

# Duct Hoses / Cuffs for Duct Hoses

Oil-Resistant / Non-PVC

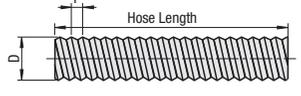
# Aluminum Duct Hoses / Heat Resistant Duct Hoses

**Oil-Resistant**

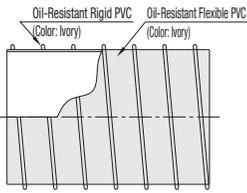


**RoHS**

**HOSEDY**  
(Hose Body Only)



**Construction Diagram**



**Material** Hose Body: Oil-resistant Hard/Flexible PVC

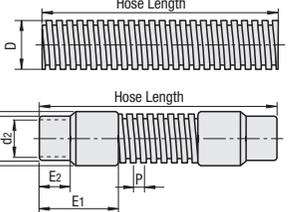
Part Number Type	Nominal	Hose Length 0.1m Increment	D	Hose I.D. (Reference) (mm)		P	Allowable Bending Radius (mm)	Reference Mass (kg/m)	Unit Price	
				d1	d2				Hose Unit Price/m	Hose Unit Price/m
<b>HOSEDY</b> (Hose Body)	75	0.5-30.0	86.4	76.4	13	75	0.785			
	100		112.2	101.6	15	100	1.03			
	125	0.5-20.0	138.7	125.9	21	125	1.355			
	150		164.8	152.4	20	150	1.68			

**Non-PVC**



**RoHS**

**Construction Diagram**



**Material** Hose Body: Polypropylene, Olefin Type Elastomer (for HOSECE, Special Anti-electrostatic Elastomer)  
Cuff: Olefin Type Elastomer

Part Number Type	Nominal Dia.	Hose Length 0.1m Increment	D	Hose I.D. (Reference) (mm)		P	d	d1	d2	E1	E2	Allowable Bending Radius (mm)	Reference Mass (kg/m)	Allowable Pressure (Ambient Temp.) (MPa (kgf/cm <sup>2</sup> ))	Allowable Decompression (Ambient Temp.) (kPa (mmHg))	Unit Price HOSECD		Unit Price HOSECE	
				Hose Unit Price/m	One End Cuffed (+ Hose Unit Price)											Both Ends Cuffed (+ Hose Unit Price)	Hose Unit Price/m	Both Ends Cuffed (+ Hose Unit Price)	
Translucent Duct Hoses <b>HOSECD</b> (Hose Body)	38	0.5-30.0	45.0	38.0	7.8	48	43	38	80	35	50	0.22	0.04 (0.4)	-50.7 (-380)					
	50		59.0	50.8	10.0	65.5	56.3	50.8	82	35	60	0.33							
	75		85.0	76.2	13.0	92.5	83.2	76.2	94	37	90	0.47							
Antistatic Translucent Duct Hoses <b>HOSECE</b> (Hose Body)	100	0.5-20.0	111.5	101.6	15.0	119	108.6	101.6	110	42	110	0.64	0.03 (0.3)	-33.0 (-248)					
	125		138.5	127.0	21.0	146.3	135	128	142	50	135	0.81							
	150		164.0	152.4	20.0	173.3	160	152	159	70	160	1.06	0.02 (0.2)	-12.5 (-94)					

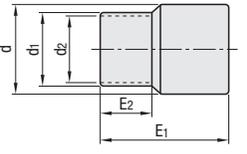
**Specifications**

Type	HOSEDY	HOSECD	HOSECE
Application	Suction and exhaust emission of oil mist	For air supply and exhaust (Air)	
Operating Temp. Range (°C)	-10~50	-20~50	
Allowable Pressure Range (MPa)	Below ambient temperature: 0 ~ 0.04 Above ambient temperature: 0 ~ 0.02		

**Ordering Example** Part Number - Hose Length  
HOSEDY100 - 5.5  
HOSECD50 - 3.2

**Cuffs for Duct Hoses**

Type	Material	Applicable Hoses
<b>DHED</b>	Flexible PVC	Lightweight Type
<b>DHSD</b>	EPDM (Light Gray)	Flexible
<b>DHHD</b>	EPDM (Black)	Wear Resistant, Antistatic
<b>DHTD</b>	Olefin Type Elastomer	Translucent Type



