

Hanging 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 21		
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-V		
3 Fan section	ENF-480-00-1-00	1
Mode of delivery 34		
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 V		
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

AHU1

Size

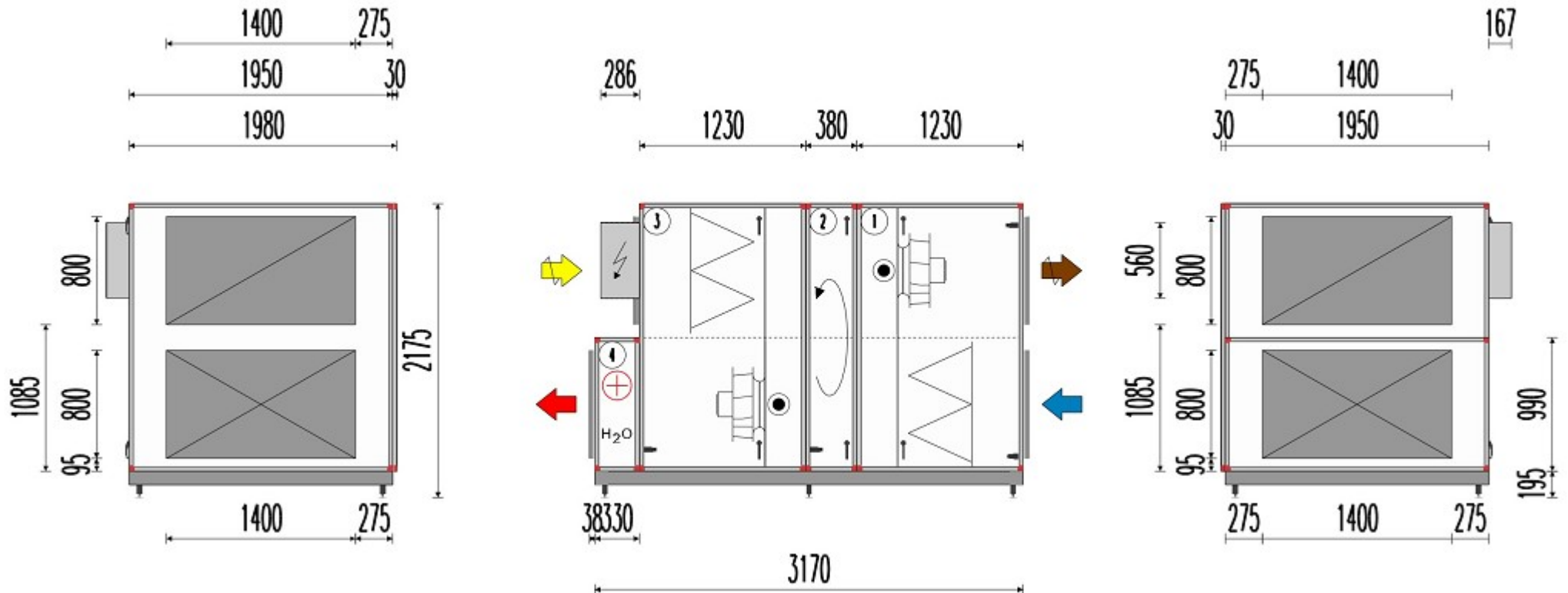
480 6670/6270 m³/h



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



Envistar Flex *Dimension drawing*

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AHU	AHU1
Size	480 6670/6270 m³/h

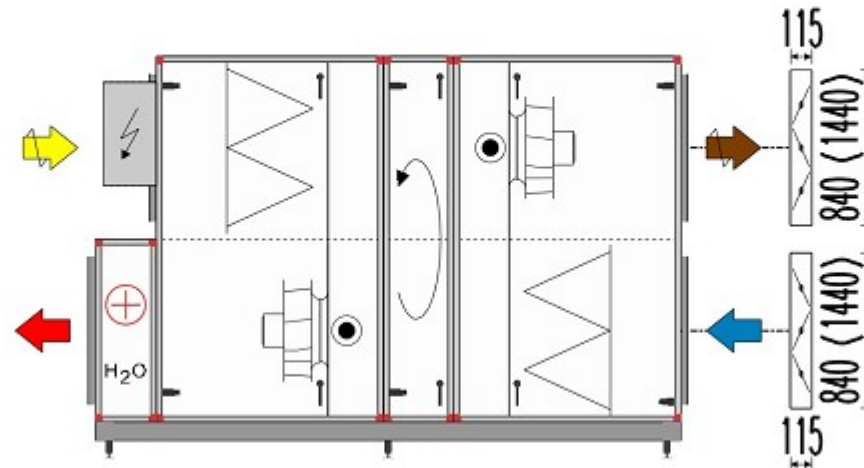


Total for AHU

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	AHU1
Size	480 6,670/6,270 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	1.75	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	6,670	6,270 m³/h
	Cleaning air flow incl leakage		541 m³/h
Output	Cross sectional velocity	1.0	1.0 m/s
	Damper	1	1 Pa
	Filter F7 / F6	66	59 Pa
	Initial pressure drop	(26)	(19) Pa
	Final press. drop	(106)	(99) Pa
	Rotary heat exch.	99	93 Pa
	Air heater water	4	Pa
	Built-in losses	15	15 Pa
	Total internal pressure	185	168 Pa
	External pressure drop	350	350 Pa

Fans

		Supply air	Extract air
Output	Total pressure	535	518 Pa
	Fan rpm	1,014	1,004 r/m
	Fan efficiency static	71.5	72.1 %
	(Fan efficiency tot)	73.2	74.0 %
	Input power fan	1.39	1.36 kW
	Motor efficiency	78.5	78.3 %
	Total efficiency	56.1	56.4 %
	Fan power at dim press	1.77	1.74 kW
	Fan power clean filter	1.64	1.61 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	58	59 %
	Max. frequency	47	47 Hz
	Fan type	063C-F1-0400	063C-F1-0400
	K-factor for air flow measuring	9.40	9.40

Sound data (sound power)

Frequency band	63	125	250	500	1k	2k	4k	8k		Tota	
Supply air:										84	dB
To surroundings	69	70	61	50	45	40	30	22	dB	57	dB(A)
Outdoor air	66	69	69	67	62	53	45	36	dB	67	dB(A)
Supply air	73	77	79	77	74	70	62	58	dB	79	dB(A)
Extract air:										84	dB
To surroundings	69	69	61	50	45	39	30	21	dB	57	dB(A)
Extract air	67	68	69	67	62	52	45	35	dB	67	dB(A)
Exhaust air	73	77	80	78	76	71	65	60	dB	80	dB(A)
Total:											
To surroundings	72	73	64	53	48	43	33	25	dB	60	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.	14.7	°C
	Temperature efficiency dry	83.6	%
	Exhaust air temperature	-17.4	°C

AIR HEATER WATER

Input	Air temperature in	14.7	°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	1.3	m/s
	Liquid flow	0.11	l/s
	Pressure drop liquid	0.4	kPa
	Power variant	00	
	Heating power	14.1	kW
	Fin pitch	6.0	mm
	Tube connection	25	
	Primary side with 2-wayvalve		
	Liquid temp in	80.0	°C
	Liquid temp out	47.6	°C
	Liquid flow	0.11	l/s
	Primary side with 3-wayvalve		
	Liquid temp in	80.0	°C
	Liquid temp out	60.0	°C
	Liquid flow	0.18	l/s



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AHU

AHU1

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RECOMMENDED FUSE

AHU

25 AT 3x400 V