

Environmental solution/Oil

Oil mist collector **MISTCATCH**

2024

Non-filter oil mist collector

Electrostatic oil mist collector

MISTCATCH keeps factory environment clean by eliminating oil mist generated from machine tools.

Oil mist collector

MISTCATCH



MISTCATCH
NON-FILTER

Protect the Earth Power-Saving Technology

Extensive lineup of Non-filter, Electrostatic and Filter types satisfy every demand of different worksites.

Non-filter type

P3—P14

No filter required! Greatly reduce running cost & zero waste!



OMC-N3

- 1 Super energy saver
- 2 High collection rate
- 3 Easy maintenance



OMC-11

- 1 Original vane design
- 2 Light & compact
- 3 Ultra low energy

Electrostatic type

P15—P26

Ionizes mist! Electrostatically charges fine particles at high efficiency

OMC-E



- 1 Super energy saver
- 2 High collection rate
- 3 Easy maintenance

Filter type (Not included in this catalog)

Low cost, high efficiency & energy saving

OMC-F

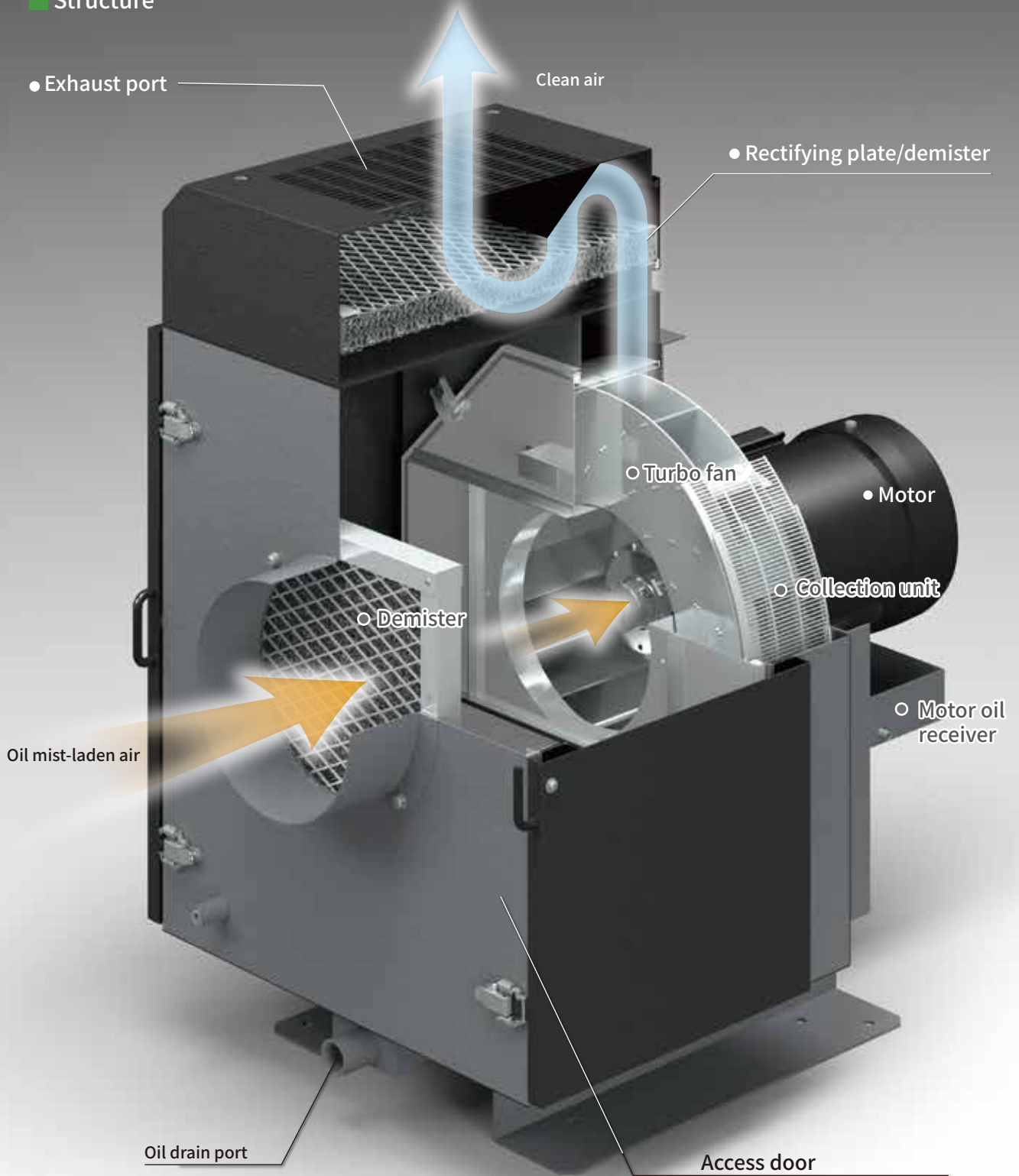


Non-filter oil mist collector OMC-N3

Structure & mechanism

Original technology enabled high collection rate with no filter

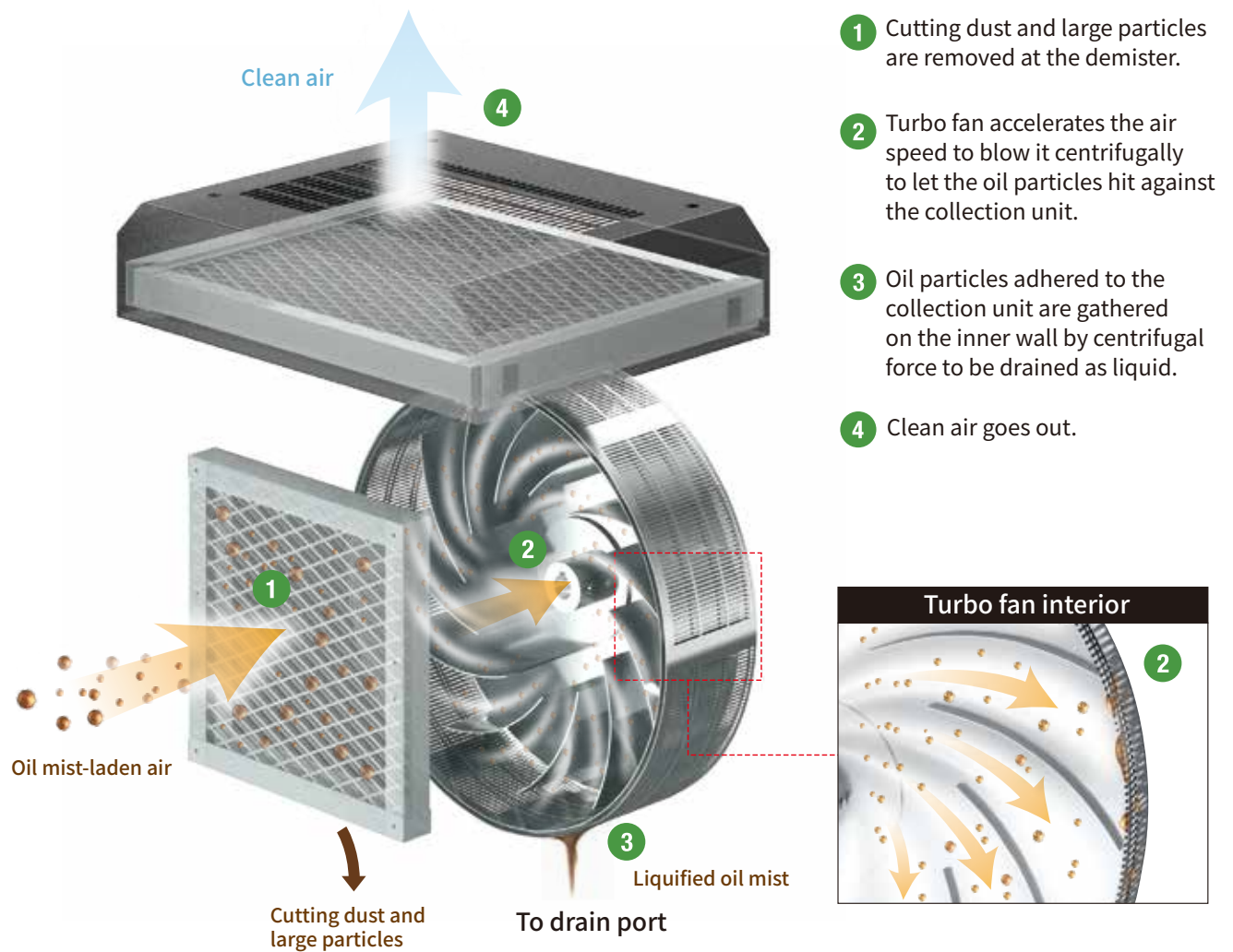
Structure



Access door

Allows access to Collection unit from either side of MISTCATCH

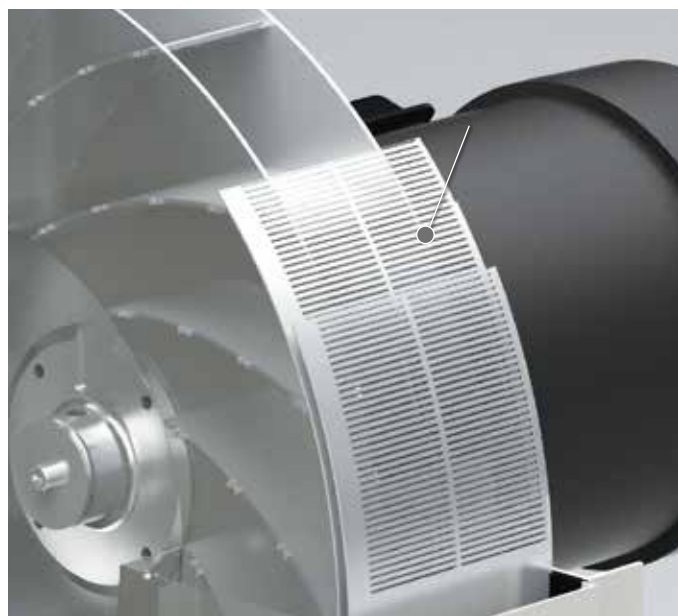
Mechanism



Key feature

Collection unit with extreme collision force

OMC-N3 realizes high collection rate by making more oil particles collide against its Collection unit. Smaller particles that are likely to escape are captured without fail.



