



UTEK®



FAI DP



FAI DP



- ◆ Heat recovery ventilator configurable on site with cross-flow aluminium heat exchanger
- ◆ Suitable solution for ventilation of commercial buildings
- ◆ Double skin steel panels, thickness 25mm
- ◆ Centrifugal fans direct driven motors
- ◆ Versions available:
 - with water or electric post-heating integrable into the unit:
 - Without regulation or
 - Plug-n-play versions with electrical panel pre-wired and microprocessor control mounted on board.
 - Optional microprocessor controllers:
 - EVO PH
 - EVO D PH (with Modbus communication protocol)

DESCRIPTION

- ◆ Extruded aluminium profile structure with rounded corners
- ◆ double skin steel panels, plasticized white, sandwiched on injected polyurethane foam insulation, thickness 25mm
- ◆ side/beneath access for inspection and maintenance
- ◆ pressure sockets to measure the filters loss of pressure
- ◆ condensation drainage system

VENTILATORS

- 3 or 4 speed direct driven AC blowers 230V-1-50Hz (up to size 4)
- 1 speed direct driven AC blowers 400V-3-50Hz (for size 5 and 6)

HEAT EXCHANGER

- ◆ High efficiency cross-flow aluminium heat exchanger, removable from beneath (for horizontal configuration) or from the side (for vertical configuration)

FILTERS

- ◆ G4 for exhaust air
- ◆ F7 low pressure loss for fresh air

RANGE

- ◆ Nr. 6 models from 400 m³/h up to 5.600 m³/h
- ◆ high values of pressure available to the ducting

CONFIGURATIONS AVAILABLE

- ◆ Horizontal with or without motorized by-pass
- ◆ vertical with or without motorized by-pass

ACCESSORIES AVAILABLE ON REQUEST (see the Accessories booklet)

- ◆ **Accessories control (for standard version only):**
 - CV4 4 speed switch commutator for 230V-1-50Hz motors
 - CV3 3 speed switch commutator for 230V-1-50Hz motors
 - RVT6A and RVT 9A speed regulator for 400V-3-50Hz motors
- ◆ **Accessories of deicing for duct mounting:**
 - RCF-SC electric heater
 - RCFE-SCT electric heater with electronic regulation
 - RCF-SCTTC electric heater with thermostatic regulation
- ◆ **Accessories of cooling for duct mounting:**
 - BA-AF cooling water coil with insulated plenum - *Contact the technical office*
- ◆ **Optional sensors:**
 - EE80 CO₂ sensor
 - QPA 2002 CO₂/VOC air quality sensor
 - EE16 Humidity sensor
- ◆ **Accessories for air filtration:**
 - F9 optional filter low pressure loss
- ◆ **Protective accessories:**
 - SKMF-R weather protection cowl
 - T weather protective roof

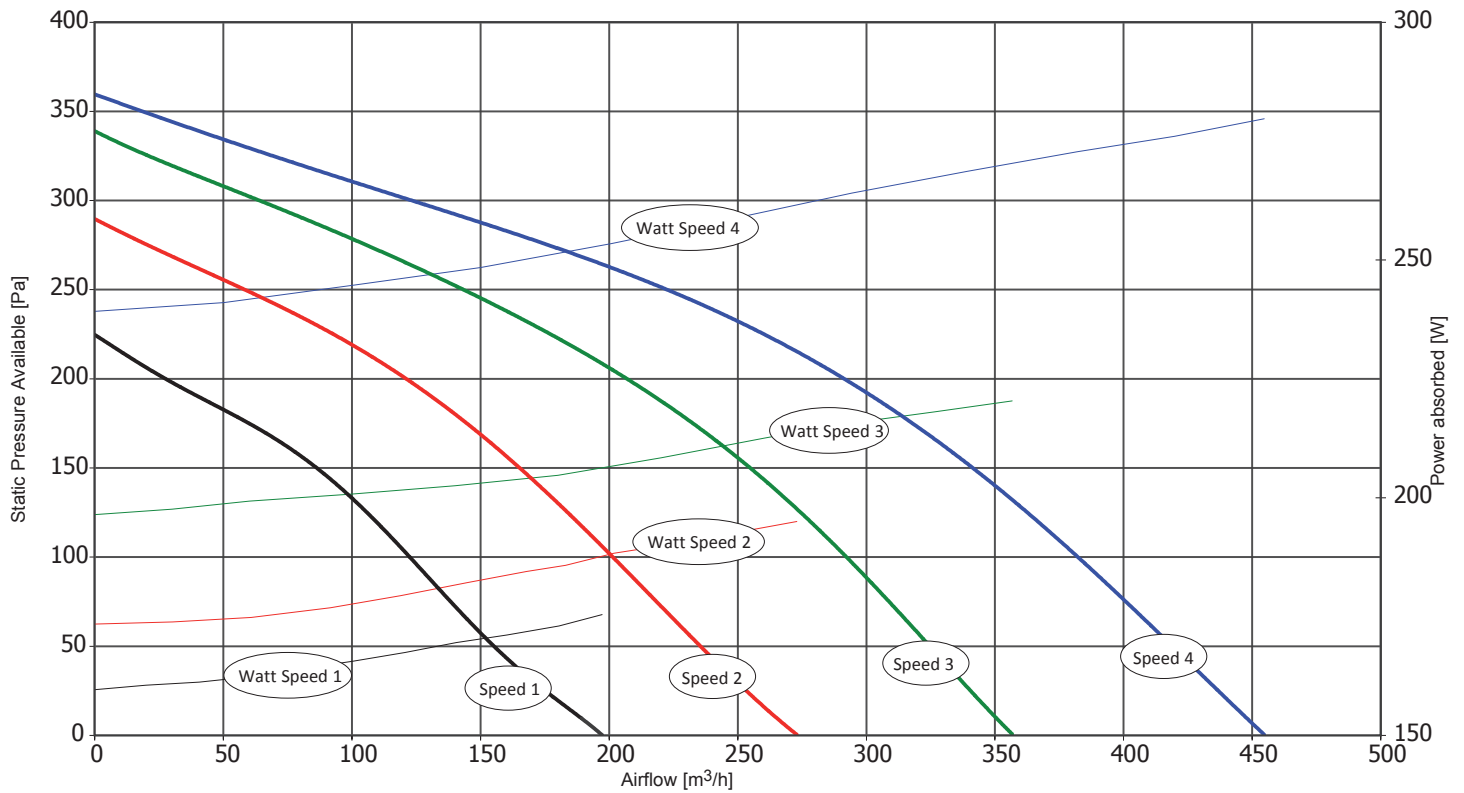
PRICE LIST

See the Price list booklet

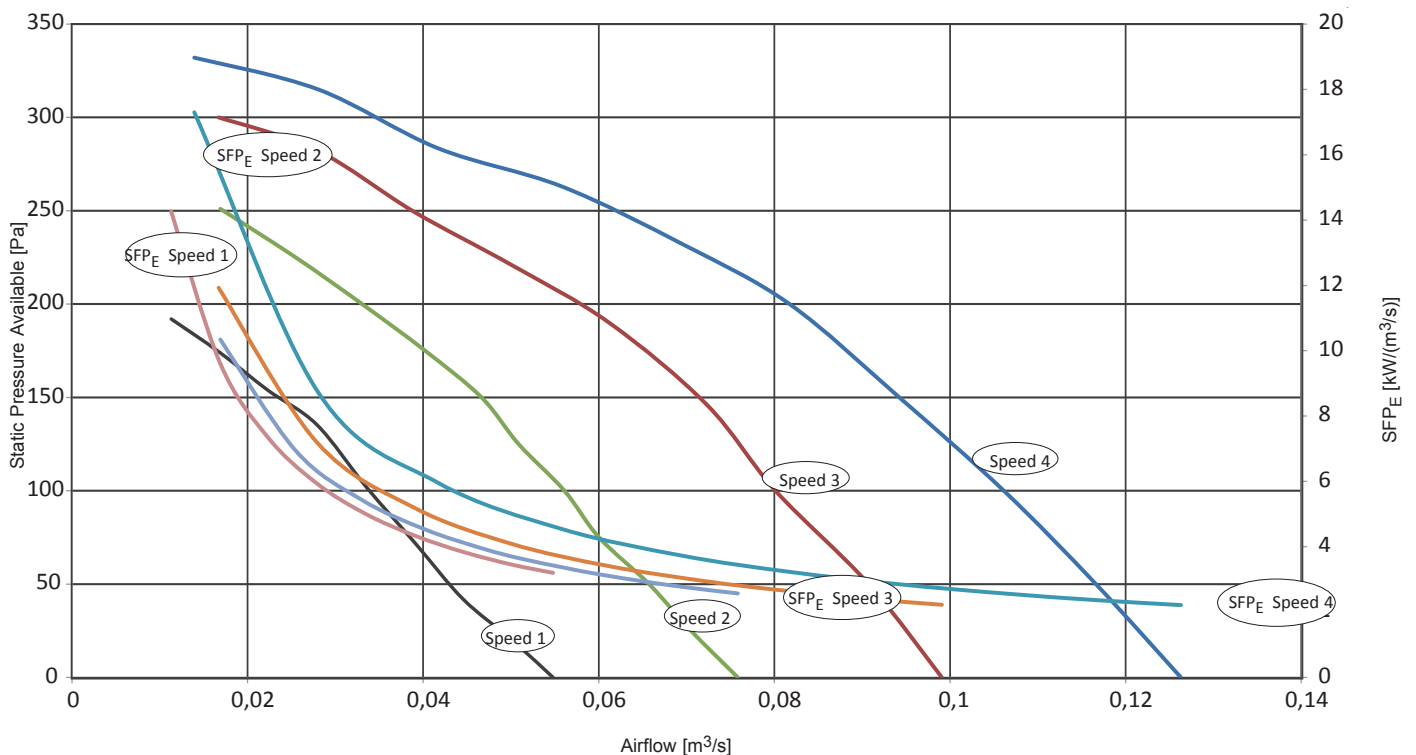


PERFORMANCES

FAI 1 DP | 4 speed



The unit must be ducted properly: UTEK authorizes the use only according to its performance diagram shown into this catalogue.
The claimed performances are guaranteed only by UTEK original filter low pressure loss.

