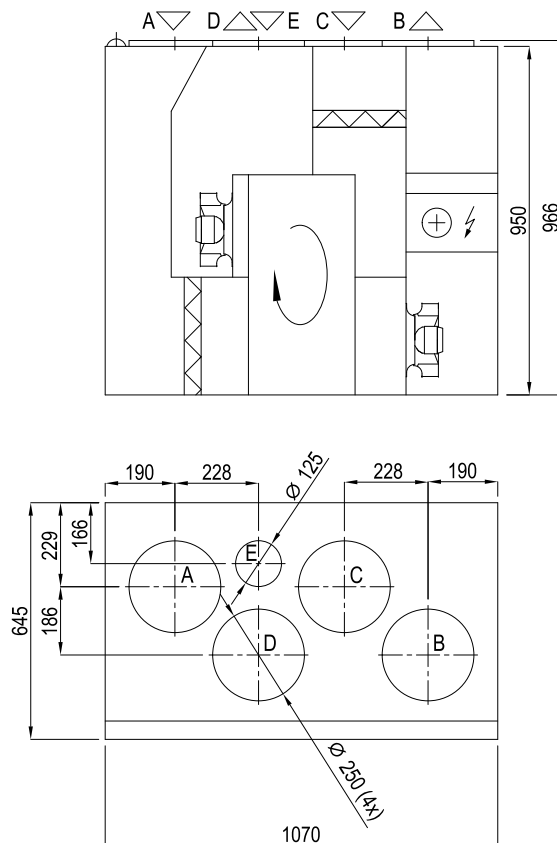


Date: 07/05/2021

Air handling unit model:

DOMEKT-R-500-V-R1-F7/M5-C6-L/A



A - outdoor intake

B - supply air

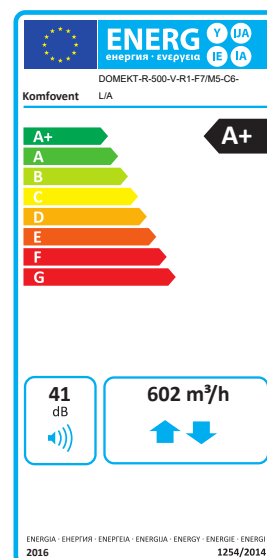
C - extract indoor

D - exhaust air

E - additional extraction connection (by-pass extraction without heat recovery)

TECHNICAL SPECIFICATION

Unit category		RVU
Unit type		BVU
Type of HRS		Rotary Heat Exchanger
Panel thickness	[mm]	50
Dimensions bxxhxl	[mm]	645×950×1070
Duct connection	[mm]	4×250 1×125
Filter dimensions bxxhxl	[mm]	540×260×46
Mass	[kg]	113
Max current	[A]	7.3
Supply voltage	[V]	1~ 230
Color		RAL 9003
Version		Vertical
Inspection side		Right



DOMEKT-R-500-V-R1-F7/M5-C6-L/A

Heater	Electric
Motor type	EC motor
Controller	C6
SPI	[W/(m³/h)] 0.21

INPUT DATA

Supply		
Nominal flow rate	[m³/h]	475
Nominal external pressure (ΔPs, ext.)	[Pa]	120
Exhaust		
Nominal flow rate	[m³/h]	475
Nominal external pressure (ΔPs, ext.)	[Pa]	120
Climate parameters		
Winter		
Outdoor temperature	[°C]	-24
Outdoor relative humidity	[%]	80
Set point temperature		
Winter	[°C]	20

CALCULATION DATA IN SPECIFIED WORKING POINT
Filter data

	Supply	Exhaust
Filter class(EN ISO 16890)	ePM1 55% (F7)	ePM10 50% (M5)
Pressure drop (clean filter)	[Pa] 39	23

Heat exchanger data

	Winter	
	Supply	Exhaust
Actual temp. efficiency	[%] 84.7	
Humidity efficiency	[%] 55.9	
Face velocity	[m/s] 1.6	1.6
Pressure drop	[Pa] 84	84
Inlet temperature	[°C] -24	21
Inlet rel. humidity	[%] 80	40
Outlet temperature	[°C] 14.1	-17.1
Outlet rel. humidity	[%] 36	95

