



**Klimor**

PRODUCT GUIDE

# KLIMOR EVO

ADVANCED AIR CONDITIONING & VENTILATION SOLUTIONS



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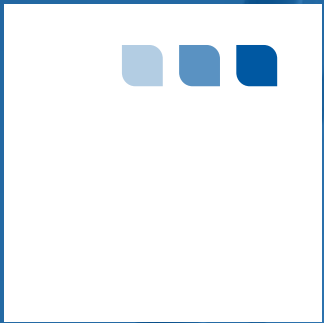
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**CHAPTER I**

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**KLIMOR  
BRAND**

**50 YEARS OF EXPERIENCE & INNOVATION**

**CERTIFICATES AND AWARDS**

**KLIMOR IN NUMBERS**

**KLIMOR SOLUTIONS**

**WE CARE ABOUT AIR FOR...**

# 50 YEARS OF EXPERIENCE & INNOVATION



For 50 years, Klimor has developed advanced air conditioning and ventilation solutions, meeting both the strictest quality standards and individual demands of customers throughout Europe – and now also in North America.

Our motto “We care about Air” reflects perfectly the essence of Klimor’s attitude. It underlines the attention we draw to the air quality and comfortable living. It motivates us to the sustainable, innovation-driven development of the Klimor brand and its portfolio – in past, present and in the future.

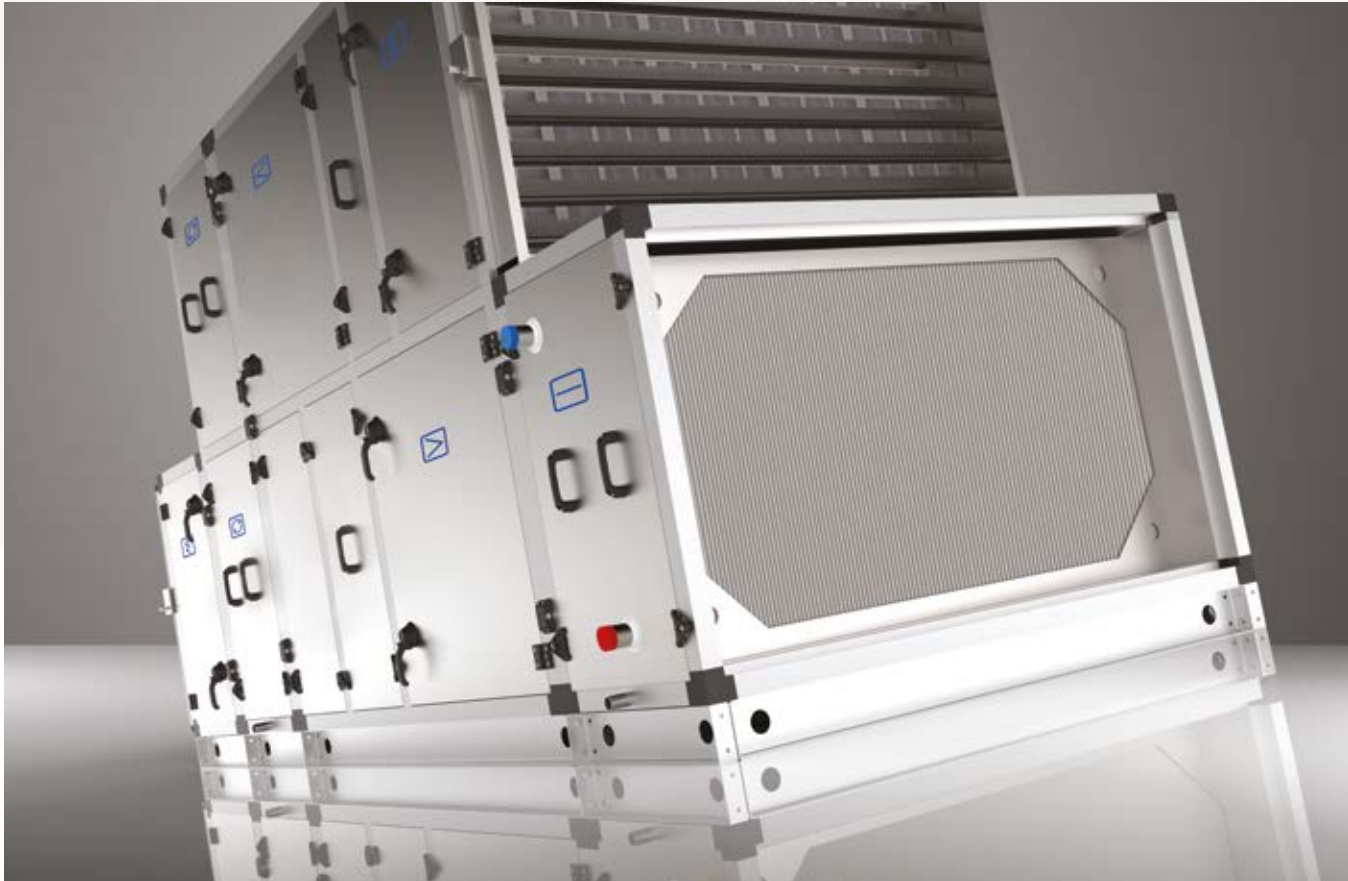
As a manufacturer, Klimor implements its own solutions applied in the wide range of air conditioning and ventilation systems. Klimor AHUs are developed in our own production plant located in the heart of Europe – in Poland. Klimor’s factory and the R&D division are situated in the northern part of the country, in Gdynia, directly by the Baltic Sea.

We are known for our commitment to highest quality and professionalism.

Foundation  
of The Company

# 1967

The Klimor company was founded in 1967 in Gdynia (Poland). We take pride in its rich tradition and global experience in the field of manufacturing both standard as well as custom air conditioning, ventilation and refrigeration systems.