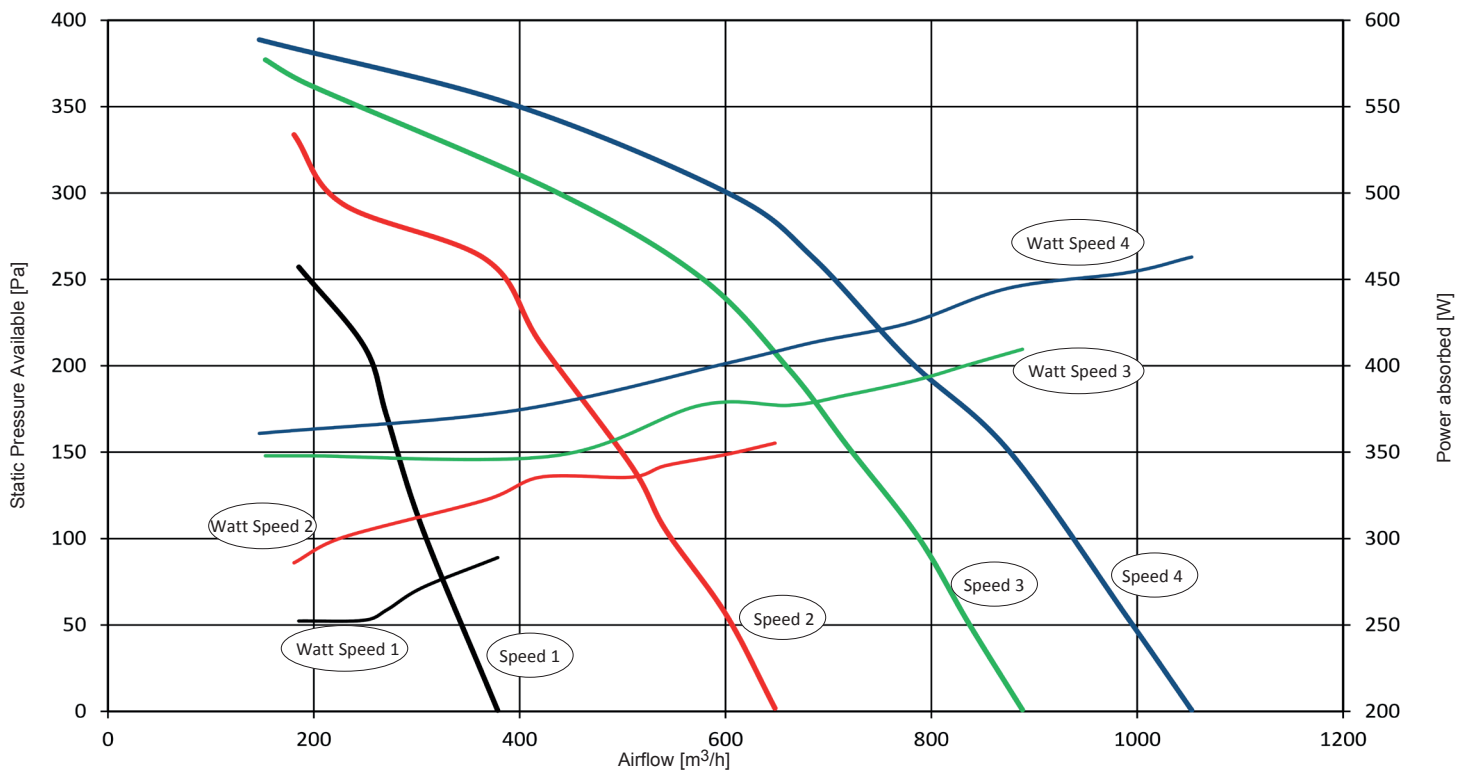


The unit must be ducted properly: UTEK authorizes the use only according to its performance diagram shown into this catalogue.
The claimed performances are guaranteed only by UTEK original filter low pressure loss.

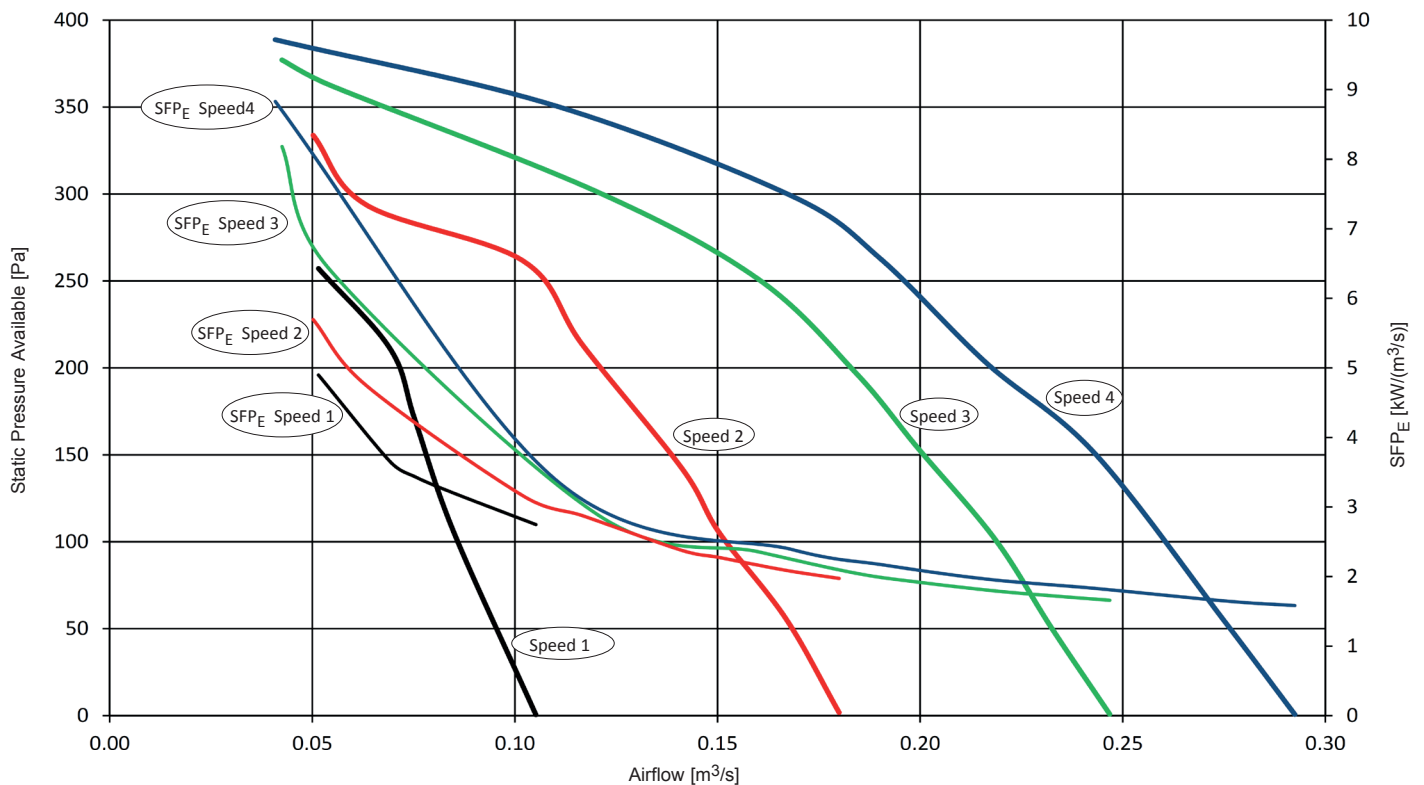


PERFORMANCES

FAI 2 DP | 4 speed



The unit must be ducted properly: UTEK authorizes the use only according to its performance diagram shown into this catalogue.
The claimed performances are guaranteed only by UTEK original filter low pressure loss.

