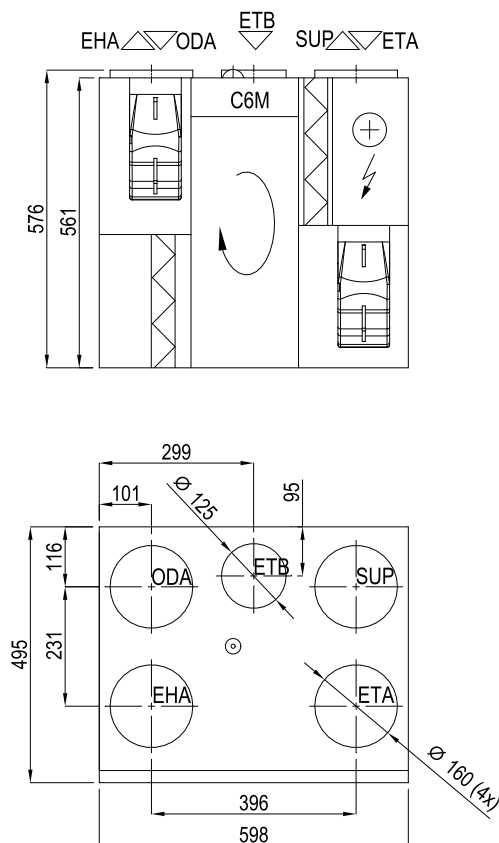


Date: 30.01.2024

Air handling unit model:

DOMEKT-R-400-V-R1-F7/M5-C6M-L/A



ODA - outdoor air

SUP - supply air

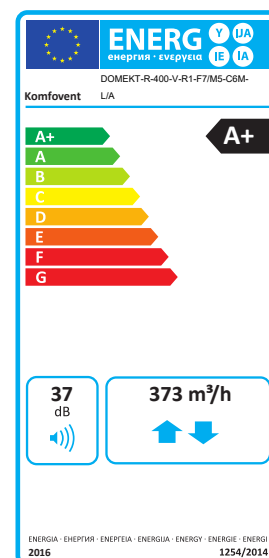
ETA - extract air

EHA - exhaust air

ETB - by-pass extraction without heat recovery

TECHNICAL SPECIFICATION

Unit category		RVU
Unit type		BVU
Type of HRS		Rotary Heat Exchanger
Heat exchanger type		Condensing
Panel thickness	[mm]	30
Dimensions b x h x l	[mm]	495×561×598
Duct connection	[mm]	4×160 1×125
Filter dimensions b x h x l	[mm]	428×231×46
Mass	[kg]	49
Max current	[A]	6,5
Supply voltage	[V]	1~ 230
Color		RAL 9003
Version		Vertical



DOMEKT-R-400-V-R1-F7/M5-C6M-L/A

Inspection side	Right
Heater	Electric
Motor type	EC motor
Controller	C6M
SPI	[W/(m³/h)] 0,30

INPUT DATA

Supply		
Nominal flow rate	[m³/h]	306
Nominal external pressure (ΔPs, ext.)	[Pa]	170
Exhaust		
Nominal flow rate	[m³/h]	306
Nominal external pressure (ΔPs, ext.)	[Pa]	170
Climate parameters		
Winter		
Outdoor temperature	[°C]	-25,0
Outdoor relative humidity	[%]	80,0
Summer		
Outdoor temperature	[°C]	27,0
Outdoor relative humidity	[%]	50,0
Set point temperature		
Winter	[°C]	21,0

CALCULATION DATA IN SPECIFIED WORKING POINT

AHU data		
SFP	[kW/(m³/s)]	1,89
SFP (STR 2.01.02 2016)	[W·h/m³]	0,53
Energy class of the building (STR 2.01.02 2016)	A+	

Filter data		
	Supply	Exhaust
Filter class(EN ISO 16890)	ePM1 60% (F7)	ePM10 50% (M5)
Pressure drop (clean filter)	[Pa] 26	14

Heat exchanger data				
	Winter		Summer	
	Supply	Exhaust	Supply	Exhaust
Actual temp. efficiency	[%] 85,0		85,0	
Humidity efficiency	[%] 56,3		0,0	
Face velocity	[m/s] 1,6	1,6	1,6	1,6

