

Thermoelectric dehumidifier

BOXDRY



OHM ELECTRIC CO., LTD.

<http://www.ohm.jp/>

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 : 1.5m
- Harness for alarm output : 0.5m
- Instruction manual : 1 copy

RoHS2

■ Model/Specification

Model	ODE-F110-AW	ODE-F122-AW
Dehumidification capacity *1	10ml/h	22ml/h
Rated voltage	Single phase, 100 - 240V AC	
Current consumption	In dehumidifying operation	0.15A (AC100V) 0.1A (AC200V)
	When dehumidifying operation is stopped	0.02A (AC100V) 0.03A (AC200V)
Starting current	2.5A	4.5A
Rated power consumption	Dehumidification ON	14W
	Dehumidification OFF	2W
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"> Detection of high temperature at radiation part..... When radiation part has reached +80°C Detection of thermoelectric module error..... When current value of the thermoelectric module has dropped Detection of abnormal working temperature..... When operation has stopped beyond the working temperature range (Below 0°C or beyond +60°C) Detection of temperature sensor disconnection..... When temperature sensor caused wire disconnection 	
Error output	Contact capacity 24V DC 300mA 1a	
Power connection	Power cable Triplex, 2m	
Noise	42.5dB (A)	49dB (A)
Dimensions *3	W132×H162×D66 mm	
Weight	1.2kg	1.8kg

*1 Nominal value with ambient humidity of 80%RH at 30°C

*2 Supply voltage should be within the specified range with fluctuation not exceeding ±10%.

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

■ 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.

Related product

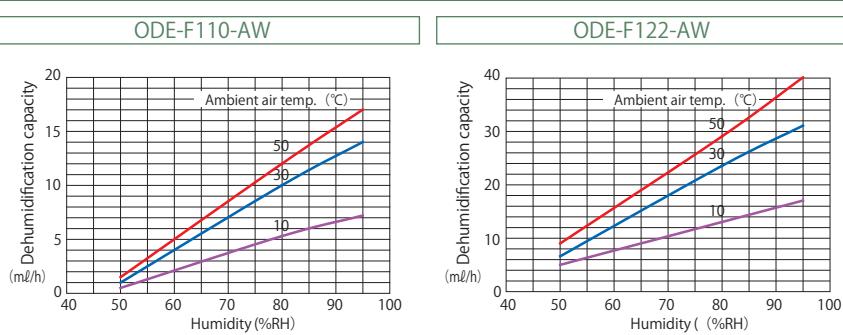
Drain evaporator



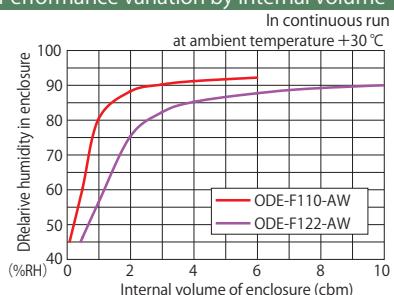
■ Performance chart

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 shows the dehumidification capability.

Dehumidification characteristics chart



Performance variation by internal volume

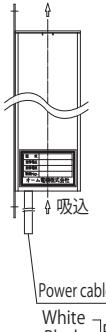


Note : The above chart shows correlation of internal humidity and cubic measure of an enclosure under the condition at 100% relative humidity and 30°C temperature outside the enclosure on condition that the enclosure has no vent, its door is hermetically sealed and not opened more than one time a day.

