

EKHR Total Heat Recovery Fresh Air Unit

Model : EKHR020H~EKHR1000H

EKHR750V~EKHR1500V

Fresh air volume : 150~15000 m³/h



We help our customers

S U C C E E D

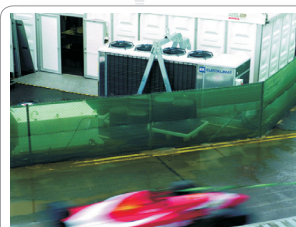
EUROKLIMAT Air Conditioner, Environmental & Energy-saving Technology from Europe.

EUROKLIMAT (EK) was established in 1963 in Italy. For the past half a century, it has become famous as an energy-saving air-conditioning manufacturer in Italy and globally. Continuous innovation, new product development and top manufacturing quality are the driving force behind this growth.

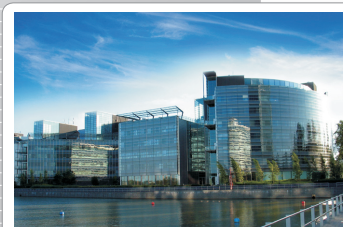
EUROKLIMAT (EK) pursues the ideals of protecting the environment, providing physical comfort and adopting energy-saving into the whole process of product R&D, manufacturing and service. Our products covering residential, commercial and close control air-conditioner are manufactured according to the global generally accepted standards.



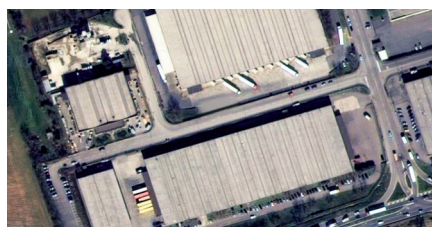
2007 Berlin - Allianz Assurance



2005 Silverstone, UK-F1 circuit



2006-2007 Helsinki- Nokia R&D Centers Worldwide Headquarters



EK Italia Headquarters



Shanghai Institute of Quality Inspection and Technical Research in 2011



ZTE Nanjing Research Center in 2009



Design and Research Center of Commercial Aircraft Corporation of China in 2011



Chongqing International Expo Center in 2012



Apple Store in 2011



Shenzhen plant of Chang'an PSA in 2012



Terminal 3 of Shenzhen Bao'an International Airport in 2011



Shenyang International Expo Center in 2010



Overview

In accordance with advanced European energy-saving design ideas, EK is always dedicated to developing air processing units for comfort and health. Based on its understanding of the Chinese market, EK introduces European technologies and launches the next-generation total heat recovery fresh air unit for the purpose of creating a return-to-nature life and work space.

The EKHR total heat recovery fresh air unit integrates multiple functions including bidirectional air exchange, purification, and sterilization, and is widely used for ventilation in places such as hotels, apartments, shopping malls, offices, vehicles, entertainment and dining venues, food and drug facilities, and underground structures. It is a high-quality product for energy efficiency in buildings.



