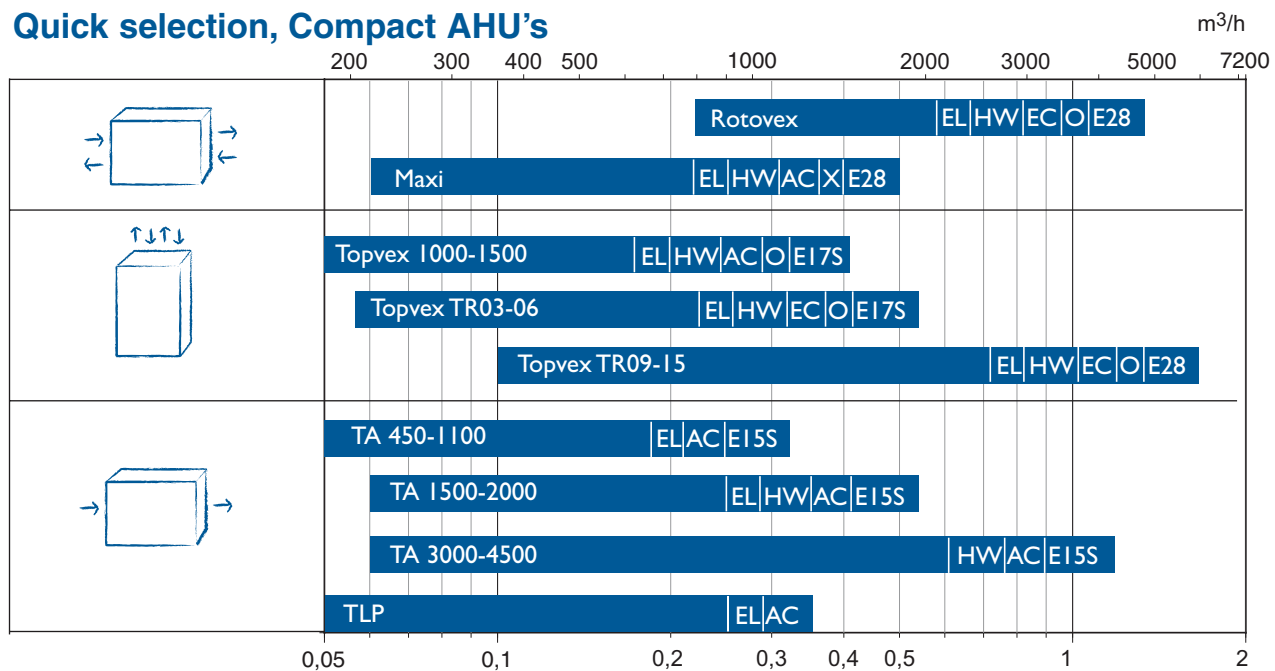


Quick selection, Compact AHU's



EL = Electrical heater O = Rotating exchanger E15S = Systemair controller (15 in/outputs) m³/s
 HW = Water heater AC = Asynchronous fan motors E17S = Systemair controller (17 in/outputs)
 X = Crossflow exchanger EC = Electronical cummutated fan motors E28 = Systemair controller (28 in/outputs)

Control system, Compact AHU's

S = standard settings
 P = possible settings
 C = choose when ordering
 A = accessories

