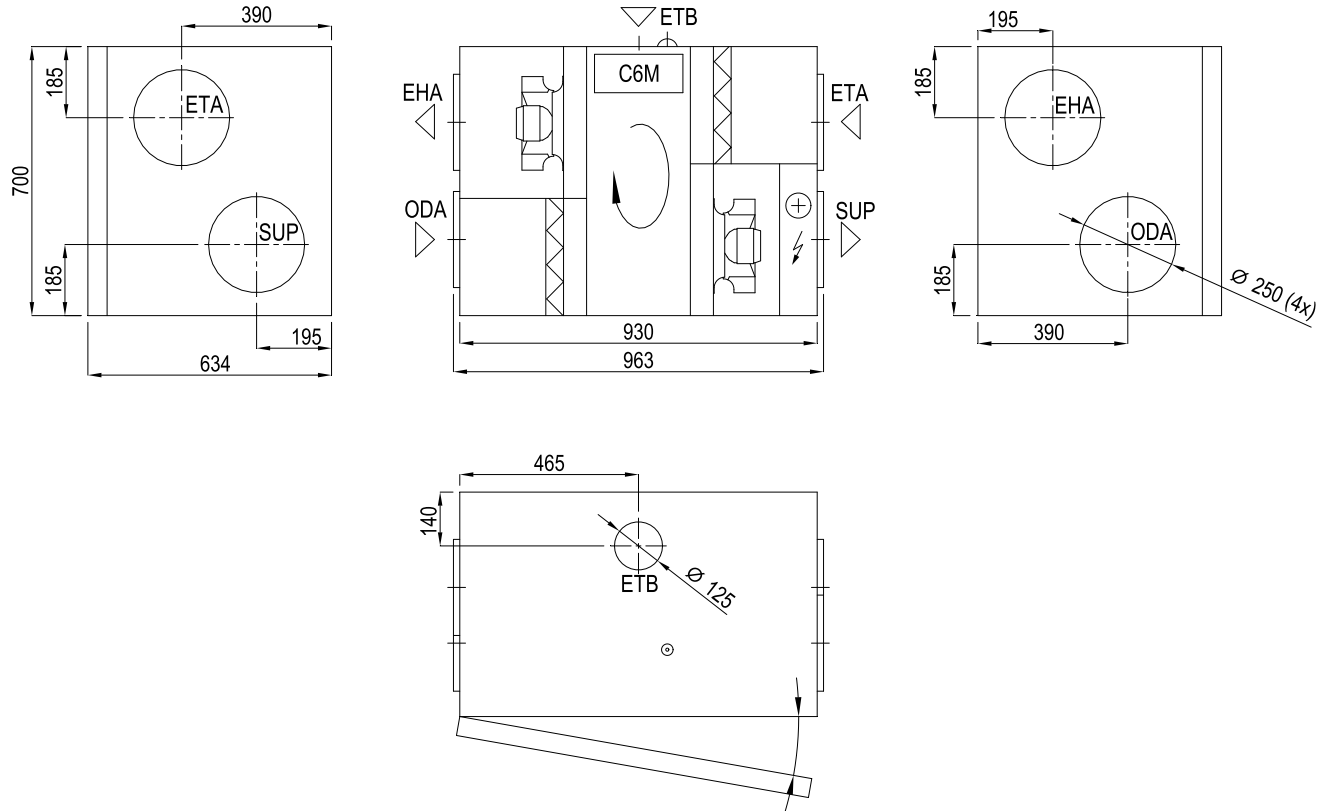


Date: 05.05.2023

Air handling unit model:

DOMEKT-R-700-H-R1-F7/M5-C6M-L/A



ODA - outdoor air

SUP - supply air

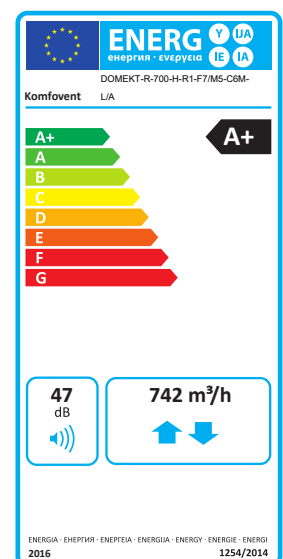
ETA - extract air

EHA - exhaust air

ETB - by-pass extraction without heat recovery

TECHNICAL SPECIFICATION

Unit category		RVU
Unit type		BVU
Type of HRS		Rotary Heat Exchanger
Panel thickness	[mm]	50
Dimensions bxxhxl	[mm]	634×700×930
Duct connection	[mm]	4×250 1×125
Filter dimensions bxxhxl	[mm]	540×260×46
Mass	[kg]	87
Max current	[A]	11,7
Supply voltage	[V]	1~ 230
Color		RAL 9003
Version		Horizontal
Inspection side		Right
Heater		Electric



