

Project	LLU Pils
AHU	AHU10
Size	600 11040/11040 m³/h



Handing side R=Right, L=Left

Product	Product code	Quant
Support	EMMT-05-600-3-3170	1
1 Fan section	ENF-600-00-1-00	1
Mode of delivery 21		
Connection kit	ENFT-01-600-00-01	1
Filter supply air	ELEF-600-F7	1
Class F7, Dim: 3x592x592 L=535, 4x592x287 L=535		
U-tube manometer	MIET-FB-01	1
Fan extract air		
Motor eff1,IE2 w. integrated frequency converter 5.50 kW, 4-pole		
2 Rotary heat exch.	EXA-600-00-NP	1
Mode of delivery N-V		
3 Fan section	ENF-600-00-1-00	1
Mode of delivery 34		
Connection kit	ENFT-01-600-00-02	1
Fan supply air		
Motor eff1,IE2 w. integrated frequency converter 5.50 kW, 4-pole		
Filter extract air	ELEF-600-F6	1
Class F6, Dim: 3x592x592 L=535, 4x592x287 L=535		
U-tube manometer	MIET-FB-01	1
4 Module section	EMM-600-10-00	1
Mode of delivery V		
Air heater water	ELEV-600-00	1
Connection gable outlet	EMMT-01-600-00	1
Connection frame outlet	EMMT-02-600-1	1
Coil fitting	MIE-CL-600-10-00	1
Damper	EMT-01-600	1
Damper	EMT-01-600	1
Control system Climatix	CSF-V316-R-CX	1
El. connection	ESEK-600-12-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

AHU10

Size

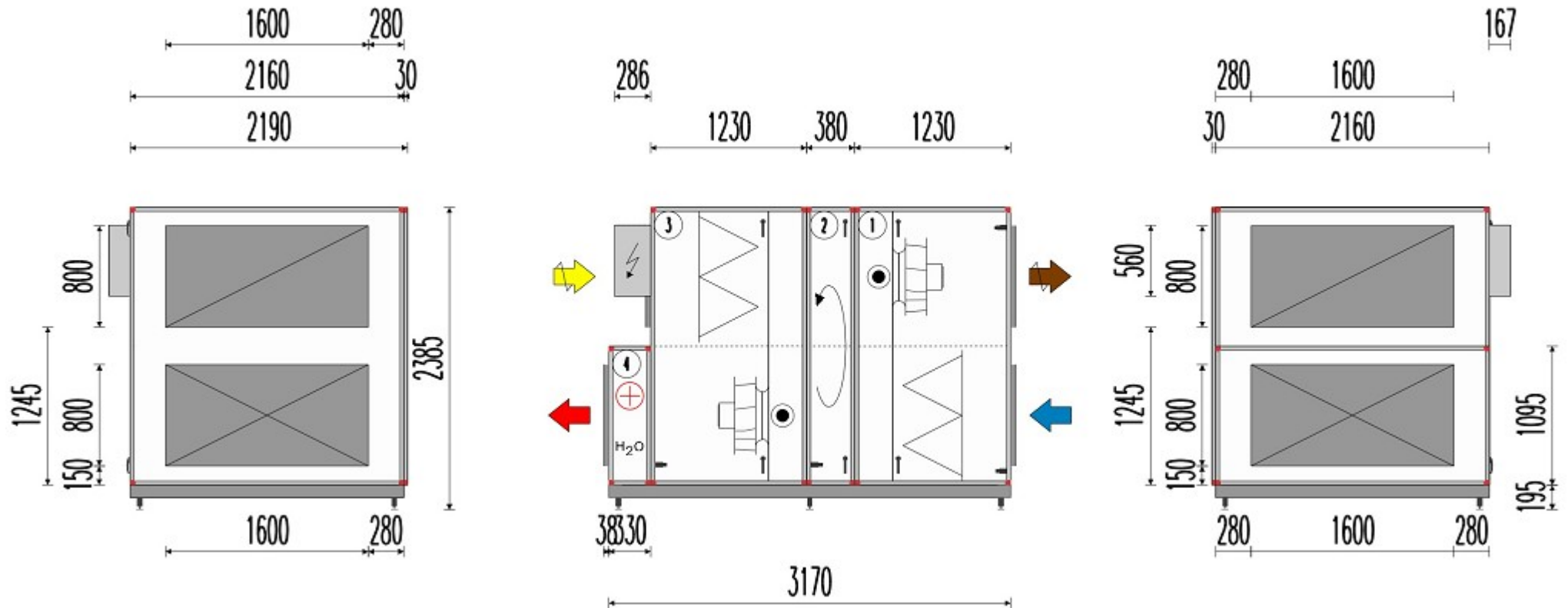
600 11040/11040 m³/h



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	2160/2190 mm	1) 535 kg
Height	2385 mm	2) 358 kg
Length	3170 mm	3) 535 kg
Weight	1595 kg	4) 112 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