■ Outline dimensions

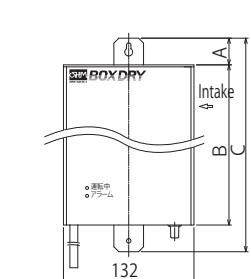


Side view

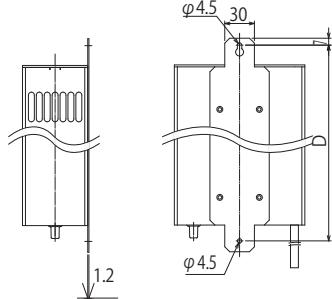


Model	A	B	C	D
ODE-F110-AW	27	162	216	198
ODE-F122-AW	38	250	328	310

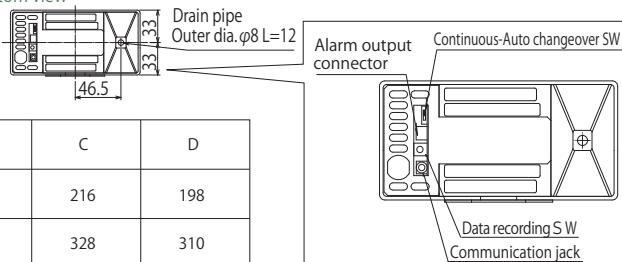
Front view



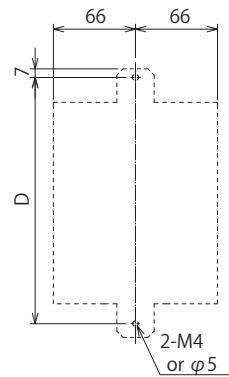
Side view



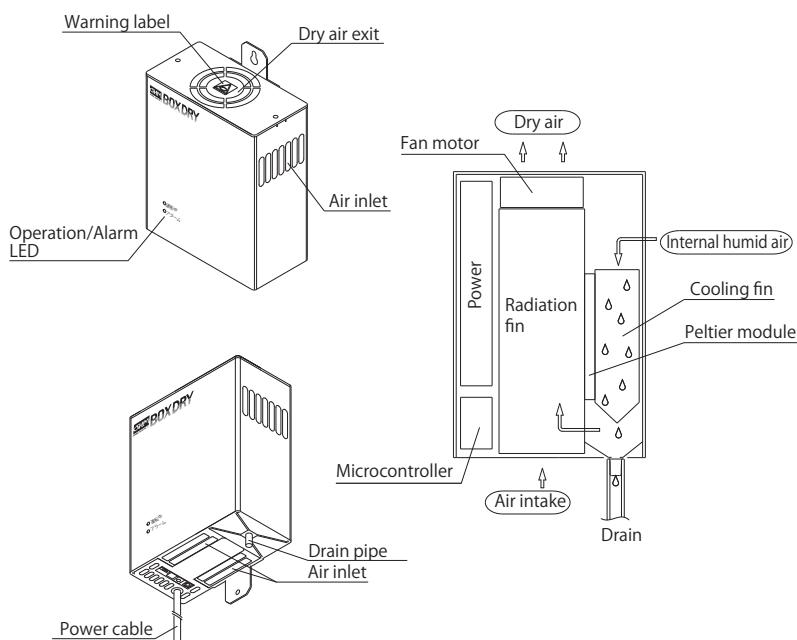
Bottom view



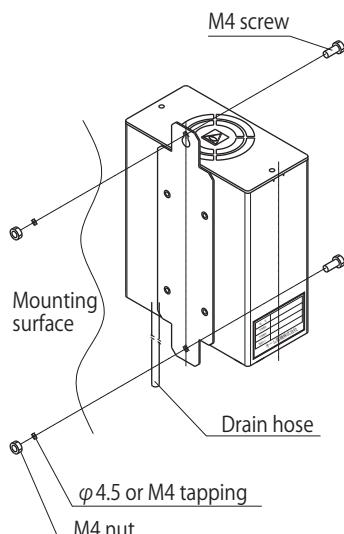
■ Panel cutout



■ 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 : 1.5m
- Harness for alarm output : 0.5m
- Instruction manual : 1 copy

