COMMERCIAL HEAT RECOVERY VENTILATORS
(thermal efficiency from 50% up to 70%)

RIB

RIB

- ♦ Heat recovery ventilator with flat casing and fixed configuration
- ♦ Suitable solution for ventilation of commercial buildings
- ♦ Versions available with water or electric post-heating integrable into the unit:
  - Without regulation
  - Plug-n-play solutions with electrical panel pre-wired and microprocessor control mounted on board.
    Optional microprocessor controls (see the Accessories booklet):
    - CTR08
    - CTR07
    - **EVO PH**
    - **EVO D PH**

NEW

DESCRIPTION

- ♦ Self-supporting casing made of galvanized steel
- ♦ reduced height dimensions allowing an easy installation in false ceiling
- ♦ side access for inspection and maintenance
- ♦ condensation drainage system
- ♦ Simple skin panels:
  - steel panels thickness 10/10mm
  - external coating with adhesive thermoacustic insulating polyethylene thickness 5mm
- ♦ Double skin sandwich panels:
  - self-supporting galvanized steel with internal rockwool insulation thickness 25mm, density 110Kg/m^3

AC BLOWERS

- ♦ 230V-1-50Hz direct driven blowers, double inlet with forward facing blades:
  - 4 speed for RIB 400 and RIB 800 models
  - 3 speed for RIB 1600, RIB 2500 and RIB 3500 models

HEAT EXCHANGER

- ♦ Cross-flow aluminium heat exchanger

FILTERS

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

RANGE

- ♦ Nr. 5 models from 400 m^3/h up to 3.500 m^3/h
- ♦ high values of pressure available to the ducting

CONFIGURATIONS AVAILABLE

- ♦ **Simple skin panel casing**
  - Horizontal and vertical, with or without internal by-pass
- ♦ **Double skin sandwich panels**
  - Horizontal and vertical, with or without internal by-pass

ACCESSORIES AVAILABLE ON REQUEST (see the Accessories booklet)

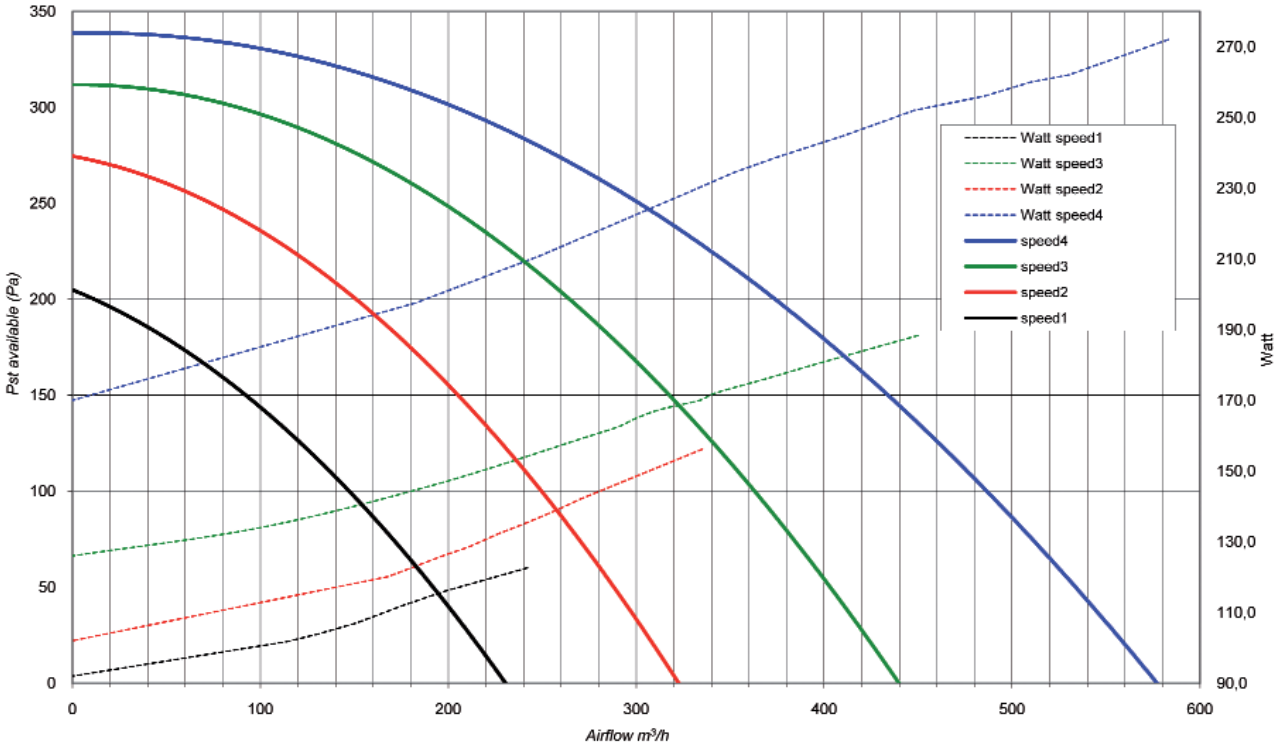
- ♦ **Accessories control:**
  - **CV4** 4 speed switch commutator for 230V-1-50Hz motors
  - **CV3** 3 speed switch commutator for 230V-1-50Hz motors
- ♦ **Accessories of deicing for duct mounting:**
  - **RCF-SC** electric heater
  - **RCFE-SCT** electric heater with electronic regulation
  - **RCF-SCTTC** electric heater with thermostatic regulation
- ♦ **Accessories of post-heating for duct mounting:**
  - **BA-AT** temperate water coil (45°/35 °C) - *Contact the technical office*
- ♦ **Accessories of cooling for duct mounting:**
  - **BA-AF** cooling water coil with insulated plenum - *Contact the technical office*
- ♦ **Optional sensors:**
  - **EE80** CO_2 sensor
  - **QPA 2002** CO_2/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