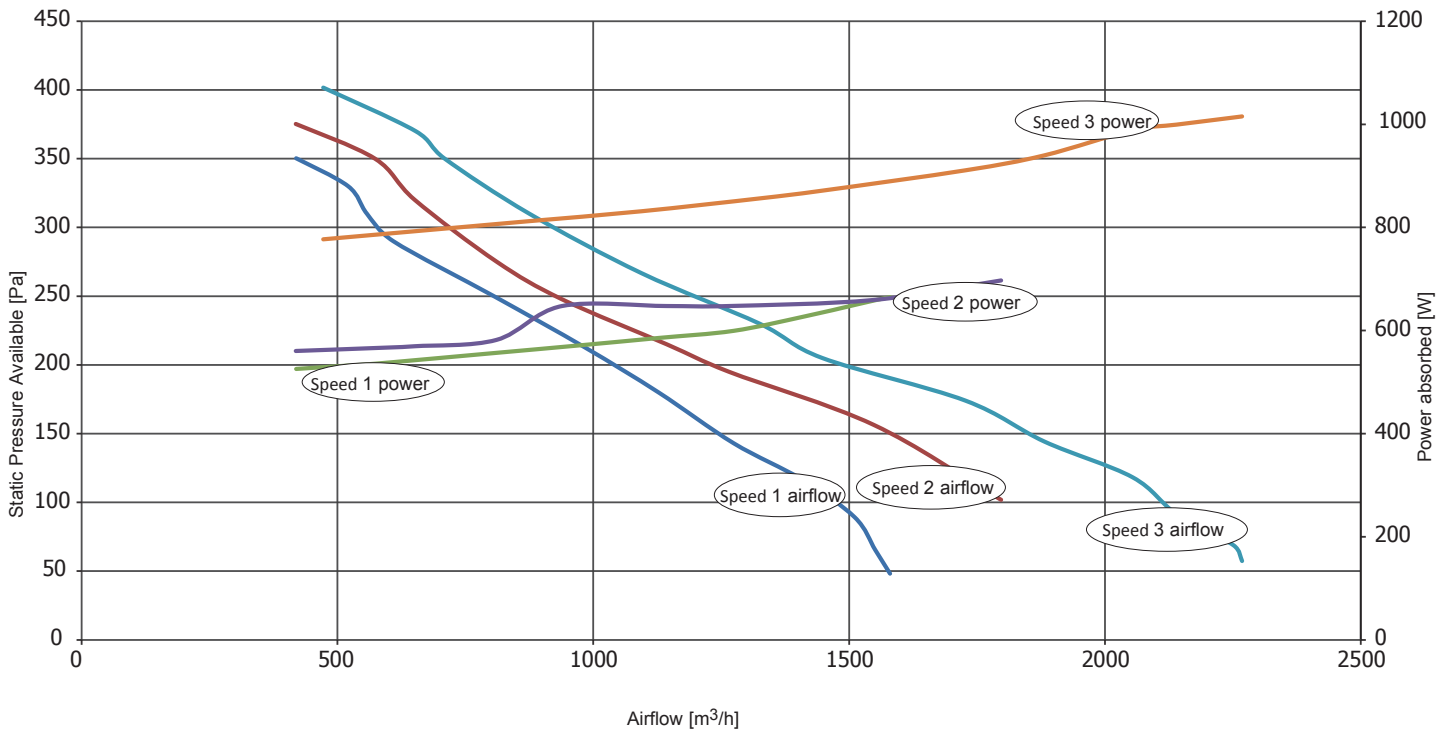


The unit must be ducted properly: UTEK authorizes the use only according to its performance diagram shown into this catalogue.
The claimed performances are guaranteed only by UTEK original filter low pressure loss.

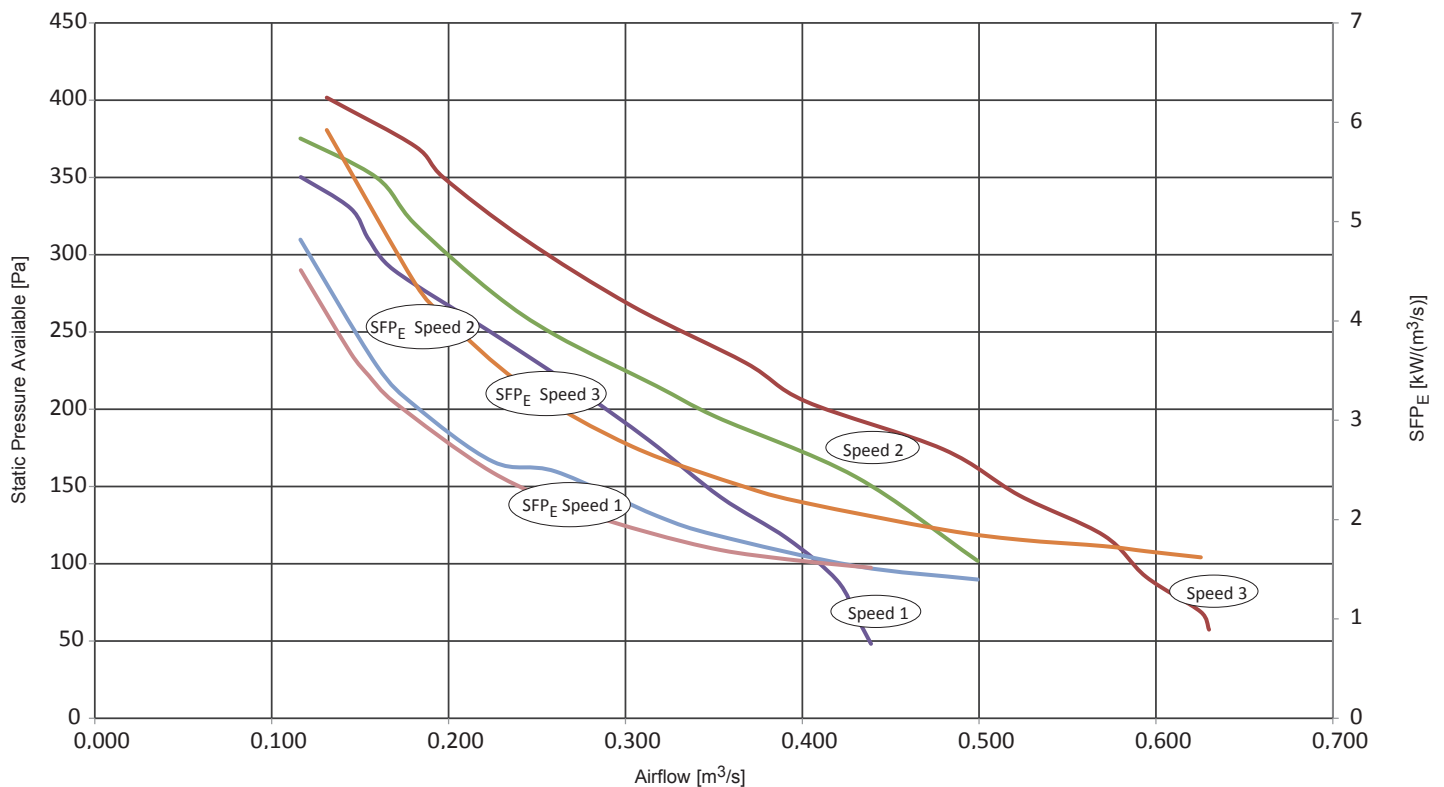


PERFORMANCES

FAI 3 DP | 3 speed



The unit must be ducted properly: UTEK authorizes the use only according to its performance diagram shown into this catalogue.
The claimed performances are guaranteed only by UTEK original filter low pressure loss.