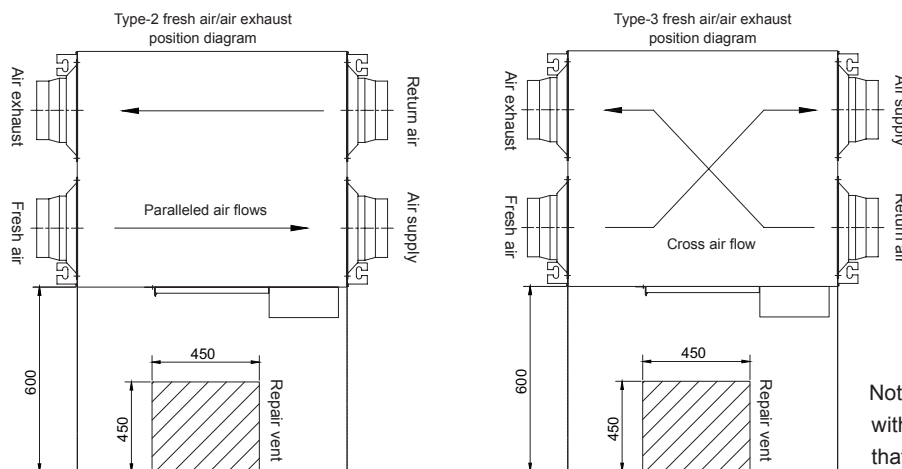
Nomenclature

EKHR 030 H - L 1 - A AA E

1 2 3 4 5 6 7 8

1. EKHR Model name: EKHR total heat recovery fresh air unit
2. 030 Air volume: 030—an air volume of 300 m³/h
3. H Structure type: H—horizontal (in the ceiling)
V—vertical (on the floor)
4. L Repair direction: L—junction box on the left (toward air outlet)
R—junction box on the right (toward air outlet)
5. 1 Fresh air/air exhaust position: type-2 standard vent for the unit of 200–1300 m³/h air volume, with the air bypass function; type-3 standard vent for the horizontal unit of 1500–10000 m³/h air volume
6. A Power supply feature: A—220 V, 50 Hz (200–2000 m³/h air volume)
F—380 V/3 N/50 Hz (2500–15000 m³/h air volume)
7. AA Detailed description of product specification changes
8. E Product feature code: export area code (omitted for domestic sales)

Fresh Air/Air Exhaust Position Diagram

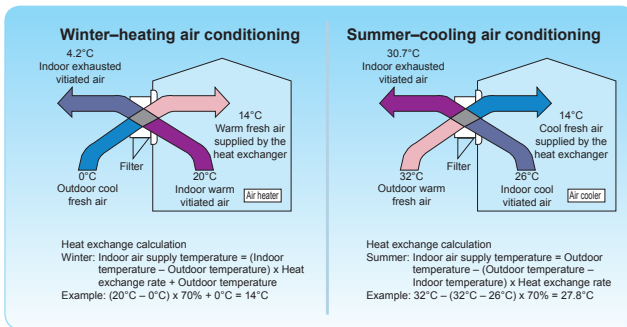


Note: This figure shows the unit diagram with the left connection orientation while that with the right connection orientation is opposite to this figure.

One Unit for Two Purposes Highly Efficient and Energy-saving

The EKHR total heat recovery fresh air unit features bidirectional air exchange, and can provide fresh air indoor and exhaust vitiated air outdoor. This enables total heat exchange through fresh air and air exhaust to create a fresh and healthy environment.

The thin and imperforate special paper for total heat exchange can effectively prevent leakage of vitiated air and facilitate the exchange of heat and humidity. The maximum heat recovery rate reaches 76% while the maximum enthalpy exchange rate reaches 74%. This greatly reduces the fresh air load of the air-conditioning unit, saves energy, and lowers the running electricity charge.



Super-Thin Design Low Operation Noise

The EKHR total heat recovery fresh air unit is a super-thin unit that can be installed in a concealed manner for saving space. The air supply outlet is blended with the interior finishing for more beauty and grace.

It adopts advanced silence design for user-friendly experience, which implements top-class quietness in the industry and is suitable for a variety of occasions.



Intelligent Design Flexible Control

The user-friendly intelligent wire controller supports multiple function settings, and creates a healthy and comfortable environment. You can use this wire controller to set the fan speed at high, medium, or low level, query the indoor temperature, fresh air temperature, and air supply temperature, and switch between common air exchange mode and energy recovery mode as well as adjust the temperature.

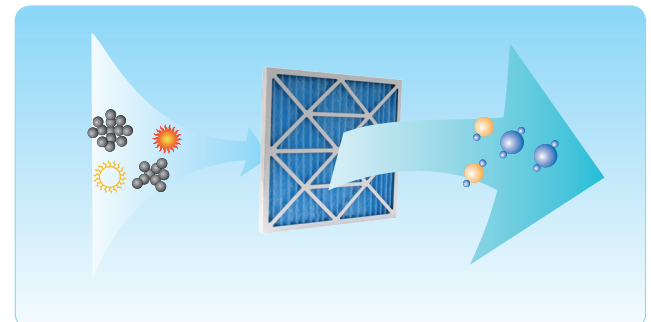
The EKHR total heat recovery fresh air unit can work together with other types of air-conditioning systems to enable combined and centralized control, without affecting the normal running of other units while satisfying users' requirements for health and energy saving.



Air Purification Wide Applications

The EKHR total heat recovery fresh air unit is equipped with a top-class filter and can be configured with absorbent carbon filter and UV sterilization lamp optionally to filter out toxic substances such as SO₂, NH₃, and benzene, thereby ensuring clean indoor air.

Besides, a remote control, an electric heater, and a humidifier are optional in different scenarios to meet various climate conditions.