## CERTIFICATES AND AWARDS

### **ETL** LISTED

The ETL Listed Mark is accepted throughout the United States when denoting compliance with nationally recognized standards such as ANSI, IEC, UL and CSA.

### **EUROPEAN STANDARD CONFIRMATION**

Independent certification confirming compliance of execution with strict standards: EN 1886:2008 and EN 13053:2008.

### **ISO 9001**

Klimor products have certificates of compliance, issued by PRS, confirming meeting of specific design and functional requirements.

### **CE**

Proves that products had been executed in line with European Union Directives and regulations.

### **EAC**

Certificate of quality and compliance with standards and regulations of Russian Federation confirms that products underwent all certification procedures and that it meets the quality requirements and requirements of engineering and safety standards.



**40**  
 over  
**countries**

---

in which KLIMOR AHUs are operating



**THOUSANDS**

---

semi-custom  
 and custom AHUs yearly



**1700**  
 vessels

---

around the world  
 equipped with KLIMOR AHUs



# KLIMOR SOLUTIONS

Klimor's offer is based on the extensive range of modern air conditioning and ventilation units designed for any kind of commercial and industrial application as well as different types of residential buildings.



**COMMERCIAL SOLUTIONS:** office and residential buildings, sport facilities, shopping malls

**PUBLIC UTILITY FACILITIES:** government buildings, universities, museums

**HEALTHCARE & PHARMACEUTICAL INDUSTRY:** hospitals, laboratories

**INDUSTRY PLANTS INCL. HIGH HUMIDITY FACILITIES:** warehouses, technical rooms, indoor swimming pools, production plants

**MARITIME INDUSTRY:** ships, boats

Klimor offers more than products. We deliver comprehensive range of services, including selection of units based on our own selection software, assembly and installation of units.

**CONSULTING SUPPORT**

**SELECTION**

**DELIVERY&ASSEMBLY**

**WARRANTY SERVICE**

# WE CARE ABOUT AIR FOR...



For half a century Klimor has offered its customers and business partners various HVACR system solutions, in order to meet versatile needs for the air comfort.

Klimor air handling and cooling systems installed in thousands of facilities all over the Old Continent, especially in Central and Eastern Europe. Thanks to Klimor's vast experience, flexibility and high quality of products the company is successfully implementing HVACR solutions in office and government buildings, public utility facilities, hotels, in hospitals and laboratories, swimming pools as well as industrial plants.

WE CARE ABOUT AIR FOR:

AUTOLIV    BORG AUTOMOTIVE    BORGWARNER    BSH  
CEREAL PARTNERS WORLDWIDE    DANFOSS    DECATHLON  
DECATHLON    DELPHI    DR. OETKER    FLEXTRONICS  
FORTUM    FRITO LAYS    GOODYEAR    HILTON HOTELS  
HUTCHINSON    IBIS    IKEA    LEROY MERLIN    MABION  
MARS    MICHELIN    NESTLE GROUP    OLIMPLABORATORIES  
PANATTONI    POLSKONE    PRATT & WHITNEY    PHILIP MORRIS  
POLPHARMA    SAINT-GOBAIN    SANOFI    TAURON    TEVA  
TIKKURILA    TRUMPF MAUXION CHOCOLATES    SUPER-PHARM  
VALE ANTEUROPE    VALEO    ROSSMANN    RESERVED  
RECKIT BENCKISER    TARKETT





**CHAPTER II**

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# **KLIMOR EVO PRODUCT LINE**

**PRODUCT PHILOSOPHY: THE EVOLUTION OF AIR**

**SELECTION SOFTWARE**

**EVO S CHARACTERISTICS**

**EVO TECHNICAL DATA**

**CODIFICATION & ENCODING**

**SAMPLE CONFIGURATIONS**

# THE EVOLUTION OF AIR

Taking into account a variety of specific needs and demands of our Clients, we succeeded in creating an innovative product line by extending our way of thinking about perfect HVACR solutions.

“Klimor EVO” is an evolution of technological thought and engineering excellence. We care about every single detail of the entire process – from design to production. Our confidence comes from implementation of the strictest standards of the quality management, proven know-how and almost five decades of manufacturing experience.

**EFFICIENT | VERSATILE | OPTIMAL**





# EFFICIENT

## EC / VFD TECHNOLOGY

Solutions that meet the requirements of ecodesign in terms of highest energy efficiency ratios.

Stepless capacity control as standard allowing to optimize energy consumption per unit of time.

## ERP 2018 – ADVANCED ENERGY RECOVERY SOLUTION

A wide range of energy recovery systems in the group of recuperators and regenerators suitably applied to the expectations of air treatment technology.



CROSS-FLOW PLATE  
HEAT EXCHANGER



COUNTER-FLOW PLATE  
HEAT EXCHANGER



ENERGY  
RECOVERY WHEEL



MIXING BOX

## DIRECT DRIVE PLENUM FANS

Minimization of energy losses due to exclusion of belt drive

Single fan and multifan technology

Application of impellers with backward curved blades with high mechanical efficiency



# VERSATILE

## WIDE RANGE OF CLIMATIC ZONES

Versatile climate zone operation temperature

-40 ÷ 158°F

## THERMAL BRAKE TECHNOLOGY

A unique housing design that uses modern composite technologies and panels without thermal bridges



## WIDE RANGE OF BUILDING APPLICATIONS

A wide range of performances along with a large-scale of model sizes that allows you to adapt the product to the size of buildings

19 sizes



600 CFM

25 000 CFM

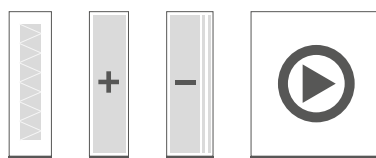




# OPTIMAL

## FLEXIBILITY

Various configurations and wide range of functions will let users select KLIMOR EVO according their needs of air treatment, sound level and cost. Klimor Evo can be selected in two types of unit construction: monoblock or multiblock. This provides unique horizontal or vertical modularity.



