

Handing side R=Right, L=Left

Product	Product code	Quant
Support	EMMT-05-480-3-3170	1
1 Fan section	ENF-480-00-1-00	1
Mode of delivery 11		
Connection kit	ENFT-01-480-00-01	1
Filter supply air	ELEF-480-F7	1
Class F7, Dim: 3x592x592 L=535, 3x592x287 L=535		
U-tube manometer	MIET-FB-01	1
Fan extract air		
Motor eff1,IE2 w. integrated frequency converter 4.00 kW, 4-pole		
2 Rotary heat exch.	EXA-480-00-NP	1
Mode of delivery N-H		
3 Fan section	ENF-480-00-1-00	1
Mode of delivery 44		
Connection kit	ENFT-01-480-00-02	1
Fan supply air		
Motor eff1,IE2 w. integrated frequency converter 4.00 kW, 4-pole		
Filter extract air	ELEF-480-F6	1
Class F6, Dim: 3x592x592 L=535, 3x592x287 L=535		
U-tube manometer	MIET-FB-01	1
4 Module section	EMM-480-10-00	1
Mode of delivery H		
Air heater water	ELEV-480-00	1
Connection gable outlet	EMMT-01-480-00	1
Connection frame outlet	EMMT-02-480-1	1
Coil fitting	MIE-CL-480-10-00	1
Damper	EMT-01-480	1
Damper	EMT-01-480	1
Control system Climatix	CSF-V311-R-CX	1
El. connection	ESEK-480-12-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

AHU9

Size

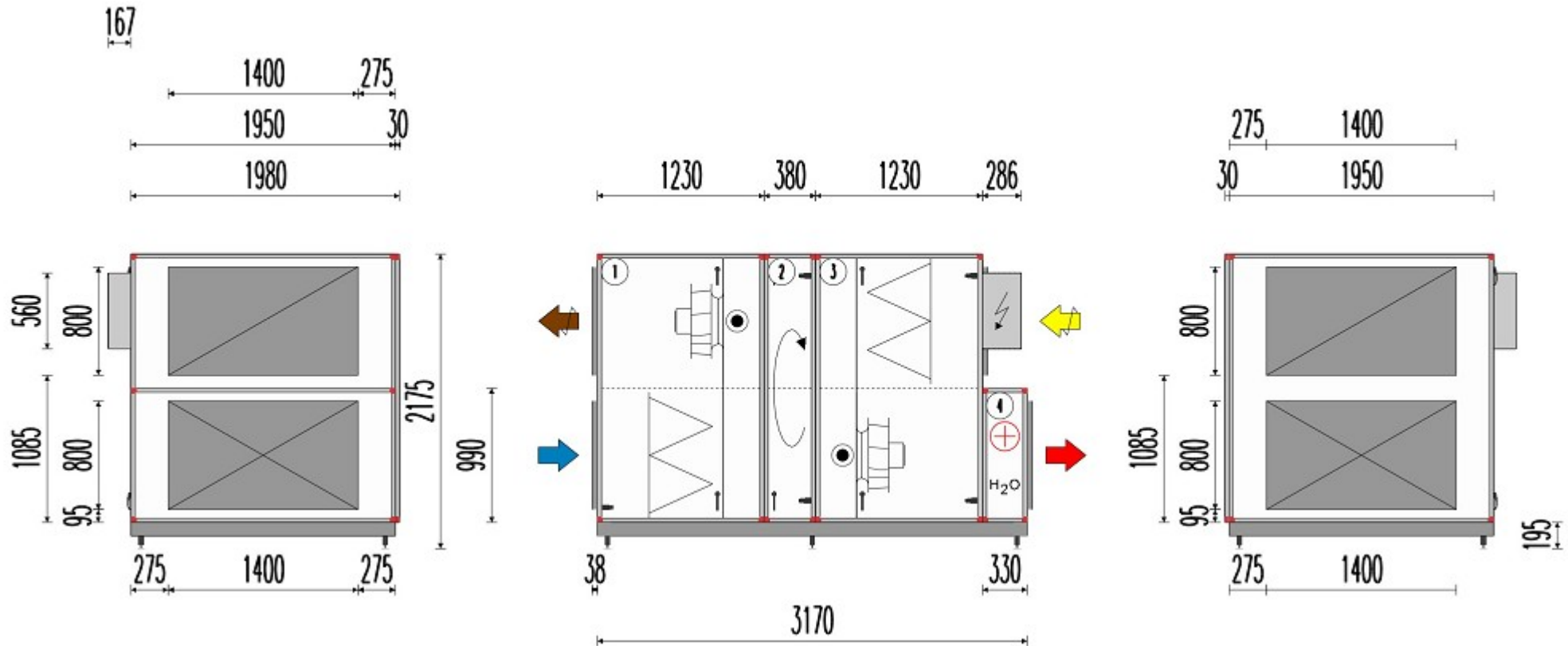
480 7750/7750 m³/h



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	1950/1980 mm	1) 449 kg
Height	2175 mm	2) 311 kg
Length	3170 mm	3) 449 kg
Weight	1353 kg	4) 94 kg