Specifications (EKHR020H-EKHR1000H/EKHR750V-EKHR1500V)

EK Model	Fresh Air Volume m³/h	External Residual Pressure Pa	Enthalpy Recovery Rate (%)		Heat Recovery Rate (%)	Noise dB(A)	Rated Voltage V	Rated Power W	Rated Current A	Net Weight kg
			Summer	Winter						
EKHR020H	150-200	60-75	60-55	63-59	75-70	22-27	220	20	0.5	23
EKHR030H	250-300	75-85	62-57	65-61	73-68	23-30	220	40	0.56	27
EKHR040H	350-400	80-88	62-57	65-60	74-69	25-32	220	80	0.72	35
EKHR060H	500-600	89-97	63-59	67-61	76-70	25-35	220	120	0.96	40
EKHR080H	700-800	92-100	57-55	63-57	74-68	32-39	220	360	1.7	67
EKHR100H	900-1000	80-86	60-58	64-62	76-70	32-40	220	360	2.1	78
EKHR130H	1000-1300	75-90	58-56	62-59	76-40	37-42	220	400	3.4	73
EKHR150H	1300-1500	100-160	69-66	74-70	74-71	40-50	220	1210	3.14	200
EKHR200H	1500-2000	100-170	65-62	69-63	74-71	44-52	220	1440	3.18	225
EKHR250H	2500	200	62	67	72	56	380	1640	3.7	235
EKHR300H	3000	210	61	65	70	60	380	2040	4.65	245
EKHR400H	4000	250	62	69	70	62	380	2340	5.61	280
EKHR500H	5000	250	61	64	70	68	380	2580	8.1	360
EKHR600H	6000	250	60	62	68	70	380	2730	8.5	360
EKHR700H	7000	310	64	69	72	72	380	4060	9.1	460
EKHR800H	8000	320	63	69	72	74	380	5920	13.2	480
EKHR900H	9000	340	62	68	72	76	380	7340	16.4	500
EKHR1000H	10000	350	63	69	72	78	380	7895	18.5	550
EKHR750V	7500	290	64	69	72	76	380	6000	14	470
EKHR1000V	10000	340	63	69	72	80	380	11000	24	755
EKHR1500V	15000	450	64	67	72	85	380	15000	30.4	1075

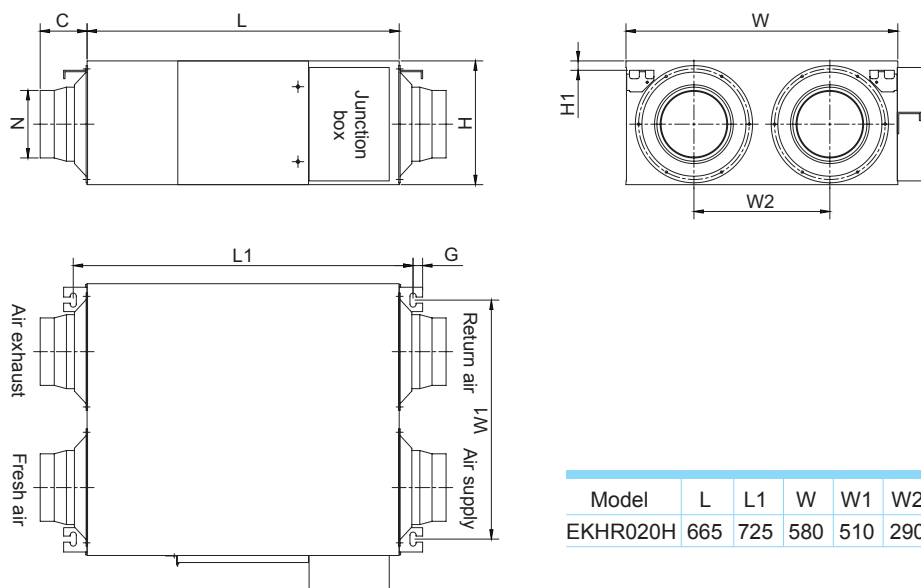
Specifications (EKHR020H-EKHR1000H with Pressurized Tank)