### MULTIBLOCK ADVANTAGES

- Variety of configurations and executions during selection
- Easy transport and delivery to the place of multiblock assembly



### MONOBLOCK ADVANTAGES

- Shorter construction time
- Competitive price
- High air tightness guarantee
- Lower total weight

## WIDE RANGE OF AIR TREATMENT FUNCTIONS

A rich portfolio of air treatment features optically adjusts the device in terms of available energy carriers vs. expectations of air treatment technology



**MECHANICAL FILTERS  
ELECTROSTATIC FILTERS  
(ON REQUEST)**



**WATER HEATER  
ELECTRIC HEATER  
(ON REQUEST)**

## ADAPTED TO BUILDING CAPABILITIES

### MODULAR DESIGN ALLOWS FREE CONFIGURATION OF FUNCTIONAL BLOCKS

#### AVAILABLE BLOCKS:

primary filtration, mixing, heating, cooling, silencing, secondary filtration, heat recovery, fan

#### ADDITIONAL EQUIPMENT FOR OUTDOOR EXECUTION:

outdoor dampers, exchangers with freezing protection, canopy, hood

MEETS THE REQUIREMENTS OF EN 1886:2008, CERTIFIED BY ACCREDITED LABORATORIES



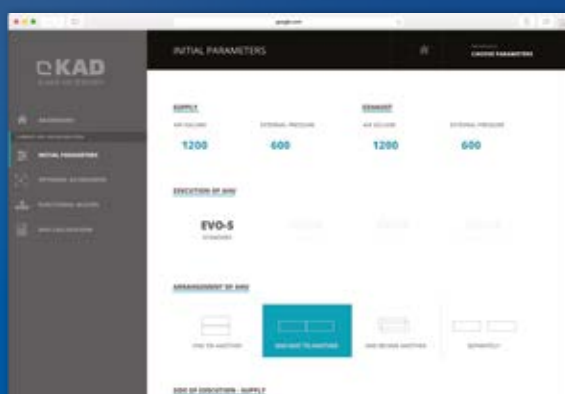
→ INTUITIVE NAVIGATION

→ DRAG & DROP

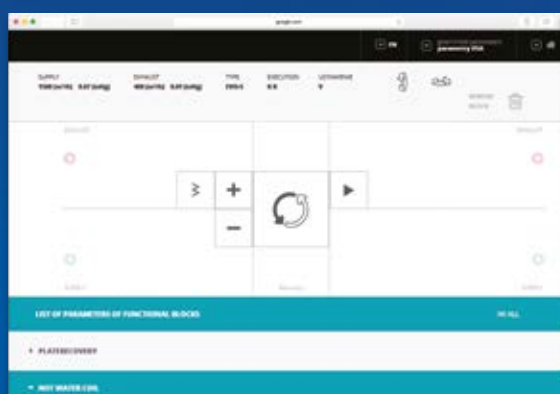
→ VARIOUS EXPORT OPTIONS  
PDF, DXF 2d&3d

→ EASY-TO-USE  
just a few steps to design complete unit

1 ENTER INITIAL PARAMETERS



2 PICK FUNCTIONS YOU NEED



3 CALCULATE & CHOOSE OPTIMAL SOLUTION

4 SELECT EXPORT OPTION (PDF, DXF 2D&3D)

# EVO S



## MODULAR AIR HANDLING UNIT STANDARD EXECUTION

  
AIR CAPACITY [CFM]

600 ÷ 25 000

Component	Construction
<b>Framework</b>	ALuminium , aluminium with thermal brake or high anticorrosive steel composite profiles or galvanised metal sheet profiles (2"), composite corners. For the gas modules, corners made of composit resistant to a temperature of 347°F.
<b>Panels</b>	Unique Thermal Brake panels made of galvanised metal sheet 0,8mm thick   Panel thickness of 2" (floor 2.7") filled with PU foam – A1 class fire protection.   Fixed panels riveted to the framework and insulated with silicone.   Access panels fixed by clamps, with pull handles.   Access doors fixed by handles.   Access panels with pull handles fixed by clamps.   Access panels and doors equipped with profiled gasket.
<b>Base Rail</b>	Base rail made from galvanised metal sheet   Standard base rail height – 4.7"
<b>Drain Pan</b>	Made of stainless steel, triple sloped, insulated with rubber mat.   Recessed in floor.   Drainage pipe made of stainless steel pipe, led out to the side through the AHU's profile beyond the outline.   It is not required to elevate the frame for the pressure of 2.4 inWg.
<b>Coil framing</b>	Made of stainless steel
<b>Air Dampers</b>	Standard aluminium construction. The mechanism hidden in the double profile, separated from external factors.
<b>Add. equipment</b>	"Dumbo" terminals for pressure switch hoses connection, installed on the AHU's fixed casing.   Lighting – low voltage led technology – option Porthole – option

# EVO S CHARACTERISTICS



## RIGID FRAME CONSTRUCTION

UNIVERSAL IN WHOLE RANGE  
2 OPTIONS OF PROFILES: COMPOSITE OR HIGH ANTICORROSIVE STEEL

## THERMAL BRAKE PANELS

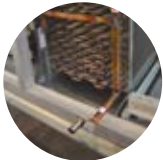
REDUCTION OF THERMAL CONDUCTIVITY  
ECONOMIC BENEFITS

## INSULATION

2" PU FOAM

## FAN SET

DDP | SINGLE OR MULTIFAN | AC OR EC SOLUTIONS  
FLEXIBLE ARRANGEMENT OF OUTLETS (TOM / BOTTOM / SIDE / FORWARD)