**RoHS**

Part Number Type	Nominal	DHED				DHSD				DHHD				DHTD							
		d	d1	d2	E1	d	d1	d2	E1	d	d1	d2	E1	d	d1	d2	E1	E2			
<b>DHED</b> (For Lightweight Duct Hoses)	38	48	43	38	80	35	47.7	44	38	70	35	52	43	38	75	30	48	43	38	80	35
	50	65.5	56.3	50.8	82	35	64	56.8	50.8	70	35	66.3	56	51	81	23	65.5	56.3	50.8	82	35
	75	78.5	69	63	86	33	78	69.5	63.5	76	35	78.1	69	63	87	31	-	-	-	-	-
	100	92.5	83.2	76.2	94	37	88	82.5	76.5	85	40	92.5	84	77	98	38	92.5	83.2	76.2	94	37
<b>DHSD</b> (For Flexible Duct Hoses)	65	106.5	96.9	89.2	99	40	100	95.9	88.9	95	45	105.8	97	89	107	46	-	-	-	-	-
	90	119.8	109.6	101.6	110	42	115.5	108.6	101.6	95	45	118.3	110	102	111	43	119	108.6	101.6	110	42
<b>DHHD</b> (For Friction Resistant and Antistatic Duct Hoses)	100	146.3	135	128	142	50	140.5	134	127	95	45	144.8	134	126	146	52	146.3	135	128	142	50
	125	173.3	160	152	160	70	166	160.4	152.4	113	50	172.3	161	153	162	78	173.3	160	152	159	70

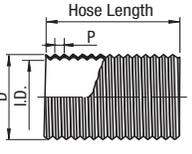
**Ordering Example** Part Number - Hose Length  
DHSD50

**Aluminum Duct Hoses**



**RoHS**

**Construction Diagram**



**Material** Aluminum Foil (Laminated), Hard Steel Wire

Part Number Type	Nominal Dia.	Hose Length 0.1m Increment	Hose I.D. (Reference) (mm)	D	P	Allowable Pressure Range (MPa (kgf/cm <sup>2</sup> ))	Allowable Decompression (Ambient Temp.) (kPa (mmHg))	Allowable Bending Radius (mm)	Reference Mass g/m	Unit Price	
										Hose Unit Price/m	Hose Unit Price/m
<b>HOAD</b>	38	0.5-5	39	45.0	10.8	0~0.02 (0~0.2)	-33 (-248)	30	130		
	50		50	55.3	10.8			35	168		
	65		64	70.3	10.8			45	205		
	75		75	80.3	10.8			55	244		
	100		98	105.3	10.8			70	312		
	117	113	119.3	10.8	75	375					
	125	125	130.3	10.8	90	390					
	150	150	155.7	10.8	105	606					

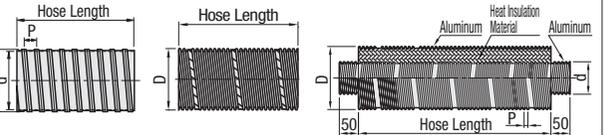
\* Hose length refers to the length with the hose extended.  
**Ordering Example** Part Number - Hose Length  
 HOAD50 - 3.2

**Heat-Resistant Duct Hoses**



**RoHS**

**Construction Diagram**



**Material** Main Body: Aluminum Polyester Cloth, Special Coating Glass Cloth, Aluminum Glass Cloth, SUS304, SUS304, SUS304, Aluminum. Others: Reinforcement Spiral: Zinc Plating, SUS304, SPOC (Zinc Plating), SUS304, SUS304, Glass Fiber.

Part Number Type	No.	Hose Length 0.1m Increment	Hose I.D. (Reference) (mm)	D	P	Allowable Pressure Range (MPa)	Allowable Decompression (Ambient Temp.) (kPa)	Reference Mass (g/m)	Allowable Bending Radius (mm)	Unit Price	
										Hose Unit Price/m	Hose Unit Price/m
<b>HOCTD</b> (Low Dust Generation Type)	50	0.5-5	51	54.5	20	0~0.007	-8.5	370	120		
	75		76	80	20			530	160		
	100		102.5	106	23			640	210		
	125		127.5	131	23			770	250		
	150		152	155	23			945	300		
<b>HOTD</b> (Heat Resistant Temperature 250°C Type)	50	0.5-5	51	54.5	20	0~0.007	-8.5	360	110		
	65		67	71.5	20			480	140		
	75		76	80	20			525	160		
	90		91	94.5	23			545	190		
	100		102.5	106	23			635	210		
<b>HOTDS</b> (Heat Resistant Temperature 180°C Type)	50	0.5-5	51	54.5	20	0~0.007	-8.5	405	110		
	65		67	71.5	20			460	140		
	75		76	80	20			525	160		
	90		91.5	95	23			570	190		
	100		102.5	106	23			635	210		
<b>HOTDH</b> (Heat Resistant Temperature 450°C Type)	50	0.5-2	52.5	56	20	0~0.007	-10.5	365	170		
	65		67	71.5	20			460	210		
	75		76	80	20			525	240		
	90		91.5	95	23			570	290		
	100		102.5	106	23			635	320		
<b>HOTDK</b> (Heat Resistant Temperature 600°C Type)	50	0.5-4	51.2	56.8	-	0~0.027	-27	220	75		
	65		66.2	71.8	-			280	98		
	75		76.2	81.8	-			320	113		
	80		81.2	86.8	-			340	120		
	100		101.7	107.3	-			420	200		
<b>HOTDA</b> (Heat Insulating Layer Coated Type)	50	0.5-2	50.9	107	4.1	0.009	-9	470	200		
	75		75.9	132	4.1	0.007	-7.2	590	300		
	100		101.4	157	4.1	0.006	-6	720	400		