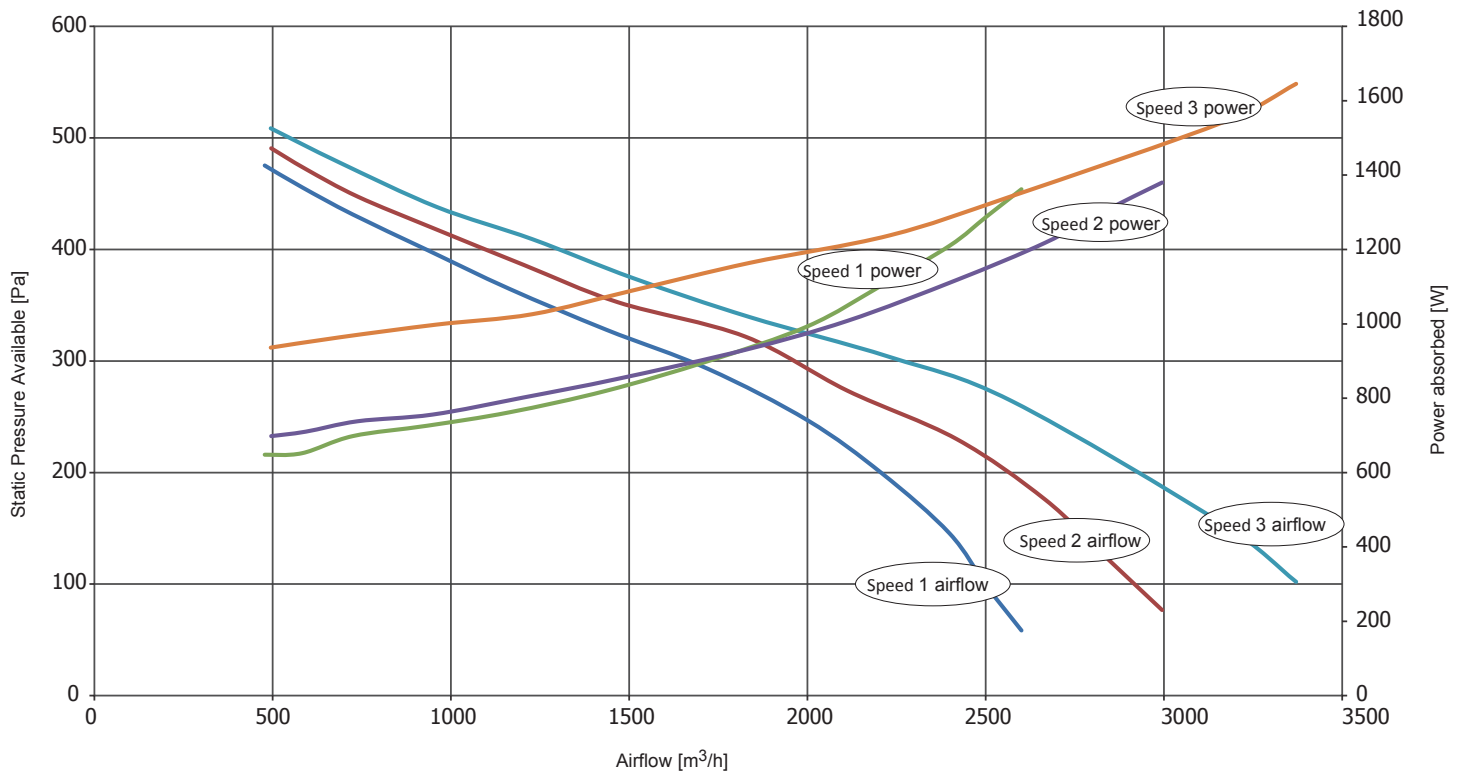


The unit must be ducted properly: UTEK authorizes the use only according to its performance diagram shown into this catalogue.
The claimed performances are guaranteed only by UTEK original filter low pressure loss.

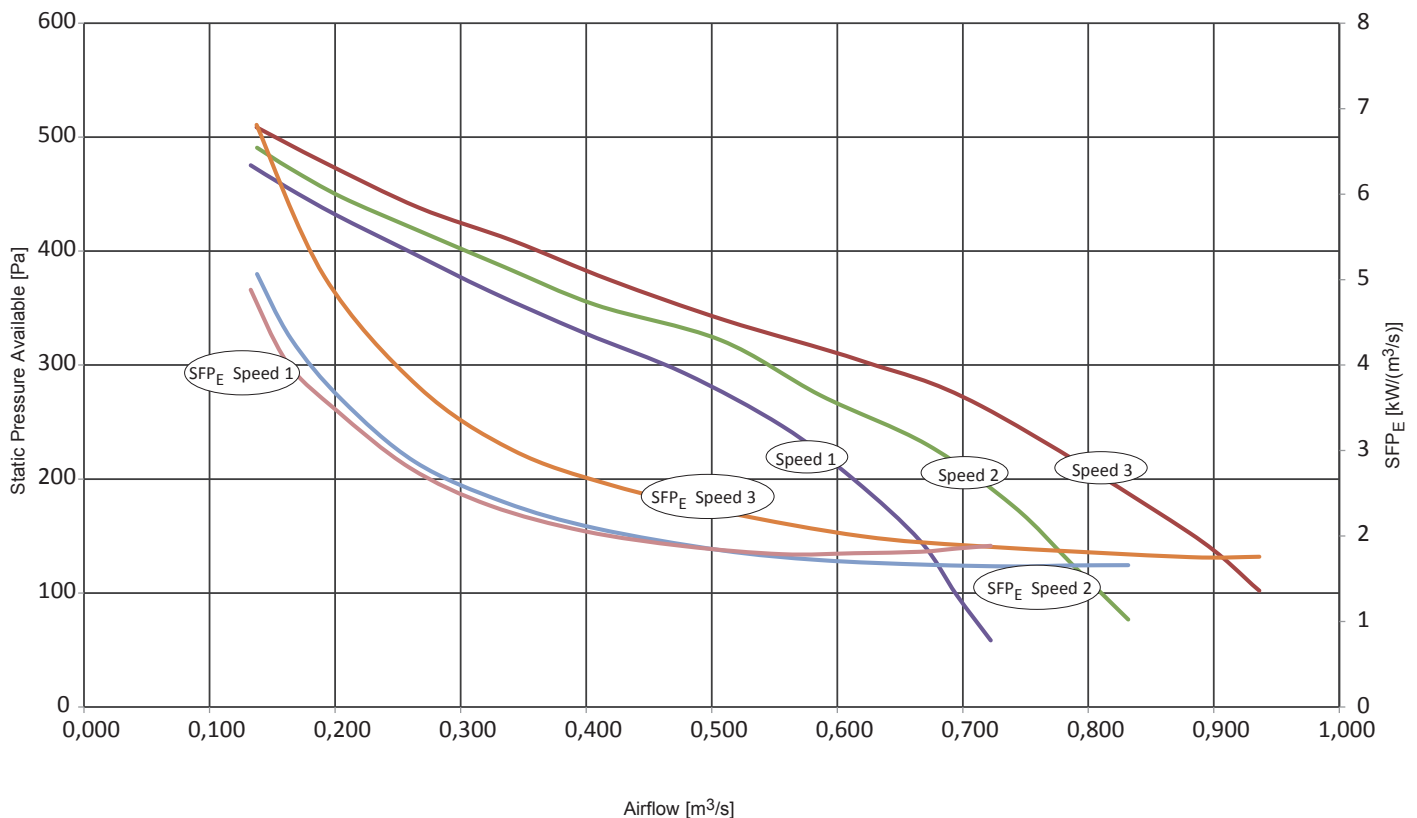


PERFORMANCES

FAI 4 DP | 3 speed



The unit must be ducted properly: UTEK authorizes the use only according to its performance diagram shown into this catalogue.
The claimed performances are guaranteed only by UTEK original filter low pressure loss.

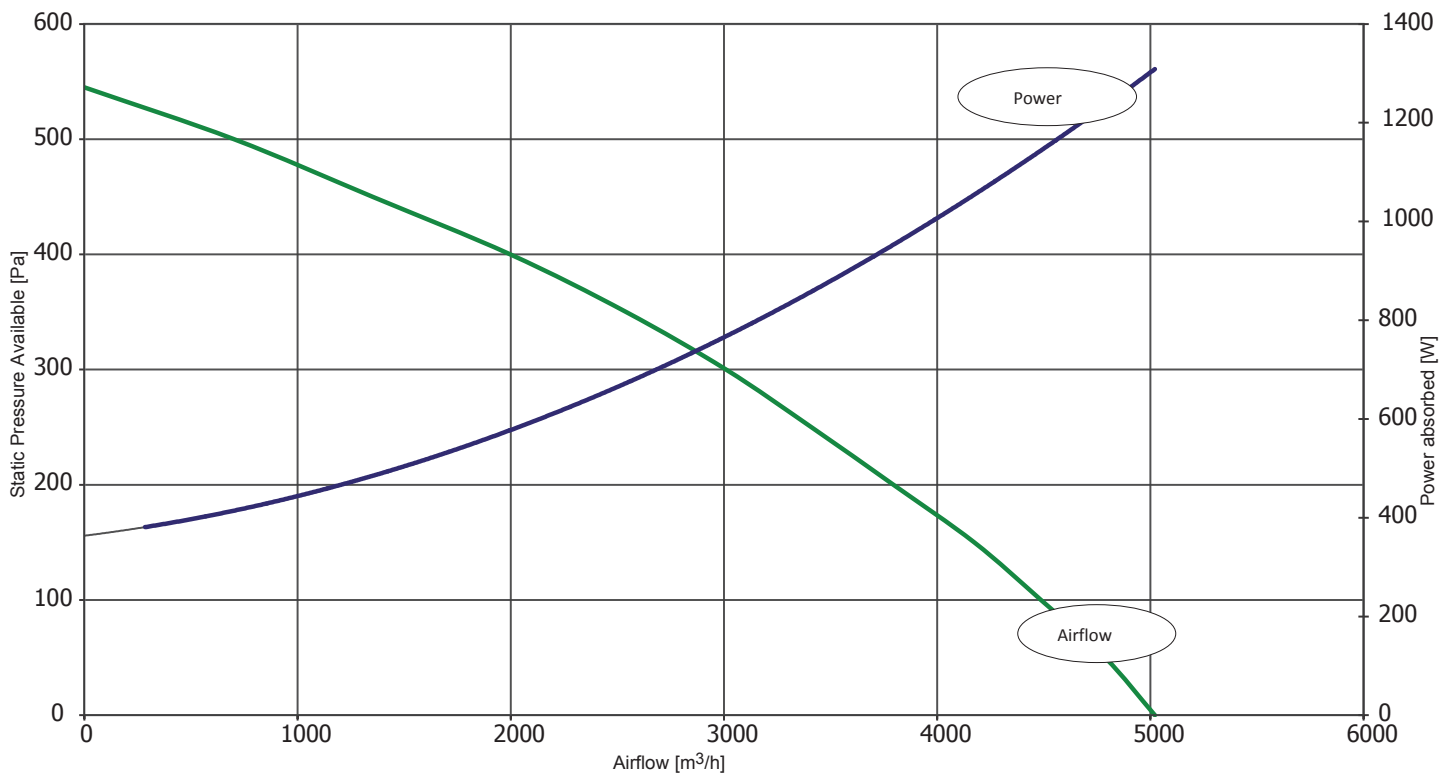


The unit must be ducted properly: UTEK authorizes the use only according to its performance diagram shown into this catalogue.
The claimed performances are guaranteed only by UTEK original filter low pressure loss.