## DRAIN PAN

TRIPLE SLOPED  
EASY MAINTENANCE  
EASY "SLIDE-OUT" COIL ACCESS

## PRACTICAL SOLUTIONS

HINGES / HANDLES / CLAMPS

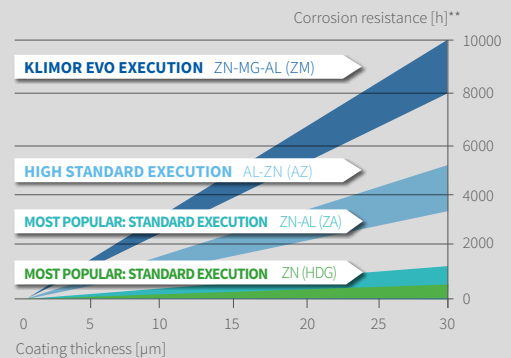
## ENERGY RECOVERY

HIGH EFFICIENCY HEAT  
ENERGY RECOVERY

Energy recovery wheel efficiency  $\leq 80\%$   
Plate heat exchanger efficiency  $\leq 70\%$   
Counter flow plate heat exchanger  
efficiency  $\leq 92\%$

## ANTICORROSIVE COATING




















OPTIONS: PAINTED OR STAINLESS  
ANTIREFLEX SURFACE



## CODIFICATION OF FUNCTIONAL BLOCKS

	<b>PF</b>	PRIMARY FILTER
	<b>SF</b>	SECONDARY FILTER
	<b>VF</b>	FAN
	<b>WC</b>	CHILLED WATER COIL
	<b>DX</b>	DIRECT EXPANSION COOLING COIL
	<b>WH</b>	HOT WATER COIL
	<b>SL</b>	SILENCER
	<b>RR</b>	ENERGY RECOVERY WHEEL
	<b>PR CPR</b>	PLATE CROSS-FLOW HEAT EXCHANGER (HIGH PERFORMANCE COUNTER FLOW HEAT EXCHANGER)
	<b>MX</b>	MIXING SECTION
	<b>ES</b>	EMPTY SECTION
	<b>EH</b>	ELECTRIC HEATER ( <b>PAGE 52</b> )

## AVAILABLE SIZES

SIZE	WIDTH [in]	HEIGHT [in]	OPTIMAL AIR FLOW [CFM]	CROSS-SECTION
800	27.56	19.69	686	
1300	37.40	19.69	1 100	
1600	37.40	23.62	1 429	
2200	47.24	23.62	1 924	
2900	51.18	27.56	2 500	
3400	51.18	31.50	2 969	
4000	59.06	31.50	3 597	
4800	59.06	37.40	4 544	
5500	66.93	37.40	5 337	
8300	70.87	47.24	7 406	
7500	59.06	59.06	7 762	
9500	78.74	51.18	9 247	
11500	94.49	51.18	11 496	
12500	70.87	70.87	11 946	
14000	94.49	59.06	13 863	
15500	78.74	78.74	15 231	
18500	110.24	66.93	18 215	
20000	122.05	66.93	20 497	
24500	122.05	78.74	24 464	

## ENCODING METHOD



### AHU RANGE NAME

KLIMOR EVO-S

### SIZE OF UNIT

800, 1300, 1600, 2200,  
2900, 3400, 4000, 4800,  
5500, 8300, 7500, 9500,  
11500, 12500, 14000,  
15500, 18500, 20000, 24500

### AIR FLOW RATE /100

### STATIC PRESSURE DROP \*10

### ACCESS SITE

R - RIGHT  
L - LEFT

EXAMPLE

**KLIMOR EVO-S-5500-53-20-R-PFWHWCVFSL**

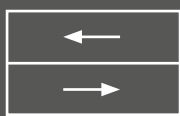
COMPLETE DESIGNATION OF THE EVO AHUS CONTAINS ALSO CODES OF AIR SECTIONS.

EXAMPLE: THE EVO AHU IN STANDARD RIGHT-SIDE VERSION, SIZE 5500, AIR FLOW: 5300 CFM, AVAILABLE PRESSURE: 2 IN. W. C., EQUIPPED WITH FILTER, WATER HEATING COIL, WATER COOLING COIL, FAN AND SILENCER.

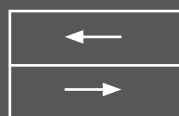
## FAN SET

AHU size	800	1300	1600	2200	2900	3400	4000	4800	5500	8300	7500	9500	11500	12500	14000	11500	18500	20000	24500
Single	1	1	1	1	1	1	1	1	1	1	1	1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Multi (qty)	n.a.	n.a.	n.a.	2	2	2	2	2	2	2	2	2	2	2	2 or 3	2 or 4	3	3 or 6	3 or 6

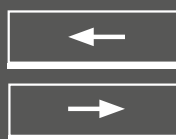
## POSSIBLE AHU ARRANGEMENT



ONE ON ANOTHER  
SIDE VIEW



ONE NEXT TO ANOTHER  
TOP VIEW



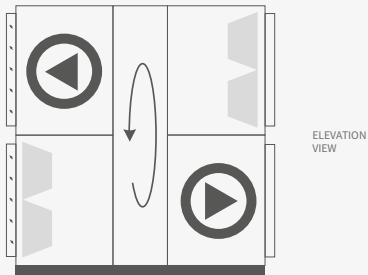
SEPARATELY  
SIDE VIEW



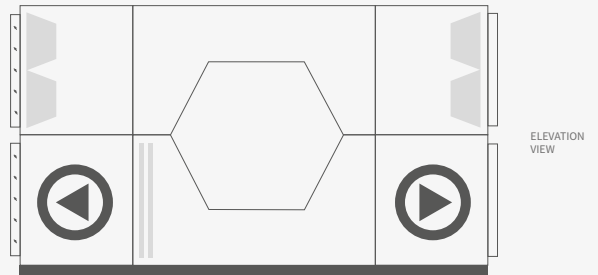
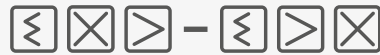
ONE AFTER ANOTHER  
SIDE VIEW