Non-filter Oil mist collector
OMC-N305(H)



RoHS2

Collection method



Features



Model/Specifications

Model		OMC-N305	OMC-N305H
Max. air flow ^{*1}		4.5/5m ³ /min	
Max. static pressure		0.56/0.79kPa	
Collection efficiency		99% or more (2μm or larger)	99% or more (1μm or larger)
Rated voltage		3-phase, 200VAC, 50Hz/200-220V, 60Hz	
Rated motor output		0.2kW (2P)	
Motor efficiency ^{*2}		-	
Rated current consump. ^{*1}		0.9/0.9 - 0.9A	
Max. current consump. ^{*1}		1.1/1.0 - 1.0A	
Working temperature		0 to +40°C	
Working humidity		85%RH, free from condensation	
Noise		69/72dB (A)	
Max. suction air temp.		+80°C	
Conformity	EMC directive	-	
	EMD	-	
	Environment	RoHS2	
Suction port diameter		φ98mm	
Color		Powder coating, N4 equivalent, N1 equivalent	
Weight		25kg	
Drain port		φ31 pipe	
Standard accessories		φ32 drain hose 2m, 1 drain hose band, 4 anti-vibration rubber, 1 motor oil receiver, 1 maintenance sticker, 1 instruction manual	

Remarks: ^{*1} Rated value in 25°C air temperature ^{*2} Efficiency value in a motor single body

See page 41 for cautions.

Maintenance

Take out the Collection unit and clean it using an air blow gun or a brush.



Remove the screw with a screwdriver.



Unlock the two draw latches.



Hold the handle and open the access door.

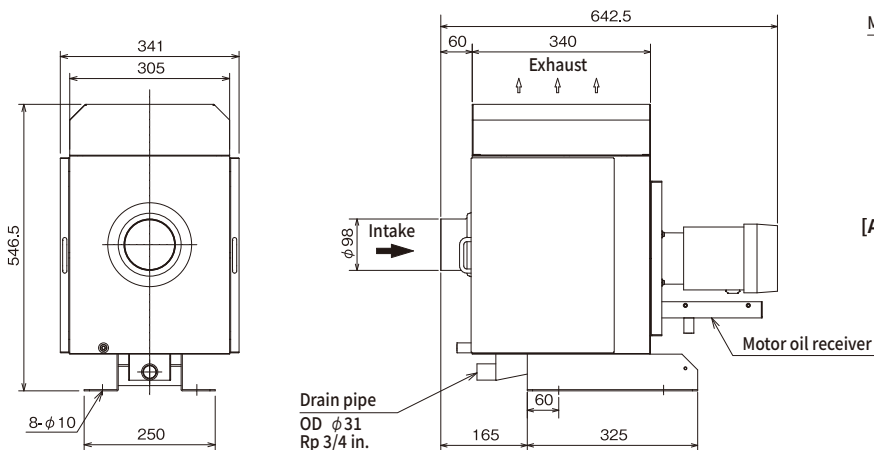
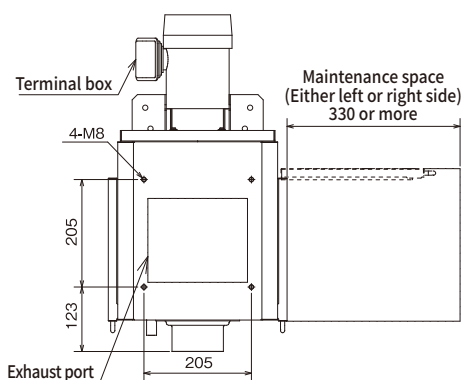


Unlock the Collection unit.

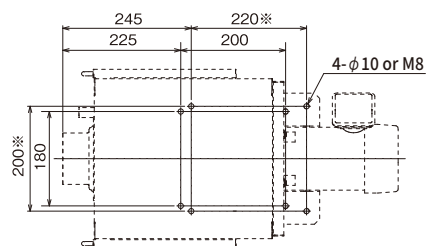


Remove the Collection unit.

Dimensional drawing

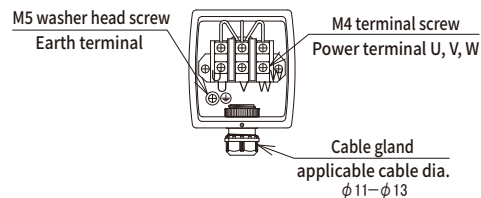


Mounting hole processing

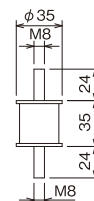


※Two different mounting holes are provided on each corner for new installation and replacement from OMC-N205(H).

