Our product code

Example:
RRS-P-E16-1550/1550/400-1500-E0/0-IE4-PS-S0-R0-T0-DGV-C00-J1-V

RRS-	P-	E	16-	1550/1550/400-	1550-	E0/0-	IE4-	PS-	S0-	R0-	T0-	DGV-	C00-	J1-	V???##
				a b c											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

1 Frame type

RRU (ECO)
RRS
RRT
RRU
RRUM(ECO)
RRV

2 Storage mass type

P: condensation
K: epoxy coated
E: enthalpy
N: sorption

3 Foil thickness

B: 0.10 mm
E: 0.06 mm (Standard)
C: 0.08 mm
A: 0.12 mm

4 Wave height

14: 1.40 mm
16: 1.60 mm
17: 1.70 mm
18: 1.80 mm
19: 1.90 mm
20: 2.00 mm
22: 2.20 mm
24: 2.40 mm
25: 2.50 mm

5a Frame height [mm]

5b Frame width [mm]

5c Frame depth [mm]

6 Wheel diameter [mm]

7 Division

1st number:
Number of segments Storage mass
2nd number: Number of housing parts
(0 = undivided)

E#/#A = divided, assembled at the factory
E#/#B = divided, not pre-assembled
Options A, B only, if not standard

Standard for up to 2 housing parts: pre-assembled

Standard for up to 3 housing parts: not pre-assembled

Code could be longer in the case of a 12-segments division on the storage mass
- E12/3
- E8/2 Storage mass with 8 segments, Housing divided into 2 parts
- E12/2 Storage mass with 12 segments
- E24/2 Storage mass with 12 segments with one attachment package each
- E36/2 Storage mass with 12 segments with 2 attachment packages each

8 Installing position

Rotor position with air streams
See next page
vertical=**A** - **H**
horizontal=**AL** - **HL** L=lying
Motor position **1** ... **4**

9 Purge sector

PN: none
PS: small (5°)
PL: large (10°)

10 Cladding sheets

S0: none
S1: with

11 Revision door

R0: none
R1: side door
R3: triangular door (on motor) on both sides
R4: triangular door (motor and controller) on both sides
RZ: customized

12 Condensate tray

T0: none
T1: tray (aluminium), flush
T2: tray (V2A), flush
T4: tray (V2A), flush
T11: 1 + 150 mm drain pipe
T21: 2 + 150 mm drain pipe
T41: 4 + 150 mm drain pipe
TZ: customized

Standard thread sizes:

RRU(ECO):	3/4“
RRS profile 40 and 60:	3/4“
RRS Zander:	1 1/4“
RRT profile 40 and 60:	3/4“
RRT profile 80 and larger:	1 1/4“
RRV:	1/2“

13 Drive sytem

D00: none
DGC: Gear motor 230/400V without controller
DGV: Gear motor 230/400V with MICROMAX controller + RC
DGW: Gear motor 230/400V without MICROMAX controller and without RC
DSC: Stepmotor 230V constant with OJ controller
DSV: Stepmotor 230V variable with OJ controller
DSR: Stepmotor 230V variable with OJ controller and RC
DGR: Gear motor 230/400V without controller, with RC
DGO: Gear motor 230/400V variable with OJ AC controller + RC
DKC: Gear motor UL 230/460V constant without controller
DLC: Gear motor UL 575V constant without controller
DMC: Gear motor UL 208V constant without controller
DKO: Gear motor UL 230/460V variable with OJ AC controller + RC
DLO: Gear motor UL 575V variable with OJ AC controller + RC
DMO: Gear motor UL 208V variable with OJ AC controller + RC
DKR: Gear motor UL 230/460V without controller + RC
DLR: Gear motor UL 575V without controller + RC
DMR: Gear motor UL 208V without controller + RC
DZZ: customized

Standard settings:
For gear motor without controller: VBP for 50 Hz
For gear motor variable: VBP for 80 Hz
For UL gear motor without controller: VBP for 60 Hz
For step motor: The connection voltage does not affect the speed.