\* Hose length refers to the length when the hose is stretched without tensile load. (The allowable pressure is the maximum design pressure. The allowable reduction pressure is the maximum negative pressure that can be applied to the hose under ambient temperature. Above range is for Hose Body only. Use data as reference.)  
 \* Use two hose clamps for each installation location to secure the hose.  
 \* For orders larger than indicated quantity, please check with WOS.  
**Ordering Example** Part Number - Hose Length  
 HOTDK50 - 3.2

# Hot Air Generating Units

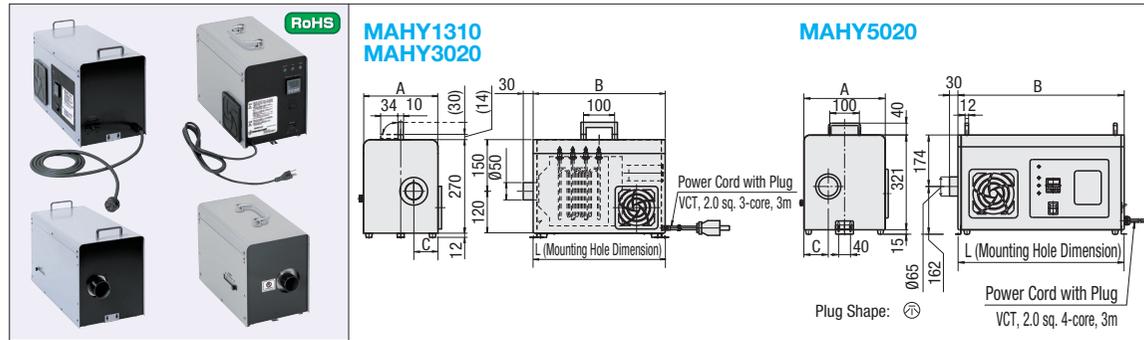
## Standard Type

Instruction manual is available online:  
<http://fa.misumi.jp/ht/>

# Hot Air Generating Units

## Air Circulation

Instruction manual is available online:  
<http://fa.misumi.jp/ht/>



Part Number Type	No.	A	B	C	L	Heater Capacity (kW)	Voltage (V)	Frequency (Hz)	Unit Price Qty. 1 ~ 2
MAHY	1310	215	380	70	383	1.3	100	For 50 and 60	
MAHY	3020	250	450	87.5	453	3.0	200		
MAHY	5020	275	561	82.5	560	5.0	200		

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 the temperature controller for effective temperature control. (For details of temperature controllers, see P.1667.)

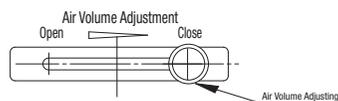
### Common Specifications

	MAHY1310	MAHY3020	MAHY5020
Power Supply	Single-phase 100V	Single-phase 200V	Three-phase 200V
Heater Capacity	1.3kw	3.0kw	5.0kw
Temperature Control Range	Room Temp. ~ 200°C	Room Temp. ~ 300°C	Room Temp. ~ 350°C
Outlet Port Dia.	Ø50		Ø65
* Max. Air Volume	Full Open 1.0/1.4(50Hz/60Hz) 1/3 Open 0.3/0.4(50Hz/60Hz)	2.7/3.2(50Hz/60Hz) 1.0/1.3(50Hz/60Hz)	
Intake Air Temperature	Room Temp.		
Control Mechanism: Temperature Indication	Digital Indication		
: Control Drive	SSR Drive		
: Temperature Sensor	K Thermocouple		
: Safety Circuit	Over-temperature / Interlock		
Air Volume Adjustment	Manual Damper		
Weight	10kg	13kg	27kg