[Terminal box]

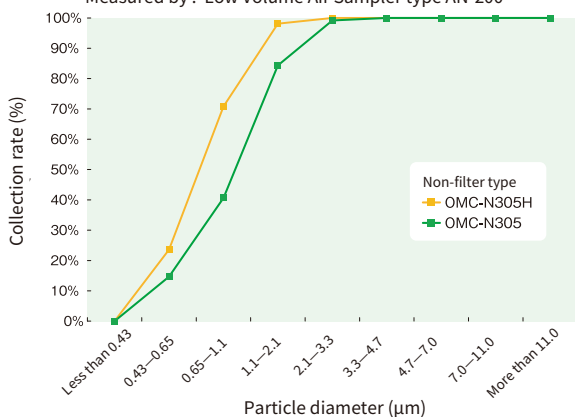


[Anti-vibration rubber (Accessory)]

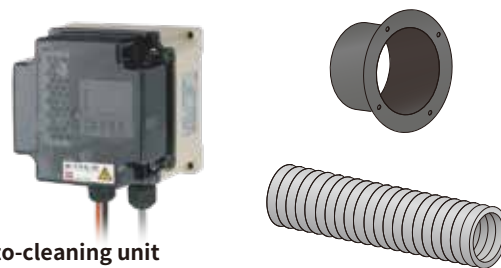


Collection rate

Test oil : Water-insoluble cutting oil
Measured by: Low Volume Air Sampler type AN-200



Option



Auto-cleaning unit
Keeps Collection unit clean by water injection.

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Non-filter Oil mist collector

OMC-N310(H)



RoHS2



Collection method



Features



Model/Specifications

Model	OMC-N310	OMC-N310H
Max. air flow ^{*1}	8 / 10m ³ / min	
Max. static pressure	0.63 / 0.88kPa	
Collection efficiency	99% or more (2μm or larger)	98% or more (1μm or larger)
Rated voltage	3-phase, 200VAC, 50Hz/200-220V, 60Hz	
Rated motor output	0.4kW (2P)	
Motor efficiency ^{*2}	76.8 / 76.8 – 77.6%	
Rated current consump. ^{*1}	1.4 / 1.4 – 1.4A	
Max. current consump. ^{*1}	1.9 / 1.7 – 1.7A	
Working temperature	0 to +40°C	
Working humidity	85%RH, free from condensation	
Noise	69 / 72dB (A)	
Max. suction air temp.	+80°C	
Conformity	EMC directive	EMI: EN61000-6-4 EMS: EN61000-6-2
	EMD	EN ISO/12100 EN60204-1 Overvoltage category II, Pollution level 3
	Environment	RoHS2
Suction port diameter	φ 123mm	
Color	Powder coating, N4 equivalent, N1 equivalent	
Weight	25kg	
Drain port	φ 31 pipe	
Standard accessories	φ 32 drain hose 2m , 1 drain hose band, 4 anti-bibration rubber, 1 motor oil receiver, 1 maintenance sticker, 1 instruction manual	

Remarks: ^{*1} Rated value in 25°C air temperature ^{*2} Efficiency value in a motor single body

See page 41 for cautions.

Maintenance

Take out the Collection unit and clean it using an air blow gun or a brush.



Remove the screw with a screwdriver.



Unlock the two draw latches.



Hold the handle and open the access door.

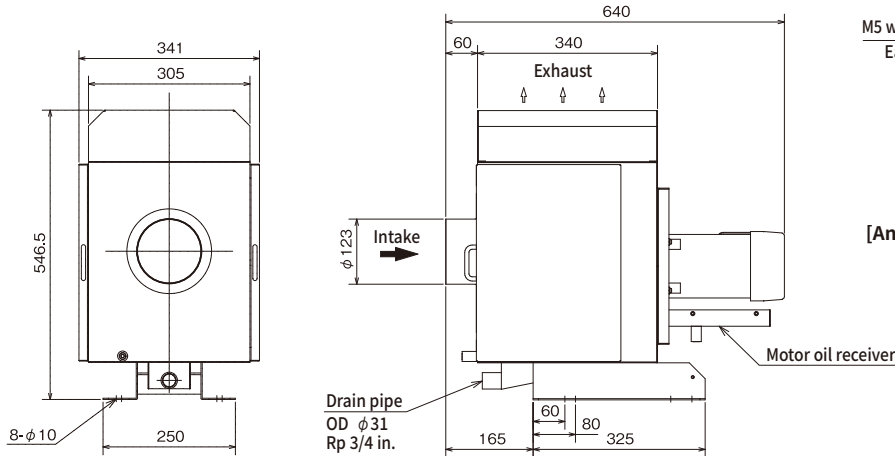
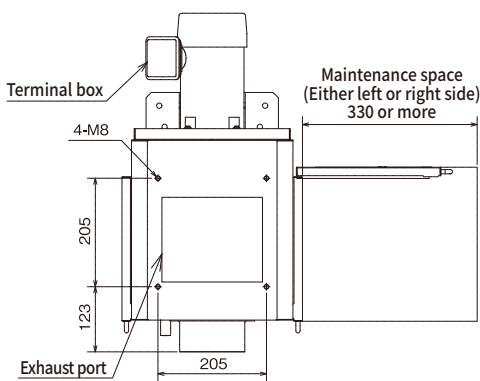


Unlock the Collection unit.

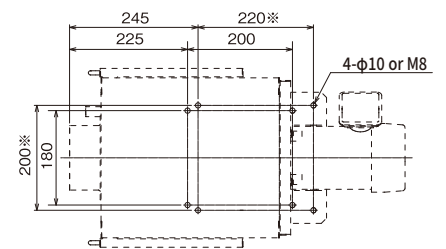


Remove the Collection unit.