TA Topvex Topvex TR 09,12 15
 Maxi Rotovex

		TA	Topvex	Topvex TR 09,12 15	Maxi	Rotovex
Temperature control	Extract air	-	P	S	S	S
	Supply air	S	S	P	P	P
	Supply air with outdoor compensation	-	P	p	P	p
	Room control	-	-	P	P	P
	Outdoor temp. changing between Supply/Extract air and Room control	-	-	P	P	P
Airflow control	Week timer, two separate running periods	S	S	S	S	S
Fan control	Transformer	S	S	-	S	-
	Stepless voltage control	-	S*	-	-	-
	Airflow control, CAV	-	-	C	-	C
	Pressure control, VAV	-	-	C	-	C
	Outdoor compensated airflow	-	-	P	P	P
Heat exchanger	Cross flow	-	-	-	S	-
	By-pass damper, stepless	-	-	-	A**	-
	Rotating, on/off	-	S	-	-	-
	Rotating, stepless	-	-	S	-	S
Heater	Hotwater	C***	C	C	C	C
	Electrical	C***	C	C	C	C
Cooler	0...10VDC signal to control a cold water coil	S	S****	S****	S****	S
	24VAC (1, 2 or 3-stage binary) to control a DX cooler	-	-	P****	-	P
Free cooling	Wall mounted outdoor sensor and room temp. sensor necessary	-	-	P	P****	P
Cool recovering		-	P	P	P****	P
Demand ventilation, CO2	2-step, CO2 sensor with a potential free switch necessary	P	P	P	P	P
	Stepless, CO2 sensor with 0...10VDC output signal necessary	-	-	P	-	P
Pump control	Heating, 24VAC output signal	-	-	P	P	P
	Cooling, 24VAC output signal	-	-	P	P	P
Exchanger efficiency	85	-	-	P	P	P
Extended running		S	S	S	S	S
Week schedule	Changing between Normal run, Reduced run or Off.	S	S	S	S	S
Damper control	Fresh/Exhaust air	S	S	S	S	S
Alarm	Alarm messages	S	S	S	S	S
	High and low priority	-	-	S	S	S
	Sum alarm, 24VAC output signal	S	S	S	S	S
Communication	Exoline, Modbus via RS 485	A	A	S	S	S
	LON, Exoline via TCP/IP	A	A	C	A	C

* Only Topvex TR03, 04 and 06
 ** MAXI 1100 have the By-pass damper built-in as standard
 *** TA 450-1100 EL, 1500-2000 EL or HW and 3000-4500 HW
 **** By-pass damper is necessary
 ***** Accessory duct sensor TG-KH/PT1000 to replace the built in supply air sensor is necessary

Supply air units

TLP



- Low noise level
- Speed and heat controllable
- Supply air unit with heater
- Easily removable inspection cover
- Compact

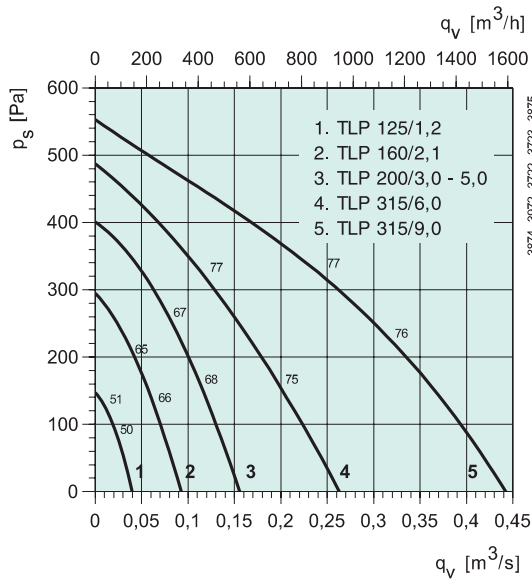
A compact unit consisting of a fan and heater in galvanised sheet steel, and an EU4 filter. The casing is insulated inside with 50 mm of mineral wool. Rubber sealed sleeve couplings. Neoprene sealing strips and toggle locks.

Note that the fan must always be connected to 230 V. Fan run-on is not normally required. (Lowest air velocity 1.5 m/s). Max output air temperature 40°C. The fan may be adjusted by either a transformer or a thyristor.

The heating element is most effectively controlled by a power regulator, pulser and duct sensor.

The filter should be checked regularly and replaced at least twice a year.