EK Model	Air Volume (m³/h)		External Residual Pressure (Pa)		Dimensions (mm)			Connector Size mm	Voltage V	Power W	Weight kg
	Low	Height	Low	Height	Length	Width	Height				
EKHR-PB020H	150	200	75	90	350	350	264	Φ144	220	10	10
EKHR-PB030H	250	300	90	100	402	372	270	Φ144	220	20	12
EKHR-PB040H	350	400	95	103	425	372	270	Φ144	220	40	14
EKHR-PB060H	500	600	105	122	452	452	270	Φ194	220	60	16
EKHR-PB080H	700	800	160	180	500	520	388	Φ242	220	180	18
EKHR-PB100H	900	1000	70	110	500	520	388	Φ242	220	180	20
EKHR-PB130H	1000	1300	80	130	500	520	388	Φ242	220	200	22.5
EKHR-PB150H	1000	1600	200	300	600	600	560	320×250	220	320	24
EKHR-PB200H	1200	2000	220	320	600	600	560	320×250	220	375	30
EKHR-PB250H	2600	2600	340	340	600	600	560	320×250	380	550	33
EKHR-PB300H	3000	3000	350	350	600	600	560	320×250	380	550	35
EKHR-PB400H	4000	4000	400	400	785	700	700	320×250	380	1500	47
EKHR-PB500H	5000	5000	460	460	900	900	900	500×300	380	2200	78
EKHR-PB600H	6000	6000	500	500	900	900	900	500×300	380	3000	85
EKHR-PB800H	7500	7500	590	590	900	1180	1000	500×400	380	3000	96
EKHR-PB1000H	10000	10000	720	720	1180	1080	1080	630×400	380	5500	150

Note:

- The noise generated during operation is measured 1.4 m below the center of the unit.
- The EKHR200H and the models in lines above it (as listed in the table) enable 3-level speed regulation.
- The noise generated during operation of the unit's fans at three levels of speed is measured in a state-certified noise laboratory. In actual environment, the noise of the unit during operation is generally higher due to ambient noise.