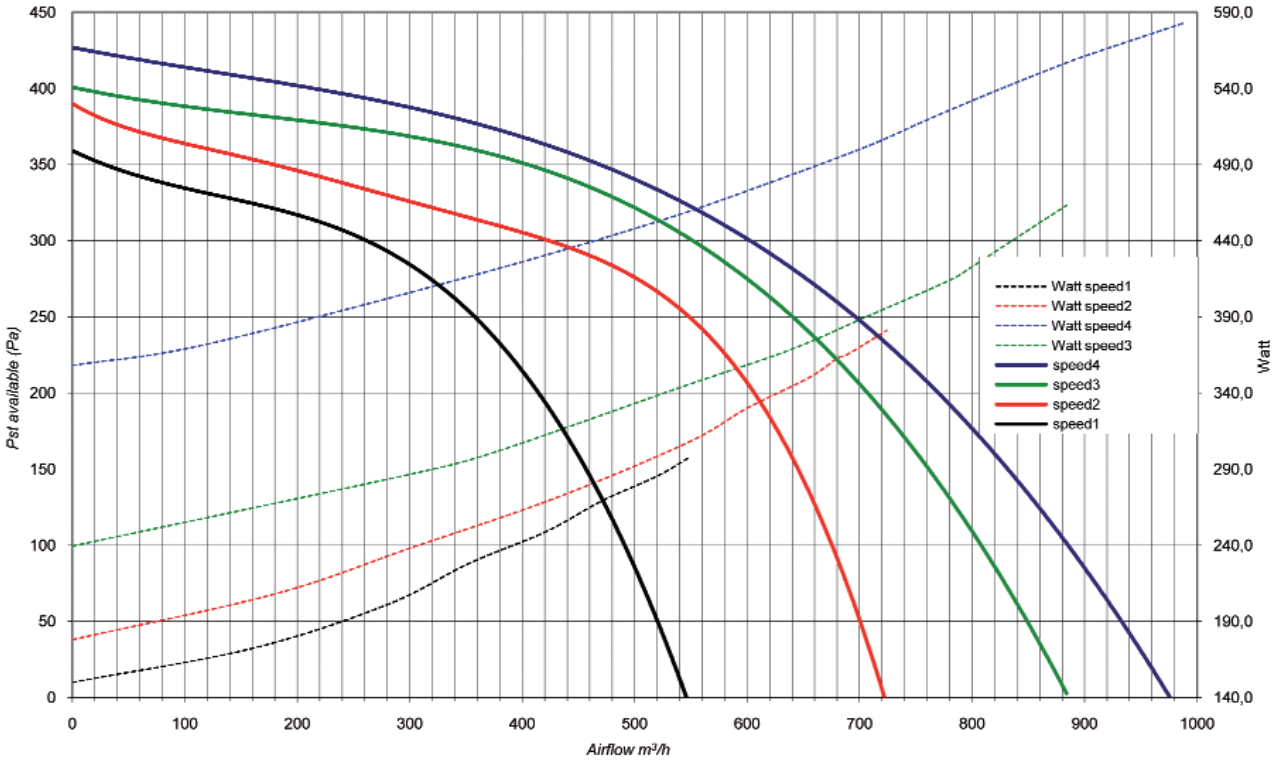
PERFORMANCES

RIB 400 | *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.