Dimensional drawing

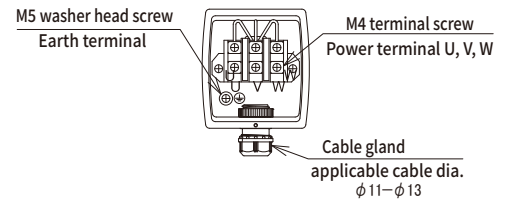


Mounting hole processing

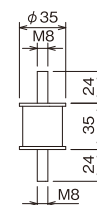


※Two different mounting holes are provided on each corner for new installation and replacement from OMC-N210(H).

[Terminal box]

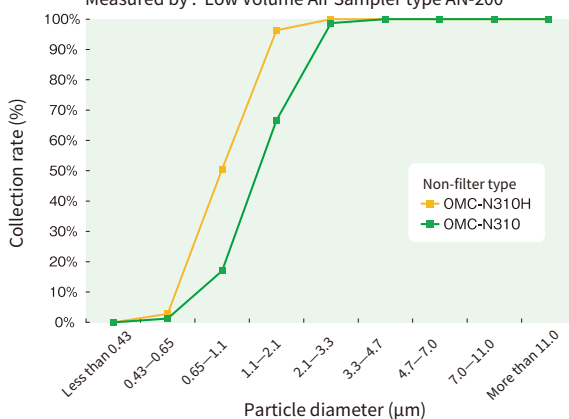


[Anti-vibration rubber (Accessory)]

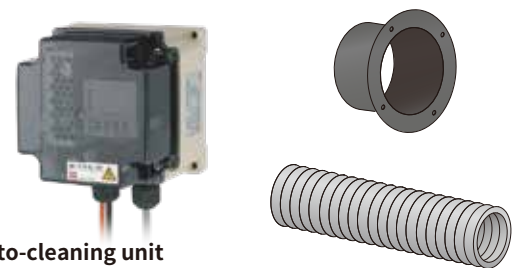


Collection rate

Test oil : Water-insoluble cutting oil
Measured by: Low Volume Air Sampler type AN-200



Option



Auto-cleaning unit
Keeps Collection unit clean by water injection.

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Non-filter Oil mist collector

OMC-N315(H)



RoHS2



Collection method



Features



Model/Specifications

Model	OMC-N315	OMC-N315H
Max. air flow ^{*1}	12/15m ³ /min	
Max. static pressure	1.08/1.50kPa	
Collection efficiency	99% or more (2μm or larger)	98% or more (1μm or larger)
Rated voltage	3-phase, 200VAC, 50Hz/200-220V, 60Hz	
Rated motor output	0.75kW (2P)	
Motor efficiency ^{*2}	81.5/81.1-82.5% IE3/IE3-IE3	
Rated current consump. ^{*1}	2.3/3.0 - 2.9A	
Max. current consump. ^{*1}	4.0/3.9 - 3.6A	
Working temperature	0 to +40°C	
Working humidity	85%RH, free from condensation	
Noise	74/76dB (A)	
Max. suction air temp.	+80°C	
Conformity	EMC directive	EMI: EN61000-6-4 EMS: EN61000-6-2
	EMD	EN ISO/12100 EN60204-1 Overvoltage category II, Pollution level 3
	Environment	RoHS2
Suction port diameter	φ 148mm	
Color	Powder coating, N4 equivalent, N1 equivalent	
Weight	40kg	
Drain port	φ 31 pipe	
Standard accessories	φ 32 drain hose 2m , 1 drain hose band, 4 anti-bibration rubber, 1 motor oil receiver, 1 maintenance sticker, 1 instruction manual	

Remarks: ^{*1} Rated value in 25°C air temperature ^{*2} Efficiency value in a motor single body

See page 41 for cautions.

Maintenance

Take out the Collection unit and clean it using an air blow gun or a brush.



Remove the screw with a screwdriver.



Unlock the two draw latches.



Hold the handle and open the access door.

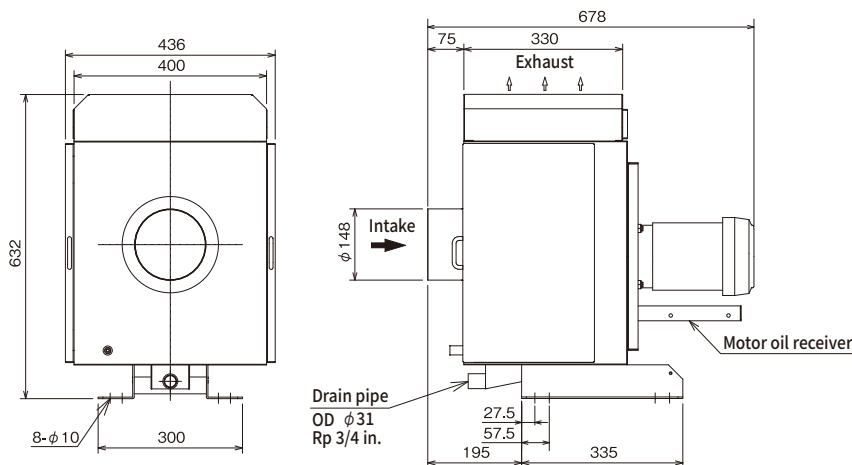
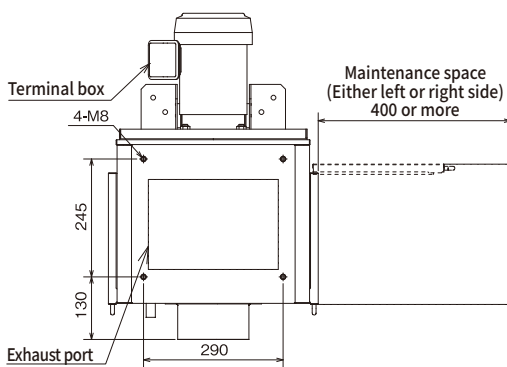