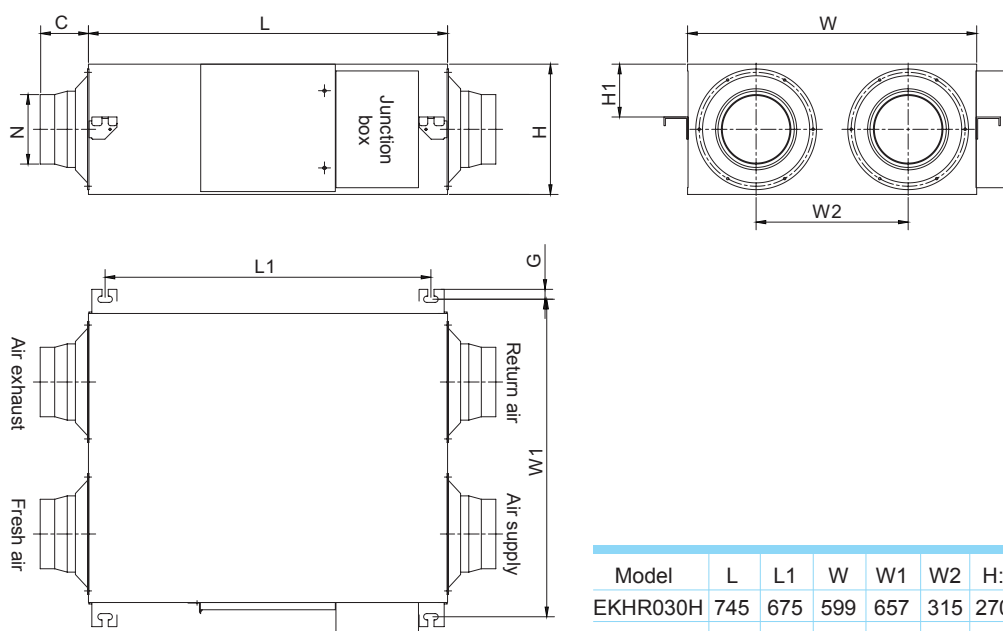
Unit Dimensions EKHR020H



Measurement: mm

Model	L	L1	W	W1	W2	H:	H1	C	G	N
EKHR020H	665	725	580	510	290	265	20	100	20	Φ144

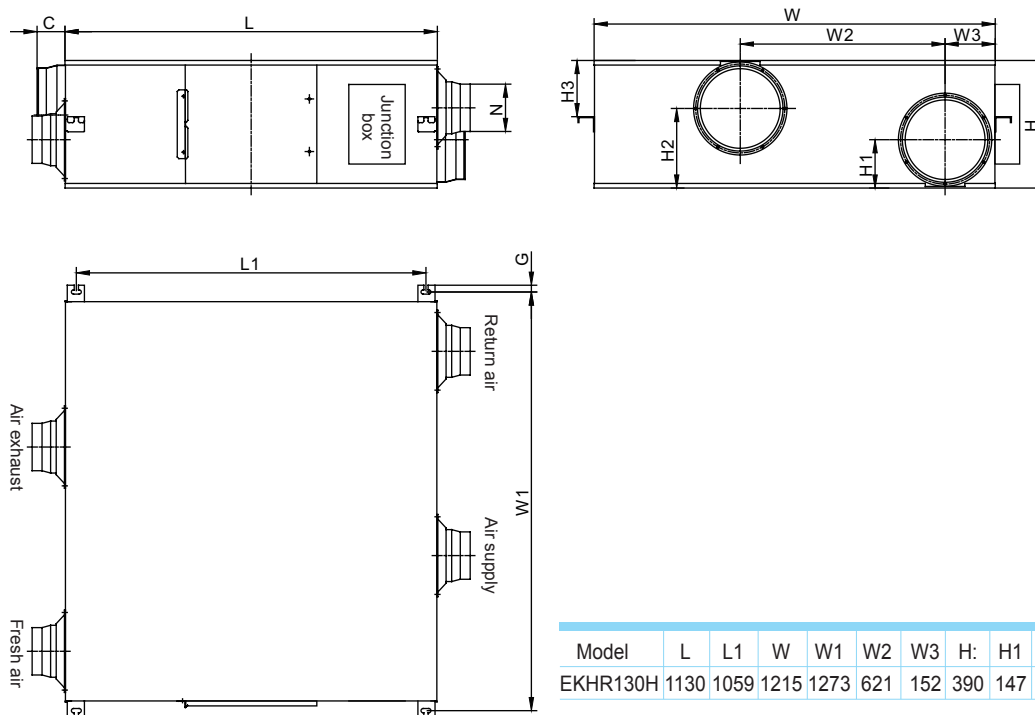
Unit Dimensions EKHR030H-EKHR100H



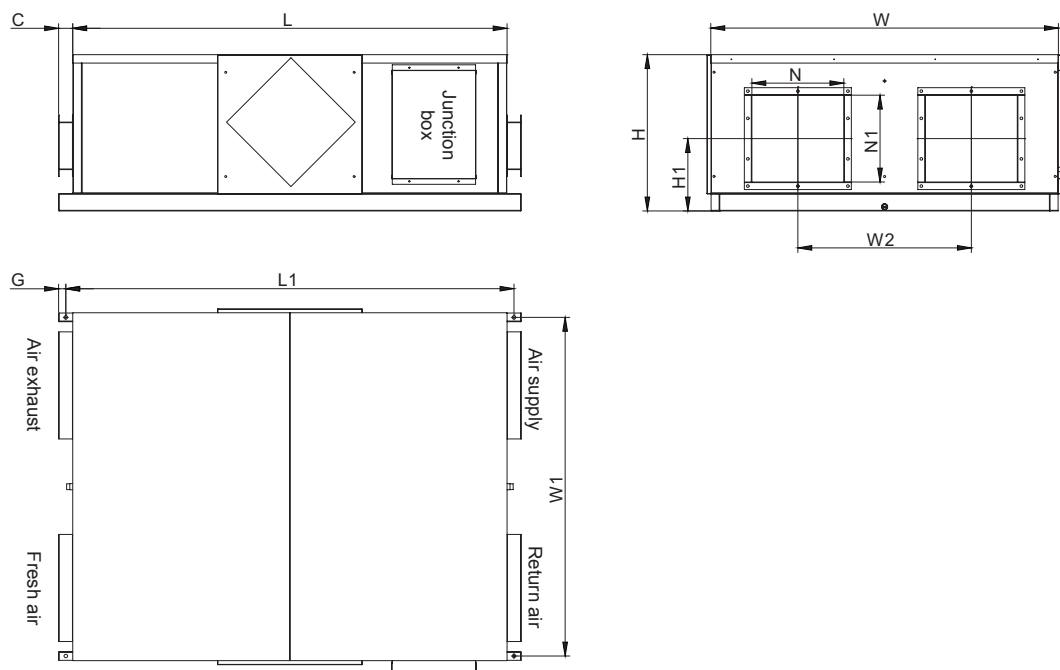
Measurement: mm

Model	L	L1	W	W1	W2	H:	H1	C	G	N
EKHR030H	745	675	599	657	315	270	110	100	20	Φ144
EKHR040H	745	675	804	862	480	270	110	100	20	Φ144
EKHR060H	825	754	904	960	500	270	110	107	20	Φ194
EKHR080H	1115	1045	884	940	428	390	170	85	20	Φ242
EKHR100H	1115	1045	1134	1190	678	390	170	85	20	Φ242

