



# Cold Mold Sweat Dehumidifier

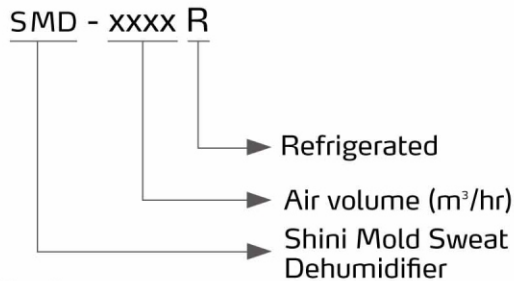
SMD-3000R



Refer carefully to this manual before operation.

# SMD-R Series

## ■ Coding Principle



## ■ Features

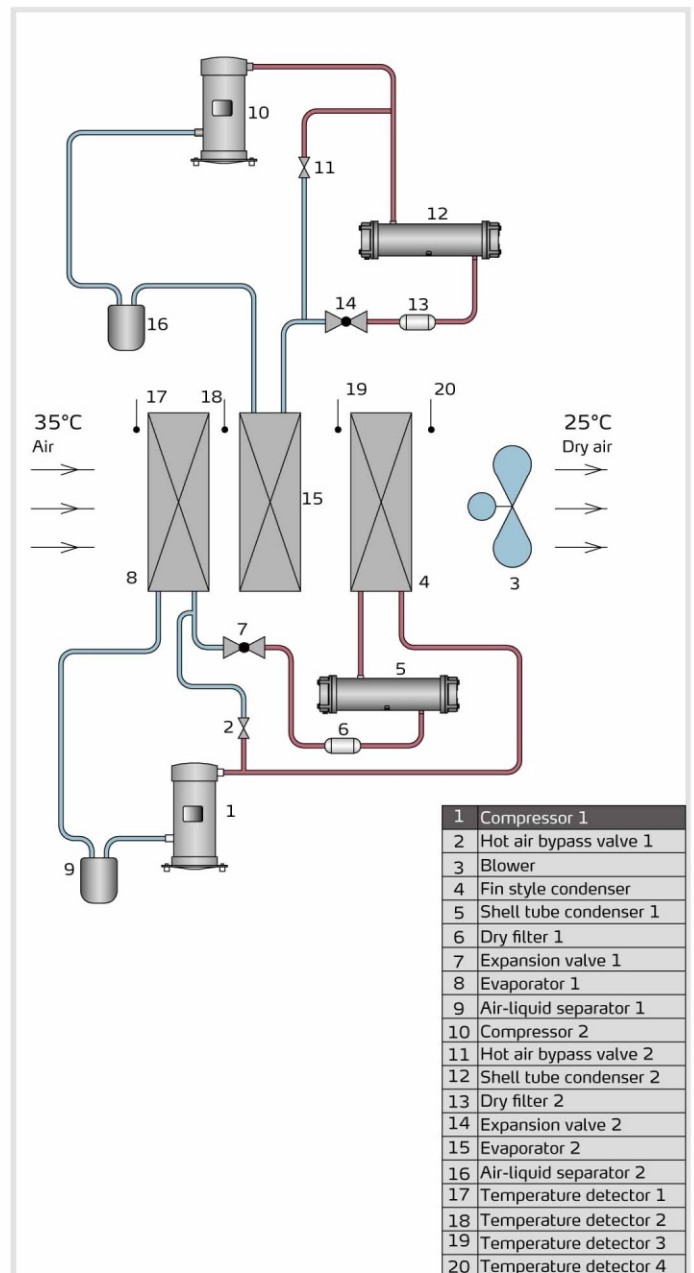
- Outlet air dew-point temperature: 2~8°C
- Low temperature protection.
- Adopt environmental friendly refrigerant R410A to ensure good cooling effect.
- Cooling system is protected by high and low pressure controllers.
- With famous compressor, it features low noise, high efficiency and long service life.
- Feature convenient operation, simple structure and easy maintenance.
- Both compressor and blower have overload protection.
- Refrigerant indicator is optional.
- Liquid pipe solenoid valve is optional.
- If comply with worldwide electrical safely standard, machine models are followed by "CE"

