

Project	LLU Pils
AHU	AHU4
Size	740 14470/13770 m³/h



Handing side R=Right, L=Left

Product	Product code	Quant
Support	EMMT-05-740-0-370	1
1 Fan section	ENF-740-00-1-00	1
Mode of delivery 11		
Connection kit	ENFT-01-740-00-01	1
Filter supply air	ELEF-740-F7	1
Class F7, Dim: 4x592x592 L=535, 4x592x287 L=535		
U-tube manometer	MIET-FB-01	1
Fan extract air		
Motor eff1,IE2 w. integrated frequency converter 7.50 kW, 4-pole		
2 Rotary heat exch.	EXA-740-00-NP	1
Mode of delivery N-H		
3 Fan section	ENF-740-00-1-01	1
Mode of delivery 44		
Connection kit	ENFT-01-740-00-02	1
Fan supply air		
Motor eff1,IE2 w. integrated frequency converter 7.50 kW, 4-pole		
Filter extract air	ELEF-740-F6	1
Class F6, Dim: 4x592x592 L=535, 4x592x287 L=535		
U-tube manometer	MIET-FB-01	1
4 Module section	EMM-740-10-00	1
Mode of delivery H		
Air heater water	ELEV-740-00	1
Connection gable outlet	EMMT-01-740-00	1
Connection frame outlet	EMMT-02-740-1	1
Coil fitting	MIE-CL-740-10-00	1
Damper	EMT-01-740	1
Damper	EMT-01-740	1
Control system Climatix	CSM-V316-R-CX	1
El. connection	ESEK-740-12-R-U-U-U-U	1
ECO Optimized energy control	STA-00	1
Fixed fan speed, 1- to 3-speeds	STB-01	1
Outdoor air damper actuator ON/OFF spring return	STC-01-2	1
Exhaust air damper actuator ON/OFF, spring return	STC-02-2	1
Water heating immersion detector	STD-02	1
Control valve incl. actuator for heating coil	STD-03-2V-15-0400	1
2-vägsventil		
Water cooling	STE-03	1



Envistar Flex

Material specification detailed

Project

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AHU

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Size

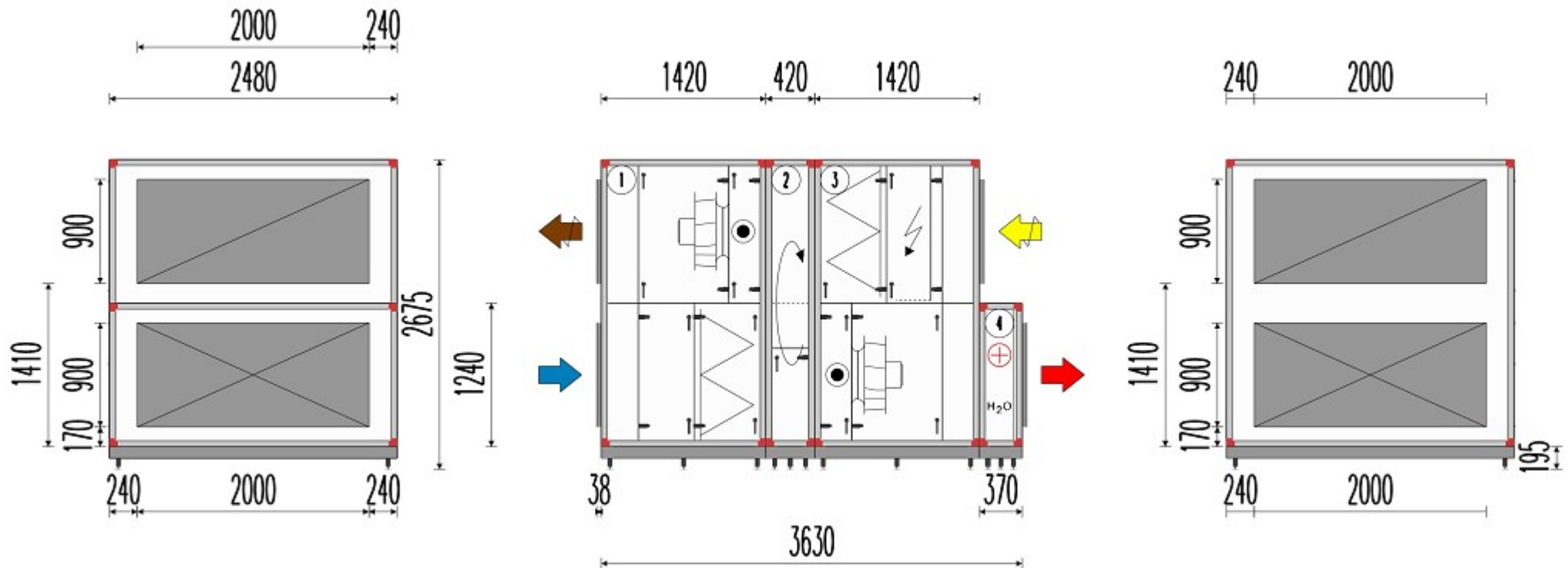
740 14470/13770 m³/h



Product	Product code	Quant
Control valve incl. actuator for cooling coil 3-vägsventil	STE-04-3V-32-1600	1
Modbus TCP/IP standard		1
Web server in text format by TCP/IP standard		1

Total for AHU

Width	2480 mm	1) 785 kg
Height	2675 mm	2) 496 kg
Length	3630 mm	3) 797 kg
Weight	2261 kg	4) 147 kg