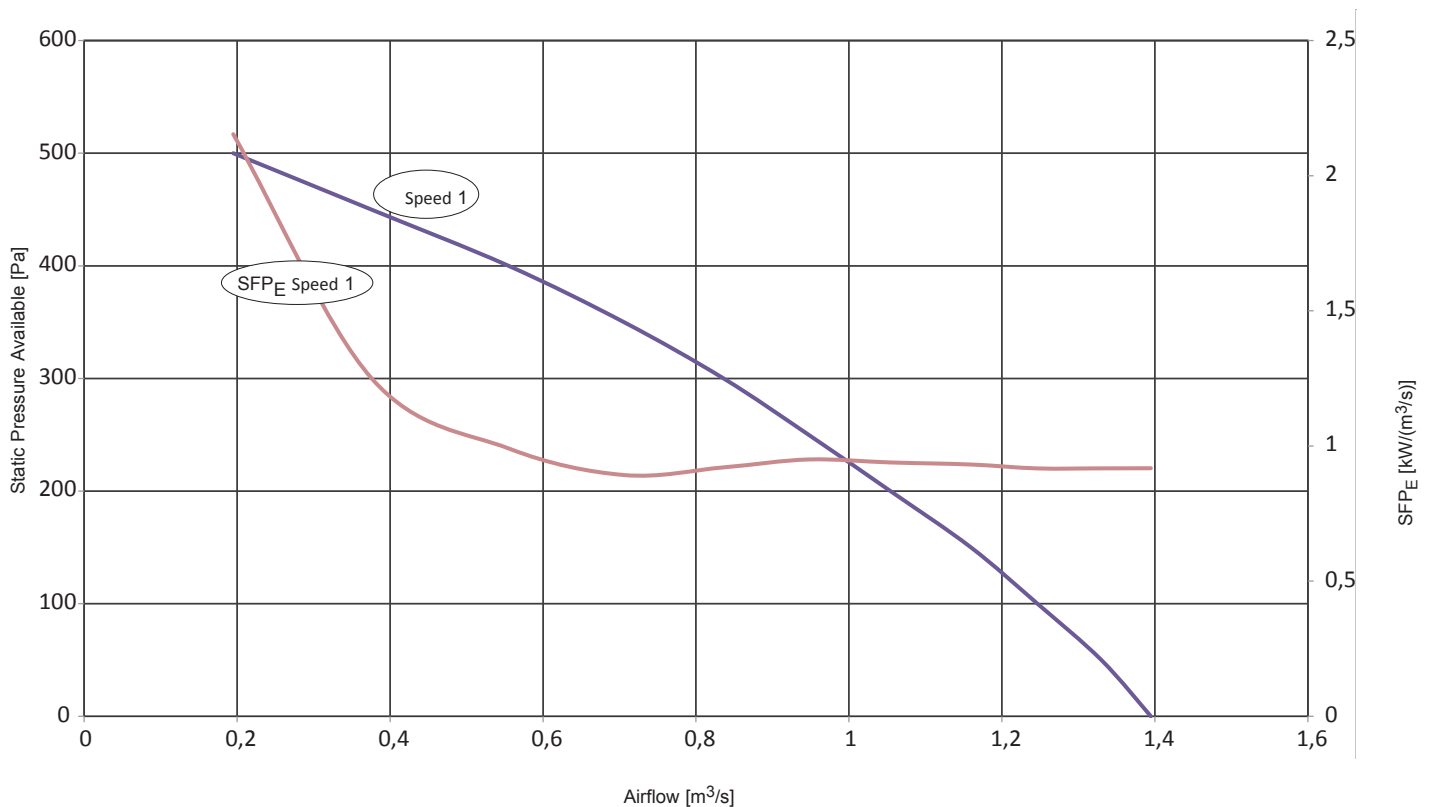


PERFORMANCES

FAI 5 DP | 1 speed



The unit must be ducted properly: UTEK authorizes the use only according to its performance diagram shown into this catalogue.
The claimed performances are guaranteed only by UTEK original filter low pressure loss.

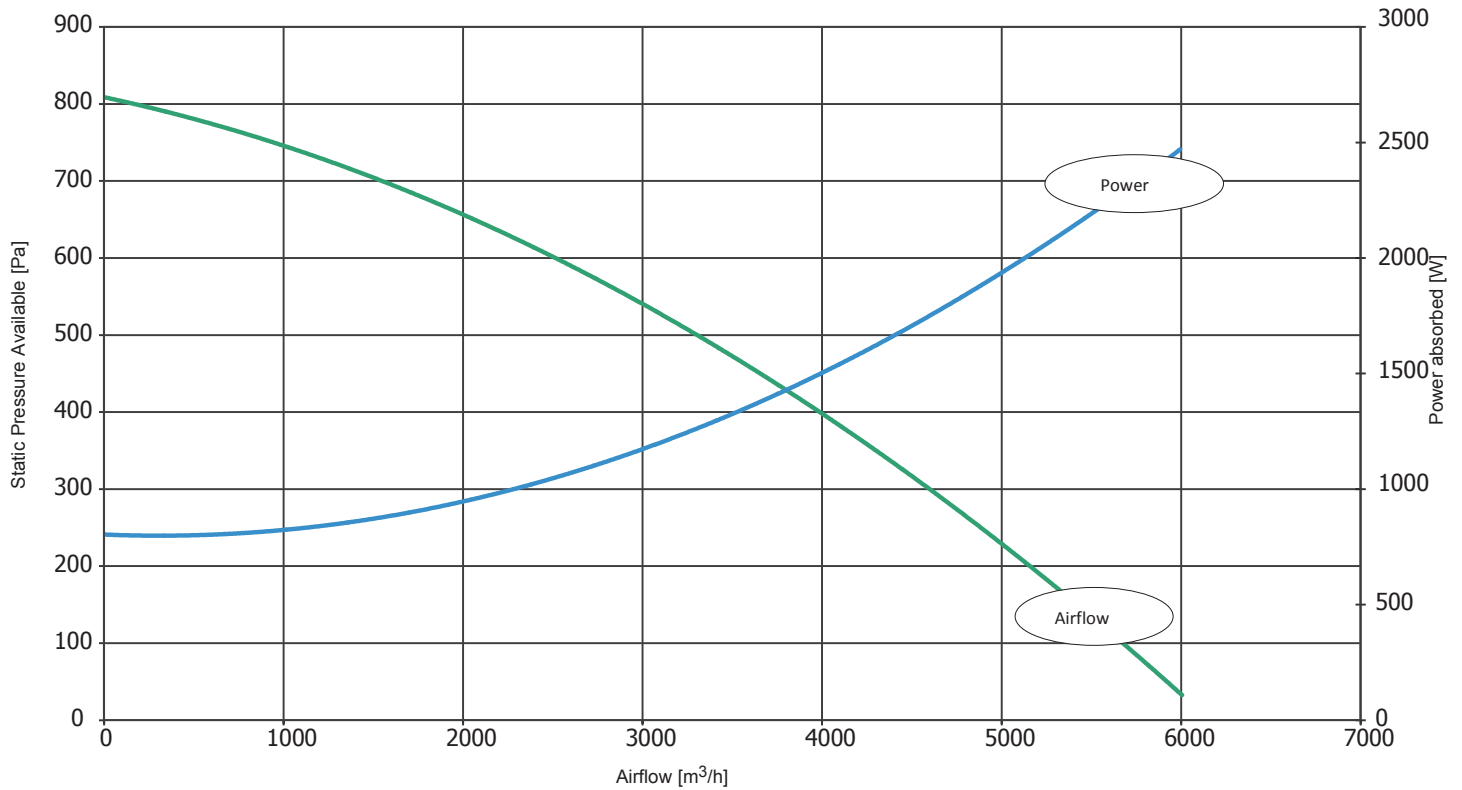


The unit must be ducted properly: UTEK authorizes the use only according to its performance diagram shown into this catalogue.
The claimed performances are guaranteed only by UTEK original filter low pressure loss.