# SAMPLE CONFIGURATIONS

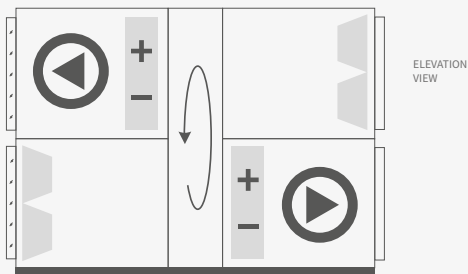
## 1 supply & exhaust AHU with energy recovery wheel



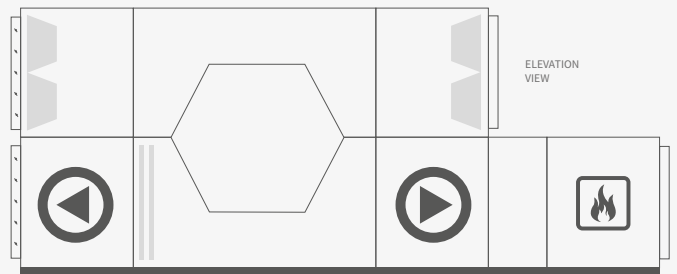
## 2 supply & exhaust AHU with counter flow heat exchanger



## 3 supply & exhaust AHU & energy recovery wheel



## 4 supply & exhaust AHU with counter flow heat exchanger & gas module



## 5 supply units heating, cooling

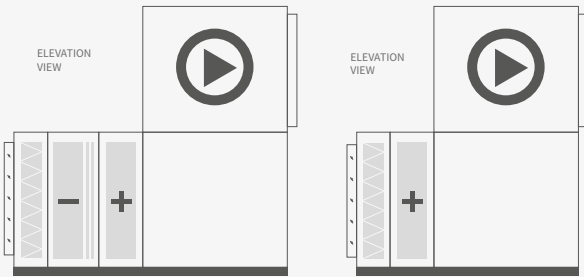


## 6 supply units mixing box

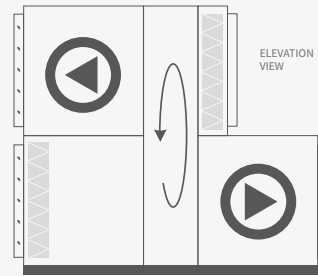
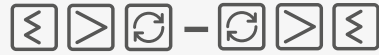




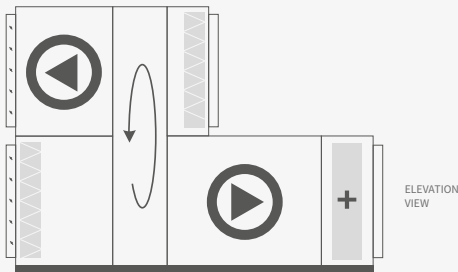
**7** supply units heating, cooling



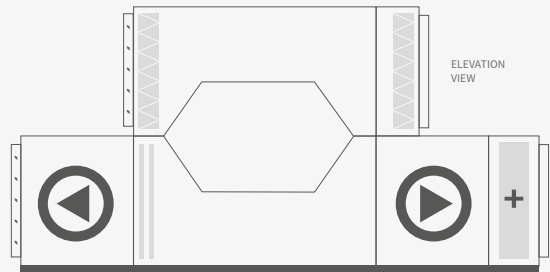
**8** supply and exhaust units with energy recovery wheel



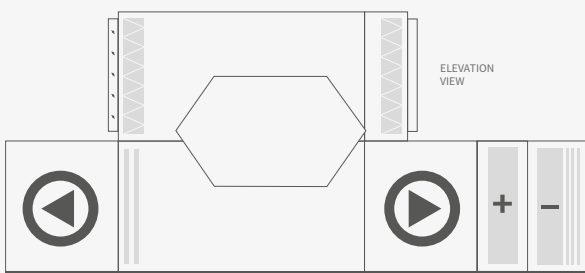
**9** supply and exhaust units with energy recovery wheel