Project

LLU Pils

AHU

AHU10

Size

600 11040/11040 m³/h

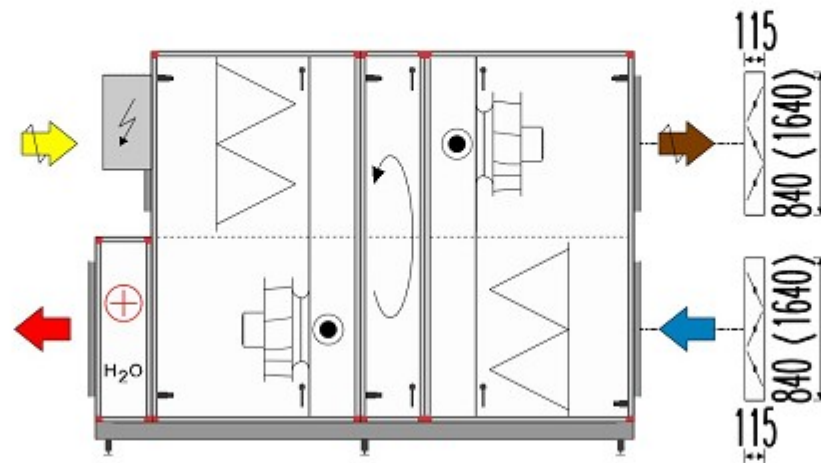


Total for AHU

Width	2160/2190 mm
Height	2385 mm
Length	3170 mm
Weight	1595 kg

Duct accessories

EMT-01 22 kg





Envistar Flex

Technical data

Project	LLU Pils
AHU	AHU10
Size	600 11,040/11,040 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	2.04	kW/m³/s
--------	---------------	------	---------

Dimension and weight

Width	2,160/2,190	mm
Height	2,385	mm
Length	3,170	mm
Weight	1,595	kg

BASIC DATA

		Supply air	Extract air
Input	Flow	11,040	11,040 m³/h
	Cleaning air flow incl leakage		773 m³/h
Output	Cross sectional velocity	1.4	1.4 m/s
	Damper	3	3 Pa
	Filter F7 / F6	84	76 Pa
	Initial pressure drop	(44)	(36) Pa
	Final press. drop	(124)	(116) Pa
	Rotary heat exch.	131	131 Pa
	Air heater water	7	Pa
	Built-in losses	24	27 Pa
	Total internal pressure	249	237 Pa
	External pressure drop	400	400 Pa

Fans

		Supply air	Extract air
Output	Total pressure	649	637 Pa
	Fan rpm	1,232	1,256 r/m
	Fan efficiency static	74.8	74.4 %
	(Fan efficiency tot)	79.1	79.3 %
	Input power fan	2.66	2.81 kW
	Motor efficiency	81.7	82.2 %
	Total efficiency	61.1	61.2 %
	Fan power at dim press	3.26	3.42 kW
	Fan power clean filter	3.06	3.20 kW
	Motor output Power	5.50	5.50 kW
	Motor current at 400V, 3-fase	11.1	11.1 A
	Max rpm	1,545	1,545 r/m
	Capacity reserve	49	46 %
	Max. frequency	53	53 Hz
	Fan type	063C-F1-0550	063C-F1-0550
	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:										88	dB
To surroundings	72	73	65	54	49	44	34	26	dB	61	dB(A)
Outdoor air	69	72	73	71	66	57	49	40	dB	71	dB(A)
Supply air	76	80	83	81	78	74	66	62	dB	83	dB(A)
Extract air:										89	dB
To surroundings	73	74	65	55	50	44	35	26	dB	61	dB(A)
Extract air	71	73	73	72	67	57	50	40	dB	72	dB(A)
Exhaust air	77	82	84	83	81	76	70	65	dB	85	dB(A)
Total:											
To surroundings	76	77	68	58	53	47	38	29	dB	64	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.	14.8	°C
	Temperature efficiency dry	83.8	%
	Exhaust air temperature	-15.1	°C

AIR HEATER WATER

Input	Air temperature in	14.8	°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	0.17	l/s
	Pressure drop liquid	0.7	kPa
	Power variant	00	
	Heating power	22.9	kW
	Fin pitch	6.0	mm
	Tube connection	25	
	Primary side with 2-wayvalve		
	Liquid temp in	80.0	°C
	Liquid temp out	45.6	°C
	Liquid flow	0.17	l/s
	Primary side with 3-wayvalve		
	Liquid temp in	80.0	°C
	Liquid temp out	60.0	°C
	Liquid flow	0.30	l/s



Envistar Flex

Technical data

Project

LLU Pils

AHU

AHU10

Size

600 11,040/11,040 m³/h



RECOMMENDED FUSE

AHU

32 AT 3x400 V