TLP		125/1.2	160/2.1	200/3.0	200/5.0	315/6.0	315/9.0
Voltage/frequency	V/50 Hz	230	230	400	400	400	400
Phase	~	1	1	2	2	2	3
Output	kW	1.2	2.1	3.0	5.0	6.0	9.0
Current	A	5.22	9.13	7.5	12.5	15.0	13.2
Max temp transported air	°C	40	40	40	40	40	40
Temp control		Pulser	Pulser	Pulser	Pulser	Pulser	TTC 2000
Min air flow	m ³ /h	70	110	170	170	415	415
Sound pressure level at 3 m	dB(A)	26	34	39	39	48	49
Connection duct	ø mm	125	160	200	200	315	315
Weight	kg	31	33	40	40	44	54
Fan type		K 125M	K 160M	K 200M	K 200M	KD 315M	KD 315L
Voltage/frequency	V/50 Hz	230	230	230	230	230	230
Phase	~	1	1	1	1	1	1
Power	W	29	61	106	106	252	372
Current	A	0.17	0.27	0.47	0.47	1.12	1.62
r.p.m.	min ⁻¹	2483	2499	2551	2551	2573	2595
Speed control, five step	Transformer	RE 1.5	RE 1.5	RE 1.5	RE 1.5	RE 1.5	RE 3
Speed control, five step high/low	Transformer	REU 1.5	REU 1.5	REU 1.5	REU 1.5	REU 1.5	REU 3
Speed control, stepless	Thyristor	REE 1	REE 1	REE 1	REE 1	REE 2	REE 2



TLP 125/1.2

	Hz	Mid-frequency band, Hz								
		Tot	63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	dB(A)	51	30	48	47	37	41	38	32	20
L _{WA} Outlet	dB(A)	60	39	54	56	53	46	45	35	24
L _{WA} Surrounding	dB(A)	33	7	23	31	27	19	16	4	2

Measuring point: q_v = 0,02 m³/s, P_s = 95 Pa

TLP 315/9.0

	Hz	Mid-frequency band, Hz								
		Tot	63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	dB(A)	77	59	70	72	69	70	67	65	61
L _{WA} Outlet	dB(A)	81	45	66	69	74	77	74	69	62
L _{WA} Surrounding	dB(A)	56	35	45	52	53	46	38	34	32

Measuring point: q_v = 0,25 m³/s, P_s = 316 Pa

TLP 160/2.1

	Hz	Mid-frequency band, Hz								
		Tot	63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	dB(A)	65	39	53	63	49	54	53	45	32
L _{WA} Outlet	dB(A)	61	23	44	53	54	55	56	46	35
L _{WA} Surrounding	dB(A)	41	15	32	40	21	26	21	7	0

Measuring point: q_v = 0,05 m³/s, P_s = 179 Pa

TLP 200/3.0-5.0

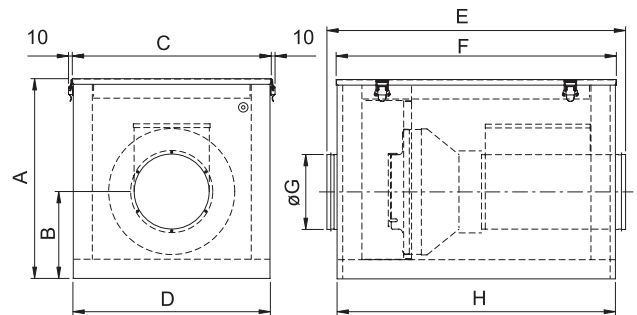
	Hz	Mid-frequency band, Hz								
		Tot	63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	dB(A)	67	41	56	59	56	62	61	55	41
L _{WA} Outlet	dB(A)	72	44	55	64	62	66	68	60	46
L _{WA} Surrounding	dB(A)	46	16	31	43	41	36	30	22	8

Measuring point: q_v = 0,09 m³/s, P_s = 228 Pa

TLP 315/6.0

	Hz	Mid-frequency band, Hz								
		Tot	63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	dB(A)	77	57	68	72	68	71	67	63	60
L _{WA} Outlet	dB(A)	82	56	76	75	76	76	74	68	61
L _{WA} Surrounding	dB(A)	55	31	42	50	51	45	36	32	24

Measuring point: q_v = 0,13 m³/s, P_s = 299 Pa



	A	B	C	D	E	F	øG	H
TLP 125/1.2	436	211	459	465	786	745	125	740
TLP 160/2.1	436	211	459	465	786	745	160	740
TLP 200/3.0-5.0	531	231	529	525	794	745	200	740
TLP 315/6.0	531	231	529	525	798	745	315	740
TLP 315/9.0	551	231	549	545	948	895	315	890

Supply air units

TA 450-4500



Control panel SCP

- Supply air units
- Low overall height
- Complete with controls and adjustment equipment
- Speed-controllable

TA is a series of air-handling units designed for ventilating petrol stations, schools, shops, offices and other smaller premises. The units have low overall height and are easy to install in existing premises.