Unlock the Collection unit.

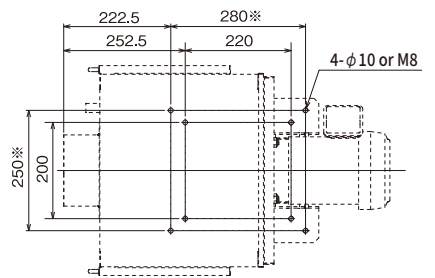


Remove the Collection unit.

Dimensional drawing

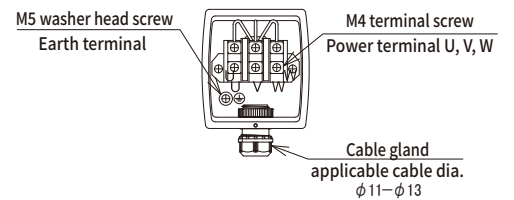


Mounting hole processing

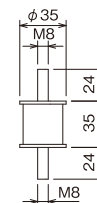


※ Two different mounting holes are provided on each corner for new installation and replacement from OMC-N215(H).

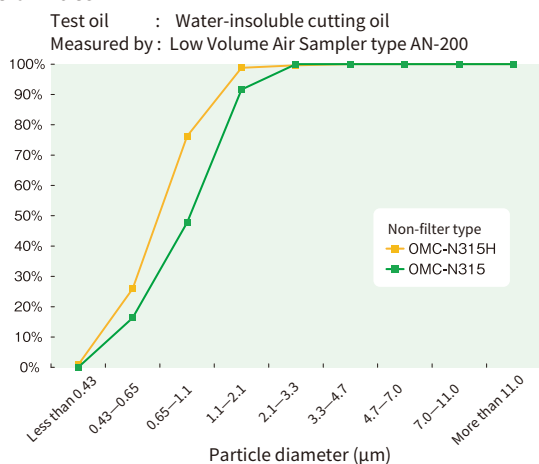
[Terminal box]



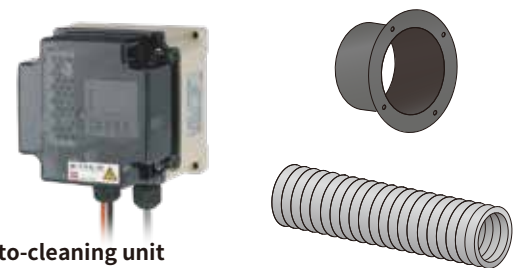
[Anti-vibration rubber (Accessory)]



Collection rate



Option



Auto-cleaning unit
Keeps Collection unit clean by water injection.

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Non-filter Oil mist collector

OMC-N325(H)



RoHS2



Collection method



Features



Model/Specifications

Model		OMC-N325	OMC-N325H
Max. air flow		20/23m ³ /min	
Max. static pressure		1.59/2.20kPa	
Collection efficiency		99% or more (2μm or larger)	98% or more (1μm or larger)
Rated voltage		3-phase, 200VAC, 50Hz/200-220V, 60Hz	
Rated motor output		1.5kW (2P)	
Motor efficiency		85.8/85.6-86.0% IE3/IE3-IE3	
Rated current consump.		4.1/5.9-5.6A	
Max. current consump.		7.1/7.1-6.4A	
Working temperature		0 to +40°C	
Working humidity		85%RH, free from condensation	
Noise		76/79dB (A)	
Max. suction air temp.		+80°C	
Conformity	EMC directive	EMI: EN61000-6-4 EMS: EN61000-6-2	
	EMD	EN ISO/12100 EN60204-1 Overvoltage category II, Pollution level 3	
	Environment	RoHS2	
Suction port diameter		φ 198mm	
Color		Powder coating, N4 equivalent, N1 equivalent	
Weight		56kg	
Drain port		φ 31 pipe	
Standard accessories		φ 32 drain hose 2m, 1 drain hose band, 4 anti-vibration rubber, 1 motor oil receiver, 1 maintenance sticker, 1 instruction manual	

Remarks: *1 Rated value in 25°C air temperature *2 Efficiency value in a motor single body

See page 41 for cautions.

Maintenance

Take out the Collection unit and clean it using an air blow gun or a brush.



Remove the screw with a screwdriver.



Unlock the two draw latches.



Hold the handle and open the access door.