RIB 800 | *4 SPEED*



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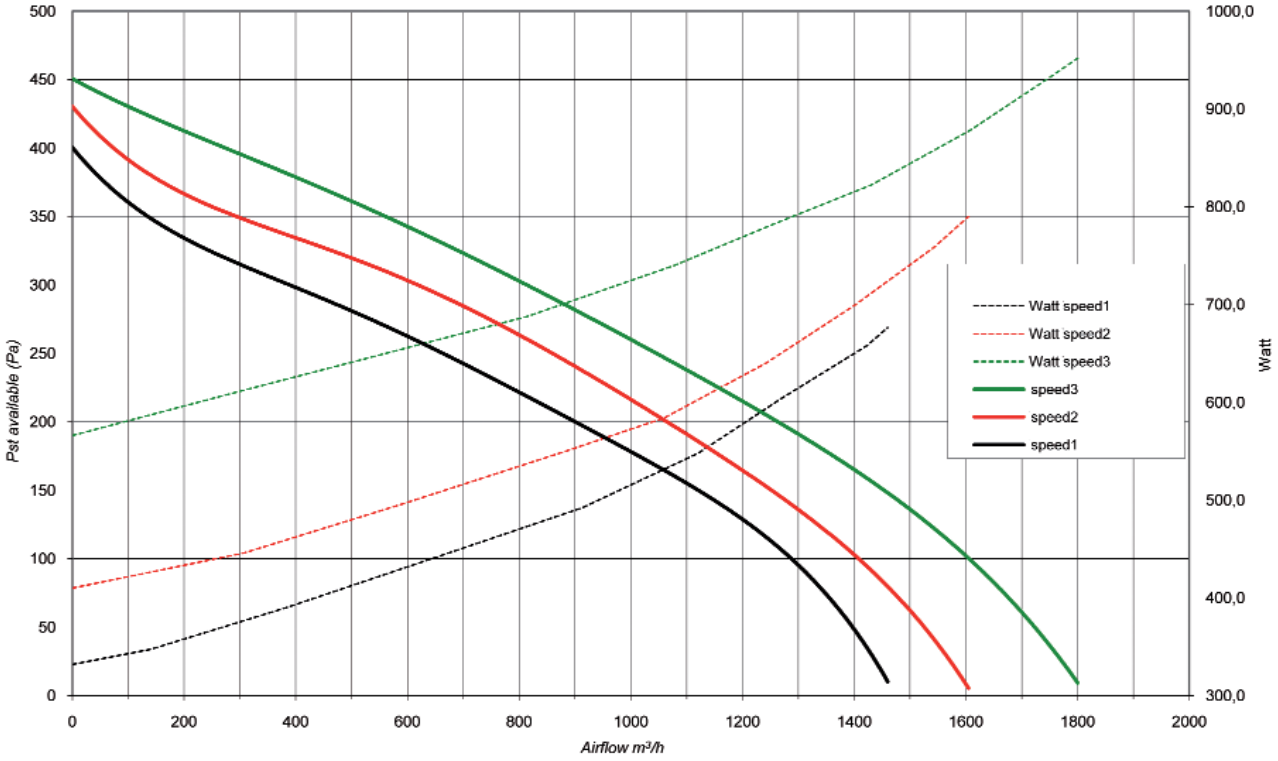
The claimed performances are guaranteed only by UTEK original filter low pressure loss.

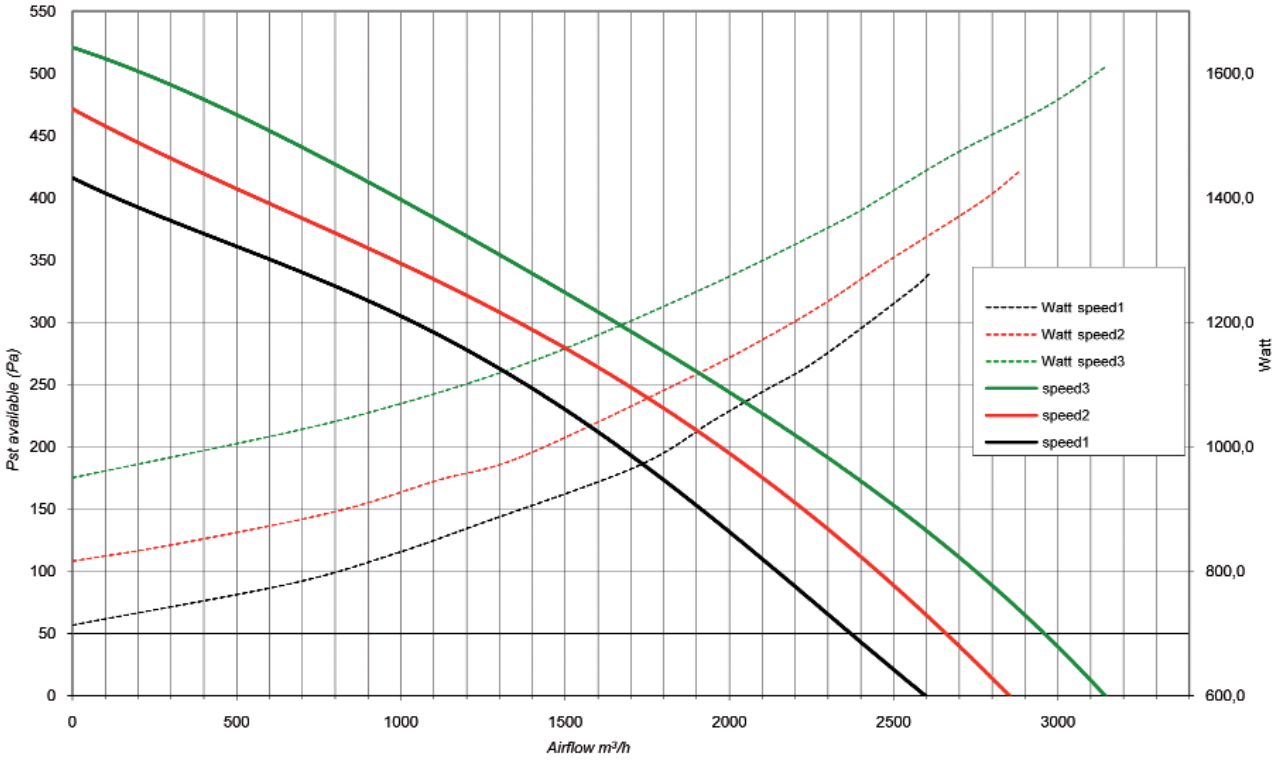
PERFORMANCES

RIB 1600 | *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.