Net weight 1.1kg

Net weight 1.7kg

RoHS2

■ Model/Specification

Model	ODE-N103-AW	ODE-N105-AW						
Dehumidification capacity *1	3ml/h	5ml/h						
Rated voltage *2	Single phase, 100 - 240V AC							
Current consumption	<table border="1"> <tr> <td>In dehumidifying operation</td><td>0.1A (100V AC) 0.05A (200V AC)</td><td>0.24A (100V AC) 0.12A (200V AC)</td></tr> <tr> <td>When dehumidifying operation is stopped</td><td>0.02A (100V AC) 0.03A (200V AC)</td><td>0.05A (100V AC) 0.06A (200V AC)</td></tr> </table>	In dehumidifying operation	0.1A (100V AC) 0.05A (200V AC)	0.24A (100V AC) 0.12A (200V AC)	When dehumidifying operation is stopped	0.02A (100V AC) 0.03A (200V AC)	0.05A (100V AC) 0.06A (200V AC)	
In dehumidifying operation	0.1A (100V AC) 0.05A (200V AC)	0.24A (100V AC) 0.12A (200V AC)						
When dehumidifying operation is stopped	0.02A (100V AC) 0.03A (200V AC)	0.05A (100V AC) 0.06A (200V AC)						
Starting current	2.5A	4.5A						
Rated power consumption	<table border="1"> <tr> <td>Dehumidification ON</td><td>10W</td><td>25W</td></tr> <tr> <td>Dehumidification OFF</td><td>2W</td><td>5W</td></tr> </table>	Dehumidification ON	10W	25W	Dehumidification OFF	2W	5W	
Dehumidification ON	10W	25W						
Dehumidification OFF	2W	5W						
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	Detection of high temperature at radiation part When radiation part has reached +80°C Detection of thermoelectric module error When current value of the thermoelectric module has dropped Detection of abnormal working temperature When operation has stopped beyond the working temperature range (Below 0°C or beyond +50°C) Detection of temperature sensor disconnection When temperature sensor caused wire disconnection							
Error output	Contact capacity 24V DC 300mA 1a							
Power connection	Power cable Triplex, 2m							
Dimensions *3	W132×H162×D66 mm	W132×H250×D66 mm						
Weight	1.1kg	1.7kg						

*1 Nominal value with ambient humidity of 80%RH at 30°C

*2 Supply voltage should be within the specified range with fluctuation not exceeding ±10%.

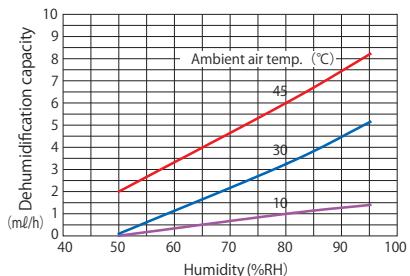
*3 Drain pipe, cable and mounting stay are excluded.

■ Performance chart

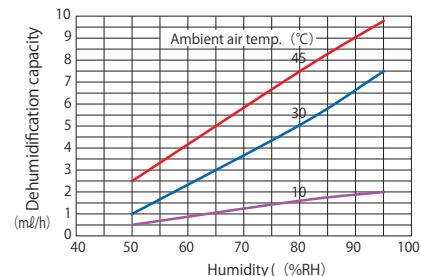
Dehumidification capability of BOXDRY is determined by the volume of the enclosure to which it is applied. The intersection of the vertical axis and the performance curve shows the dehumidification capability.

