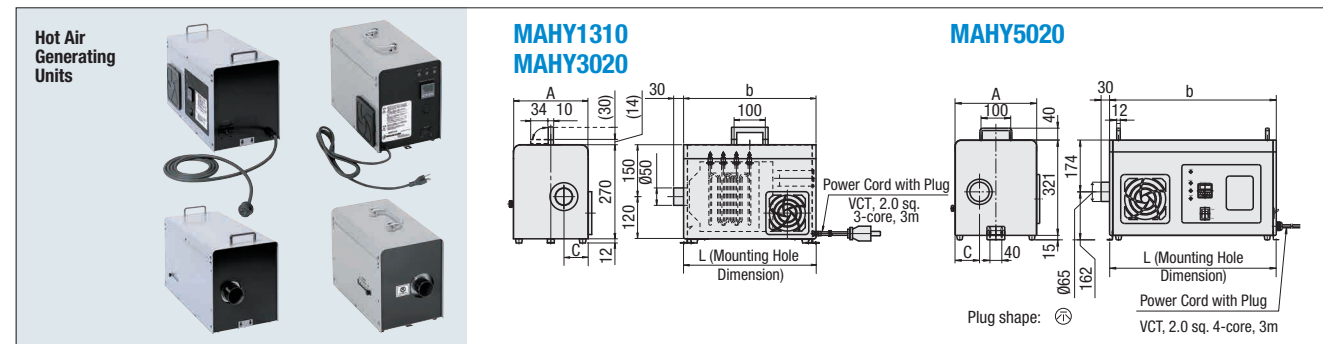


# Hot Air Generating Units



Part Number	A	B	C	L	Heater Capacity (kW)	Voltage (V)	Frequency (Hz)
<b>MAHY</b> 1310	215	380	70	383	1.3	100	For 50 & 60
3020	250	450	87.5	453	3.0	200	
5020	275	561	82.5	560	5.0	200	

Part Number Example	Part Number
	MAHY3020

## Features

The MISUMI's Hot Air Generating Unit is a compact heater unit, incorporating a blower and a temperature controller with a built-in sheath heater for air heating. PID control method is employed for temperature controllers, which enables effective temperature control. (For details of temperature controllers, refer to P.3770)

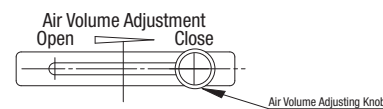
## Common Specifications

	MAHY1310	MAHY3020	MAHY5020
Power Supply	Single-Phase 100 V	Single-Phase 200 V	Three-Phase 200 V
Heater Capacity (kW)	1.3	3.0	5.0
Temperature Control Range (°C)	Ambient Temp. ~200°C	Ambient Temp. ~300°C	Ambient Temp. ~350°C
Outlet Port Dia. (mm)	Ø50		
*Max Air Volume	Full Open 1.0 / 1.4 (50 Hz / 60 Hz)	2.7/3.2 (50 Hz / 60 Hz)	
1/3 Open	0.3 / 0.4 (50 Hz / 60 Hz)	1.0/1.3 (50 Hz / 60 Hz)	
Intake Air Temperature (°C)	Ambient Temperature		
Control Mechanism: Temp. Indication	Digital Indication		
: Control Drive	SSR Drive		
: Temp. Sensors	K Thermocouple		
: Safety Circuit	Over-Temperature / Interlock		
Air Volume Adjustment	Manual Damper		
Weight	10 kg	13 kg	27 kg

\*The values of maximum wind volume are for reference only.

## Air Volume Adjustment

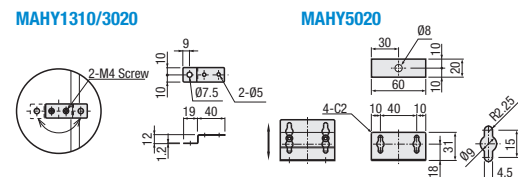
Air volume can be adjusted by moving the "Air Volume Adjusting Knob" left and right on the side of the body.