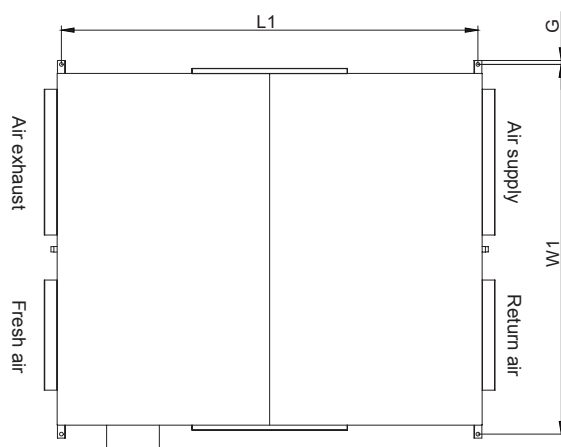
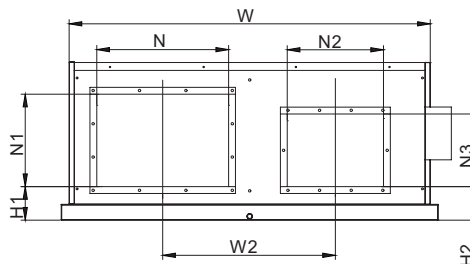
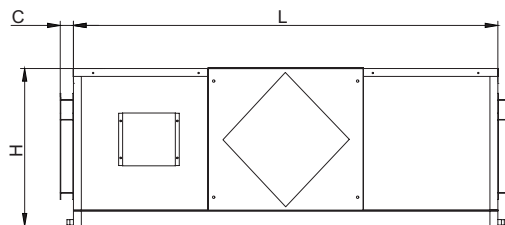
Unit Dimensions EKHR130H



Unit Dimensions EKHR150H/EKHR200H



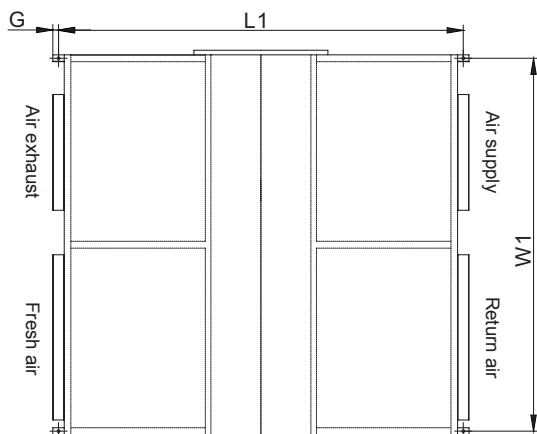
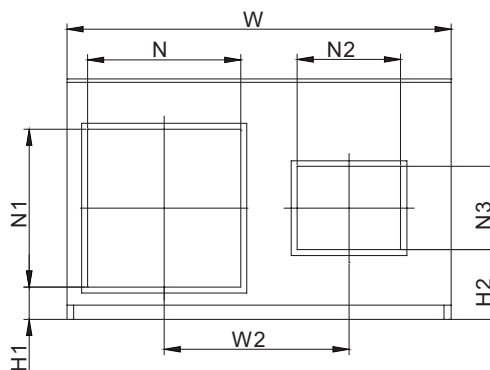
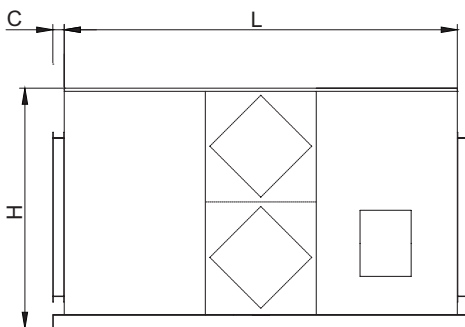
Unit Dimensions EKHR250H-EKHR300H



Measurement: mm

Model	L	L1	W	W1	W4	H:	H1	H2	C	G	N	N1	N2	N3
EKHR250H	1610	1580	1330	1400	158	600	127	127	50	15	500	350	365	275
EKHR300H	1700	1670	1500	1570	158	640	155	192	50	25	500	350	365	275

