

Handing side R=Right, L=Left

Product	Product code	Quant
Support	EMMT-05-600-1-1230	1
Support	EMMT-05-600-1-1560	1
1 Fan section	ENF-600-00-1-00	1
Mode of delivery 11		
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 Cooling unit EcoCooler with cooling recovery	ACR-600-00-2V-0-40-HP-N-H	1
Integrated speed-controlled cooling unit with cooling recovery		
3 Fan section	ENF-600-00-1-00	1
Mode of delivery 44		
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 H		
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-U-U-U-R-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		



Envistar Flex

Material specification detailed

Project

LLU Pils

AHU

AHU8 Aula

Size

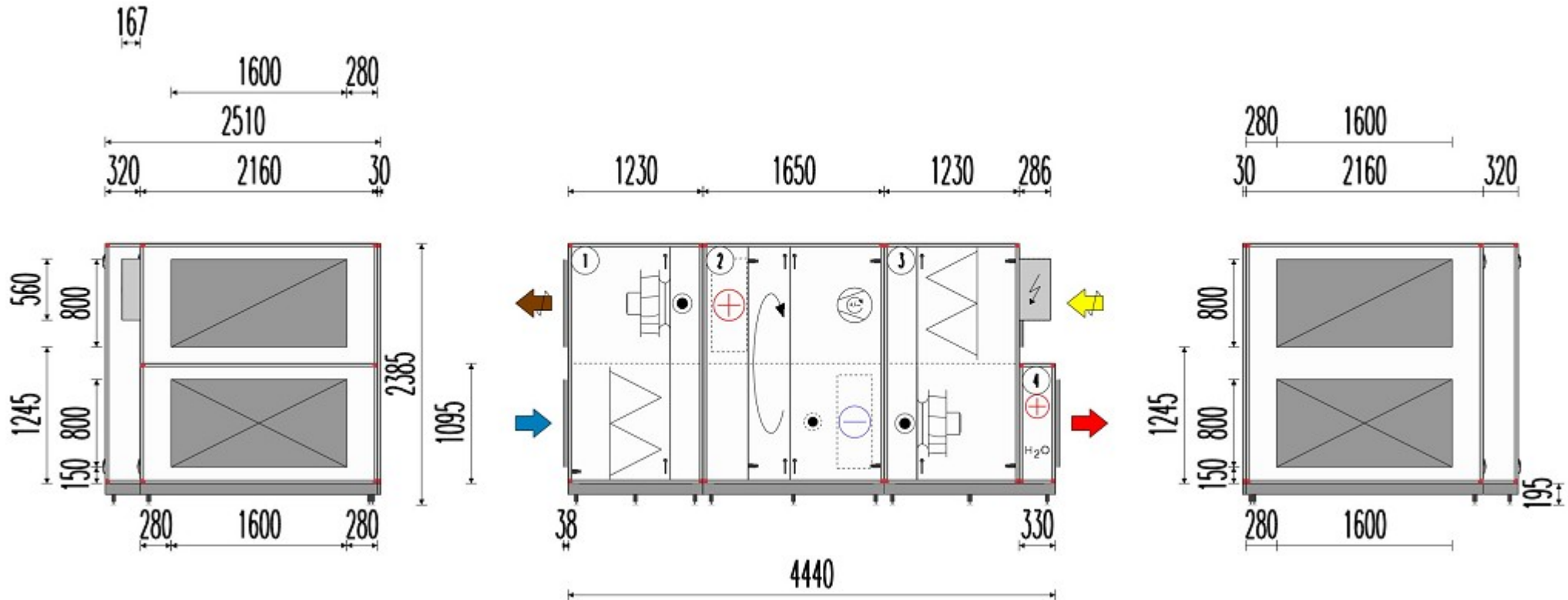
600-2V 12000/12000 m³/h



Product	Product code	Quant
Integrated cooling unit EcoCooler with cooling recovery	STE-V2	1
Modbus TCP/IP standard		1
Web server in text format by TCP/IP standard		1

Total for AHU

Width	2160/2510 mm	1) 535 kg
Height	2385 mm	2) 1129 kg
Length	4440 mm	3) 535 kg
Weight	2381 kg	4) 112 kg



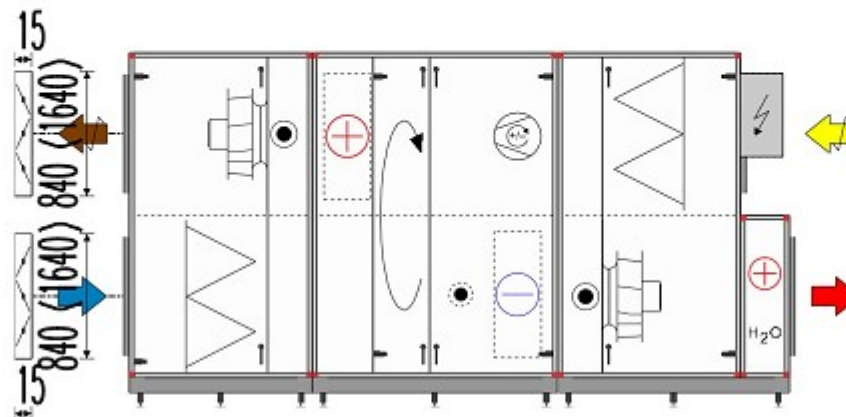
Note! Consider the required space needed to open inspection doors and for plumbing. Service space in front of cooler may not be less than 1000 mm.
Access door with largest radius 920 mm is in module 1;3