DOMEKT-R-700-H-R1-F7/M5-C6M-L/A

Motor type	EC motor
Controller	C6M
SPI	[W/(m³/h)] 0,26

INPUT DATA

Supply		
Nominal flow rate	[m³/h]	522
Nominal external pressure (ΔPs, ext.)	[Pa]	300
Exhaust		
Nominal flow rate	[m³/h]	522
Nominal external pressure (ΔPs, ext.)	[Pa]	300
Climate parameters		
Winter		
Outdoor temperature	[°C]	-20,0
Outdoor relative humidity	[%]	90,0
Summer		
Outdoor temperature	[°C]	27,0
Outdoor relative humidity	[%]	40,0
Set point temperature		
Winter	[°C]	21,0

CALCULATION DATA IN SPECIFIED WORKING POINT

AHU data			
SFP	[kW/(m³/s)]	2,12	
Filter data			
		Supply	Exhaust
Filter class(EN ISO 16890)		ePM1 55% (F7)	ePM10 50% (M5)
Pressure drop (clean filter)	[Pa]	44	26
Heat exchanger data			
		Winter	
		Supply	Exhaust
Actual temp. efficiency	[%]	84,1	
Humidity efficiency	[%]	55,3	
Face velocity	[m/s]	1,7	1,7
Pressure drop	[Pa]	93	93
Inlet temperature	[°C]	-20,0	22,0
Inlet rel. humidity	[%]	90	40
Outlet temperature	[°C]	15,3	-13,3

DOMEKT-R-700-H-R1-F7/M5-C6M-L/A

Outlet rel. humidity	[%]	36	95	54	37
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Energy recovery

Sensible heat	[kW]	6,2	-0,9
Latent heat	[kW]	1,4	0,0
Total heat	[kW]	7,6	-0,9
OACF		1,14	1,14

Electric heater data

		Winter	
Capacity	[kW]	1,00	
Outlet temperature	[°C]	21,0	
Outlet rel. humidity	[%]	25,3	
Max power	[kW]	2,0	

Fans data

Input power	[W]	170,0
Max current	[A]	1,4
Nominal voltage	[V]	200..240
Overall efficiency	[%]	48

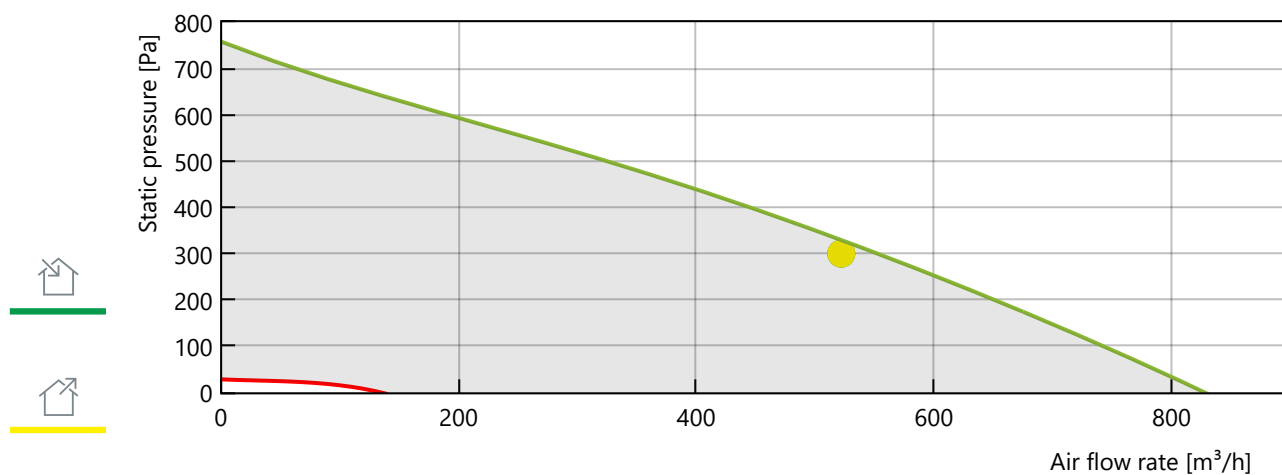
		Supply	Exhaust
Rotating speed	[RPM]	2852	2790
Running current	[A]	1,27	1,20
Static pressure	[Pa]	515	491
Usable power	[W]	158	150
Specific fan power	[kW/(m³/s)]	1,09	1,03

ACOUSTICS DATA

Frequency	[Hz]	63	125	250	500	1000	2000	4000	8000	dB(A)
Outdoor Lw	[dB]	61	61	66	66	61	56	51	44	66
Supply Lw	[dB]	68	71	75	75	71	66	61	57	76
Extract Lw	[dB]	60	60	66	65	60	56	51	44	66
Exhaust Lw	[dB]	67	70	74	74	70	65	61	56	75
Casing Lw	[dB]	50	52	58	54	45	28	24	22	54
Casing Lp 1 m	[dB]	47	48	54	50	41	24	20	18	50
Casing Lp 3 m	[dB]	42	44	45	42	35	17	14	12	42

DOMEKT-R-700-H-R1-F7/M5-C6M-L/A

PLOT



Instructions

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