For gear motor constant: Star connection
For gear motor variable: Delta connection

A fourth or fifth digit may be added to the code if the standard differs from:
A: VBP for 50 Hz
B: VBP for 80 Hz
C: VBP for 60 Hz
E: Star connection
F: Delta connection

Example: DGCBF = Gear motor without controller, wired in delta connection and VBP for 80 Hz, as controller is provided by customer

RC= rotor running control
VBP = V-belt pulley

14 Wiring

C00: none

C10: Defined as: Motor pre-wired to controller; requirement: Controller installed (narrow side above motor)

CP0: (Gear) motor pre-wired, without controller

CL0: Motor pre-wired, controller packaged separately (stepper motor always with connecting cable)

C0G: As C00, but with openings (3x) for cable glands (PGs) (included, near motor), covered with plastic caps, all corners, both sides

C1G: C10 + openings (3x) for cable glands (PGs) (included, near motor), covered with plastic caps, all corners, on both sides

CPG: CP0 + openings (3x) for cable glands (PGs) (included, near motor), covered with plastic caps, all corners, both sides

CLG: CL0 + openings (3x) for cable glands (PGs) (included, near motor), covered with plastic caps, all corners, on both sides

CLH: CLG + cables routed out of PGs

CZZ: Customised
A customised variant must be added for customised inspection doors (RZ), drives (DZZ) or cabling (CZZ).

15 Cleaning device

J1: RCD (Rotor cleaning Device = single-sided cleaning, Gladbeck)
J2: FTR
J3: EPR

This -JX code is optional. The code -JX only indicates whether and what type of cleaning is added to the rotor

The cleaning itself is considered a separate component with detailed code.

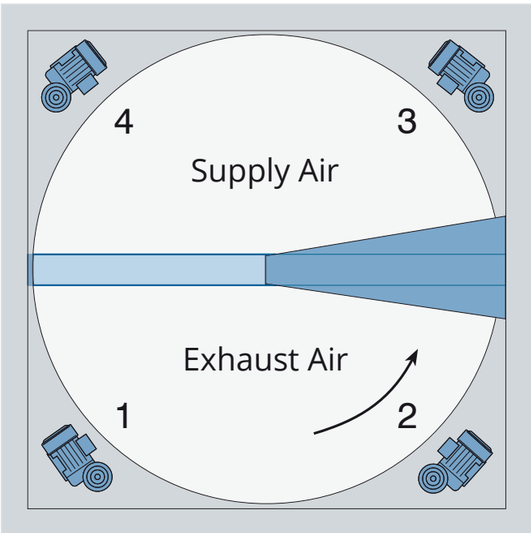
16 Customised version (optional)