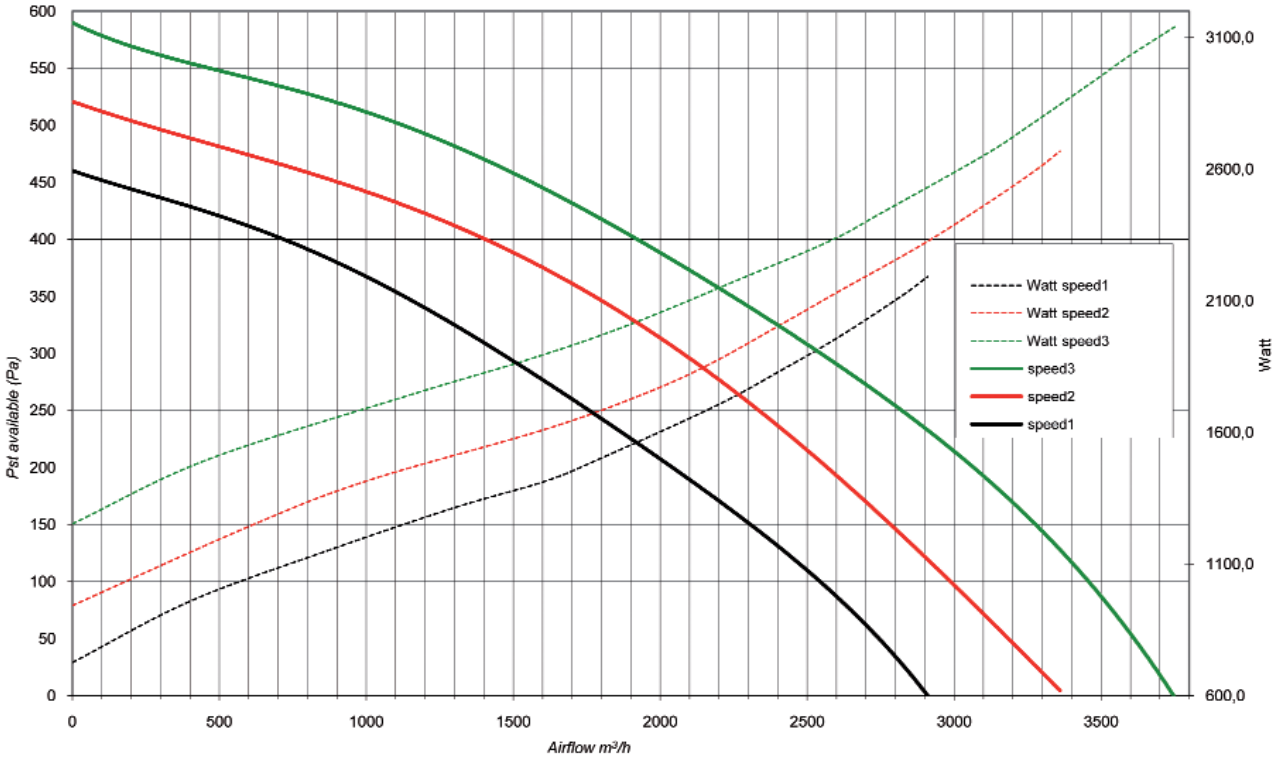
RIB 2500 | *3 SPEED*



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.