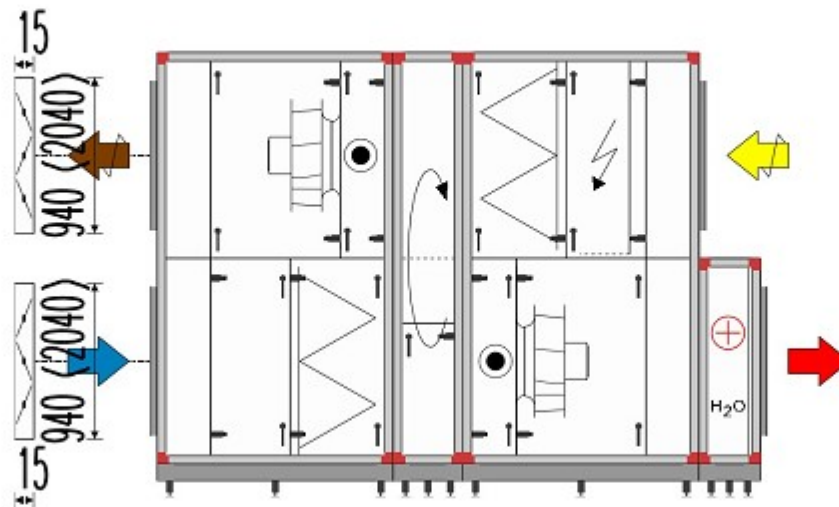
Note! Consider the required space needed to open inspection doors and for plumbing.
Access door with largest radius 770 mm is in module 1;3

Total for AHU

Width	2480 mm
Height	2675 mm
Length	3630 mm
Weight	2261 kg

Duct accessories

EMT-01 28 kg





Envistar Flex

Technical data

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The system's Specific Fan Power (SFP) calculation is based on clean filters. When using rotor heat recovery, the rotor cleaning air flow, and any pressure reducing damper is included.

Specific fan power

Output	Total for AHU	1.99	kW/m³/s
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Dimension and weight

Width	2,480	mm
Height	2,675	mm
Length	3,630	mm
Weight	2,261	kg

BASIC DATA

		Supply air	Extract air
Input	Flow	14,470	13,770 m³/h
	Cleaning air flow incl leakage		923 m³/h
Output	Cross sectional velocity	1.5	1.4 m/s
	Damper	3	2 Pa
	Filter F7 / F6	90	78 Pa
	Initial pressure drop	(50)	(38) Pa
	Final press. drop	(130)	(118) Pa
	Rotary heat exch.	139	133 Pa
	Air heater water	7	Pa
	Built-in losses	25	25 Pa
	Total internal pressure	264	238 Pa
	External pressure drop	400	400 Pa

Fans

		Supply air	Extract air
Output	Total pressure	664	638 Pa
	Fan rpm	1,118	1,110 r/m
	Fan efficiency static	74.8	74.5 %
	(Fan efficiency tot)	79.2	79.2 %
	Input power fan	3.57	3.50 kW
	Motor efficiency	83.2	83.0 %
	Total efficiency	62.2	61.9 %
	Fan power at dim press	4.30	4.22 kW
	Fan power clean filter	4.04	3.95 kW
	Motor output Power	7.50	7.50 kW
	Motor current at 400V, 3-fase	15.1	15.1 A
	Max rpm	1,390	1,390 r/m
	Capacity reserve	48	49 %
	Max. frequency	47	47 Hz
	Fan type	071C-F1-0750	071C-F1-0750
	K-factor for air flow measuring	7.30	7.30

Sound data (sound power)

Frequency band	63	125	250	500	1k	2k	4k	8k		Tota	
Supply air:										89	dB
To surroundings	74	74	66	55	50	45	35	27	dB	62	dB(A)
Outdoor air	71	73	74	72	67	58	50	41	dB	72	dB(A)
Supply air	78	81	84	82	79	75	67	63	dB	84	dB(A)
Extract air:										89	dB
To surroundings	74	74	66	55	50	44	35	27	dB	62	dB(A)
Extract air	72	73	74	72	67	57	50	41	dB	72	dB(A)
Exhaust air	78	82	85	83	81	76	70	66	dB	85	dB(A)
Total:											
To surroundings	77	77	69	58	53	48	38	30	dB	65	dB(A)

ROTARY HEAT EXCH.

	Rotor variant	NP	
Input	Air temperature in	-22.3	°C
	RH Outdoor Air	90	%
	Return air temp	22.0	°C
	RH Return Air	30	%
Output	Supply air temp. after exch.	13.7	°C
	Temperature efficiency dry	81.3	%
	Exhaust air temperature	-15.9	°C

AIR HEATER WATER

Input	Air temperature in	13.7	°C
	Requested air temp out	21.0	°C
	Liquid temp in	80.0	°C
	Liquid temp out requested	60.0	°C
	Frost protection concentration	35	%
	Frost protection	Ethylene glycol	
Output	Air temperature out	21.0	°C
	Air speed	1.7	m/s
	Liquid flow	0.28	l/s
	Pressure drop liquid	1.4	kPa
	Power variant	00	
	Heating power	35.4	kW
	Fin pitch	6.0	mm
	Tube connection	32	
	Primary side with 2-wayvalve		
	Liquid temp in	80.0	°C
	Liquid temp out	47.4	°C
	Liquid flow	0.28	l/s
	Primary side with 3-wayvalve		
	Liquid temp in	80.0	°C
	Liquid temp out	60.0	°C
	Liquid flow	0.46	l/s



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RECOMMENDED FUSE

AHU

40 AT 3x400 V