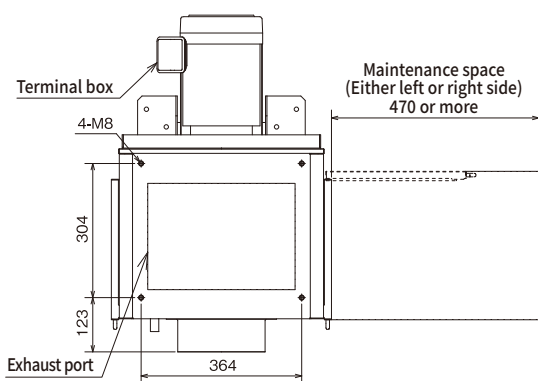


Unlock the Collection unit.

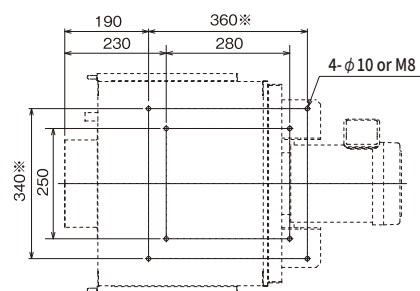


Remove the Collection unit.

Dimensional drawing

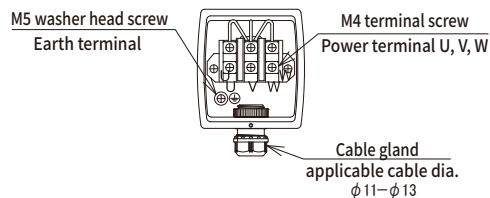


Mounting hole processing

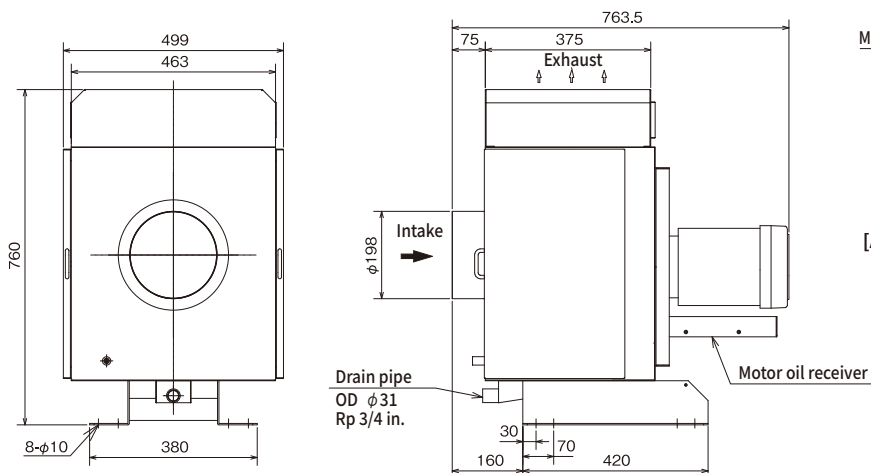
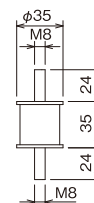


※ Two different mounting holes are provided on each corner for new installation and replacement from OMC-N225(H).

[Terminal box]

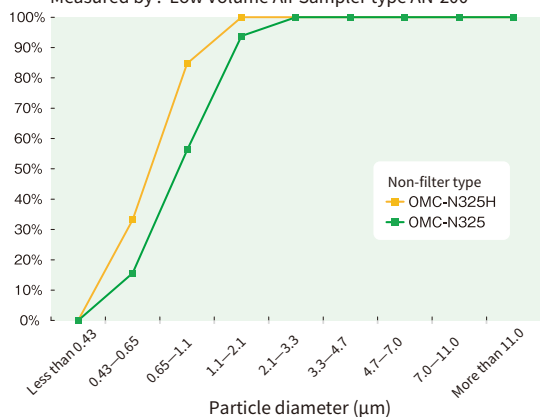


[Anti-vibration rubber (Accessory)]

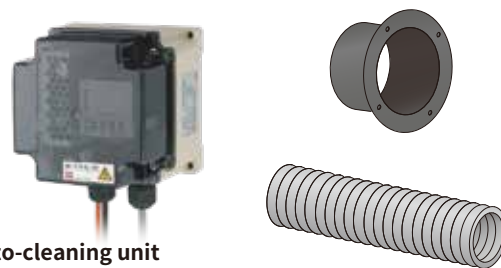


Collection rate

Test oil : Water-insoluble cutting oil
Measured by: Low Volume Air Sampler type AN-200



Option



Auto-cleaning unit
Keeps Collection unit clean by water injection.