DOMEKT-R-400-V-R1-F7/M5-C6M-L/A

Pressure drop	[Pa]	83	83	83	83
Inlet temperature	[°C]	-25,0	21,0	27,0	20,0
Inlet rel. humidity	[%]	80	40	50	50
Outlet temperature	[°C]	14,1	-18,1	21,1	25,9
Outlet rel. humidity	[%]	36	95	71	35

Energy recovery

Sensible heat	[kW]	4,0	-0,6
Latent heat	[kW]	0,8	0,0
Total heat	[kW]	4,9	-0,6
OACF		1,15	1,15

Electric heater data

		Winter
Capacity	[kW]	0,71
Outlet temperature	[°C]	21,0
Outlet rel. humidity	[%]	23,5
Max power	[kW]	1,0

Fans data

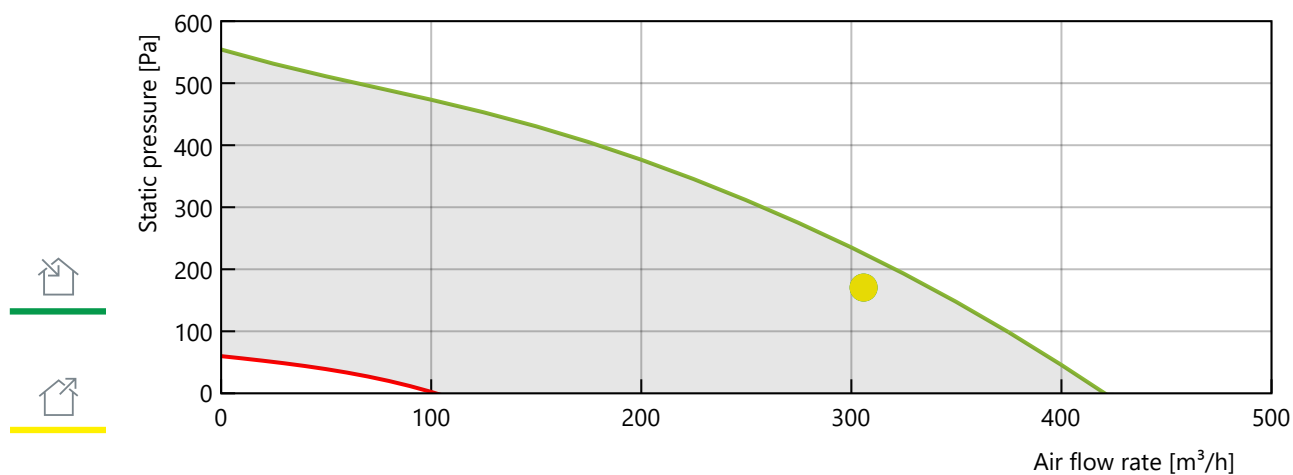
Input power	[W]	118,0	
Max current	[A]	1,0	
Nominal voltage	[V]	200..240	
Overall efficiency	[%]	44	
		Supply	Exhaust
Rotating speed	[RPM]	2524	2285
Running current	[A]	0,75	0,62
Static pressure	[Pa]	412	338
Usable power	[W]	88	73
Specific fan power	[kW/(m³/s)]	1,04	0,86

ACOUSTICS DATA

Frequency	[Hz]	63	125	250	500	1000	2000	4000	8000	dB(A)
Outdoor Lw	[dB]	62	59	56	56	54	55	52	48	61
Supply Lw	[dB]	72	75	73	72	68	67	65	62	75
Extract Lw	[dB]	59	58	54	54	52	53	50	45	59
Exhaust Lw	[dB]	69	73	70	69	66	66	63	61	73
Casing Lw	[dB]	54	51	45	37	35	32	25	20	42
Casing Lp 1 m	[dB]	51	48	41	33	31	28	21	17	38
Casing Lp 3 m	[dB]	46	43	32	25	25	21	15	10	32

DOMEKT-R-400-V-R1-F7/M5-C6M-L/A

PLOT



Instructions

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