PERFORMANCES

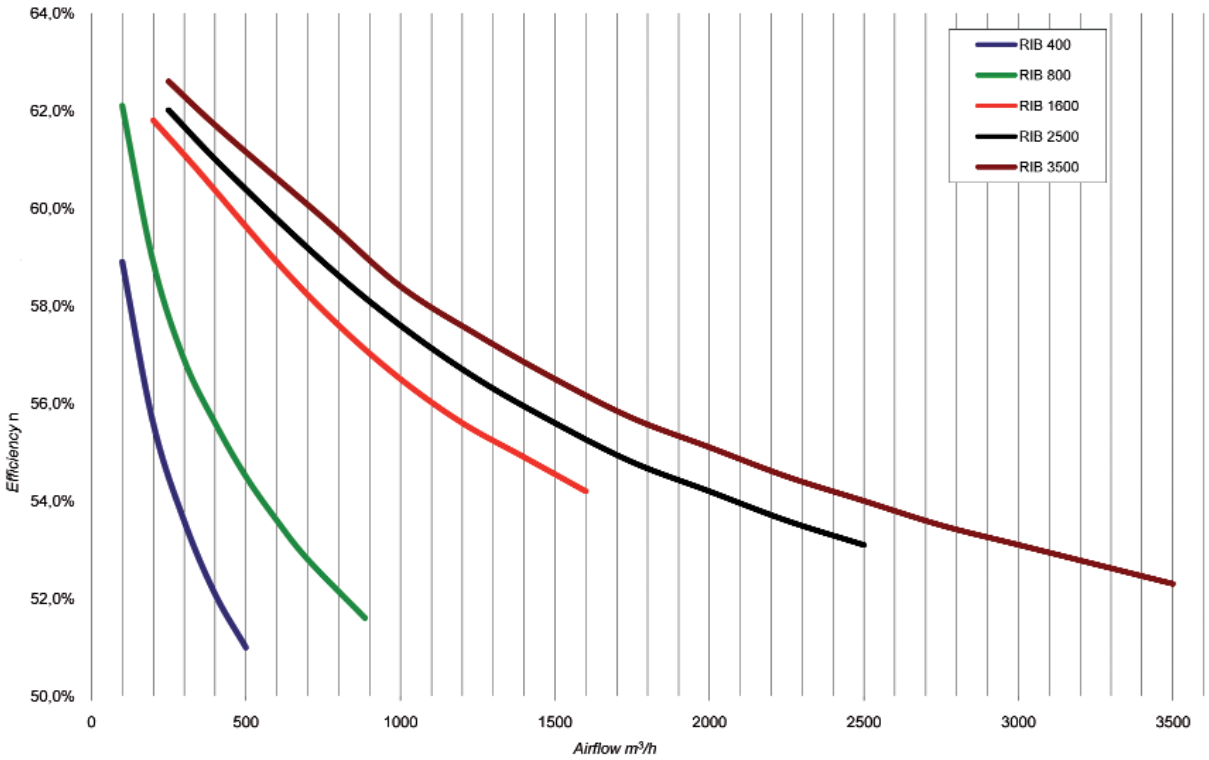
RIB 3500 | *3 SPEED*



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.

HEAT RECOVERY PERFORMANCE (sensible efficiency)

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



TECHNICAL DATA

	RIB 400	RIB 800	RIB 1600	RIB 2500	RIB 3500
Nominal airflow (m^3/h)	485	885	1600	2680	3500
Available static pressure (Pa)*	100	100	100	100	100
Max. current absorption (A)	1,32	3,1	5,5	8	16,2
VENTILATORS					
Installed power (W)	150x2	355x2	373x2	550x2	750x2
Poles (nr.)	2	2	4	4	4
Max. current absorption (A)	0,66x2	1,55x2	2,75x2	4x2	8,1x2
Fan speed	4	4	3	3	3
Protection level (IP)	20	20	20	20	20
Insulation class	F	F	F	F	F
Electrical power supply (V/ph/Hz)	230V-1-50Hz	230V-1-50Hz	230V-1-50Hz	230V-1-50Hz	230V-1-50Hz
THERMAL RECOVERY UNIT**					
Efficiency (%)	51,2	51,6	54,2	52,7	52,3
Recovered thermal power (kW)	2,1	3,8	7,3	11,8	15,3
Renewal air outlet temp (°C)	7,8	7,9	8,6	8,2	8,1
FILTERS					
Filtration class for exhaust air	G4	G4	G4	G4	G4
Filtration class for fresh air	F7	F7	F7	F7	F7

** Values reffering to the nominal airflow having overcome the loss of pressure of the recovery unit and filters*
*** Values referring to the following conditions: Tbs ext. air.=-5°C; Tbs environment=20°C; U.R. environment= 50%; Nominal airflow*

TECHNICAL DATA

RCF..
ELECTRICAL HEATER OF DEICING

	RIB 400	RIB 800	RIB 1600	RIB 2500		RIB 3500	
Nominal power (kW)	2	4	6	8	8	8	8
Voltage (V)	230	230	230	230	400	230	400
Phases (nr.)	1	1	1	1	3	1	3
Stages (nr.)	1	2	2	2	2	2	2
Current absorption (A)	8,5	17,5	26	34,78	12,17	34,78	12,17
Intake air temp. on exchanger (°C)	-5	-5	-5	-5	-5	-5	-5

Measured with external air temp.= -15°C nominal airflow

REL..
ELECTRICAL HEATER OF POST-HEATING

	RIB 400	RIB 800	RIB 1600	RIB 2500		RIB 3500	
Nominal power (kW)	2	4	6	8	8	8	8
Voltage (V)	230	230	230	230	400	230	400
Phases (nr.)	1	1	1	1	3	1	3
Stages (nr.)	1	2	2	2	2	2	2
Current absorption (A)	8,5	17,5	26	34,78	11,55	34,78	11,55
Intake air temp. on exchanger (°C)	20	20	22	22	22	20	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

	RIB 400	RIB 800	RIB 1600	RIB 2500	RIB 3500
Rows (nr.)	2	2	2	2	2
Thermal yeld (kW)	3,16	4,97	10,09	17,2	21,86
Replacement air outlet temp. (°C)	27	30	26,6	27	26,5
Air side pressure loss (Pa)	43	32	65	69	67
Water side pressure loss (kPa)	1	4	8	20	8
Water side connection size (ø)	1/2"	1/2"	1/2"	1/2"	1/2"