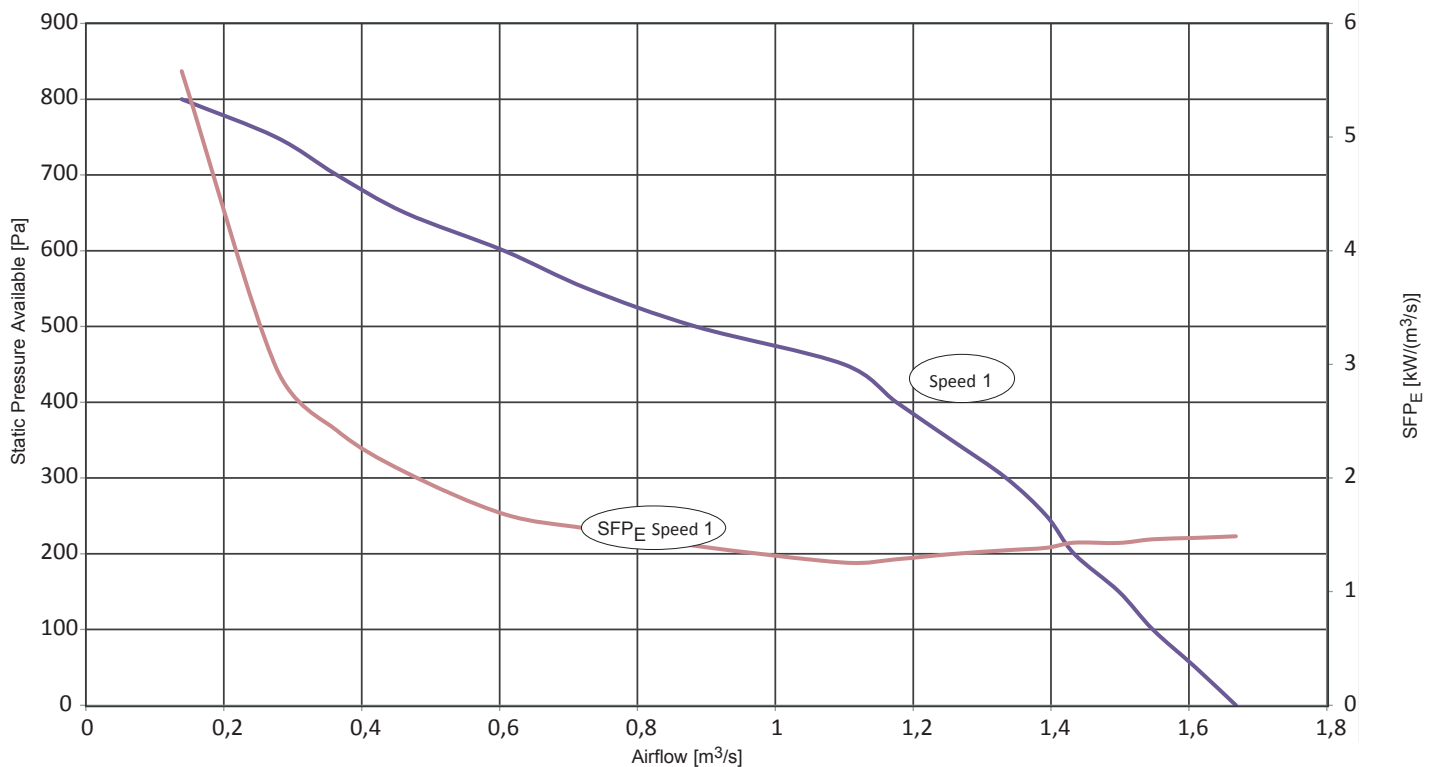


PERFORMANCES

FAI 6 DP | 1 speed



The unit must be ducted properly: UTEK authorizes the use only according to its performance diagram shown into this catalogue.
The claimed performances are guaranteed only by UTEK original filter low pressure loss.

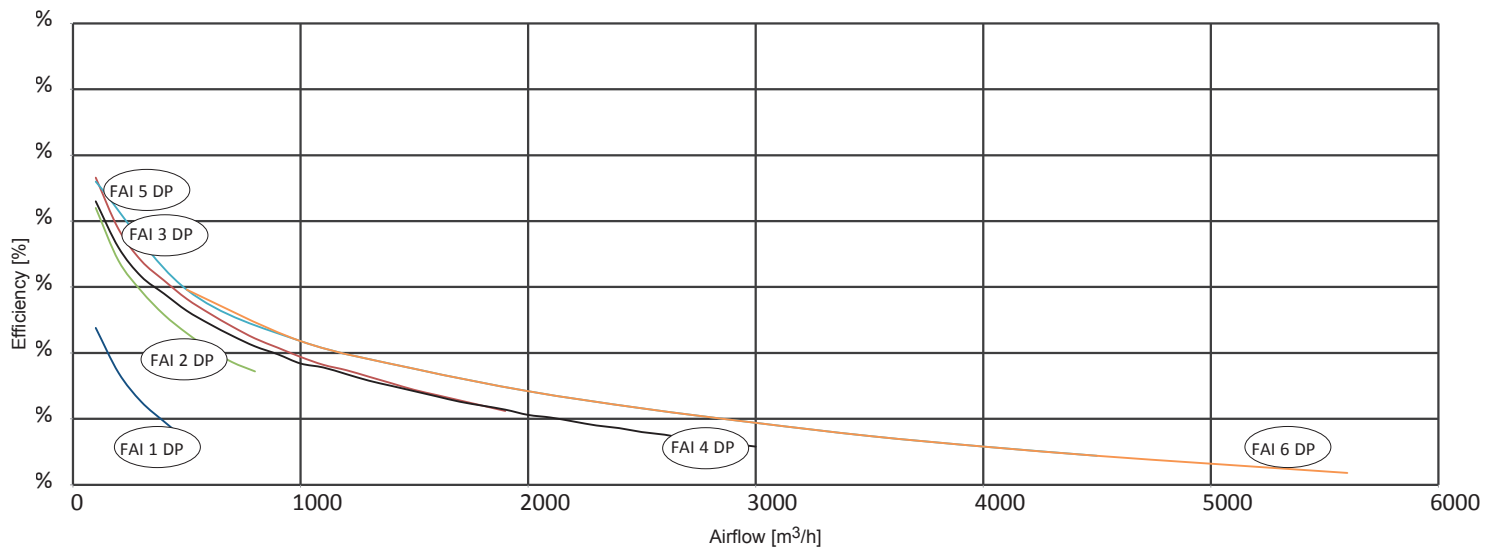


The unit must be ducted properly: UTEK authorizes the use only according to its performance diagram shown into this catalogue.
The claimed performances are guaranteed only by UTEK original filter low pressure loss.



HEAT RECOVERY PERFORMANCE (sensible efficiency)

Values referred to the following conditions: T_{bs} external air - 5°C; U.R. external 80%; T_{bs} environment 20°C; U.R. environment 50%; nominal airflow



TECHNICAL DATA

	FAI 1 DP	FAI 2 DP	FAI 3 DP	FAI 4 DP	FAI 5 DP	FAI 6 DP
Nominal airflow (m³/h)	400	800	1900	3000	4500	5600
Available static pressure (Pa)*	85	100	140	180	100	120
Max. current absorption (A)	1,32	2,1	5,5	8	6,2	11,20
VENTILATORS						
Installed power (W)	150x2	290x2	373x2	550x2	750x2	1500x2
Poles (nr.)	2	4	4	4	4	4
Max. current absorption (A)	0,66x2	1,28x2	2,75x2	4x2	3,1x2	5,6x2
Fan speed	4	4	3	3	1	1
Protection level (IP)	20	20	20	20	55	55
Insulation class	F	F	F	F	F	F
Electrical power supply (V/ph/Hz)	230V-1-50Hz	230V-1-50Hz	230V-1-50Hz	230V-1-50Hz	400V-3-50Hz	400V-3-50Hz
FILTERS						
Filtration class for exhaust air	G4	G4	G4	G4	G4	G4
Filtration class for fresh air	F7	F7	F7	F7	F7	F7

* Values referring to the nominal airflow having overcome the loss of pressure of the recovery unit and filters

** Values referring to the following conditions: T_{bs} ext. air. = -5°C; T_{bs} environment = 20°C; U.R. environment = 50%; Nominal airflow



TECHNICAL DATA

RCF.. ELECTRICAL HEATER OF DEICING

	FAI 1 DP	FAI 2 DP	FAI 3 DP	FAI 4 DP		FAI 5 DP	FAI 6 DP
Nominal power (kW)	2	4	6	8	8	12	12
Voltage (V)	230	230	230	230	400	400	400
Phases (nr.)	1	1	1	1	3	3	3
Stages (nr.)	1	2	2	2	2	2	2
Current absorption (A)	8,5	17,5	26	34,78	11,55	17,32	17,32
Intake air temp. on exchanger (°C)	-3	-3	0	-5	-5	-5	-5

Dimensionate con temperatura aria esterna = -15°C e portata aria nominale.