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

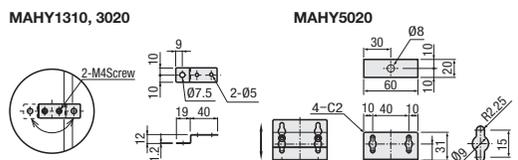
### Air Volume Adjustment

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



### How to Mount

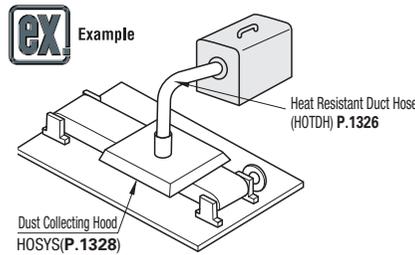
- Screwing with the fixing bracket
- Remove the M4 bolt from the fixing bracket, and install the bracket as shown below.
- Prepare two M6 screws for securing the main body.



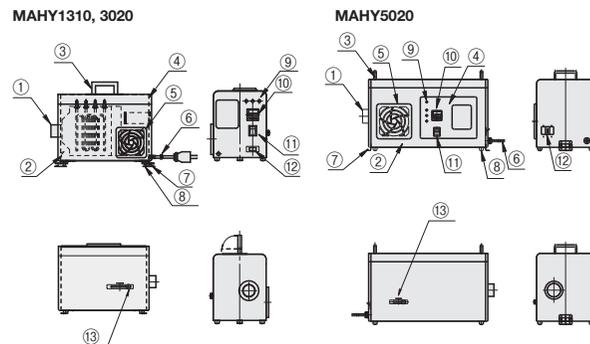
### Precautions for Use

- 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. Otherwise, burn injury may be suffered 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.

Example  
 For orders larger than indicated quantity, please check with WOS.



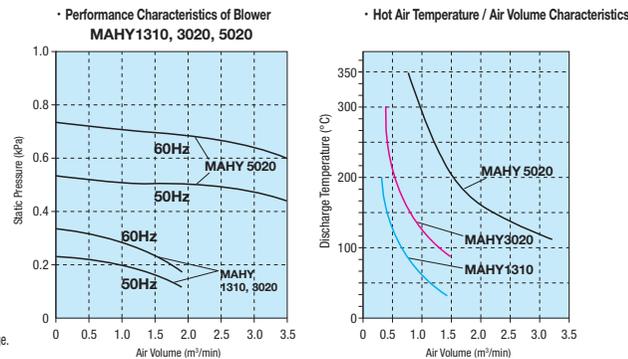
### Basic Structure



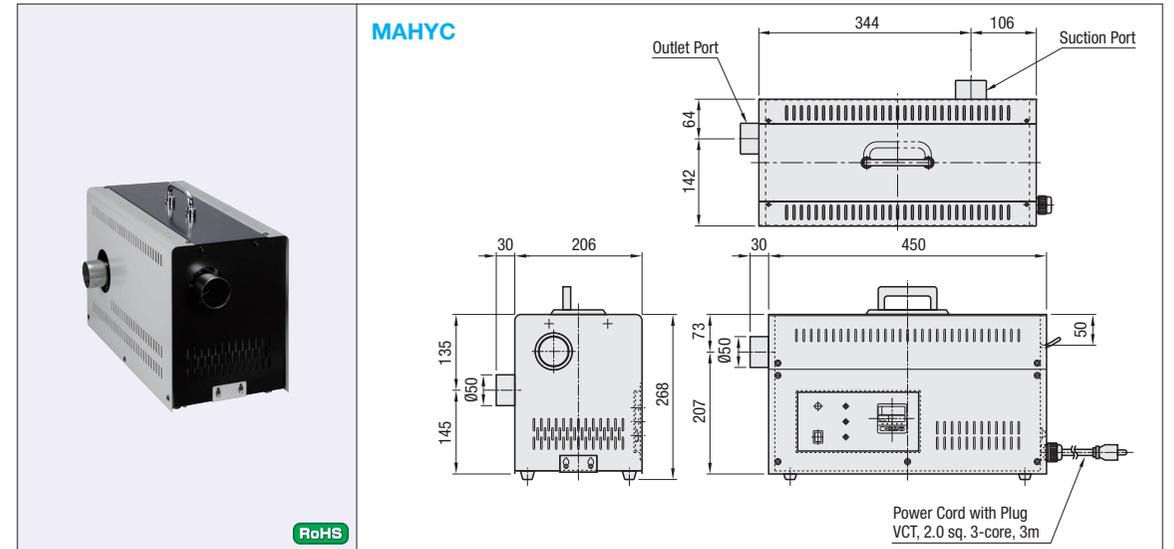
No.	Name	No.	Name
①	Outlet Port	⑧	Rubber Legs
②	Body Case (SPCC, Painted)	⑨	Operation Indicator Lamp
③	Handle	⑩	Temperature Adjuster
④	Control Panel	⑪	ON/OFF Switch
⑤	Suction Port	⑫	Breaker
⑥	Power Cord with Plug	⑬	Air Volume Adjusting Knob
⑦	Metal Part for Fixation (SUS304)		

Plug type for No.3020 is WF5320, and for No.5020 is WF5420.