Values referring to the following conditions: water 80°/70°C; Intake air temp. 8°C; nominal airflow
The tables of thermal yeld are available on Accessories booklet

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

	RIB 400	RIB 800	RIB 1600	RIB 2500	RIB 3500
Rows (nr.)	2	2	2	2	3
Thermal yeld (kW)	2,2	3,7	7,9	13,3	20,6
Replacement air outlet temp. (°C)	21,0	22,2	20,3	21,2	22,1
Air side pressure loss (Pa)	90	65	95	80	90
Water side pressure loss (kPa)	0,9	2,1	4,9	5,7	6,1
Water side connection size (ø)	1/2"	1/2"	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 yeld are available on Accessories booklet

NOISE LEVEL RIB

Lw Sound level taken in accordance to UNI EN ISO 3741
(UNI EN ISO 3747 FOR RIB 3500; ΔLfA ≥ 7 dB for each measurement position, class accuracy 2)

RIB 400	NOISE TRANSMITTED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	37	26	18	27	15	6	5	33
$L_W V_2$	44	32	24	36	24	13	8	41
$L_W V_3$	49	38	30	42	32	22	16	47
$L_W V_4$	54	44	35	46	39	30	25	52
	NOISE IRRADIATED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	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

RIB 800	NOISE TRANSMITTED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	46	34	26	41	25	23	18	45
$L_W V_2$	52	42	34	47	35	33	30	52
$L_W V_3$	56	47	39	51	42	40	39	57
$L_W V_4$	59	50	43	53	46	44	42	59
	NOISE IRRADIATED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	39	29	22	35	22	19	15	36
$L_W V_2$	44	36	29	40	30	28	26	41
$L_W V_3$	48	40	33	43	36	34	33	45
$L_W V_4$	50	42	36	45	39	37	36	48

RIB 1600	NOISE TRANSMITTED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	65	57	60	62	58	52	44	57
$L_W V_2$	68	60	62	64	60	55	48	59
$L_W V_3$	67	62	64	65	62	58	51	61
	NOISE IRRADIATED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	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

RIB 2500	NOISE TRANSMITTED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	56	50	50	48	41	31	28	59
$L_W V_2$	69	59	63	64	61	57	48	61
$L_W V_3$	71	71	72	75	73	70	64	63
	NOISE IRRADIATED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	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

RIB 3500	NOISE TRANSMITTED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	55	57	59	48	42	32	30	57
$L_W V_2$	64	60	62	60	59	55	45	65
$L_W V_3$	68	67	67	66	65	62	50	71
	NOISE IRRADIATED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	47	48	50	40	36	27	26	49
$L_W V_2$	54	51	53	51	50	47	38	56
$L_W V_3$	58	57	57	56	55	53	43	62

NOISE LEVEL RIB DP

Lw Sound level taken in accordance to UNI EN ISO 3741
(UNI EN ISO 3747 FOR RIB 3500; ΔLfA ≥ 7 dB for each measurement position, class accuracy 2)

RIB 400 DP	NOISE TRANSMITTED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	37	26	18	27	15	6	5	33
$L_W V_2$	44	32	24	36	24	13	8	41
$L_W V_3$	49	38	30	42	32	22	16	47
$L_W V_4$	54	44	35	46	39	30	25	52
	NOISE IRRADIATED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	23	17	11	17	9	4	3	19
$L_W V_2$	28	20	15	23	15	8	5	25
$L_W V_3$	31	24	19	27	20	14	10	29
$L_W V_4$	35	28	23	29	25	19	16	32

RIB 800 DP	NOISE TRANSMITTED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	46	34	26	41	25	23	18	45
$L_W V_2$	52	42	34	47	35	33	30	52
$L_W V_3$	56	47	39	51	42	40	39	57
$L_W V_4$	59	50	43	53	46	44	42	59
	NOISE IRRADIATED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	29	22	16	26	16	14	11	27
$L_W V_2$	33	27	22	30	22	21	19	32
$L_W V_3$	36	30	25	32	27	25	25	35
$L_W V_4$	37	32	27	34	30	28	27	37

RIB 1600 DP	NOISE TRANSMITTED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	65	57	60	62	58	52	44	57
$L_W V_2$	68	60	62	64	60	55	48	59
$L_W V_3$	67	62	64	65	62	58	51	61
	NOISE IRRADIATED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	41	38	38	40	37	33	28	44
$L_W V_2$	43	38	40	41	38	35	31	45
$L_W V_3$	43	40	41	41	40	37	33	46

RIB 2500 DP	NOISE TRANSMITTED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	56	50	50	48	41	31	28	59
$L_W V_2$	69	59	63	64	61	57	48	61
$L_W V_3$	71	71	72	75	73	70	64	63
	NOISE IRRADIATED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	36	32	32	30	26	20	18	34
$L_W V_2$	44	37	40	31	39	36	30	45
$L_W V_3$	45	45	46	48	47	45	41	53

