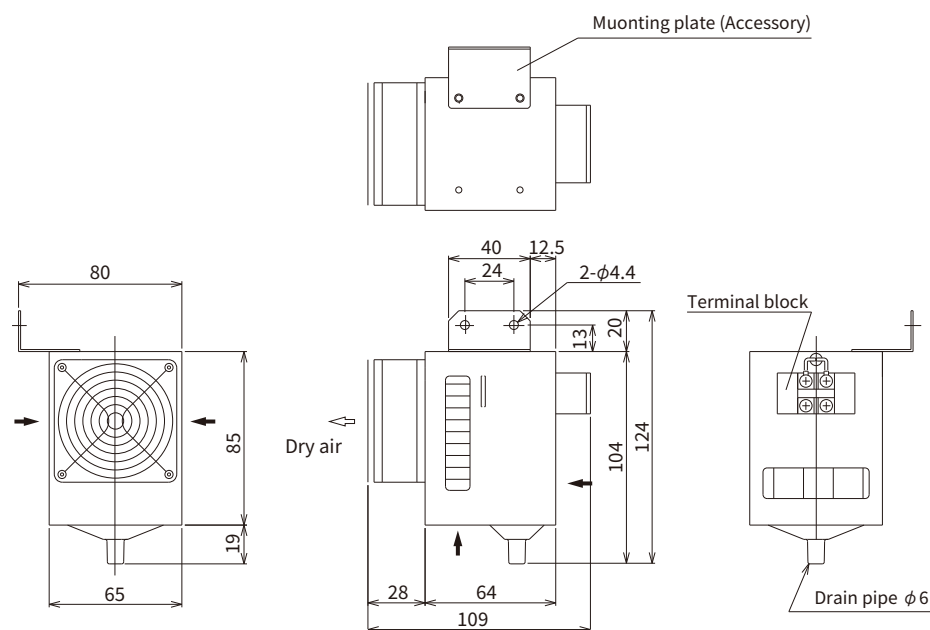


Performance by volume (in cont. run)

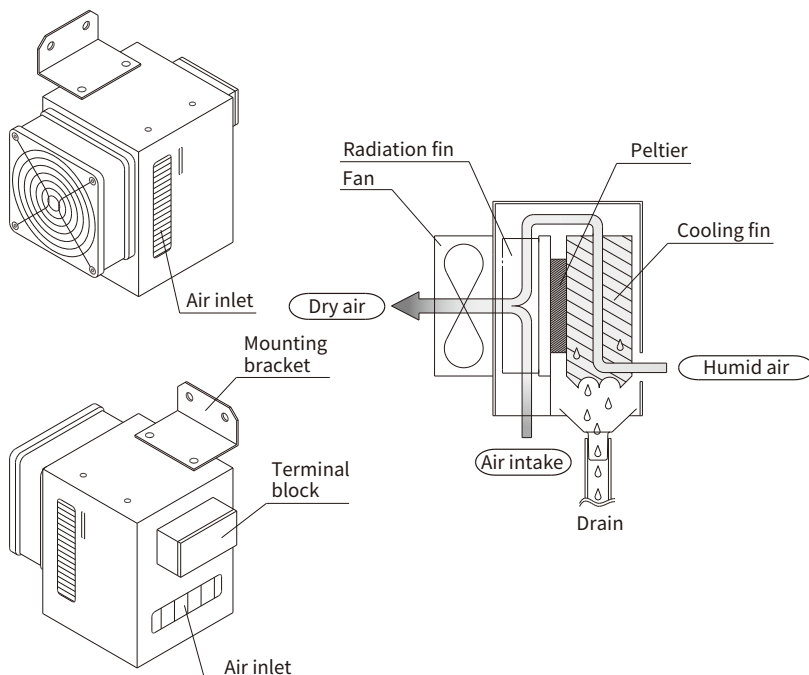


Note: The chart shows correlation of internal humidity and enclosure inner volume under the condition at 100%RH and 30°C temperature outside the enclosure provided that the enclosure has no vent having a hermetically sealed door which is not opened more than one time a day.

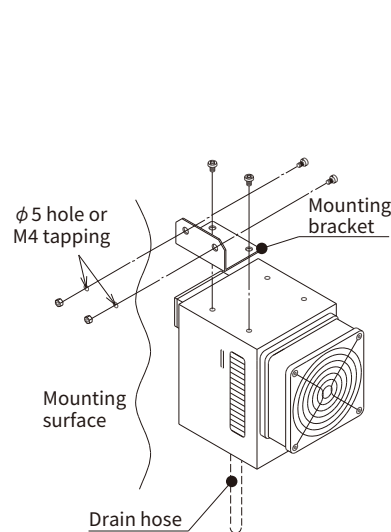
## Dimensional drawing



## Structural drawing



## Installation drawing



Distributor \_\_\_\_\_



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[www.ohm.jp/](http://www.ohm.jp/)



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