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Non-filter Oil mist collector

OMC-11



Example of use

RoHS2

Collection method



Features



Model/Specifications

Model	OMC-11
Max. airflow	8/10m ³ /min
Collection efficiency	83% ±5% (2µm or larger)
Rated voltage	3-phase, 200VAC, 50Hz/200-220V, 60Hz
Motor output rating	0.2kW (2P)
Rated current consump.*1	1.0/1.3-1.3A or less
Working temperature	0 to +40°C
Max. working humidity	85%RH, free from condensation
Noise	77dB(A)
Max. suction air temp.	+50°C
Conformity Environment	RoHS2
Suction port diameter	φ123mm
Color	10GY9/1 equivalent
Weight	13kg
Standard accessory	2m φ 18 drain hose, 1 drain hose band, 1 instruction manual

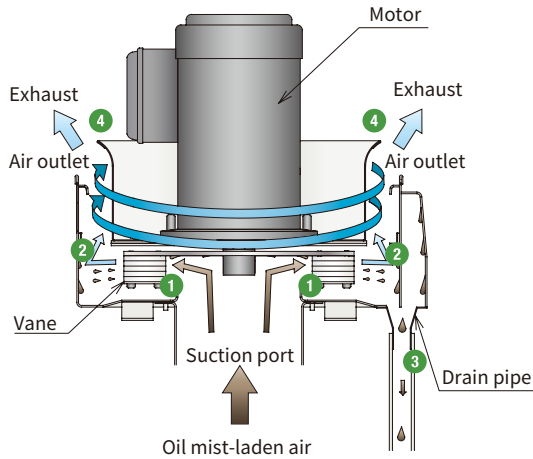
Remarks: *1 Rated value in 25°C air temperature

See page 41 for cautions.

Mechanism

1 Oil-containing air is inhaled through the air intake from underneath of MIST CATCH by its rapidly spinning vane attached to the motor shaft.

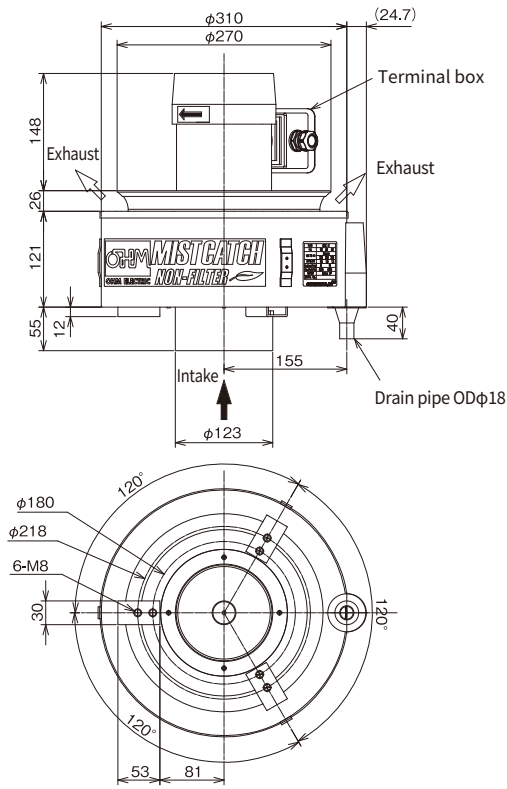
2 The inhaled air flow is then accelerated by centrifugal force when passing through the numerous pores of the vane and collides against the inner wall of the MIST CATCH housing. This separates oil particles from the outgoing air.



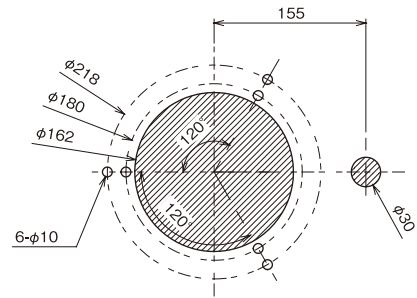
3 By air spirals around the wall, oil particles sit on the inner wall drip along the wall surface down to the slits to be discharged from the drain pipe.

4 The outgoing air is returned to the atmosphere out of the air outlet.

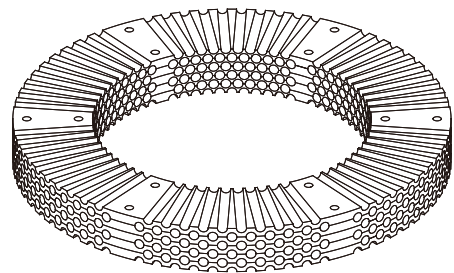
Dimensional drawing



Mounting hole processing

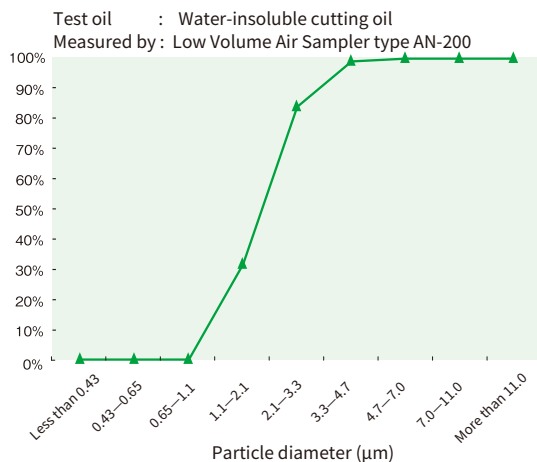


[Vane construction]

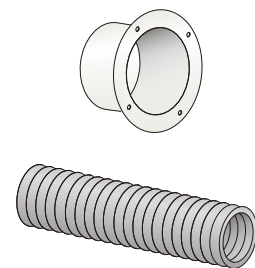


Material: TPX (Polymethylpentene)
Registered trademark of Mitsui Chemicals, Inc.

Collection rate



Option



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