The units are delivered complete with control system, heating battery and filters. The TA EL has an electric re-heater, whilst the TA HW uses a hot-water battery for re-heating. Speed-controllable, high efficiency plug fans make service and cleaning easy.

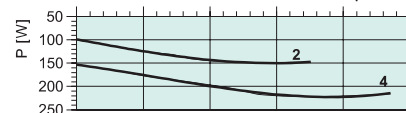
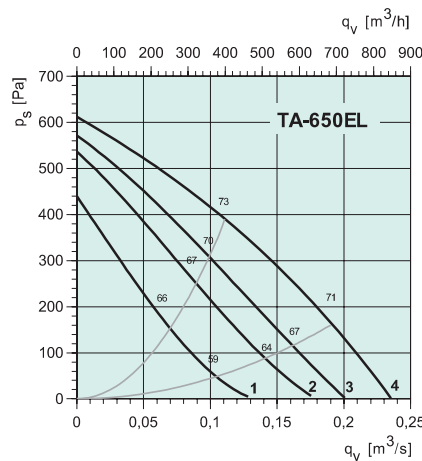
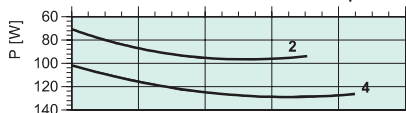
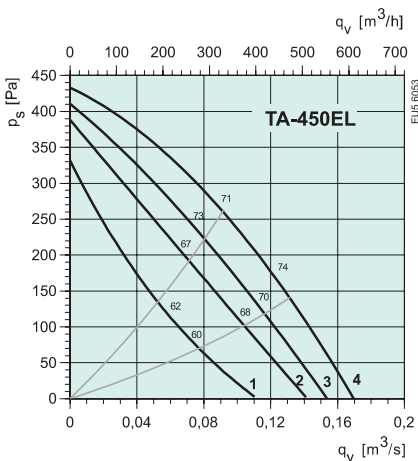
The double skin casing is insulated with 50 mm mineral wool to minimize sound to the environment. The units are controlled from a user-friendly control panel that can be mounted on the wall. TA is tested according to Eurovent EN 1886.

Accessories page 323

TA-		450EL	650EL	1100EL	1500EL	1500HW
Voltage/Frequency	V/50 Hz	230/400	400	400	400	230
Phase	~	1/3	3	3	3	1
Input power, motors	W	130	220	325	548	573
Input power, heater battery	kW	3/3/6	8,3	13,3	20,3	- *
Fuse	A	16	16	25	35	10
Filter, supply air		EU5	EU5	EU5	EU5	EU5

TA-		2000EL	2000HW	3000HW	4500HW
Voltage/Frequency	V/50 Hz	400	400	400	400
Phase	~	3	3	3	3
Input power, motors	W	775	673	1084	1880
Input power, heater battery	kW	33,3	- *	- *	- *
Fuse	A	63	10	10	10
Filter, supply air		EU5	EU5	EU5	EU5

* See separate brochure "Specification data" on www.systemair.com, in the online catalogue