## Mounting Method

Screwing with the fixing bracket

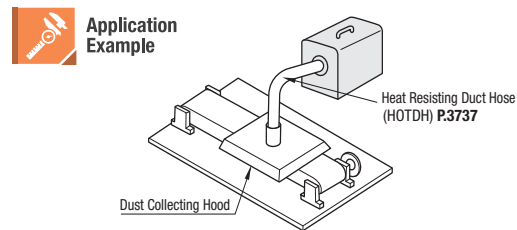
- Remove the M4 bolt from the fixing bracket, and install the bracket as shown below.
- Prepare two M6 bolts for securing the main body.



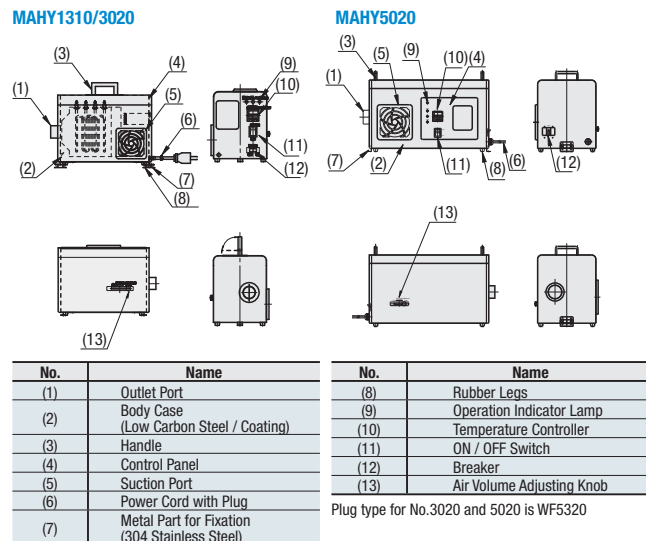
## Precautions for Use

- Never use the unit at any temperature over the maximum operating temperature. It may result in breakage.
- Never touch the air outlet and adjacent portion during operation. A severe injury may result due to high temperature.
- The heater is not waterproof. Never expose the heater to water or any other liquids.
- Do not use over the rated voltage (V).
- Do not dismantle or remodel the body.
- Read the instruction manual thoroughly to ensure safe operation of the unit.

## Application Example



## Basic Structure

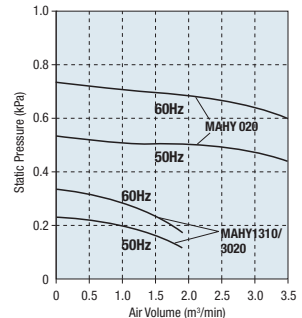


No.	Name	No.	Name
(1)	Outlet Port	(8)	Rubber Legs
(2)	Body Case (Low Carbon Steel / Coating)	(9)	Operation Indicator Lamp
(3)	Handle	(10)	Temperature Controller
(4)	Control Panel	(11)	ON / OFF Switch
(5)	Suction Port	(12)	Breaker
(6)	Power Cord with Plug	(13)	Air Volume Adjusting Knob
(7)	Metal Part for Fixation (304 Stainless Steel)		

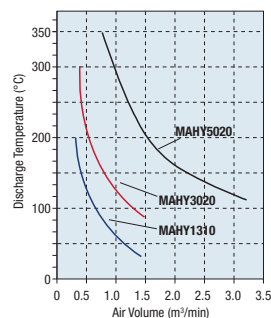
Plug type for No.3020 and 5020 is WF5320