### Performance Curve



### MAHYC



Part Number Type	No.	Heater Capacity (kW)	Voltage (V)	Frequency (Hz)	Unit Price Qty. 1 ~ 2
MAHYC	1010	1.0	100	For 50 and 60	

Part Number  
**MAHYC1010**

### Features

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

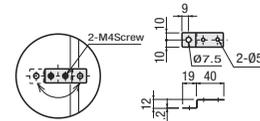
### Specification

	MAHYC
Power Supply	Single-phase 100V
Heater Capacity	1.0kw
Temperature Control Range	Room Temp. ~ 200°C
* Maximum Air Volume (50/60Hz)	1.1/1.2 m³/min
Maximum Static Pressure (50/60Hz)	0.2/0.3kPa
Control Mechanism: Temperature Indication	Digital Indication
: Control Drive	SSR Drive
: Temperature Sensor	K Thermocouple
: Safety Circuit	Over-temperature / Interlock
Maximum Noise (at the time of maximum air volume)	63dB
Temperature of Suctioned Air	Room Temp. ~ 150°C
Power Cord	VCTF 3-corex2sq (3m)
Weight	9kg

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

### How to Mount

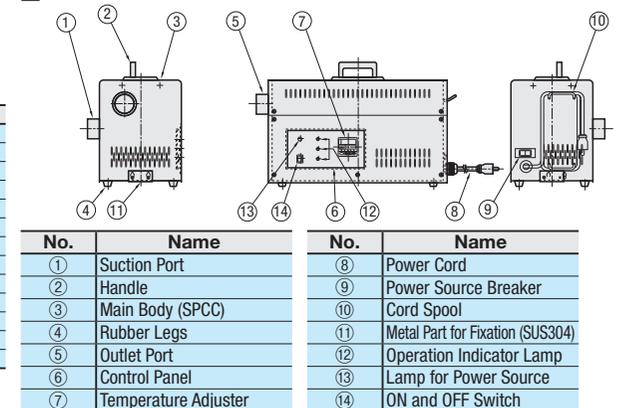
- Screwing with the fixing bracket
- Remove the M4 bolt from the fixing bracket, and install the bracket as shown below.
- Prepare two M6 screws for securing the main body.



### Precautions for Use

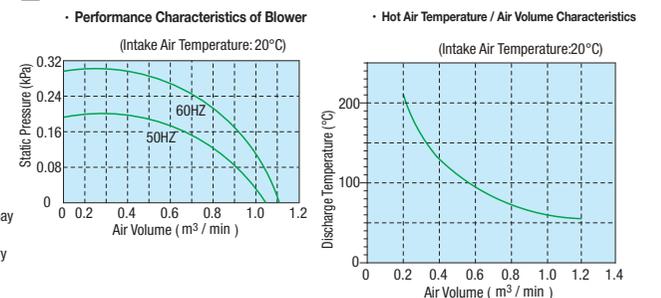
- Never use the unit at any temperature over the maximum operating temperature. It may result in breakage.
- Never touch the air outlet and adjacent portion during operation. Otherwise, burn injury may be suffered due to high temperature.
- The heater is not waterproof. Never expose the heater to water 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.

### Basic Structure



No.	Name	No.	Name
①	Suction Port	⑧	Power Cord
②	Handle	⑨	Power Source Breaker
③	Main Body (SPCC)	⑩	Cord Spool
④	Rubber Legs	⑪	Metal Part for Fixation (SUS304)
⑤	Outlet Port	⑫	Operation Indicator Lamp
⑥	Control Panel	⑬	Lamp for Power Source
⑦	Temperature Adjuster	⑭	ON and OFF Switch

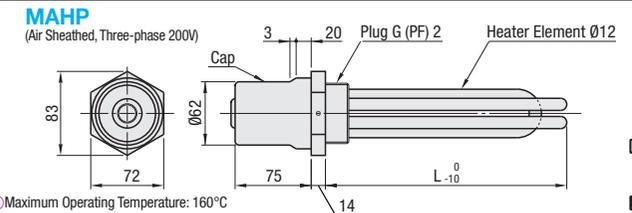
### Performance Curve



# Air Sheathed Plug Heaters, Small Hot Air Generators

Be sure to refer to "Precautions for Use" in the Heaters for Air Heating Overview on P.1663.