TA-450EL

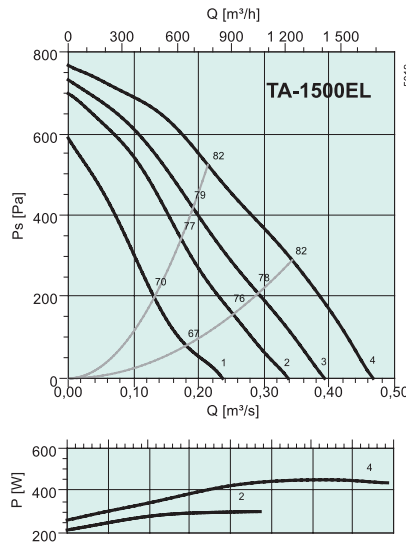
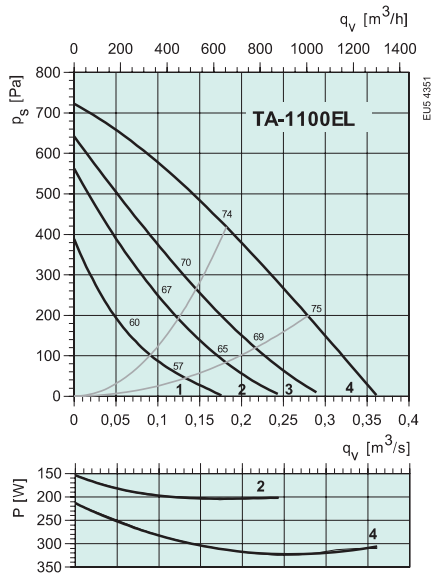
	Octave band, Hz	Tot								
		63	125	250	500	1k	2k	4k	8k	
L _{WA} Inlet	dB(A)	59	49	55	52	54	40	35	27	32
L _{WA} Outlet	dB(A)	74	49	58	62	73	63	62	56	40
L _{WA} Surrounding	dB(A)	51	24	37	41	9	44	40	37	23

Measuring point: $q_v = 0,13 \text{ m}^3/\text{s}$, $p_s = 154 \text{ Pa}$

TA-650EL

	Octave band, Hz	Tot								
		63	125	250	500	1k	2k	4k	8k	
L _{WA} Inlet	dB(A)	63	44	61	58	54	44	47	44	38
L _{WA} Outlet	dB(A)	73	49	60	67	70	58	61	58	53
L _{WA} Surrounding	dB(A)	51	26	42	45	49	32	29	25	17

Measuring point: $q_v = 0,11 \text{ m}^3/\text{s}$, $p_s = 383 \text{ Pa}$



TA-1100EL

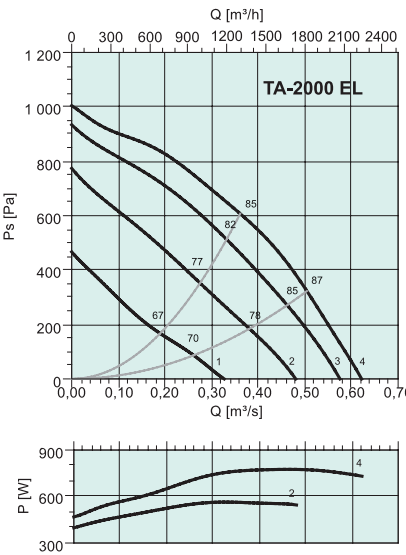
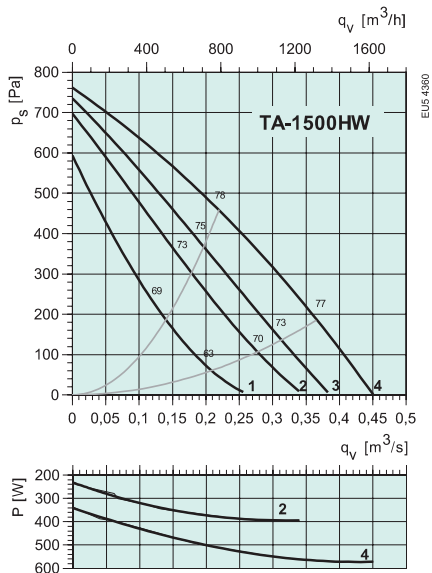
		Octave band, Hz								
		Tot	63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	dB(A)	64	45	62	58	53	45	47	45	37
L _{WA} Outlet	dB(A)	74	49	62	68	70	60	63	61	56
L _{WA} Surrounding	dB(A)	49	23	41	45	46	32	34	29	19

