

Project	LLU Pils
AHU	AHU2
Size	740 12400/12200 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 21		
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-V		
3 Fan section	ENF-740-00-1-01	1
Mode of delivery 34		
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 V		
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-15-0190	1
2-vägsventil		
Water cooling	STE-03	1



Envistar Flex

Material specification detailed

Project

LLU Pils

AHU

AHU2

Size

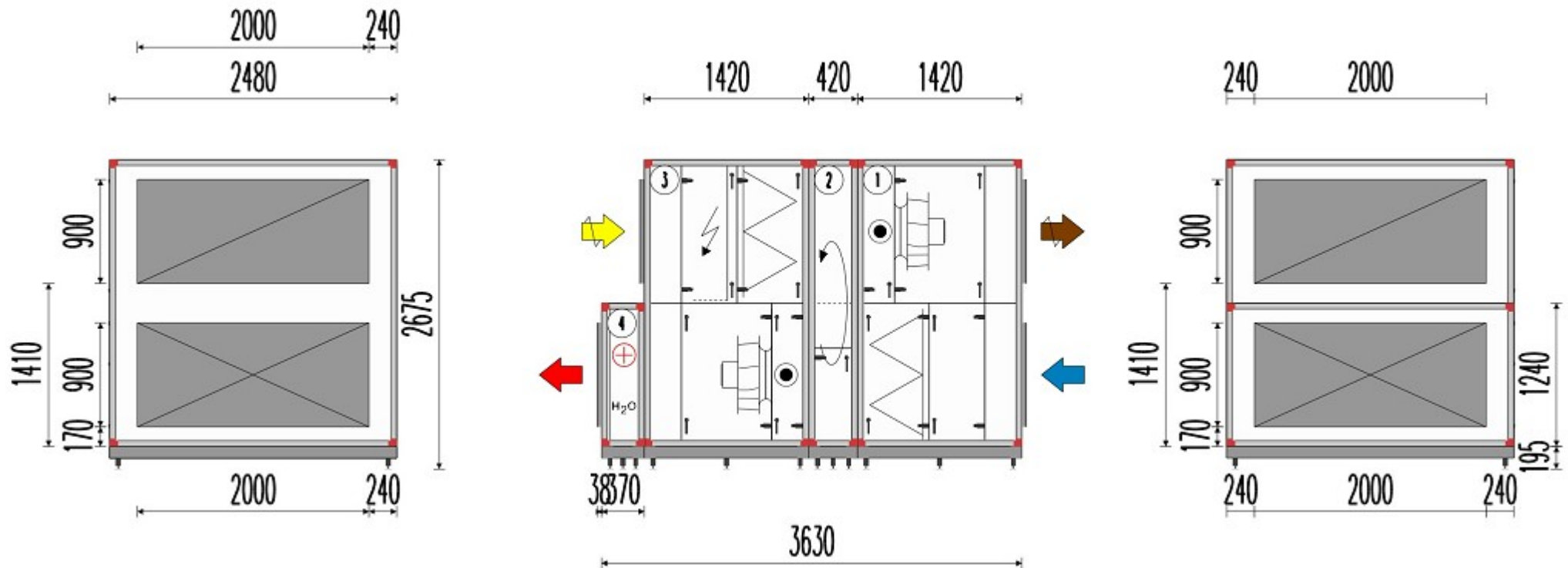
740 12400/12200 m³/h



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



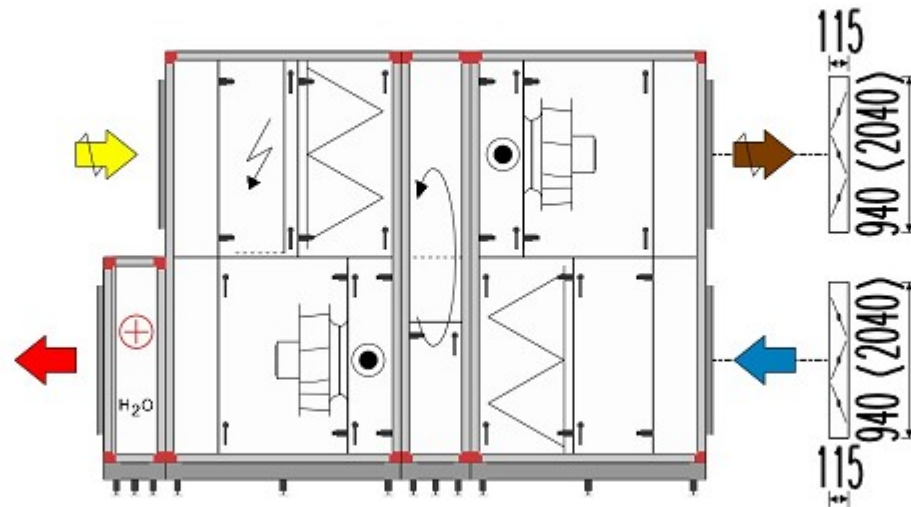
Note! Consider the required space needed to open inspection doors and for plumbing.
Access door with largest radius 770 mm is in module 1;3

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

Project	LLU Pils
AHU	AHU2
Size	740 12,400/12,200 m³/h



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	1.97	kW/m³/s
--------	---------------	------	---------

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	12,400	12,200 m³/h
	Cleaning air flow incl leakage		857 m³/h
Output	Cross sectional velocity	1.3	1.2 m/s
	Damper	2	2 Pa
	Filter F7 / F6	81	72 Pa
	Initial pressure drop	(41)	(32) Pa
	Final press. drop	(121)	(112) Pa
	Rotary heat exch.	120	118 Pa
	Air heater water	5	Pa
	Built-in losses	21	22 Pa
	Total internal pressure	229	214 Pa
	External pressure drop	400	400 Pa

Fans

		Supply air	Extract air
Output	Total pressure	629	614 Pa
