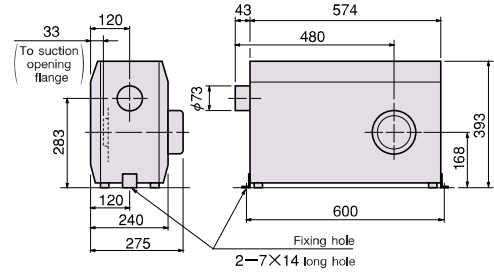


without controller

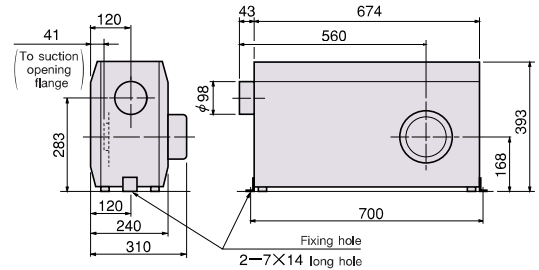
Series HAS2000

Most suitable for built in to other devices, since no controller or electrical component equipped. Also suited for using an existing control board. SSR or electromagnetic contactor can be installed.

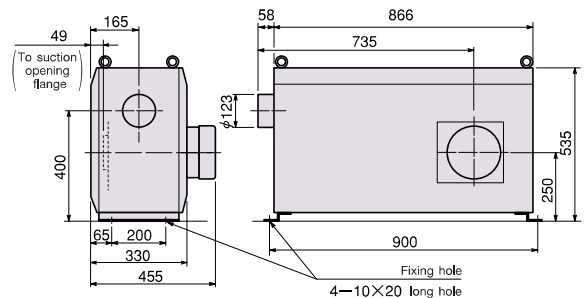
HAS2031 / HAS2051 / HAS2076 (Three-phase 200V 3kW/5kW/7.5kW)



HAS2081 / HAS2101 (Three-phase 200V 8kW/10kW)



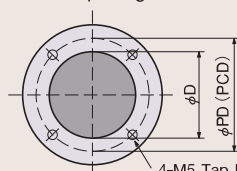
HAS2151H / HAS2201H (Three-phase 200V 15kW/20kW)



Suction opening



Suction opening size

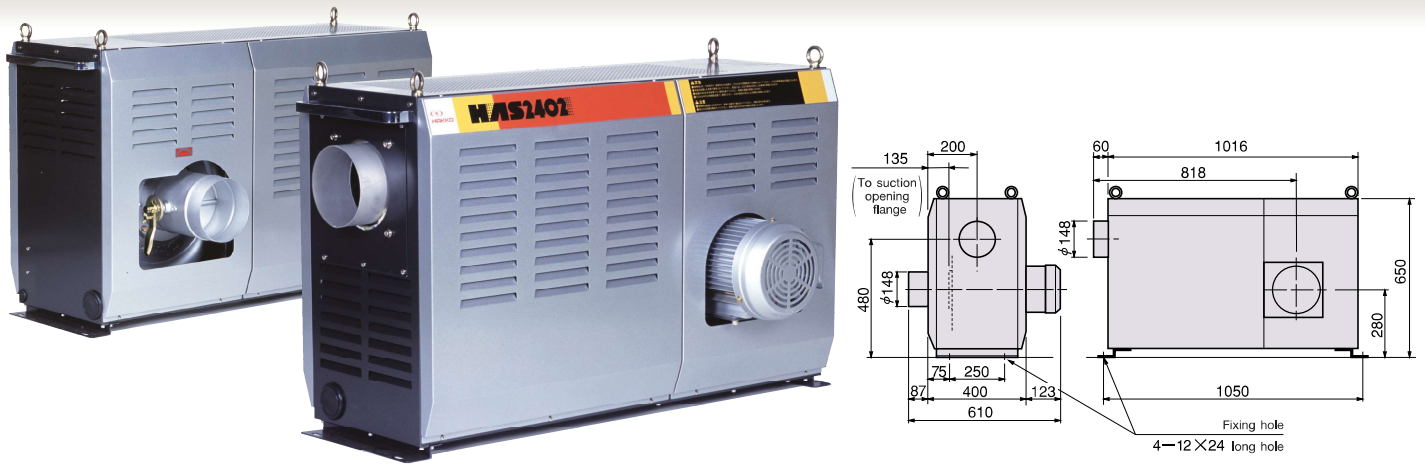


4-M5 Tap hole
4-M8 Tap hole for
HAS2301H or 2402H.

Model No.	φ D	φ PD
HAS2031 • 2051 • 2076	75	96
HAS2081 • 2101	100	120
HAS2151H • 2201H	125	140
HAS2301H • 2402H	150	180

The suction opening is positioned opposite to the blast motor in all models.
HAS2031 ~ HAS2201H equipped with movable damper (open air ratio : approx. 10 ~ 100%).
HAS2301H ~ HAS2402H equipped with damper with flange (model No. PPD0150).