**10** supply and exhaust units with cross-flow heat exchanger heat recovery



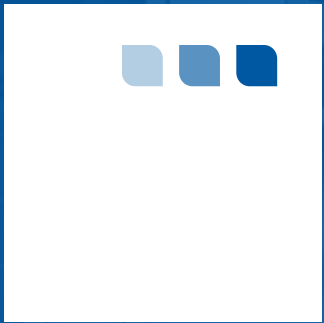
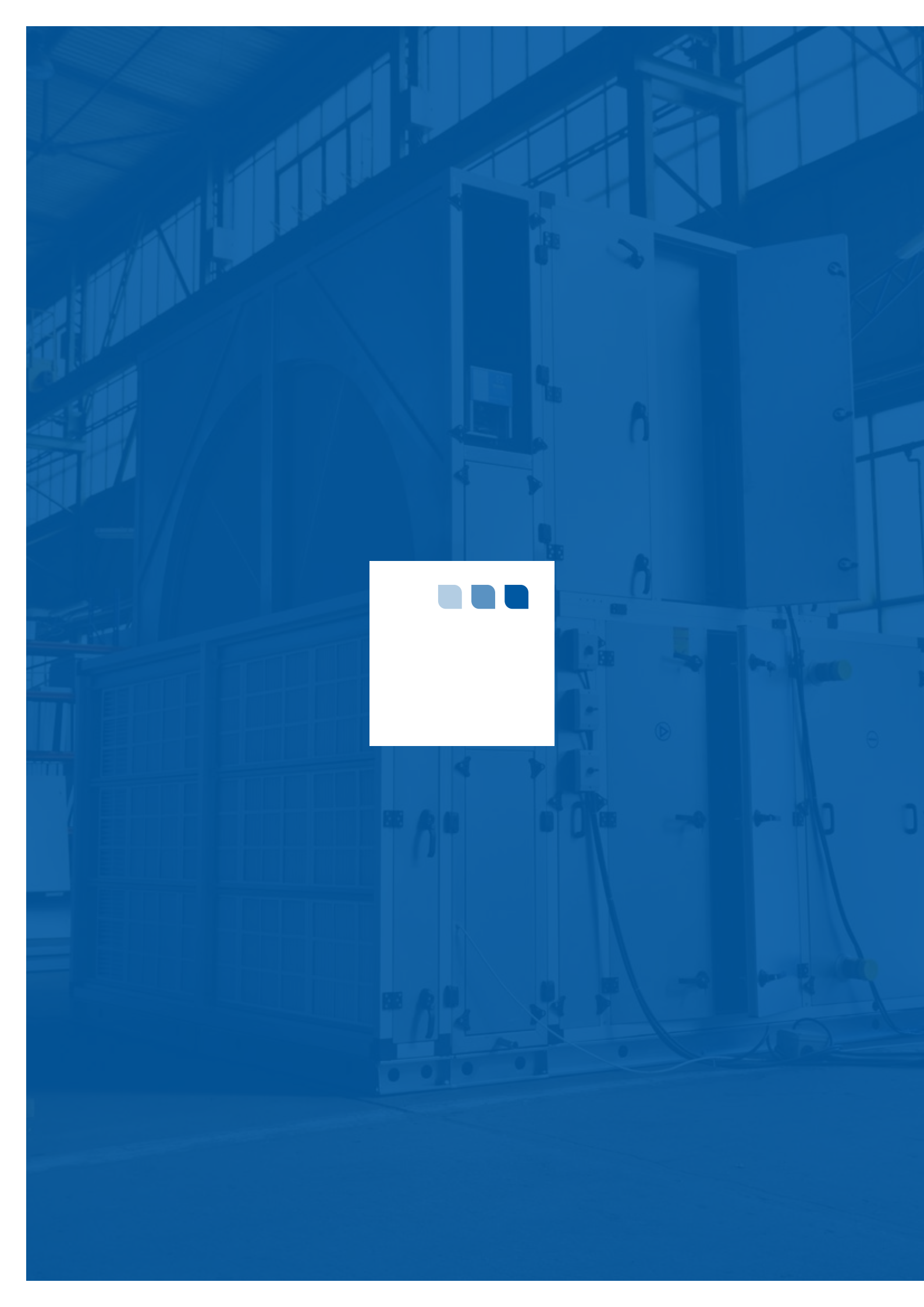
**11** supply and exhaust units with cross-flow heat exchanger heat recovery, cooling



Much more configurations available in KLIMOR AIR DESIGNER selection software



 [klimor.com](http://klimor.com)



**CHAPTER III**

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# **FUNCTIONAL BLOCKS**

CASING

MECHANICAL FILTER

FAN SET

HOT WATER COIL

CHILLED WATER COIL

DIRECT EXPANSION COOLING COIL

ENERGY RECOVERY WHEEL

PLATE HEAT EXCHANGER (STANDARD & HIGH PERFORMANCE)

ELECTRIC HEATER

SILENCER



# casing



## functions and application

### framework

Supporting framework structure based on internal system of aluminum or steel frame

### environment

AHU for indoor and outdoor installation

### panels

Sandwich type with thermal brake solution

## construction

### external materials

Magnesium sheet

Galvanized and coated (option)

Stainless steel sheet (option)

### insulation

PU foam

Mineral wool (option)

### internal material

Galvanized sheet

Stainless steel

Coated sheet (option)

### access

On the side

Butterfly clamps and hinges

### cover

Other panels riveted with framework structure

### base rail

Steel rail for transport/foundation of the unit

## parameters (panels)

### working temperature

-40÷194°F

### panel thickness

2 in

### type of sheets

Galvanized sheet with magnesium (DX51+ZM250)

Optional: galvanized and polyester coated steel sheet RAL9010, stainless sheet type 304 and 316



# filter

[PF]  
[SF]



## functions and application

### type

Pleated filter  
MERV8 ÷ MERV14

Air purification

### usage

As base filter in systems with standard purity requirements

As preliminary filter in systems with strict purity requirements

### application

Public utility buildings, office spaces, hotels, arenas, collective and individual residential buildings, etc.

## parameters

### filtration class

MERV8 ÷ MERV14

### end pressure drop

$\Delta p = 1 \text{ in w.g.}$

### filtration grade

$A_m = \text{up to } 98\%$

### air velocity

Maximum  $v = 625 \text{ FPM}$

### working temperature

Maximum  $200^\circ\text{F}$

## construction

### class

MERV8 ÷ MERV13 pleated filters  
MERV14 cartridge filters

### installation

Mounted on steel frames



# fan set

[VF]



## functions and application

### application

Low and medium pressure ventilation and air-conditioning systems with overall pressures up to 8.03 in w.g.

## construction

### type

Radial fan without casing

One-way suction

PLUG type with backward curved blades

### insulation

Fan and motor set on common frame

Insulated from unit structure by rubber shock absorbers

### mounting

Direct drive – rotor mounted on motor shaft

### motor

TEFC (Totally Enclosed Fan Cooled) motors conforming to PREMIUM efficiency class

All units equipped with direct drive fans are equipped with factory mounted Variable Frequency Drives (VFD)

### optional

ECM

Shaft Grounding Rings

## parameters

### rated voltage

3×208..460V  
50/60Hz.