Dehumidification characteristics chart

ODE-N103-AW

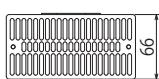


ODE-N105-AW

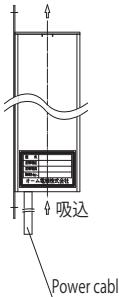


■ Outline dimensions

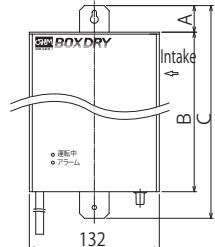
Top view



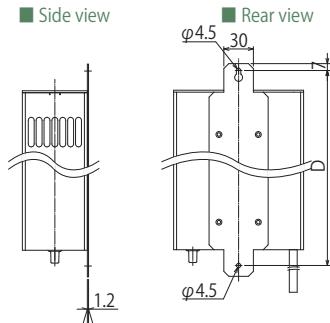
Side view



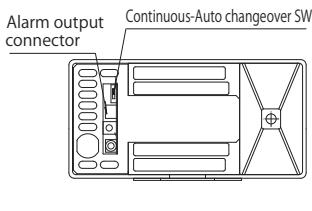
Front view



Side view

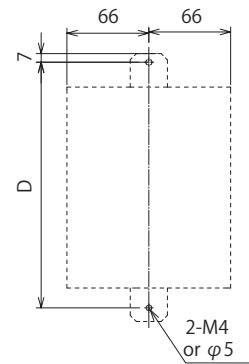


Bottom view

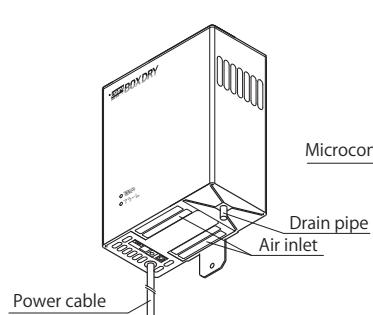
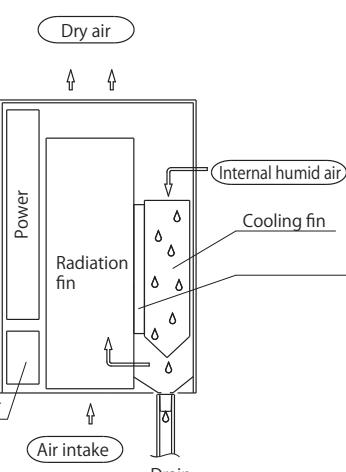
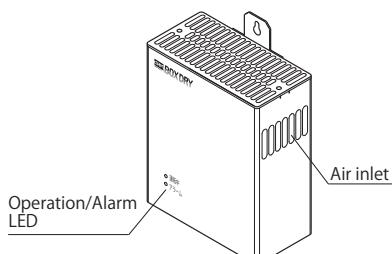


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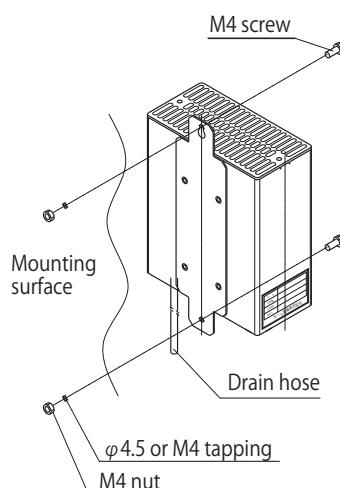
■ Panel cutout



■ Structural drawing



■ Installation drawing



Thermoelectric dehumidifier | Compact type

ODE-1512D

Capability
15ml/h



Supply includes

- BOXDRY : 1 pc.
- Mounting stay : 1 pc.
- M3×6 screw : 2 pcs.
- Drain hose : 1.5m
- Instruction manual : 1 copy

Net weight : 500g

RoHS

■ Model/Specification

Model	ODE-1512D
Dehumidification capacity *1	15ml/h
Rated voltage *2	DC12V
Rated current consumption	5.0A or less
Starting current	5.2A
Working temperature *3	+10 to +60°C
Working humidity	Max. 95%RH
Overheat protection on radiation side	None
Operation mode	Continuous
Vibration withstand	Frequency 10~55Hz, Total amplitude 0.7mm, Cycle 5 min., X,Y, Z direction 25 min. each
Power connection	Screw terminal board
Dimensions	W65×H104×D109 mm
Weight	500g

*1 Nominal value with ambient humidity of 80%RH at 30°C

*2 Supply voltage should be within the specified range with fluctuation not exceeding ±5%.

*3 If the ambient temperature decreases to near +10°C, the cooling fin may freeze up. In such case, dehumidification performance will be lessened.

● ODE-1512D has no microcontroller-controlled functions like energy-saving operation.

Related product

Drain evaporator

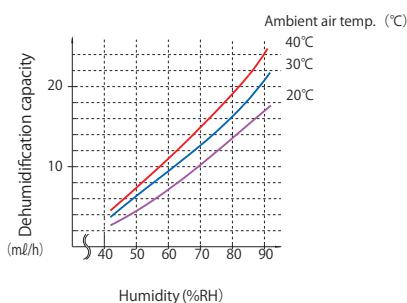


EVAPRO

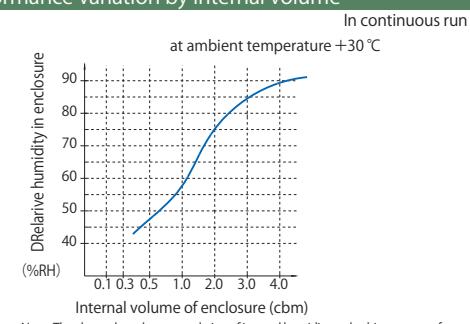
■ Performance chart

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 shows the dehumidification capacity.