	Fan rpm	1,044	1,052 r/m
	Fan efficiency static	74.8	74.9 %
	(Fan efficiency tot)	78.2	78.8 %
	Input power fan	2.90	2.97 kW
	Motor efficiency	81.0	81.3 %
	Total efficiency	60.6	60.9 %
	Fan power at dim press	3.58	3.66 kW
	Fan power clean filter	3.35	3.43 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	58	57 %
	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:										88	dB
To surroundings	72	73	64	54	48	43	34	25	dB	60	dB(A)
Outdoor air	69	72	72	71	65	56	49	39	dB	71	dB(A)
Supply air	76	80	82	81	77	73	66	61	dB	82	dB(A)
Extract air:										88	dB
To surroundings	73	73	64	54	49	43	34	25	dB	60	dB(A)
Extract air	71	72	72	71	66	56	49	39	dB	71	dB(A)
Exhaust air	77	81	83	82	80	75	69	64	dB	84	dB(A)
Total:											
To surroundings	76	76	67	57	52	46	37	28	dB	63	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.	14.9	°C
	Temperature efficiency dry	83.9	%
	Exhaust air temperature	-15.8	°C

AIR HEATER WATER

Input	Air temperature in	14.9	°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	1.4	m/s
	Liquid flow	0.18	l/s
	Pressure drop liquid	0.7	kPa
	Power variant	00	
	Heating power	25.5	kW
	Fin pitch	6.0	mm
	Tube connection	32	
	Primary side with 2-wayvalve		
	Liquid temp in	80.0	°C
	Liquid temp out	43.1	°C
	Liquid flow	0.18	l/s
	Primary side with 3-wayvalve		
	Liquid temp in	80.0	°C
	Liquid temp out	60.0	°C
	Liquid flow	0.33	l/s



Envistar Flex

Technical data

Project

LLU Pils

AHU

AHU2

Size

740 12,400/12,200 m³/h



RECOMMENDED FUSE

AHU

40 AT 3x400 V