RIB 3500 DP	NOISE TRANSMITTED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	55	57	59	48	42	32	30	57
$L_W V_2$	64	60	62	60	59	55	45	65
$L_W V_3$	68	67	67	66	65	62	50	71
	NOISE IRRADIATED (Hz)							
	125	250	500	1000	2000	4000	8000	dB(A)
$L_W V_1$	35	36	38	30	27	20	19	37
$L_W V_2$	41	38	40	38	38	35	29	44
$L_W V_3$	43	43	43	41	41	40	32	48

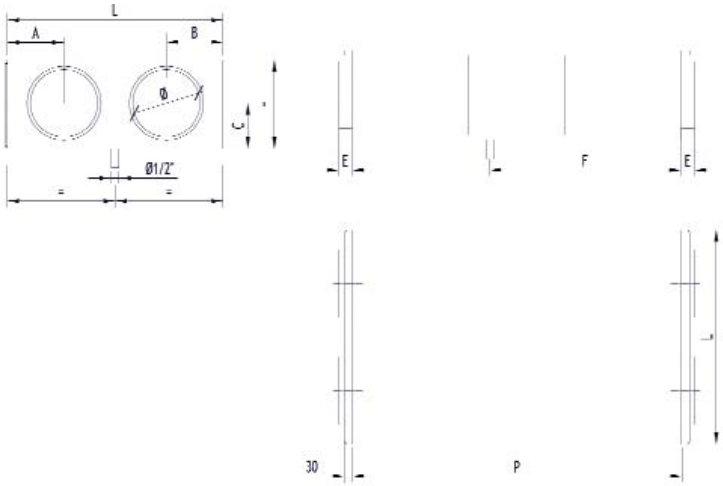
DIMENSIONS AND WEIGHT
HORIZONTAL CONFIGURATION (H)

DIMENSIONS (mm) and WEIGHT (Kg)

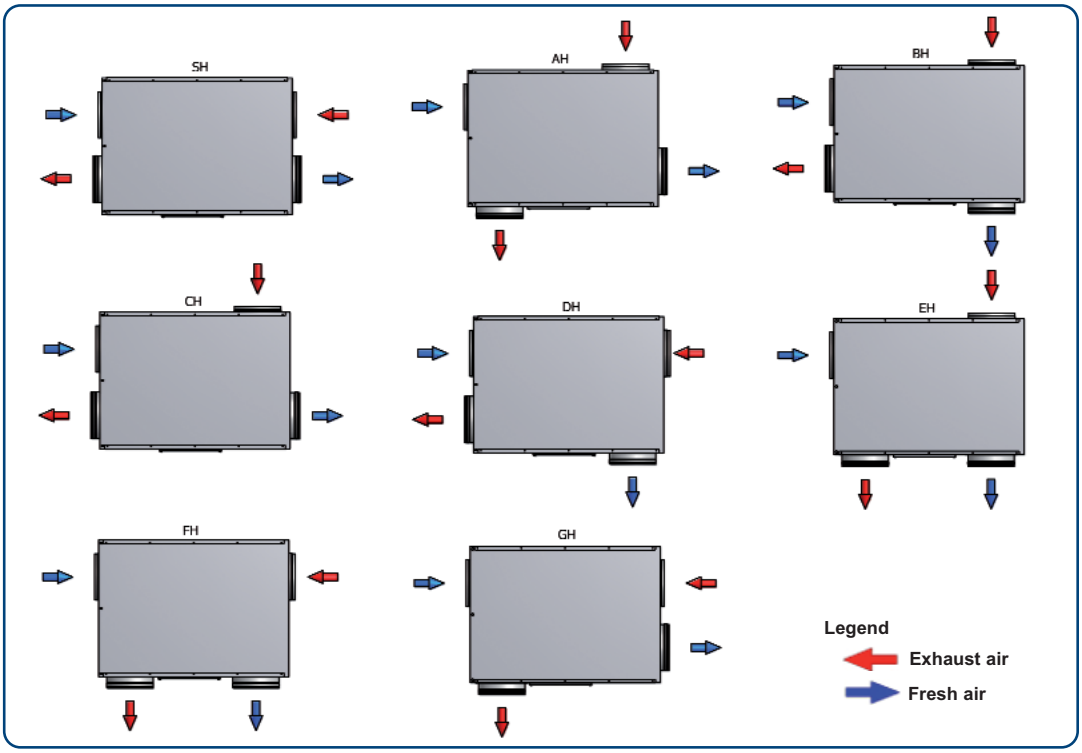
MODEL	L	H	P	A	B	C	E	F	Ø	Weight
RIB 400	570	310	920	135	135	155	50	530	200	30
RIB 800	680	310	920	175	175	155	50	530	250	43
RIB 1600	820	450	1400	225	190	270	50	770	315	95
RIB 2500	990	500	1460	285	210	280	50	845	355	105
RIB 3500	1250	500	1460	300	260	265	50	845	400	138