## Performance Curve

### Performance Characteristics of Blower MAHY1310/3020/5020

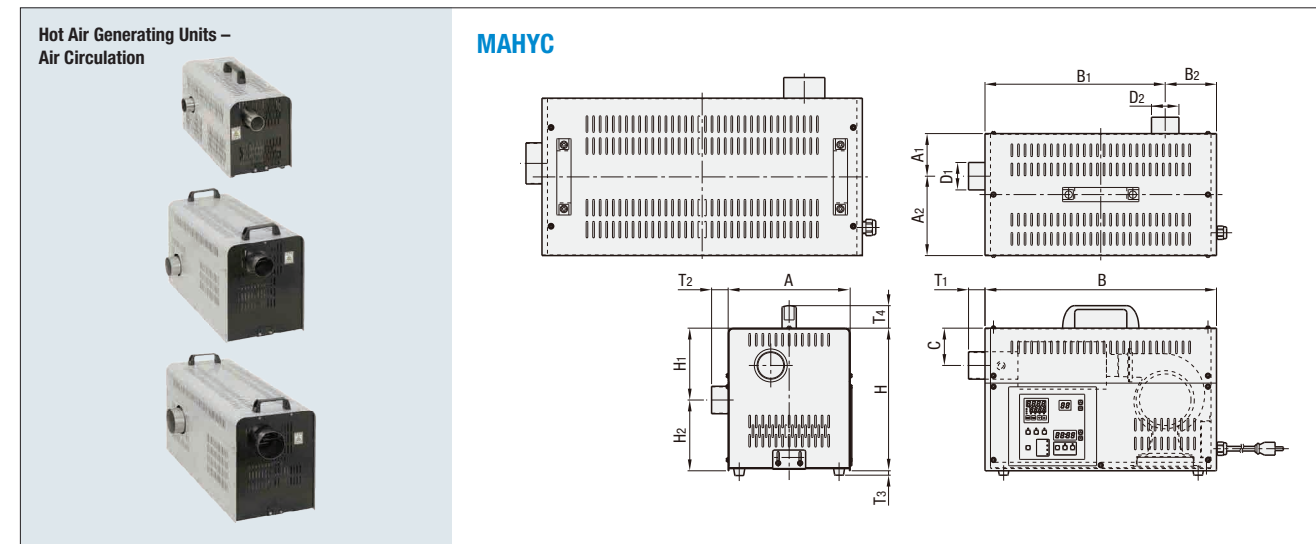


### Hot Air Temperature / Air Volume Characteristics



# Hot Air Generating Units

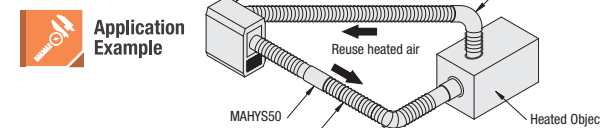
## Air Circulation



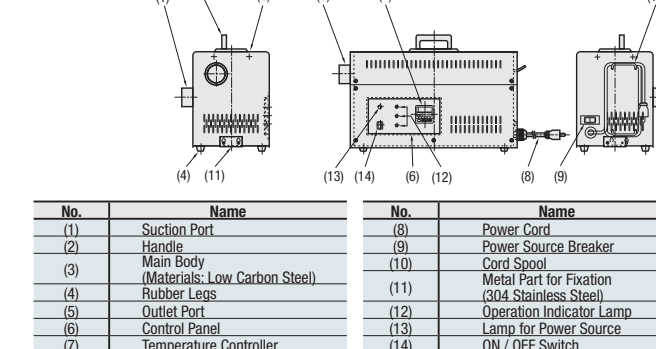
Part Number	A	A1	A2	B	B1	B2	C	D1	D2	H	H1	H2	T1	T2	T3	T4	Heater Capacity (kW)	Voltage (V)	Frequency (Hz)
<b>MAHYC</b> 1010	206	64	142	450	344	106	73	50	50	268	135	133	30	30	12	41	1.0	100	For 50 & 60
1210	222	78	145	422	329	94	69	50	50	260	132	128	30	30	12	41	1.2	100	For 50 & 60
5020	287	119	168	584	478	106	83	75	75	361	243	118	29	38	16	41	5.0	200	For 50 & 60
10020	302	116	186	665	506	159	99	100	100	380	190	190	27	39	16	41	10.0	200	For 50 & 60