HAS2301H / HAS2402H (Three-phase 200V 30kW/40kW)



Series HAS2000

Product in stock

Model No.	HAS2031	HAS2051	HAS2076	HAS2081	HAS2101
Product code	00700310	00700320	00700330	00700340	00700350
Power source	Three-phase 200 V (50/60 Hz)				
Total capacity	3.2 kW	5.2 kW	7.7 kW	8.3 kW	10.3 kW
Heater capacity	3 kW	5 kW	7.5 kW	8 kW	10 kW
Gas temperature range at discharge opening	Normal temperature ~ 350°C*1				
Airflow volume range (50/60 Hz)	4.0/4.8 m ³ /min (with damper full-open) 3.2/3.8 m ³ /min (with damper 2/3-open) 2.0/2.4 m ³ /min (with damper 1/3-open)			6.7/7.8 m ³ /min (with damper full-open) 5.7/6.6 m ³ /min (with damper 2/3-open) 3.6/4.3 m ³ /min (with damper 1/3-open)	
Airflow volume range	Adjust suction volume with movable damper.*2				
Suction opening diameter	φ75 mm hole (movable plate-type damper attached)			φ100 mm hole (movable plate-type damper attached)	
Discharge opening diameter	φ73 mm stainless steel pipe			φ98 mm stainless steel pipe	
Suction air temperature	-10°C ~ 230°C				
Specifications of hot air generator	Maximum airflow volume (50/60 Hz)	5.4/6.2 m ³ /min			8.8/10.4 m ³ /min
	Maximum static pressure (50/60 Hz)	0.63/0.91 kPa			0.95/1.35 kPa
	Capacity	Three-phase 200 V 0.15 kW			Three-phase 200 V 0.3 kW
	Maximum noise (50/60 Hz)	55/59 dB			64/66 dB
Weight	24 kg			30 kg	31 kg

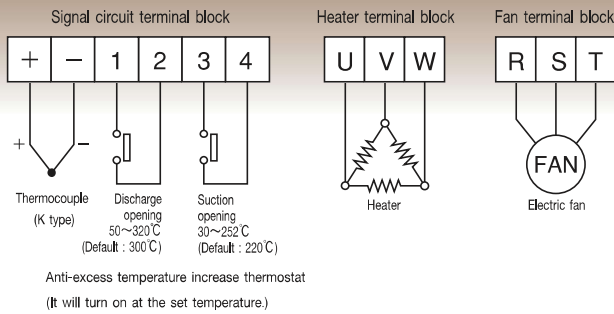
Model No.	HAS2151H	HAS2201H	HAS2301H	HAS2402H
Product code	00700361	00700371	00700381	00700392
Power source	Three-phase 200 V (50/60 Hz)			
Total capacity	16.5 kW	21.5 kW	31.5 kW	41.5 kW
Heater capacity	15 kW	20 kW	30 kW	40 kW
Gas temperature range at discharge opening	Normal temperature ~ 350°C*1			
Airflow volume range (50/60 Hz)	15.0/17.5 m ³ /min (with damper full-open) 12.4/14.8 m ³ /min (with damper 2/3-open) 7.5/9.1 m ³ /min (with damper 1/3-open)		23/27 m ³ /min (with damper full-open) 17/21 m ³ /min (with damper 2/3-open) 5.5/6.5 m ³ /min (with damper 1/3-open)	
Airflow volume range	Adjust suction volume with movable damper.*2			
Suction opening diameter	φ125 mm hole (movable plate-type damper attached)		φ148 mm hole (damper with flange attached)	
Discharge opening diameter	φ123 mm stainless steel pipe		φ148 mm stainless steel pipe	
Suction air temperature	-10°C ~ 230°C			
Specifications of hot air generator	Maximum airflow volume (50/60 Hz)	20.8/24.0 m ³ /min		30/34 m ³ /min
	Maximum static pressure (50/60 Hz)	1.65/2.37 kPa		1.95/2.8 kPa
	Capacity	Three-phase 200 V 1.5 kW		
	Maximum noise (50/60 Hz)	85/90 dB		87/90 dB
Weight	69 kg	73 kg	110 kg	117 kg

*1 : Gas temperature varies depending on the conditions of use. The product should not be used above the maximum temperature.

*2 : Frequency level should be retained between 30 to 60Hz when adjusting temperature by changing frequency with the inverter.

Series HAS2000 Circuit Diagram

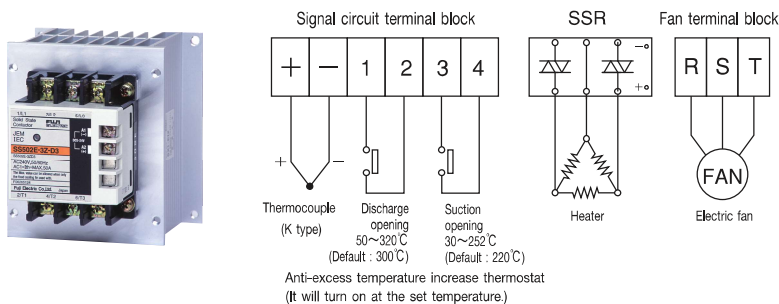
Standard



In each model, terminal stands are assembled under the side panel at the right side from the discharge opening, where the wires are to be set. Special attention should be paid to phase rotation (RST) when setting the wire of the generator. The default temperature for the anti-excess temperature thermostat, which can be used for anti-excessive temperature increase path, is 300°C (50~320°C) at discharge opening and 220°C (30~252°C) at suction opening. The rated voltage at the contact point is 250V / 16A (resistance load).