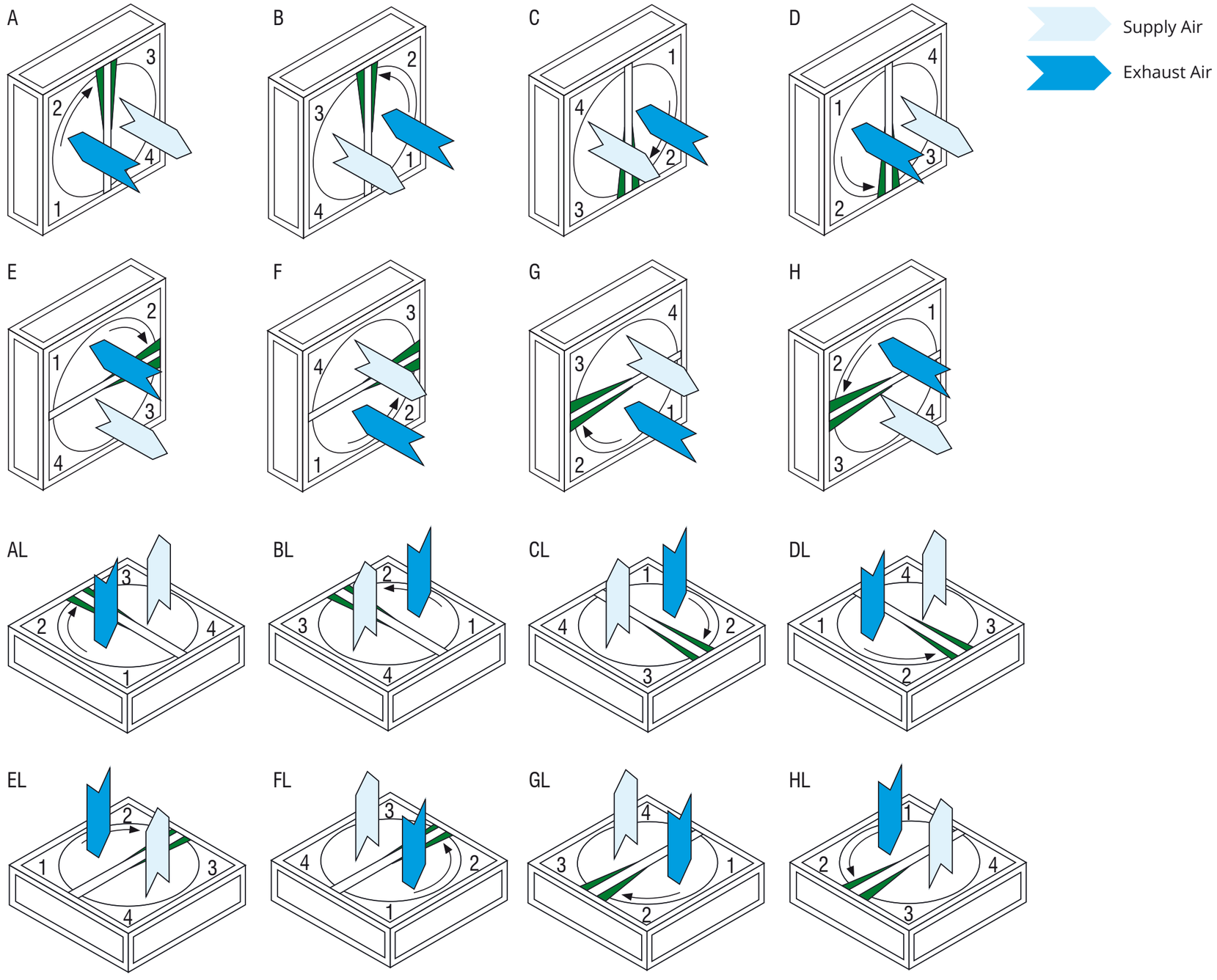
??? Three capital letters as customer code

Two-digit number for different variants of the same product code with detailed code.