REL.. ELECTRICAL HEATER OF POST-HEATING

	FAI 1 DP	FAI 2 DP	FAI 3 DP	FAI 4 DP		FAI 5 DP	FAI 6 DP
	REL-M1	REL-M1	REL-M1	REL-M2	REL-T2	REL-T2	REL-T2
Nominal power (kW)	2	4	6	8	8	12	12
Voltage (V)	230	230	230	230	400	400	400
Phases (nr.)	1	1	1	1	3	3	3
Stages (nr.)	1	2	2	2	2	2	2
Current absorption (A)	8,5	17,5	26	34,78	11,55	17,32	17,32
Intake air temp. on exchanger (°C)	20	20	21	20	20	22	20

Measured with intake air temp. = 8°C and nominal airflow

Loss of pressure between 2 and 10 Pa, on the air side of the REL section

BA-AC POST-HEATING HOT WATER COIL 80°/70° C

	FAI 1 DP	FAI 2 DP	FAI 3 DP	FAI 4 DP	FAI 5 DP	FAI 6 DP
Rows (nr.)	2	2	2	2	2	2
Thermal yield (kW)	2,62	5,75	10,67	14,29	30	34,5
Replacement air outlet temp. (°C)	23,3	29,2	24,4	21,9	29	25,4
Air side pressure loss (Pa)	16	32	31	27	60	100
Water side pressure loss (kPa)	1	2,5	41	21	10	10
Water side connection size (ø)	1/2"	1/2"	1/2"	1	1	1

Values referring to the following conditions: water 80°/70°C; Intake air temp. 8°C; nominal airflow

The tables of thermal yield are available on [Accessories](#) booklet

BA-AT POST-HEATING TEMPERATE WATER COIL 45°/35° C

	FAI 1 DP	FAI 2 DP	FAI 3 DP	FAI 4 DP	FAI 5 DP	FAI 6 DP
Rows (nr.)	2	2	2	2	3	3
Thermal yield (kW)	2,2	3,7	7,9	13,3	20,6	23,4
Replacement air outlet temp. (°C)	21,0	22,2	20,3	21,2	22,1	20,5
Air side pressure loss (Pa)	90	65	95	80	90	125
Water side pressure loss (kPa)	0,9	2,1	4,9	5,7	6,1	7,0
Water side connection size (ø)	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"

Values referring to the following conditions: water 45°/35°C; Intake air temp. 8°C; nominal airflow

The tables of thermal yield are available on [Accessories](#) booklet



NOISE LEVEL

*L_w Sound level taken in accordance to UNI EN ISO 3741
(UNI EN ISO 3747 FOR FAI 5 and 6 DP models; $\Delta L_f A \geq 7$ dB for each measurement position, class accuracy 2)*

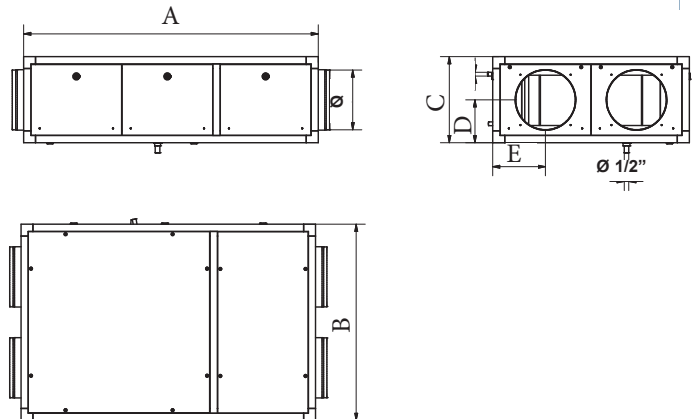
FAI 1 DP		NOISE TRANSMITTED (Hz)							dB(A)
		125	250	500	1000	2000	4000	8000	
$L_{W V_1}$		37	26	18	27	15	6	5	29
$L_{W V_2}$		44	32	24	36	24	13	8	37
$L_{W V_3}$		49	38	30	42	32	22	16	43
$L_{W V_4}$		54	44	35	46	39	30	25	48
		NOISE IRRADIATED (Hz)							dB(A)
		125	250	500	1000	2000	4000	8000	
$L_{W V_1}$		31	22	15	23	12	5	5	25
$L_{W V_2}$		37	27	20	31	21	11	6	32
$L_{W V_3}$		42	32	25	36	27	19	13	37
$L_{W V_4}$		46	37	30	39	33	26	21	41
FAI 2 DP		NOISE TRANSMITTED (Hz)							dB(A)
		125	250	500	1000	2000	4000	8000	
$L_{W V_1}$		50	48	37	45	24	25	18	47
$L_{W V_2}$		57	56	45	51	35	35	29	53
$L_{W V_3}$		61	60	51	54	43	42	37	58
$L_{W V_4}$		65	63	56	56	47	45	41	60
		NOISE IRRADIATED (Hz)							dB(A)
		125	250	500	1000	2000	4000	8000	
$L_{W V_1}$		53	49	35	38	19	12	8	43
$L_{W V_2}$		57	55	42	43	26	20	13	48
$L_{W V_3}$		61	58	46	45	33	24	15	52
$L_{W V_4}$		63	61	47	47	36	28	17	55
FAI 3 DP		NOISE TRANSMITTED (Hz)							dB(A)
		125	250	500	1000	2000	4000	8000	
$L_{W V_1}$		65	57	60	62	58	52	44	65
$L_{W V_2}$		68	60	62	64	60	55	48	67
$L_{W V_3}$		67	62	64	65	62	58	51	69
		NOISE IRRADIATED (Hz)							dB(A)
		125	250	500	1000	2000	4000	8000	
$L_{W V_1}$		55	48	51	53	49	44	37	56
$L_{W V_2}$		58	51	53	54	51	47	41	58
$L_{W V_3}$		57	53	54	55	53	49	43	59
FAI 4 DP		NOISE TRANSMITTED (Hz)							dB(A)
		125	250	500	1000	2000	4000	8000	
$L_{W V_1}$		56	50	50	48	41	31	28	52
$L_{W V_2}$		69	59	63	64	61	57	48	68
$L_{W V_3}$		71	71	72	75	73	70	64	79
		NOISE IRRADIATED (Hz)							dB(A)
		125	250	500	1000	2000	4000	8000	
$L_{W V_1}$		48	42	43	40	35	27	23	44
$L_{W V_2}$		58	50	54	54	52	48	41	59
$L_{W V_3}$		60	60	61	64	62	60	55	68
FAI 5 DP		NOISE TRANSMITTED (Hz)							dB(A)
		125	250	500	1000	2000	4000	8000	
$L_{W V_{\max}}$		82	76	70	69	63	64	55	75
		NOISE IRRADIATED (Hz)							dB(A)
		125	250	500	1000	2000	4000	8000	
$L_{W V_{\max}}$		78	70	64	63	57	56	42	69
FAI 6 DP		NOISE TRANSMITTED (Hz)							dB(A)
		125	250	500	1000	2000	4000	8000	
$L_{W V_{\max}}$		84	78	73	70	65	68	57	77
		NOISE IRRADIATED (Hz)							dB(A)
		125	250	500	1000	2000	4000	8000	
$L_{W V_{\max}}$		80	71	65	63	57	58	43	70



DIMENSIONS AND WEIGHT HORIZONTAL CONFIGURATION (H)

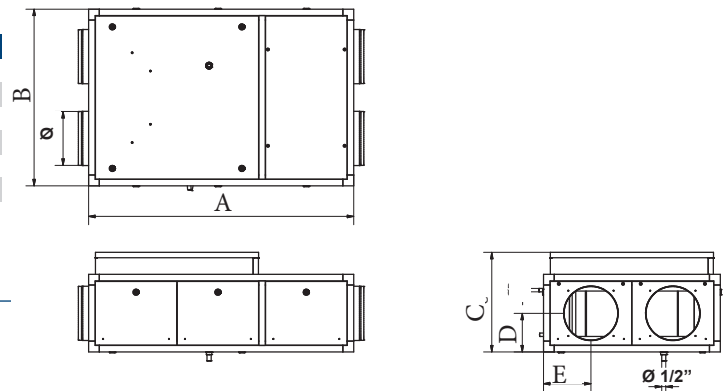
DIMENSIONS (mm) and WEIGHT (Kg) WITHOUT BY-PASS

MODEL	A	B	C	D	E	Ø	Weight
FAI 1 DP	960	640	345	172,5	175	200	40
FAI 2 DP	1230	820	360	180	220	250	56
FAI 3 DP	1560	1040	535	267,5	225	315	110
FAI 4 DP	1905	1270	630	315	240	355	155
FAI 5 DP	1550	1200	855	427,5	305	450	195
FAI 6 DP	1550	1200	855	427,5	305	450	200

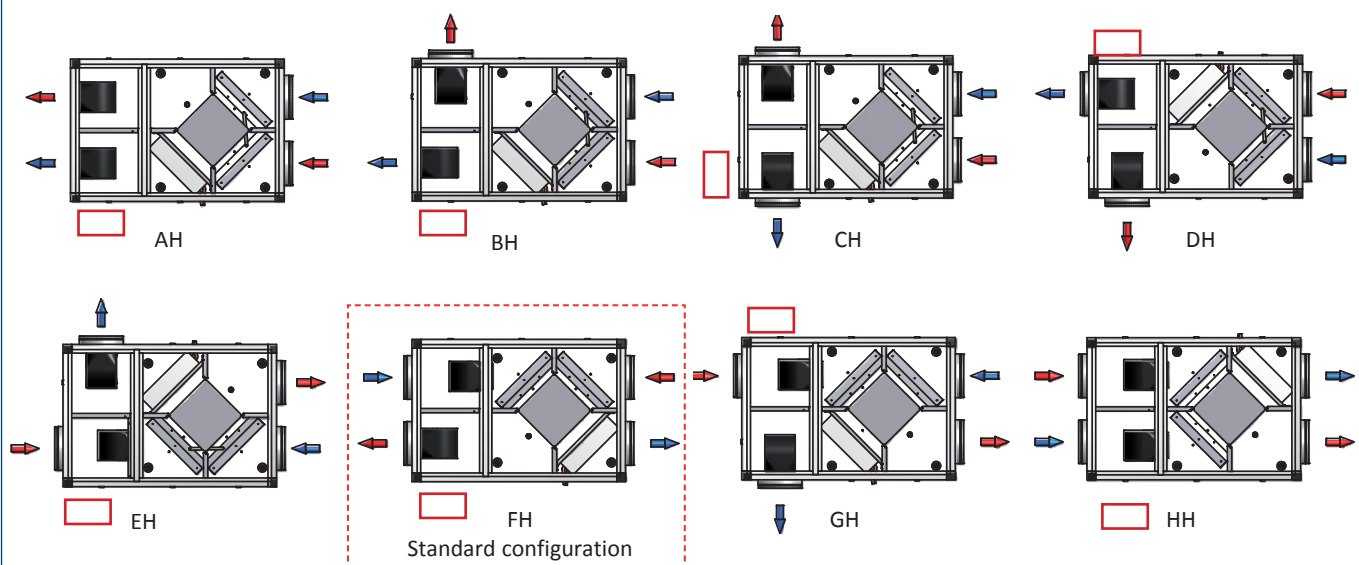


DIMENSIONS (mm) and WEIGHT (Kg) WITH BY-PASS (BP)