### protection type / index

PTC / IP55

### motor insulation

insulation class: F

### bearing lifecycle

L10 = 20000h /  
L50 = 100000h

### working environment

140°F



# hot water coil

[WH]

## functions and application

### supply air

Heating of supply air to premises in air conditioning and ventilation systems

### process air

Heating of process air in industry-grade air conditioning and ventilation systems

### source

Heat source is required, supplying the coil with hot water



## construction

### structure

Galvanized steel sheet casing

CuAl package with copper pipes and aluminum fins

Manifolds and connectors made of copper or steel

standard fin spacing

0.08 in

standard fin thickness

0.006 in

tube wall thickness

0.02 in

tube diameter

3/8" ÷ 5/8"

## connector types (nominal diameter)

Ø NPS [in]	0.75	1.00	1.25	2.00	3.00
Connector ending	Thread R 3/4"	Thread R 1"	Thread R 1 1/4"	Thread R 2"	Thread R 3"

## parameters

max. medium temp.

302°F

max. medium pressure

535.30 in w.g.  
= 0.005 in w.g.  
(tested 0.007 in w.g.)

max. permitted air flow

v = 480.31 fpm

additional data

Thermal output, pressure losses, etc. available in KAD selection software

air temperature

Min/max temperature of air for the coil:  
-40 ÷ 140°F

Protection: permissible minimum temperature of air downstream coil is monitored by freezing protection thermostat (optional)



# chilled water coil

[WC]



## functions and application

cooling\*

Of supply air to premises in air conditioning and ventilation systems

Of process air in industry-grade air conditioning and ventilation systems

## construction

### general info

Copper pipes;  
aluminium fins

### standard fin spacing

Distance between  
fins: 0.08 in

### number of rows

4+10

### drain pan

Triple sloped drain pan  
made of stainless steel

## connector types (nominal diameter)

Ø NPS [in.]	0.75	1.00	1.25	2.00	3.00
Connector ending	Thread R 3/4"	Thread R 1"	Thread R 1 1/4"	Thread R 2"	Thread R 3"

## parameters

### medium temp.\*\*

Min temperature  
of the medium:  
35°F\*

### medium pressure

Maximum working  
pressure of the medium:  
535.30 in w.g. =  
0.005 in w.g.  
(tested 0.007 in w.g.)

### glycol content

Max glycol  
content: 50%

### air velocity

Max. permitted  
air velocity  
v = 480.31 fpm

### additional data

Cooling capacity,  
pressure drop, etc.  
available in KAD

\* Cold source is required, supplying the coil with chilled water.

\*\* Possibility to select individually according to non standard parameters.



# direct expansion cooling coil

[DX]



## functions and application

cooling\*

Supply air to premises in air conditioning and ventilation systems

Process air in industry-grade air conditioning and ventilation systems

## construction

general info

Copper pipes;  
aluminium fins  
stainless steel  
coil casing

standard fin spacing

Distance between fins:  
0.08 in

number of rows

4÷10

drain pan

Made of stainless steel

heat exchanger

Single (100%) or double section

connection stub pipes

Connection stub pipes are on the service side of the unit.

## parameters

medium temp.\*\*

Minimum evaporating temperature of cooling medium evaporation: 37.4°F\*

medium pressure

Maximum working pressure of the medium up to 11241.27 in w.g. = 0.112 in w.g. (tested 0.128 in w.g.)

air velocity

Max. permitted air velocity v = 480.31 fpm

additional data

Cooling capacity, pressure drops, etc. available in KAD selection software

\* Cold source is required, supplying the coil with refrigerant.

\*\* Possibility to select individually according to non standard parameters.



# energy recovery wheel



## functions and application

### heat & humidity recovery

Transfers sensible and latent heat (i.e. energy bound up in moisture) simultaneously

### energy recovery

Energy recovery without full separation of supply and exhaust air streams

### application

Applicable in combined supply and exhaust units

## construction

### general info

Shaft mounted rotor, framework casing

### hygroscopic rotary heat exchanger

Rotor made of aluminium strips/sheets

### brush sealing

Protects against additional air leaks

### purification lock

Reduces the quantity of "contaminated" exhaust air to the supply section of the unit

### speed belt

belt driven transmission – controlling recuperation degree and freezing protection for humidity condensing on rotor

## parameters

efficiency

Up to 80%

tightness

Heat-exchanger tightness for rated working parameters 97%

air velocity

Maximum air velocity 1023.62 fpm

rotor speed

Rotor rotational speed: 10rpm

pressure drop

Maximum pressure drop: 1.806 in w.g.

working environment

-20÷158°F



# plate heat exchanger

**2 OPTIONS**  
AVAILABLE



**standard**

cross-flow plate heat exchanger



**high performance**

counter cross-flow plate heat exchanger

## functions and application

### heat recovery

Indirect heat recovery from exhaust air and transfer of such energy to supply air, without possibility of humidity recovery

### supply air

Complete separation of supply air from exhaust air streams

### application

Used in combined supply and exhaust units

## construction

### materials

The block is made of aluminium plates with separated supply and exhaust air streams flowing between them

### face & bypass damper

Installed damper allows to bypass the plate heat exchanger in order to:

- decrease efficiency or "switch off" energy recovery
- protect the exchanger against freezing

### drop tray

Drop separator with drip pan

## parameters

### efficiency

Up to 70% – cross flow plate heat exchanger

Up to 90% – counter flow plate heat exchanger

### air velocity

Maximum air velocity: 866.14 fpm

### medium pressure

Heat-exchanger tightness for rated working parameters 99.9%

### additional data

Maximum pressure drop: 1.806 in w.g.