Electrical components circuit diagram (circuit diagram for custom-made product assembled with electrical components)

○ SSR (Solid State Relay)

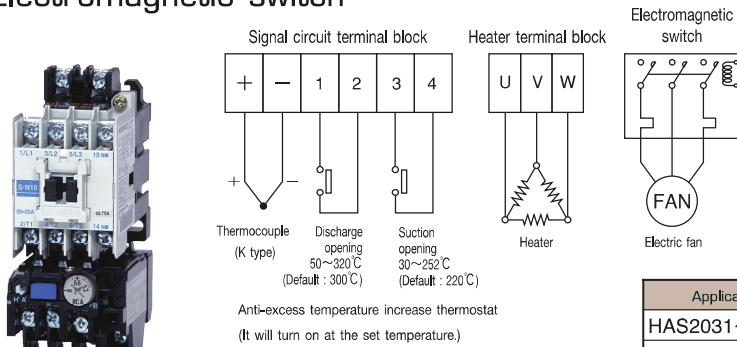


Heater terminal block is not provided in models with SSR. Please set electrical supply wire to the heater at the primary SSR. The secondary SSR and heater are already connected. (If you purchase SSR only, please connect from the secondary SSR to heater with heat-resistant electrical wire.) Please set the SSR drive signal wire (DC5~24V) from the temperature controller in the input terminal of SSR.

Note) SSR is a semiconductor. When a semiconductor is damaged due to excessive heat or current, it becomes conductive regardless of input signal. In such case, it is impossible only by switching SSR to prevent excessive temperature increase. Please position relay or electromagnetic contactor in the path to the heater so that the electricity can be cut by using the signal for excess temperature increase.

Applicable model	Rated
HAS2031, HAS2051	AC 100~240V 20A Input DC 5~24V
HAS2076, HAS2081	AC 100~240V 30A Input DC 5~24V
HAS2101	AC 100~240V 35A Input DC 12~24V
HAS2151H	AC 100~240V 50A Input DC 3.5~30V
HAS2201H	AC 100~240V 80A Input DC 3.5~30V
HAS2301H, HAS2402H	AC 100~240V 120A Input DC 3.5~30V

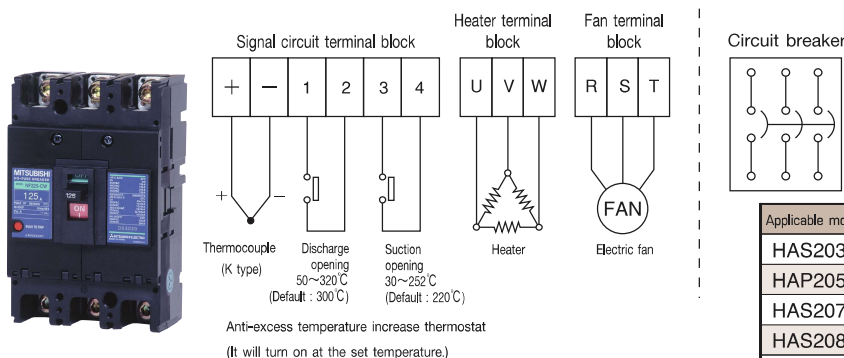
○ Electromagnetic switch



Fan terminal block is not provided in models with electromagnetic switches. Please set electrical supply wire to heater at the primary SSR. The secondary SSR and heater are already connected. (If you purchase SSR only, please connect from the secondary SSR to the heater with heat-resistant electric wire.) To set wires, please make sure that phase rotation (RST) is correct. The circuit should be designed so that the electricity to the heater can be cut when the thermal relay is tripped on due to excessive current to the fan.

Applicable model	Rated
HAS2031~HAS2076	Electrical power of coil AC200V, Nominal current of thermal relay 0.9A
HAS2081, HAS2101	Electrical power of coil AC200V, Nominal current of thermal relay 1.7A
HAS2151H~HAS2402H	Electrical power of coil AC200V, Nominal current of thermal relay 6.6A

○ Circuit breaker



Circuit breaker is provided at the left side from discharge opening, while each terminal is set at the right side, as in the standard model. Please set wires accordingly.

Applicable model	Rated	Applicable model	Rated
HAS2031	3P 30AF/15AT	HAS2151H	3P 100AF/60AT
HAP2051	3P 30AF/20AT	HAS2201H	3P 100AF/75AT
HAS2076	3P 30AF/30AT	HAS2301H	3P 225AF/125AT
HAS2081	3P 50AF/40AT	HAS2402H	3P 225AF/150AT
HAS2101	3P 50AF/50AT		