Part Number Example	Part Number
	MAHYC1010

## Application Example



## Basic Structure



No.	Name	No.	Name
(1)	Suction Port	(8)	Power Cord
(2)	Handle	(9)	Power Source Breaker
(3)	Main Body (Materials: Low Carbon Steel)	(10)	Cord Spool
(4)	Rubber Legs	(11)	Metal Part for Fixation (304 Stainless Steel)
(5)	Outlet Port	(12)	Operation Indicator Lamp
(6)	Control Panel	(13)	Lamp for Power Source
(7)	Temperature Controller	(14)	ON / OFF Switch

## Features

- Heat can be effectively utilized by circulating heated air emitted from outlet port to suction port.
- Higher energy efficiency operation than the conventional products (MAHY).

## Specification

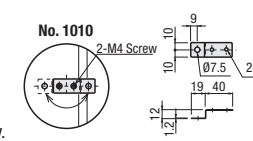
	MAHYC1010	MAHYC1210	MAHYC5020	MAHYC10020
Power Supply	Single-Phase 100V	Single-Phase 100V	Triple-Phase 200V	Triple-Phase 200V
Heater Capacity (kW)	1.0kW	1.2kW	5.0kW	10.0kW
Temperature Control Range (°C)	Ambient Temperature ~200°C	Ambient Temperature ~230°C	Ambient Temperature ~250°C	Ambient Temperature ~250°C
*Maximum Air Volume (50/60 Hz)	1.1/1.2 m³/min	1.2 m³/min (60Hz)	4.0 m³/min (60Hz)	7.6 m³/min (60Hz)
Maximum Static Pressure (50/60 Hz)	0.2/0.3 kPa	0.2 kPa (60Hz)	0.44 kPa (60Hz)	0.8 kPa (60Hz)
Control Mechanism: Temperature Indication	Digital Indication	Digital Indication	Digital Indication	Digital Indication
: Control Drive	PID Control / SSR Drive	PID Control / SSR Drive	PID Control / SSR Drive	PID Control / SSR Drive
: Temperature Sensors	K Thermocouple	K Thermocouple	K Thermocouple	K Thermocouple
: Safety Circuit	Over-Temperature / Interlock	Over-Temperature / Interlock	Over-Temperature / Interlock	Over-Temperature / Interlock
Maximum Noise (at max Air Flow)	63dB	63dB	82dB	85dB
Air Volume Adjustment	—	Inverter (30 to 60 Hz)	Inverter (30 to 60 Hz)	Inverter (30 to 60 Hz)
Temperature of Suctioned Air	Ambient Temperature ≤ 150°C	Ambient Temperature ≤ 170°C	Ambient Temperature ≤ 170°C	Ambient Temperature ≤ 180°C
Power Cord	VCTF 3-core x 2sq (3m)	VCTF 3-core x 2sq (2m)	2PNCCT 4-core x 2sq (3m)	2PNCCT 4-core x 5.5sq (3m)
Weight	9 kg	12 kg	33 kg	40 kg

\*The values of maximum wind volume are for reference only.

## Mounting Method

Screwing with the fixing bracket

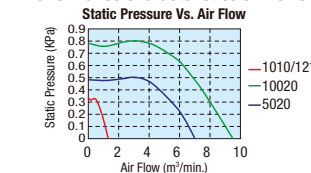
- Remove the M4 bolt from the fixing bracket, and install the bracket as shown below.
- Prepare two M6 bolts for securing the main body.



## Precautions for Use

- Never use the unit at any temperature over the maximum operating temperature. It may result in breakage.
- Never touch the air outlet and adjacent portion during operation. A severe injury may result due to high temperature.
- The heater is not waterproof. Never expose the heater to water or any other liquids.
- Do not use over the rated voltage (V).
- Do not dismantle or remodel the body.
- Read the instruction manual thoroughly to ensure safe operation of the unit.

### Performance Characteristics of Blower



### Hot Air Temperature / Air Volume Characteristics