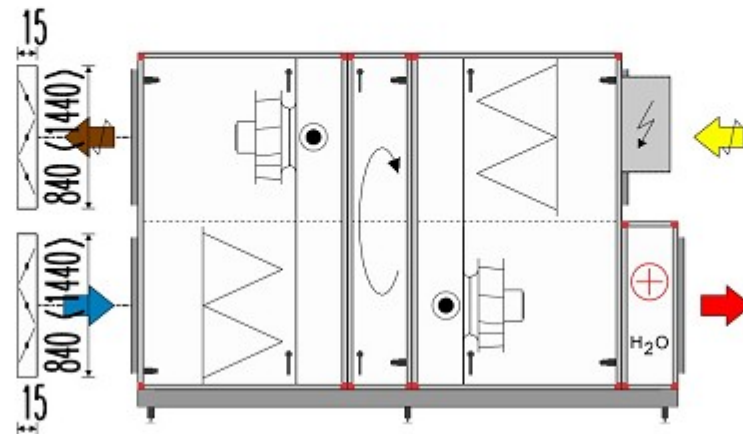
Note! Consider the required space needed to open inspection doors and for plumbing.
Access door with largest radius 920 mm is in module 1;3

Total for AHU

Width	1950/1980 mm
Height	2175 mm
Length	3170 mm
Weight	1353 kg

Duct accessories

EMT-01 18 kg





Envistar Flex

Technical data

Project	LLU Pils
AHU	AHU9
Size	480 7,750/7,750 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	1.81	kW/m³/s
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Dimension and weight

Width	1,950/1,980	mm
Height	2,175	mm
Length	3,170	mm
Weight	1,353	kg

BASIC DATA

		Supply air	Extract air
Input	Flow	7,750	7,750 m³/h
	Cleaning air flow incl leakage		603 m³/h
Output	Cross sectional velocity	1.2	1.2 m/s
	Damper	2	2 Pa
	Filter F7 / F6	72	65 Pa
	Initial pressure drop	(32)	(25) Pa
	Final press. drop	(112)	(105) Pa
	Rotary heat exch.	115	115 Pa
	Air heater water	5	Pa
	Built-in losses	17	19 Pa
	Total internal pressure	211	201 Pa
	External pressure drop	350	350 Pa

Fans

		Supply air	Extract air
Output	Total pressure	561	551 Pa
	Fan rpm	1,062	1,072 r/m
	Fan efficiency static	73.3	74.3 %
	(Fan efficiency tot)	75.7	77.1 %
	Input power fan	1.65	1.72 kW
	Motor efficiency	80.2	80.6 %
	Total efficiency	58.8	59.9 %
	Fan power at dim press	2.06	2.14 kW
	Fan power clean filter	1.91	1.99 kW
	Motor output Power	4.00	4.00 kW
	Motor current at 400V, 3-fase	8.4	8.4 A
	Max rpm	1,355	1,355 r/m
	Capacity reserve	52	50 %
	Max. frequency	47	47 Hz
	Fan type	063C-F1-0400	063C-F1-0400
	K-factor for air flow measuring	9.40	9.40



Envistar Flex

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Project

LLU Pils

AHU

AHU9

Size

480 7,750/7,750 m³/h



Sound data (sound power)

Frequency band	63	125	250	500	1k	2k	4k	8k		Tota	
Supply air:										85	dB
To surroundings	70	70	62	51	46	41	31	23	dB	58	dB(A)
Outdoor air	67	69	70	68	63	54	46	37	dB	68	dB(A)
Supply air	74	77	80	78	75	71	63	59	dB	80	dB(A)
Extract air:										85	dB
To surroundings	70	70	62	51	46	41	31	23	dB	58	dB(A)
Extract air	68	69	70	68	63	54	46	37	dB	68	dB(A)
Exhaust air	74	78	81	79	77	73	66	62	dB	81	dB(A)
Total:											
To surroundings	73	73	65	54	49	44	34	26	dB	61	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.	15.3	°C
	Temperature efficiency dry	84.9	%
	Exhaust air temperature	-15.6	°C

AIR HEATER WATER

Input	Air temperature in	15.3	°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	1.5	m/s
	Liquid flow	0.12	l/s
	Pressure drop liquid	0.4	kPa
	Power variant	00	
	Heating power	14.8	kW
	Fin pitch	6.0	mm
	Tube connection	25	
	Primary side with 2-wayvalve		
	Liquid temp in	80.0	°C
	Liquid temp out	46.9	°C
	Liquid flow	0.12	l/s
	Primary side with 3-wayvalve		
	Liquid temp in	80.0	°C
	Liquid temp out	60.0	°C
	Liquid flow	0.19	l/s



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RECOMMENDED FUSE

AHU

25 AT 3x400 V