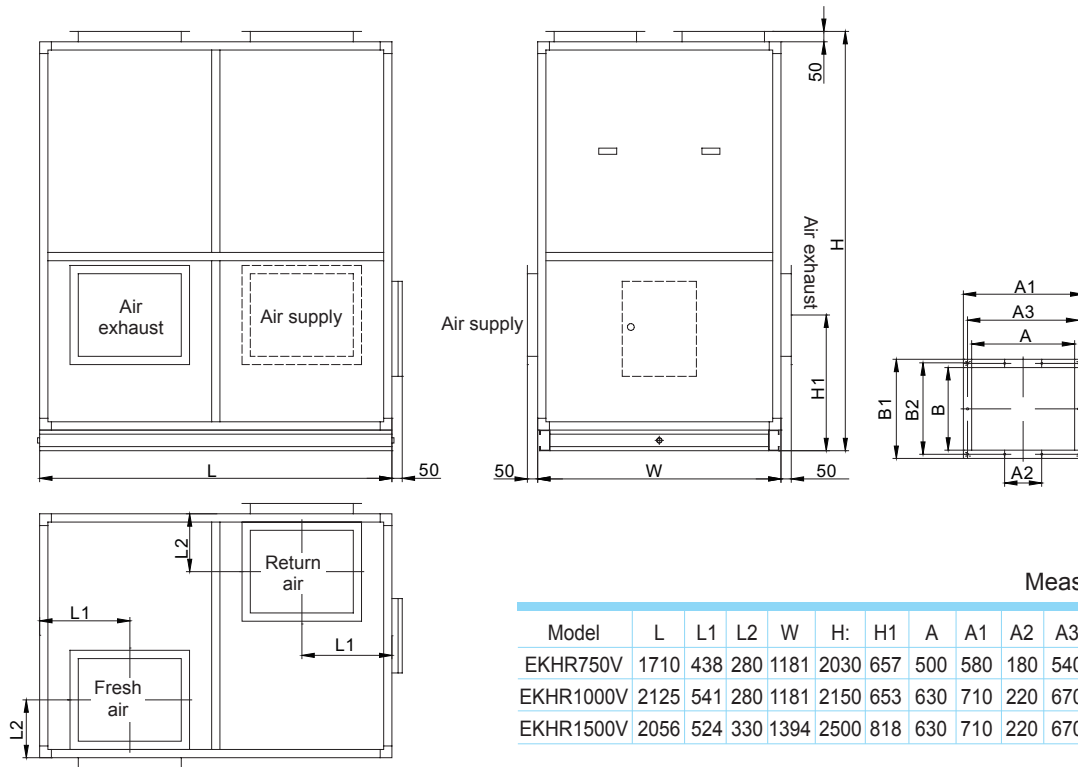
Unit Dimensions EKHR400H-EKHR1000H



Measurement: mm

Model	L	L1	W	W1	W2	H:	H1	H2	C	G	N	N1	N2	N3
EKHR400H	1625	1675	1330	1300	650	720	90	225	50	25	500	600	380	330
EKHR500H	1720	1770	1660	1630	810	860	115	280	50	25	670	690	455	360
EKHR650H	1720	1770	1660	1630	810	860	115	280	50	25	670	690	455	360
EKHR700H	1960	2010	1780	1750	890	1168	214	271	50	25	710	800	660	685
EKHR800H	1960	2010	1780	1750	890	1168	214	271	50	25	710	800	660	685
EKHR900H	2210	2260	1900	1870	900	1200	230	287	50	25	710	800	660	685
EKHR1000H	2210	2260	1900	1870	900	1200	230	287	50	25	710	800	660	685