Total for AHU

Width	2160/2510 mm
Height	2385 mm
Length	4440 mm
Weight	2381 kg

Duct accessories

EMT-01 22 kg





Envistar Flex

Technical data

Project	LLU Pils
AHU	AHU8 Aula
Size	600-2V 12,000/12,000 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	2.00	kW/m³/s
--------	---------------	------	---------

Dimension and weight

Width	2,160/2,510	mm
Height	2,385	mm
Length	4,440	mm
Weight	2,381	kg

BASIC DATA

		Supply air	Extract air
Input	Flow	12,000	12,000 m³/h
	Cleaning air flow incl leakage		813 m³/h
Output	Cross sectional velocity	1.5	1.5 m/s
	Damper	4	4 Pa
	Filter F7 / F6	90	81 Pa
	Initial pressure drop	(50)	(41) Pa
	Final press. drop	(130)	(121) Pa
	Rotary heat exch.	154	154 Pa
	Cooler	48	59 Pa
	Air heater water	8	Pa
	Built-in losses	27	30 Pa
	Total internal pressure	331	328 Pa
	External pressure drop	300	300 Pa

Fans

		Supply air	Extract air
Output	Total pressure	631	628 Pa
	Fan rpm	1,261	1,295 r/m
	Fan efficiency static	74.2	73.3 %
	(Fan efficiency tot)	79.3	79.1 %
	Input power fan	2.83	3.05 kW
	Motor efficiency	82.3	83.0 %
	Total efficiency	61.1	60.9 %
	Fan power at dim press	3.45	3.68 kW
	Fan power clean filter	3.23	3.45 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	46	41 %
	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:										89	dB
To surroundings	73	74	65	55	50	44	35	26	dB	61	dB(A)
Outdoor air	69	72	71	69	64	54	47	37	dB	69	dB(A)
Supply air	77	81	83	82	79	74	67	62	dB	84	dB(A)
Extract air:										89	dB
To surroundings	73	75	66	56	54	56	53	36	dB	64	dB(A)
Extract air	70	73	73	70	71	70	71	50	dB	77	dB(A)
Exhaust air	77	82	85	83	81	77	71	66	dB	85	dB(A)
Total:											
To surroundings	76	78	69	59	55	56	53	36	dB	66	dB(A)

ROTARY HEAT EXCH.

	Rotor variant	HP	
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.	14.5	°C
	Temperature efficiency dry	83.1	%
	Relative humidity supply air	34.9	%
	Specific humidity supply air	3.6	g/kg
	Enthalpy efficiency	80.3	%
	Exhaust air temperature	-14.8	°C

COOLING UNIT ECOCOOLER WITH COOLING

Output	Power variant	2V	
	Stepless control		
	No. compressors	2	st
	Refrigerant R407C circuit 1	7.0	kg
	Refrigerant R407C circuit 2	8.6	kg
	Max operating current	54.0	A
Summer			
Input	Outdoor air temperature summer	27.0	°C
	RH outdoor air summer	70	%
	Supply air temp. summer	18.0	°C
	Return air temp summer	24.0	°C
	Change of humidity in room	1	g/kg
Output	Supply air temp after cooling coil	17.2	°C
	Supply air temp after fan	18.0	°C
	Max cooling power	97.7	kW
	Cooling power used	80.1	kW
	Available internal cooling load	24.0	kW
	Cooling factor	5.4	
	Evaporation water	27.0	l/h



Envistar Flex

Technical data

Project

LLU Pils

AHU

AHU8 Aula

Size

600-2V 12,000/12,000 m³/h



AIR HEATER WATER

Input	Air temperature in	14.5	°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	%
Output	Frost protection	Ethylene glycol	
	Air temperature out	21.0	°C
	Air speed	1.8	m/s
	Liquid flow	0.21	l/s
	Pressure drop liquid	1.0	kPa
	Power variant	00	
	Heating power	26.2	kW
	Fin pitch	6.0	mm
	Tube connection	25	
	Primary side with 2-wayvalve		
	Liquid temp in	80.0	°C
	Liquid temp out	47.0	°C
	Liquid flow	0.21	l/s
	Primary side with 3-wayvalve		
	Liquid temp in	80.0	°C
	Liquid temp out	60.0	°C
	Liquid flow	0.34	l/s

RECOMMENDED FUSE

AHU	32 AT 3x400 V
Cooler	63 AT 3x400 V