Klingenburg Produktcode 0925 de en

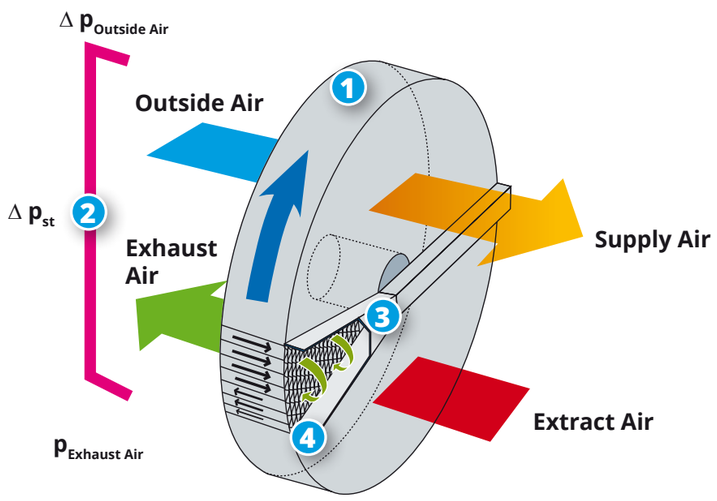
Rotor- and motor positions





Selection and sizing of purge chambers for rotors

Complete separation between air volume flows is not guaranteed with rotary heat exchangers ❶. To avoid leakage via the sealing system in the direction of the supply air, a design with the outside air/ supply air line in positive pressure ❷ is recommended. In order to minimise the rotation-related entry of extract air components into the supply air, a so-called purge chamber ❸ can be used. Depending on the pressure gradient between the outside air and the exhaust air ❷, the proportion of outside air or fresh air routed through the purge chamber displaces used extract air ❹ and thus contributes to a low EATR (Exhaust Air Transfer Ratio) value.

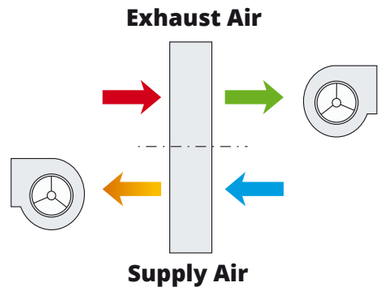


The table below lists guideline values for possible use of a purge chamber. Since the purge pressure in [Pa] plays an important role and the purge air volume must always be higher than the extract air volume transferred via rotation, use of the Klingenburg design software is recommended to determine whether a purge chamber is effective and if so, which size.

Differential pressure between outside and exhaust air Δp_{st} (*)	Type of purge chamber	
< 0 Pa	Differential pressure insufficient	No purge chamber
0 - 200 Pa	Effect of the purge chamber questionable	No purge chamber
200 - 500 Pa	Large purge chamber	10°
500 - 800 Pa	Small purge chamber	5°
> 800 Pa	Observe the purge air volume!	No purge chamber
> 1500 Pa	High differential pressure	Double seal airflow separation (depending on model)

(*) $\Delta p_{st} = p_{Outside\ air} - p_{Exhaust\ air}$

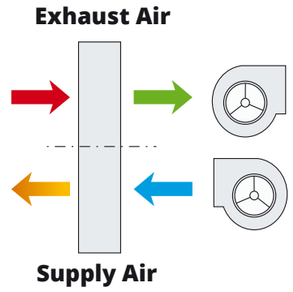
The arrangement of the fans allows conclusions to be drawn about the expected differential pressure. Klingenburg recommends using the design software to understand the effects of the pressures prevailing in the rotary heat exchanger in order to select the correct purge chamber, if necessary.



Exhaust air draw through
Supply air draw through

This arrangement should be preferred. The pressure potential of the outside air is expected to be higher than that of the exhaust air.

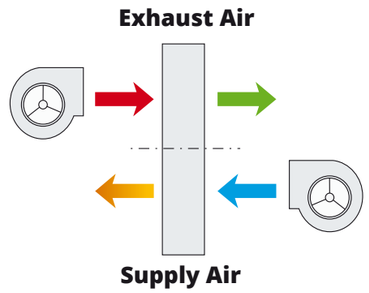
Purge chamber: 10°



Exhaust air draw through
Supply air blow through

The air volume flowing through the purge chamber increases due to the presumably very different pressure potentials.

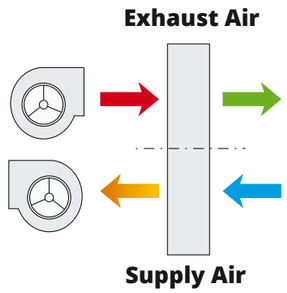
Purge chamber: 5°



Exhaust air blow through
Supply air blow through

The pressure potential of the outside air is expected to be higher than that of the exhaust air.

Purge chamber: 10°



Exhaust air blow through
Supply air draw through

An overflow of exhaust air into the outside air is probable. This arrangement should be selected when air recirculation is permitted.

Purge chamber: none

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