### working environment

-40÷175°F



# electric heater

[EH]



## functions and application

### application

- Heating of supply air to premises in air conditioning and ventilation systems
- Heating of process air in industry-grade air conditioning and ventilation systems

## construction

- Single or multi-stage heating components
- Radiator heaters combined in groups
- Casing: framework made of galvanized metal sheet
- Connection to terminal strip
- Overheating protection thermostat (standard)

### exchanger medium connection

- Connection stub pipes are on the service side of the unit

## parameters

- Rated voltage: 208/230V or 460V
- Min. / max. rating capacity: 4/168kW
- Permitted min. air velocity:  $v = 295\text{ fpm}$
- Max. permissible ambient temperature around heating components: 149°F



# silencer

[SL]



## functions and application

silent operation

Installed to ensure silent operation of the AHU

sound levels reduction

Reduces noise spreading throughout ventilation ducts

## construction

materials

The block is fitted with silencing cartridges made of non-flammable mineral wool, 3.9 or 7.87 in thick

wool insert

The surface of wool insert is protected with veil

protection

Protection prevents permeating of condensate into slotted cartridges

execution

2 stes of baffle silencer are being produced

## accessories

Roof/Weather hoods

- Components with water drainage to the side opposite from the viewing side can be additionally installed on air handling units that are designed to be used outdoors

Door Locks and Handles

- Easy to use door locks and handles ensure safe unit maintenance

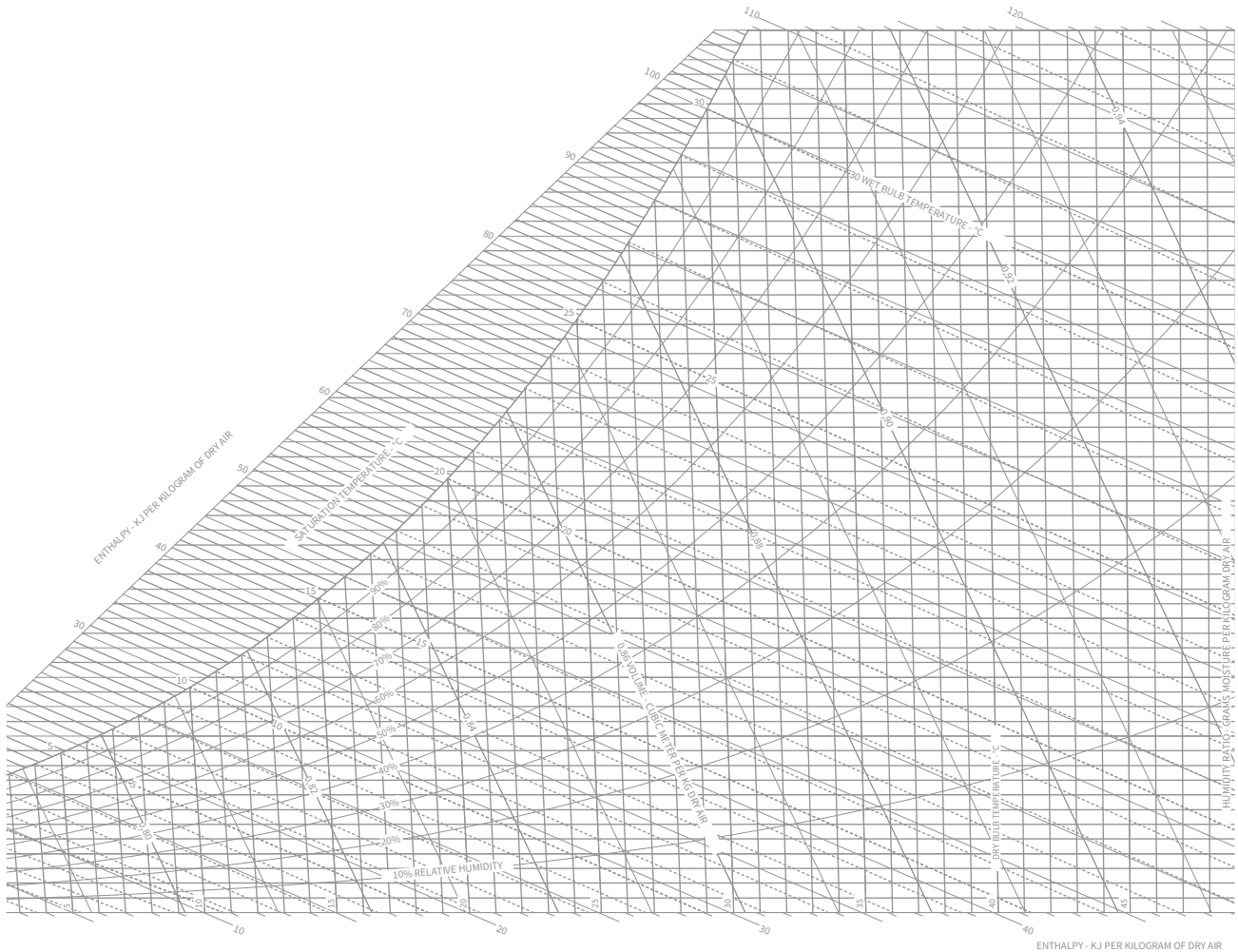
Inspection window

- Inspection window enables to observe unit's internal operation. The diameter of plastic window is 8in

Internal lighting

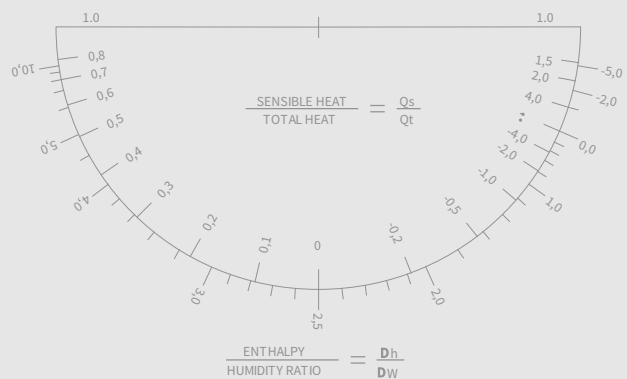
- Internal lighting enables to observe unit's internal operation through inspection window. Economy light is used with switch outside the unit

# PSYCHROMETRIC CHART



**NORMAL TEMPERATURE**

**BAROMETRIC PRESSURE: 406.793 in w.g**



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let us know. **We will design a custom  
solution especially for you.**

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