## ■ Application

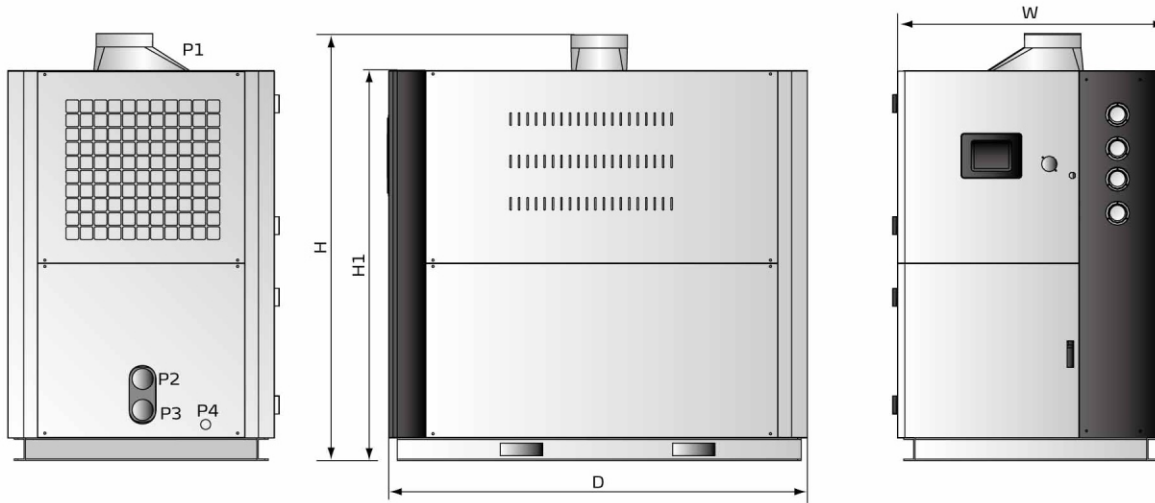
Cold Mould Sweat Dehumidifiers are designed to remove moisture sweat from condensing on mold surface. Moisture condensation on the mold surface is due to the use of chilled water for reducing molding cycle time, particularly while molding PET preform. When mold surface temperature is lower than dew-point temperature of surrounding air, the water vapor comes into being, which leads to moisture condensation, and then affect product quality and production efficiency as well as bring corrosion to the mold surface and cause environmental pollution. This series of machine uses honeycomb rotor to carry out dehumidifying function, which ensures the surrounding air of mold remaining in a low dew-point temperature ranging from 2~8°C. It greatly reduce the reject ratio by making mold no moisture condensation on its surface and not affected by changes of seasons.

## ■ Working Principle

With the effect of centrifugal blower, air of high dew-point temperature exchanges heat with refrigerant of low temperature when going through fin style evaporator 1 and 2. Some parts of moisture in air will be condensed out after becoming liquid, since temperature is going down, and thus to get dehumidified air of low dew-point temperature. Then, the dehumidified air of low dew-point temperature gets heated without changing its humidity when going through fin style condenser to become air of low dew-point and room temperature and then be taken away by centrifugal blower.



## Outline Drawings



Models	H (mm)	H1 (mm)	W (mm)	D (mm)	P1 Air outlet (inch)	P2 Water outlet (inch)	P3 Water inlet (inch)	P4 Drainage port (inch)	Weight (kg)
SMD-3000R	1510	1375	962	1482	8	2 1/2	2 1/2	1	640

## Specifications

Models		SMD-3000R
project / parameters		
Air volume	m <sup>3</sup> /hr	3000
Static pressure	Pa	350
Power	kW	2.2
Outlet air temperature	°C	25~30
Outlet air dew-point temperature	°C	2~8
Dehumidification capacity	kg/hr	52
Compressor	Type	Scroll
	Power (kW)	2 × 7
Refrigerant	Type	R410A
	Filling Volume (kg)	2 × 6.5
Condenser	Type	Shell tube style
Evaporator	Type	Fin style
Total Power (kW)		16.2
Pipe Coupling (inch)	Chilled Water Inlet (inch) (50Hz/60Hz)	2 1/2
	Chilled Water Outlet (inch) (50Hz/60Hz)	2 1/2
	Air outlet	8
	Condensing water drainage port	1
Protective Devices	Compressor	Overload relay
	Blower	Overload relay
	Cooling system	High and low pressure controller
	Evaporator	Overlow temperature
Power		3Φ, 400VAC, 50

Notes: 1) all above data is got under the conditions: ambient dry-bulb temperature of 35°C, wet-bulb temperature of 28°C, inlet water temperature of 30°C, outlet water temperature of 35°C

2) Adopt environmental friendly refrigerant R410A.

3) Suitable for environment with dry-bulb temperature of 10 ~ 43°C and relative humidity less than 70% (Including 70%).

4) Power supply can be adapted according to clients' requirements.

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