MODEL	A	B	C	D	E	Ø	ØR	Weight
FAI 1 DP	960	640	450	172,5	175	200	1/2"	49
FAI 2 DP	1230	820	465	180	220	250	1/2"	68
FAI 3 DP	1560	1040	640	267,5	225	315	1/2"	126
FAI 4 DP	1905	1270	735	315	240	355	1"	176
FAI 5 DP	1550	1200	855	427,5	305	450	1"	195
FAI 6 DP	1550	1200	855	427,5	305	450	1"	200



HORIZONTAL CONFIGURATION - top view -



Legend

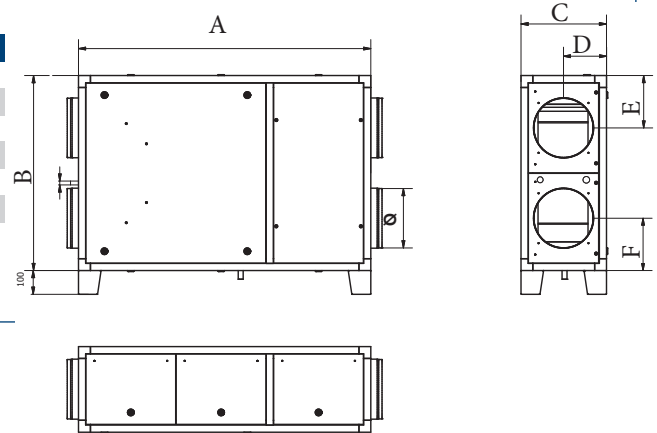
- Electric board
- Fresh air
- Exhaust air



DIMENSIONS AND WEIGHT VERTICAL CONFIGURATION (V)

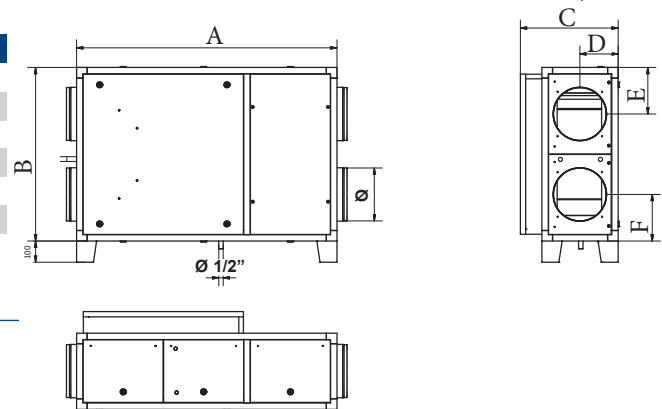
DIMENSIONS (mm) and WEIGHT (Kg) WITHOUT BY-PASS

MODEL	A	B	C	D	E	F	Ø	Weight
FAI 1 DP	960	640	345	172,5	175	175	200	40
FAI 2 DP	1230	820	360	180	220	220	250	56
FAI 3 DP	1560	1040	535	267,5	325	225	315	110
FAI 4 DP	1905	1270	630	315	425	240	355	155
FAI 5 DP	1550	1200	855	427,5	305	305	450	195
FAI 6 DP	1550	1200	855	427,5	305	305	450	200



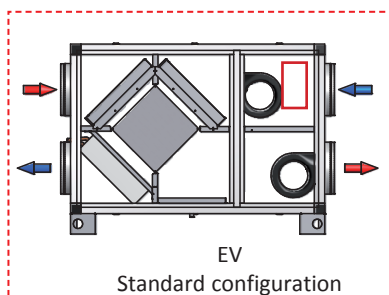
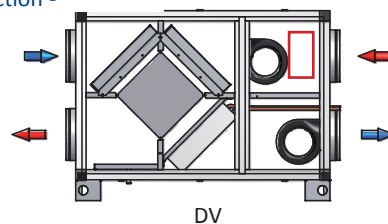
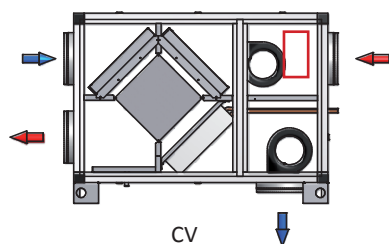
DIMENSIONS (mm) and WEIGHT (Kg) WITH BY-PASS (BP)

MODEL	A	B	C	D	E	F	Ø	Weight
FAI 1 DP	960	640	450	172,5	175	175	200	49
FAI 2 DP	1230	820	465	180	220	220	250	68
FAI 3 DP	1560	1040	640	267,5	325	225	315	126
FAI 4 DP	1905	1270	735	315	425	240	355	176
FAI 5 DP	1550	1200	855	427,5	305	305	450	195
FAI 6 DP	1550	1200	855	427,5	305	305	450	200



VERTICAL CONFIGURATION

- front view side inspection -

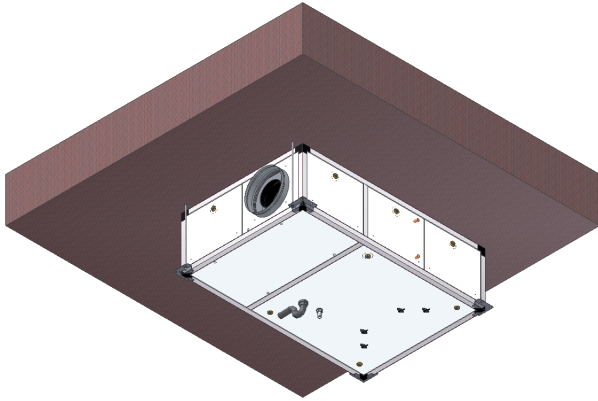


Legend

- Fresh air
- ← Exhaust air
- Electric board



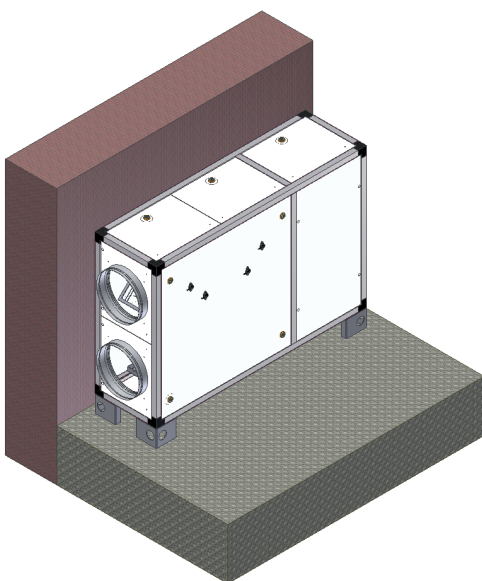
CEILING MOUNTED



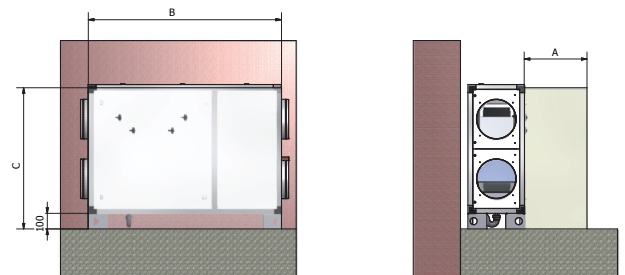
MINIMUM REQUIRED SPACE FOR MAINTENANCE (mm)

	A	B	C	D	E	F	G
FAI 1 DP	345	400	640	640	960	400	320
FAI 2 DP	360	400	820	820	1230	400	410
FAI 3 DP	535	400	1040	1040	1560	600	520
FAI 4 DP	630	500	1270	1270	1905	700	640
FAI 5 DP	855	500	970	1300	1550	900	600
FAI 6 DP	855	500	970	1300	1550	900	600

FLOOR MOUNTED



MINIMUM REQUIRED SPACE FOR MAINTENANCE (mm)



	A	B	C
FAI 1 DP	400	960	740
FAI 2 DP	400	1230	920
FAI 3 DP	600	1560	1140
FAI 4 DP	700	1900	1370
FAI 5 DP	900	1550	1300
FAI 6 DP	900	1550	1300

*UTEK s.r.l. reserves the right to make modifications
to their products without giving prior notice to third parties.*

UTEK S.r.l. | Via Provinciale, 30 | 23030 Mazzo di Valtellina (So) Italy
Tel. +39 0342 862031 | Fax +39 0342 862029 | www.utek.eu | utek@utek.it

Marketing department
Via Maniago, 9 | 20134 Milano (Mi) Italy | Tel. +39 02 26417298 | marketing@utek.it