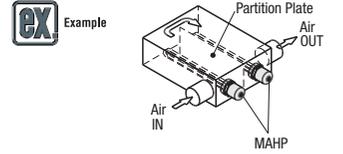
## Air Sheathed Plug Heater



Maximum Operating Temperature: 160°C

- Material Element: SUS316L
- Plug: SCS14
- Cap: SCS13
- Accessory Gasket: Non Asbestos

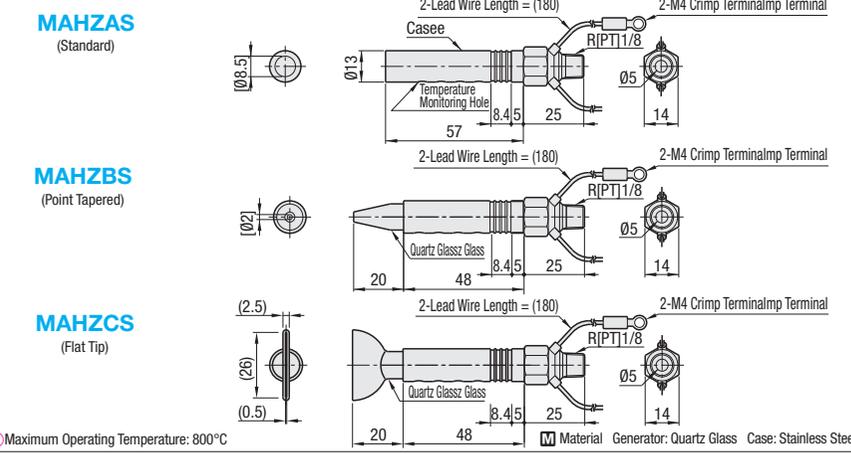
Part Number Type	No.	L	W (Electric Power)	V (Voltage)	Electrical Power Density (W/cm <sup>2</sup> )	Unit Price
MAHP	1	230	1000	200	2.5	
	2	400	2000			
	3	580	3000			
	4	760	4000			
	5	890	5000			



Ordering Example: MAHP3

The overall length has been shortened.

## Small Hot Air Generators



Maximum Operating Temperature: 800°C

As heat generation increase, temperature monitoring holes will turn red in order of 4 to 1. The load reaches the limit when the 4th to 2nd lights turn red and the 1st light remains black. Keep the color of the 4th hole unchanged when using.

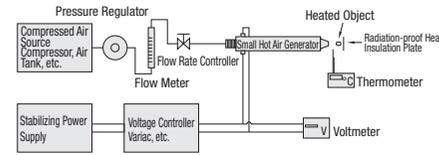
Part Number Type	No.	V (Voltage)	W (Electric Power)	Max. Flow (L/min)	Operating Gas Pressure (kgf/cm <sup>2</sup> (MPa))	Maximum Operating Temperature	Unit Price		
							MAHZAS	MAHZBS	MAHZCS
MAHZAS MAHZBS MAHZCS	1	100	350	60	2(0.2)	800°C			
	2	200	440						

Ordering Example: MAHZAS1

**Features**  
MISUMI's small hot air generators employ quartz glass which excels in heat-resistance on the body and ceramic processed special elements on the heat generator. Compact, safe, and clean hot air can be obtained.

- Usage**
- Spot Drying after Workpiece Cleaning
  - Welding of Resin Products
  - Soldering of Electronic Parts such as IC chips
  - Cap Seal Shrinkage (Shrink Packaging)
  - Cutting (heat cutting) of Resin Film etc.
  - Shrinkage of Pipe Wrapping Tubes

- Usage Procedure**
- Introduce compressed air before turning on small hot air generator.
  - Confirm the compressed air is flowing and apply a voltage to it.
  - Put the nozzle toward the object, and start heating.
- \* Temperature Controllers (P.1701) and Temperature Adjusters (P.1706) cannot be used.



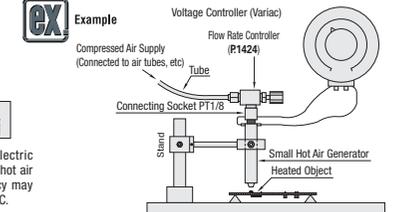
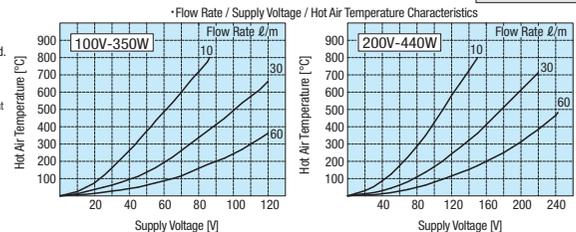
**Applicable / Not Applicable Cases**  
The list below is for reference only and not a product guarantee.