Measuring point: $q_v = 0,18 \text{ m}^3/\text{s}$, $p_s = 421 \text{ Pa}$

TA-1500EL

		Octave band, Hz								
		Tot	63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	dB(A)	72	53	70	63	57	53	49	54	53
L _{WA} Outlet	dB(A)	82	57	72	74	78	72	72	71	64
L _{WA} Surrounding	dB(A)	67	39	60	60	60	56	57	57	55

Measuring point: $q_v = 0,21 \text{ m}^3/\text{s}$, $p_s = 523 \text{ Pa}$



TA-1500HW

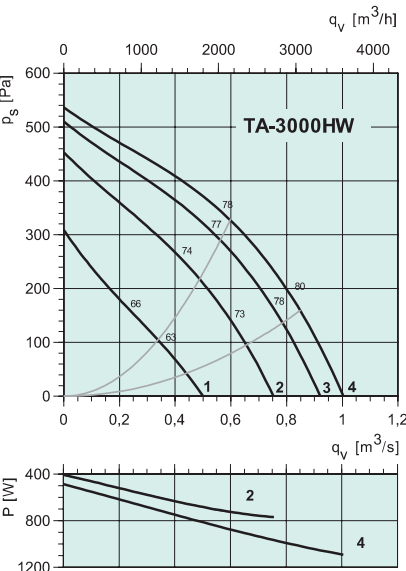
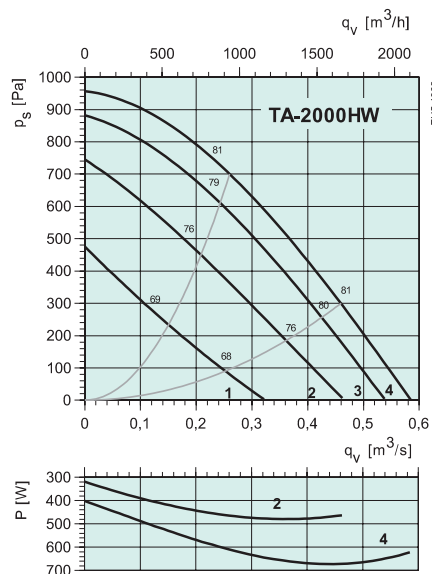
		Octave band, Hz								
		Tot	63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	dB(A)	72	55	70	65	59	55	54	60	54
L _{WA} Outlet	dB(A)	78	56	70	71	73	66	67	65	59
L _{WA} Surrounding	dB(A)	67	39	60	60	60	56	57	57	55

Measuring point: $q_v = 0,22 \text{ m}^3/\text{s}$, $p_s = 456 \text{ Pa}$

TA-2000EL

		Octave band, Hz								
		Tot	63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	dB(A)	70	51	67	67	60	56	50	53	50
L _{WA} Outlet	dB(A)	85	57	70	81	77	75	75	74	70
L _{WA} Surrounding	dB(A)	65	37	57	63	54	49	52	54	51

Measuring point: $q_v = 0,36 \text{ m}^3/\text{s}$, $p_s = 607 \text{ Pa}$



TA-2000HW

		Octave band, Hz								
		Tot	63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	dB(A)	74	55	68	71	59	56	57	61	58
L _{WA} Outlet	dB(A)	81	55	70	78	72	70	67	68	62
L _{WA} Surrounding	dB(A)	64	36	51	63	50	38	37	39	32

Measuring point: $q_v = 0,23 \text{ m}^3/\text{s}$, $p_s = 752 \text{ Pa}$

TA-3000HW

		Octave band, Hz								
		Tot	63	125	250	500	1k	2k	4k	8k
L _{WA} Inlet	dB(A)	72	56	71	65	57	51	51	56	54
L _{WA} Outlet	dB(A)	78	56	71	73	73	70	66	64	55
L _{WA} Surrounding	dB(A)	64	41	57	62	53	46	52	50	46