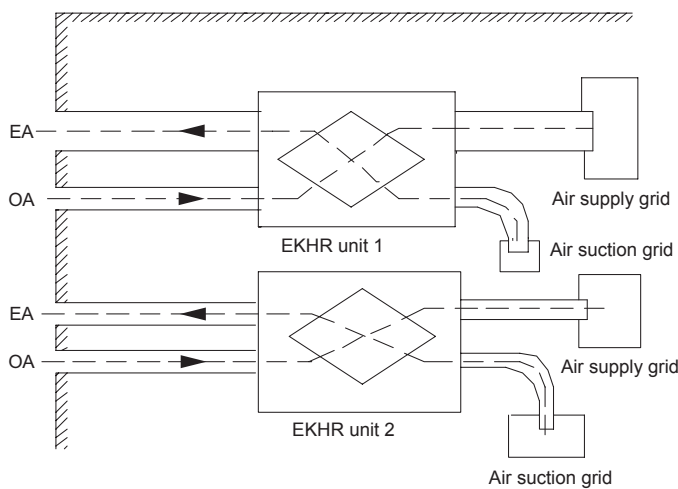
Unit Dimensions EKHR750V–EKHR1500V



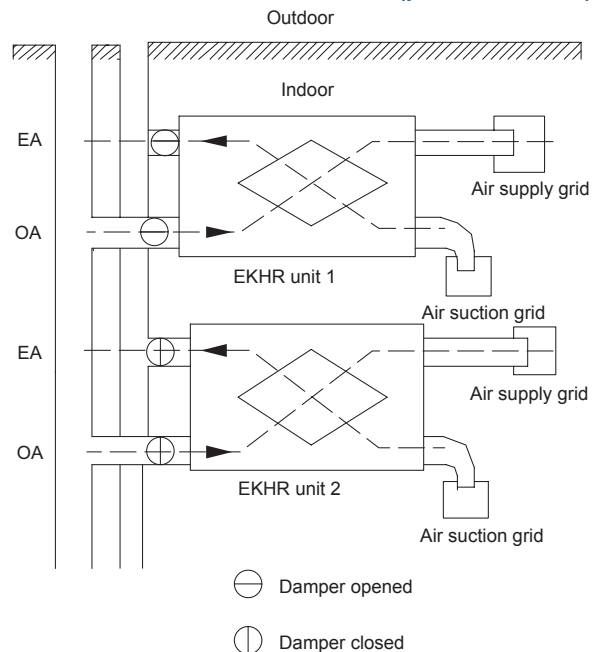
Pipelining

Centralized pipelining must be avoided for the OA (fresh air) pipe and EA (air exhaust) pipe on two or more EKHR units if possible. If no anti-return air damper is installed, the unit cannot run properly or maintain a normal air volume. If an anti-return air damper is installed at both the OA and EA sides of each EKHR unit, the cost is higher than that on a single unit. Therefore, installing the wind pipe on a single unit is recommended.

Installing the wind pipe on a single EKHR unit



Installing the anti-return air damper at both the OA and EA sides for two or more units (provided onsite)



Unit Installation Schematic

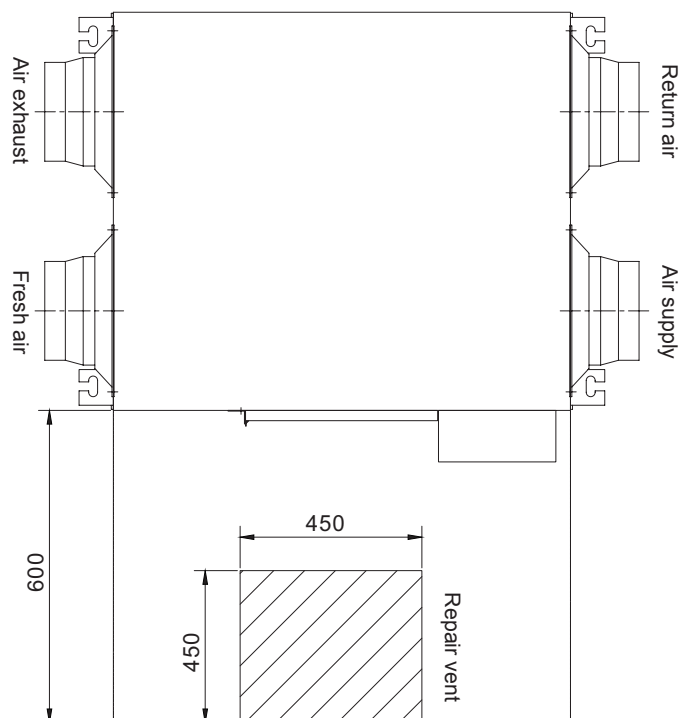


Figure 1

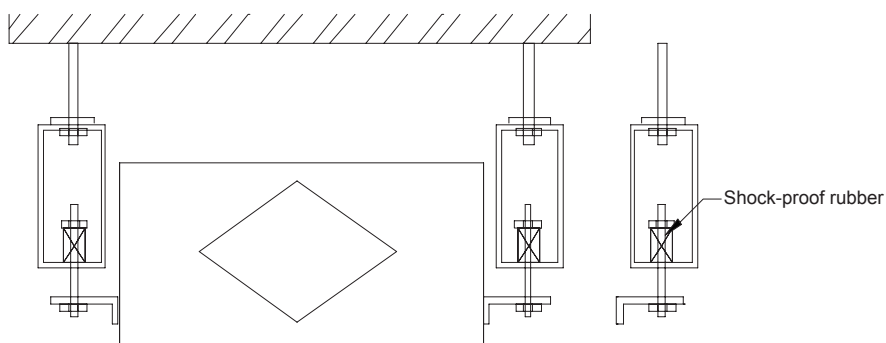


Figure 2

Note: If the unit is hoisted using a bolt in the ceiling, prevent resonance by attaching the shock-proof rubber as shown in Figure 2.



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EKHR1209-Catalog-AA

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