Gas	Applicable or Not	Cautions and Others
Air, Oxygen	○	Avoid large amounts of oil mist or water.
Nitrogen, Argon	○	All inert gases are applicable, but they will decrease the life span of the product.
Hydrogen	△	Igniting occurs if the gas is exposed in the air at temperature 600°C or more.
Water Vapor	△	Letting the heat generator wet will cause breakage.
Town Gas, LPG	×	After thermal decomposition, carbon adheres to a heat generator.

**Calculation of Hot Air Temperature**  
Use the following formula to estimate hot air temperature.

$$\text{Hot Air Temperature } [^{\circ}\text{C}] = \frac{50 \times \text{Power Consumption [W]}}{\text{Flow Rate of Compressed Air [L/min]}}$$

Power consumption should be made smaller than W (electric power) of each type. The above formula is for reference. If hot air temperature is high while flow rate is small, heat efficiency may decrease. Hot air temperature must be set to lower than 800°C.

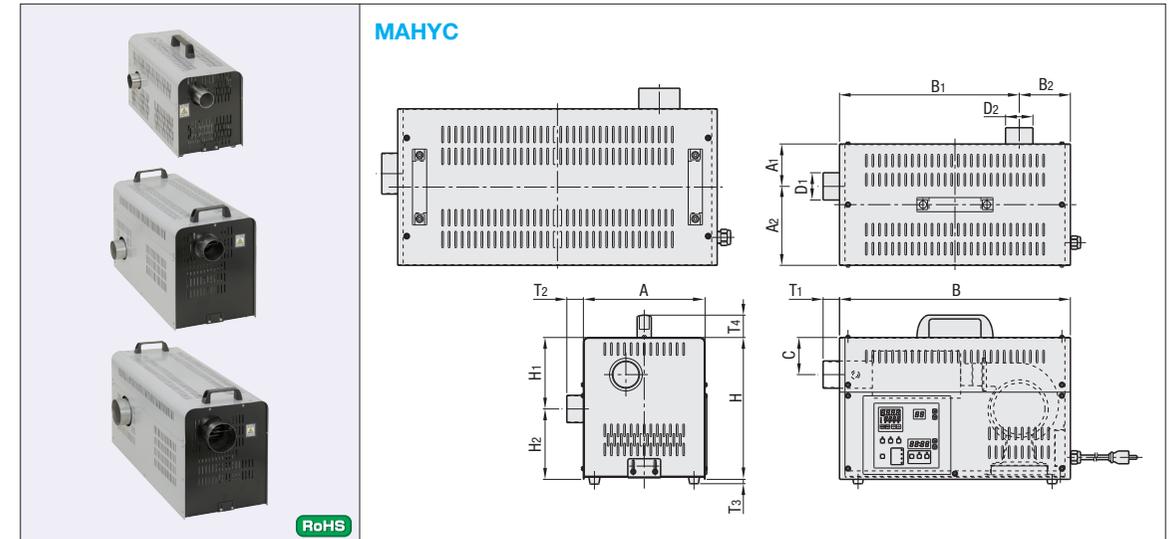


- [IMPORTANT] Cautions**
- Check the air flow supply before applying a voltage. Never use without air flow.
  - After turning off the small hot air generator, please keep the compressed airflow for 3 min or more for the sake of safety. Then stop air flow supply when the temperature of the hot air becomes lower than 50°C.
  - Quartz glass is used on the body. Do not apply an impact.
  - The body and case get high temperature during the operation. Do not touch them. It will cause burn injury.
  - Voltage and electric power should be set lower than the rated values.
  - Do not exceed max. operating temperature (800°C).