Energy recovery

Sensible heat	[kW] 6.1
Latent heat	[kW] 1.3

DOMEKT-R-500-V-R1-F7/M5-C6-L/A

Total heat	[kW]	7.4
OACF		1.46

Electric heater data

		Winter
Capacity	[kW]	0.94
Outlet temperature	[°C]	20
Outlet rel. humidity	[%]	24.9
Max power	[kW]	1

Fans data

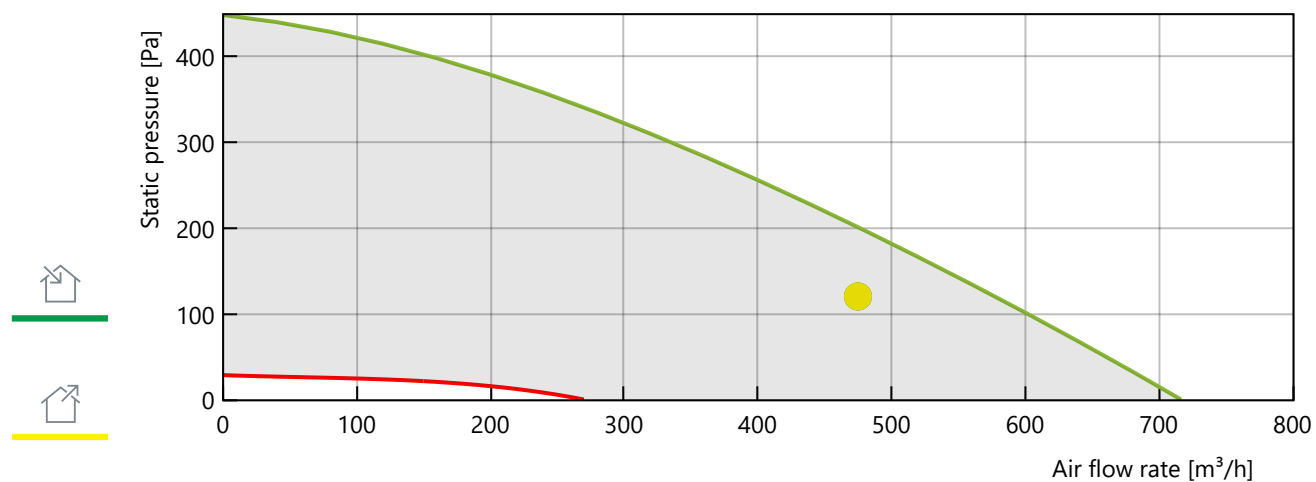
Input power	[W]	170	
Max current	[A]	1.4	
Nominal voltage	[V]	200..240	
Overall efficiency	[%]	50	
		Supply	Exhaust
Rotating speed	[RPM]	2180	2124
Running current	[A]	0.63	0.59
Static pressure	[Pa]	289	273
Usable power	[W]	78	73
Specific fan power	[kW/(m³/s)]	0.59	0.55

ACOUSTICS DATA

Frequency	[Hz]	63	125	250	500	1000	2000	4000	8000	dB(A)
Outdoor Lw	[dB]	53	52	54	55	52	48	42	36	56
Supply Lw	[dB]	60	60	62	63	61	55	51	45	65
Extract Lw	[dB]	52	51	53	54	51	47	42	35	56
Exhaust Lw	[dB]	59	60	61	62	60	55	51	45	64
Casing Lw	[dB]	54	52	50	41	38	33	24	19	45
Casing Lp 1 m	[dB]	51	49	46	37	35	29	21	15	41
Casing Lp 3 m	[dB]	46	44	37	29	29	21	14	9	35

DOMEKT-R-500-V-R1-F7/M5-C6-L/A

PLOT



Instructions

<https://www.komfovent.com/>

Domekt manual version: 21-03

Control manual version: 20-03