Dehumidification characteristics chart

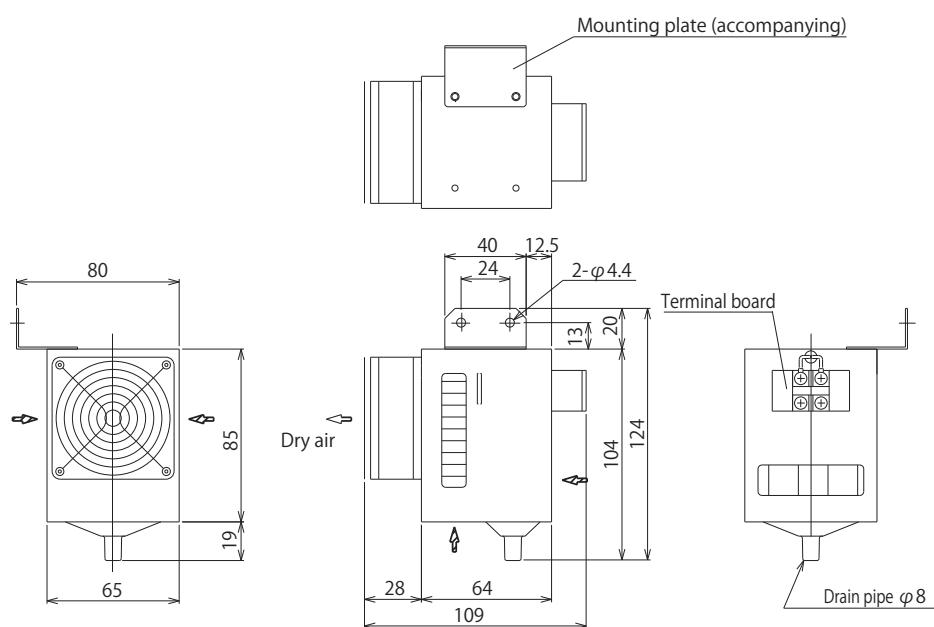


Performance variation by internal volume

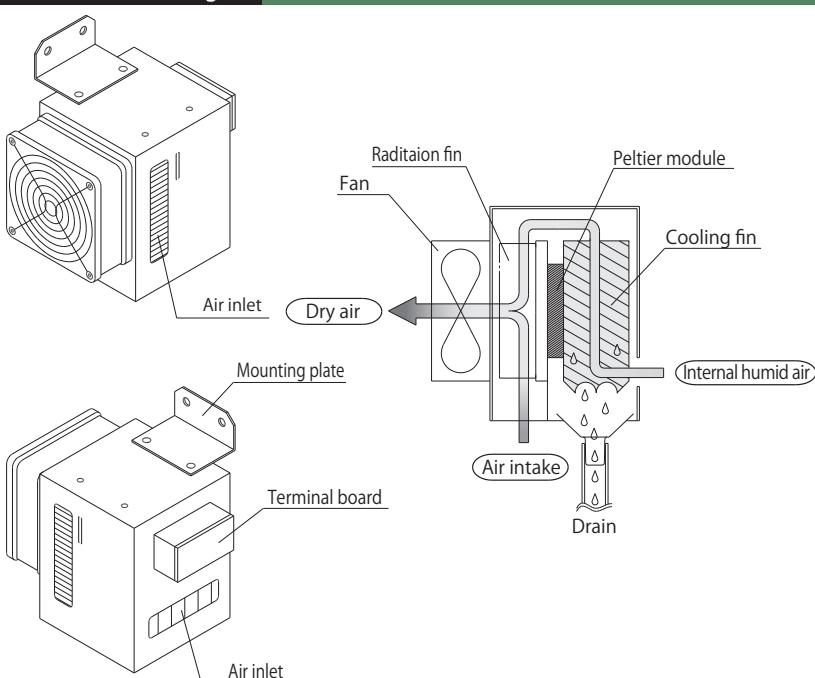


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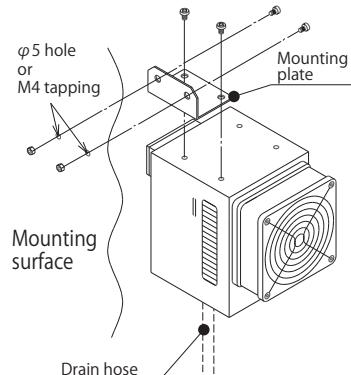
■ Outline dimensions



■ Structural drawing



■ Installation drawing



Distributor



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URL: <https://www.ohm.jp/>



Please read the enclosed instruction manual carefully before use.

- Actual colors may vary from the pictures shown in this catalog due to printing restrictions.
- The contents of this catalog are subject to change without prior notice for product improvements.
- The contents of this catalog is as of January 2020.