Measuring point: $q_v = 0,57 \text{ m}^3/\text{s}$, $p_s = 340 \text{ Pa}$

Supply air units



T 120 p. 463



CWK p. 475



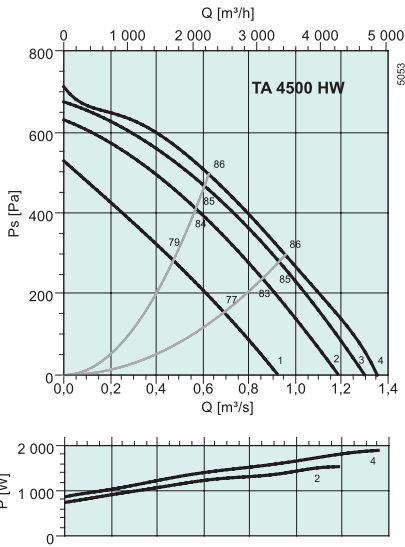
LDC p. 469



PGK p. 481



LDR p. 478



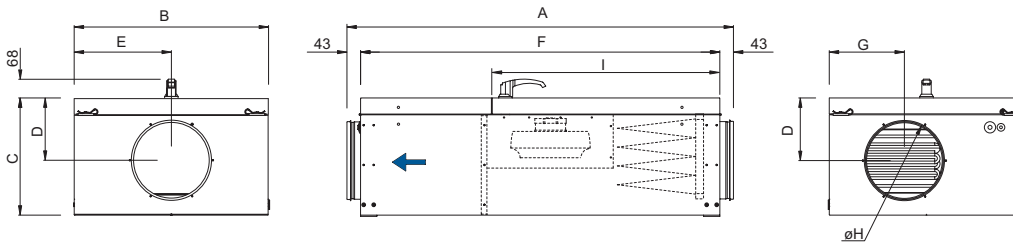
TA-4500HW

Octave band, Hz

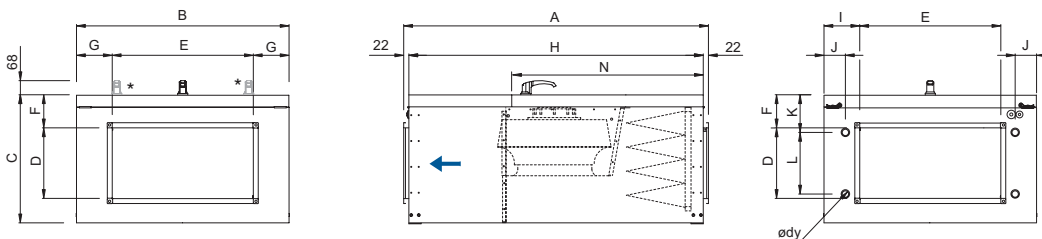
	Tot	63	125	250	500	1k	2k	4k	8k	
L _{wA} Inlet	dB(A)	77	55	73	69	70	68	64	63	53
L _{wA} Outlet	dB(A)	86	60	82	80	79	76	72	71	63
L _{wA} Surrounding	dB(A)	73	45	70	69	58	51	50	53	52

Measuring point: $q_v = 0,63 \text{ m}^3/\text{s}$, $p_s = 495 \text{ Pa}$

Dimensions



	A	B	C	D	E	F	G	øH	I
TA-450EL	1125	500	354	203	250	1042	189	200	716
TA-650EL	1203	556	307	169	278	1116	182	200	702
TA-1100EL	1233	620	374	200	310	1146	240	250	731



	A	B	C	D	E	F	G	H	I	J	K	L	ødy	N
TA-1500EL	1190	750	374	200	400	105	175	1146	69	-	-	-	-	731
TA-1500HW	1190	750	374	200	400	105	175	1146	175	102	125	162	21mm	731
TA-2000EL	1190	850	374	250	500	73	175	1146	73	-	-	-	-	731
TA-2000HW	1190	850	374	250	500	73	175	1146	175	101	92	212	21mm	731
TA-3000HW	1296	904	545	300	600	141	152	1252	152	92	160	262	27mm	325
TA-4500HW	1346	1006	545	400	700	91	153	1302	153	92	110	362	34mm	320

* TA-3000HW and 4500HW have two handles on the door

TA

Fans

TA has a direct driven plug fan with external rotor motor. Impeller have backward-curved blades and is chosen to give optimal operation considering air-flow, sound level and efficiency. Speed control, two-step via transformer.