# Hot Air Generating Units

## Air Circulation

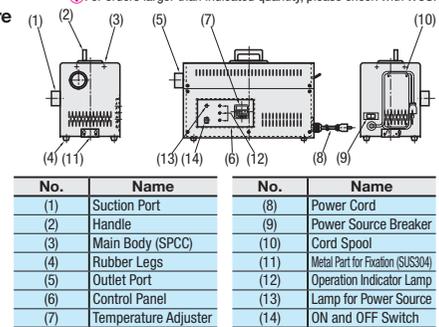
Instruction manual is available online:  
<http://fa.misumi.jp/ht/>



Part Number	Type	No	A	A <sub>1</sub>	A <sub>2</sub>	B	B <sub>1</sub>	B <sub>2</sub>	C	D <sub>1</sub>	D <sub>2</sub>	H	H <sub>1</sub>	H <sub>2</sub>	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	T <sub>4</sub>	Heater Capacity (Kw)	Voltage (V)	Frequency (Hz)	Unit Price
																						Qty. 1-2
MAHYC		1010	206	64	142	450	344	106	73	50	50	268	135	133	30	30	12	41	1.0	100	For 50 and 60	
		1210	222	78	145	422	329	94	69	50	50	260	132	128	30	30	12	41	1.2	100	For 50 and 60	
		5020	287	119	168	584	478	106	83	75	75	361	243	118	29	38	16	41	5.0	200	For 50 and 60	
		10020	302	116	186	665	506	159	99	100	100	380	190	190	27	39	16	41	10.0	200	For 50 and 60	

Ordering Example  
 Part Number  
**MAHYC1010**

### Basic Structure



No.	Name	No.	Name
(1)	Suction Port	(8)	Power Cord
(2)	Handle	(9)	Power Source Breaker
(3)	Main Body (SPCC)	(10)	Cord Spool
(4)	Rubber Legs	(11)	Metal Part for Fixation (SUS304)
(5)	Outlet Port	(12)	Operation Indicator Lamp
(6)	Control Panel	(13)	Lamp for Power Source
(7)	Temperature Adjuster	(14)	ON and OFF Switch

### Features

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

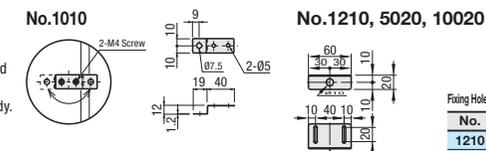
### Specification

	MAHYC1010	MAHYC1210	MAHYC5020	MAHYC10020
Power Supply	Single-phase 100V	Single-phase 100V	Three-phase 200V	Three-phase 200V
Heater Capacity	1.0kW	1.2kW	5.0kW	10.0kW
Temperature Control Range	Room Temp. ~ 200°C	Room Temp. ~ 230°C	Room Temp. ~ 250°C	Room Temp. ~ 250°C
* Maximum Air Volume (50/60Hz)	1.1/1.2 m <sup>3</sup> /min	1.2 m <sup>3</sup> /min(60Hz)	4.0 m <sup>3</sup> /min(60Hz)	7.6 m <sup>3</sup> /min(60Hz)
Maximum Static Pressure (50/60Hz)	0.2/0.3kPa	0.2kPa(60Hz)	0.44kPa(60Hz)	0.8kPa(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 Sensor	K Thermocouple	K Thermocouple	K Thermocouple	K Thermocouple
Safety Circuit	Over-temperature / Interlock	Over-temperature / Interlock	Over-temperature / Interlock	Over-temperature / Interlock
Max. Noise (at the time of max. air volume)	63dB	63dB	82dB	85dB
Air Volume Adjustment	Not Provided	Inverter (30~60Hz)	Inverter (30~60Hz)	Inverter (30~60Hz)
Temperature of Suctioned Air	Room Temp. ~ 150°C	Room Temp. ~ 170°C	Room Temp. ~ 170°C	Room Temp. ~ 180°C
Power Cord	VCTF 3-core x 2 sq. (3m)	VCTF 3-core x 2 sq. (2m)	2PNCCT 4-core x 2 sq. (3m)	2PNCCT 4-core x 5.5 sq. (3m)
Weight	9kg	12kg	33kg	40kg

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

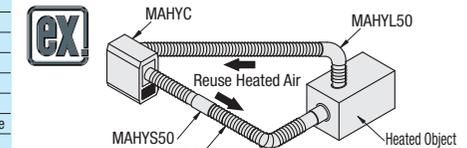
### How to Mount

- Screwing with the fixing bracket
- (1) Remove the M4 screw from the fixing bracket, and install the bracket as shown below.
- (2) Prepare two M6 screws for securing the main body.



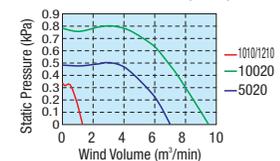
### Precautions for Use

- 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. Otherwise, burn injury may be suffered 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.

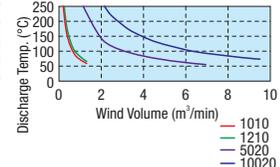


### Performance Curve

#### Wind Volume Curve (60Hz)



#### Thermal Performance Curve (Fresh)



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Fixing Hole-to-Hole Dim.

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