Extract fan, external

The unit has a connection block for connecting an external extract fan. The extract fan must be a single-phase type with adjustable voltage control up to size 1500 and 3-phase

Available current for external extract fan

TA-	230 V 1~	400 V 3~
450	0.7 A	-
650	1.0 A	-
1100	3.5 A	-
1500	2.6 A	-
2000	-	2.8 A
3000	-	2.0 A
4500	-	4.3 A

with adjustable voltage control for size 2000 and up-wards. The extract fan must have an integral thermal contact that protects against overheating. The extract fan and the supply-air fan will then start and stop simultaneously. The control of the fan speed will also be in parallel.

A list of suitable extract fans can be found in the brochure "Specification data" which can be downloaded on www.systemair.com, in the online catalogue.

Control system

The units are supplied with a user-friendly and reliable control system – fully integrated in the unit. Functions required are selected via a menu based display with text messages. The units are factory-configured for constant supply-air temperature control. Settings for alarm, timer and fan are also made via display.

Filter

Bag filters available in Class EU 3-7. Filters designed to produce low pressure drop and long life between filter change.

Heating coil – electric

Built-in electric heating coil, step-less control via triac. The coil is removable for inspection

and service and equipped with both automatic and manual overheating protection.

Heating coil – water

The built-in hot water coil is easy to connect via pipe connections located on the gable of the unit. The coil is equipped with frost protection surface sensor and also has union for installation of immersion sensor.

Unit housing

The units housing is made up from panels with 50 mm mineral wool insulation. The inside is dressed with easy-to-clean fabric.

Installation

The unit can be installed in the following way:

1. In ceiling with door facing down-wards
2. On floor with door facing up-wards
3. On wall with door facing out-wards or to the side.

When installing the unit on the wall with vertical duct connection, place the heating coil on top. Connection to the mains via the terminal blocks.

N.B! More information can be found in the brochure "Specification data" on www.systemair.com, in the online catalogue.

Accessories, TA

	TA-450	TA-650	TA-1100	TA-1500	TA-2000	TA-3000	TA-4500
Spring return damper	EFD 200	EFD 200	EFD 250	EFD 4020	EFD 5025	EFD 6030	EFD 7040
WH:Valve actuator	-	-	-	AQM	AQM	AQM	AQM
Valve, 2-way	-	-	-	STV15-1.0	STV15-1.6	STV15-2.1	STV20-4.2
Valve, 3-way	-	-	-	STR15-0.63	STR15-1.0	STR15-1.6	STR20-4.2
Intake grid	ITA 200	ITA 200	ITA 250	ITA 40-20	ITA 50-25	ITA 60-30	ITA 70-40
Cooling battery, water	CWK 200	CWK 200	CWK 250	PGK 40-20	PGK 50-25	PGK 60-30	PGK 70-40
Silencer	LDC 200	LDC 200	LDC 250	LDR 40-20	LDR 50-25	LDR 60-30	LDR 70-40
Timer	T 120	T 120	T 120	T 120	T 120	T 120	T 120
Filter EU3	BFTA 450/3	BFTA 650/3	BFTA 1100/3	BFTA 1500/3	BFTA 2000/3	BFTA 3000/3	BFTA 4500/3
Filter EU5	BFTA 450/5	BFTA 650/5	BFTA 1100/5	BFTA 1500/5	BFTA 2000/5	BFTA 3000/5	BFTA 4500/5
Filter EU7	BFTA 450/7	BFTA 650/7	BFTA 1100/7	BFTA 1500/7	BFTA 2000/7	BFTA 3000/7	BFTA 4500/7
CO2 Room sensor (digital 1/0)	CO2RT-DR	CO2RT-DR	CO2RT-DR	CO2RT-DR	CO2RT-DR	CO2RT-DR	CO2RT-DR