DIMENSIONS (mm) and WEIGHT (Kg) DOUBLE SKIN SANDWICH PANELS

MODEL	L	H	P	A	B	C	E	F	Ø	Weight
RIB 400	620	360	970	160	160	180	50	555	200	55
RIB 800	730	360	970	200	200	180	50	555	250	71
RIB 1600	870	500	1450	250	215	295	50	795	315	127
RIB 2500	1040	550	1510	310	235	305	50	870	355	140
RIB 3500	1300	550	1510	325	285	290	50	870	400	168



TOP VIEW
(standard configuration: SH)



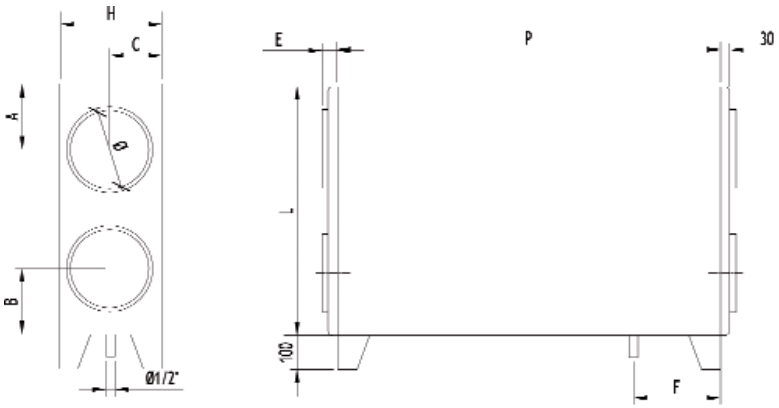
DIMENSIONS AND WEIGHT
VERTICAL CONFIGURATION (V)

DIMENSIONS (mm) and WEIGHT (Kg)

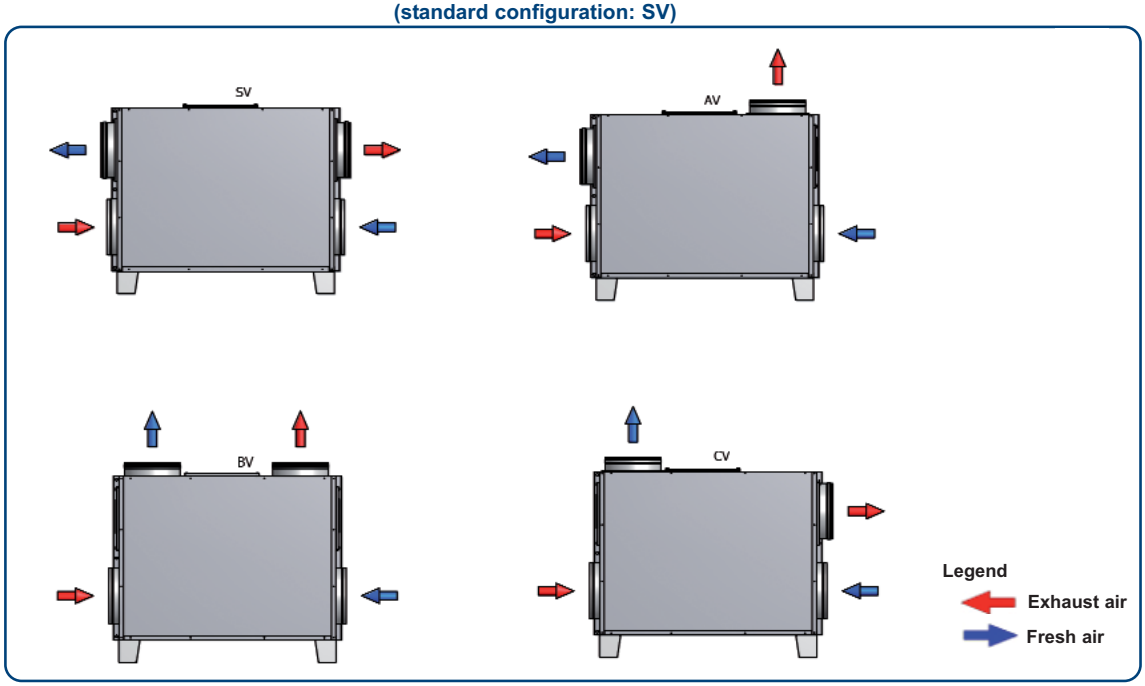
MODEL	L	H	P	A	B	C	E	F	Ø	Weight
RIB 400	570	310	920	135	135	155	50	100	200	30
RIB 800	680	310	920	175	175	155	50	100	250	43
RIB 1600	820	450	1400	225	190	270	50	45	315	95
RIB 2500	990	500	1460	285	210	280	50	45	355	105
RIB 3500	1250	500	1460	300	260	265	50	45	400	138

DIMENSIONS (mm) and WEIGHT (Kg) DOUBLE SKIN SANDWICH PANELS

MODEL	L	H	P	A	B	C	E	F	Ø	Weight
RIB 400	620	360	970	160	160	180	50	125	200	55
RIB 800	730	360	970	200	200	180	50	125	250	71
RIB 1600	870	500	1450	250	215	295	50	70	315	127
RIB 2500	1040	550	1510	310	235	305	50	70	355	140
RIB 3500	1300	550	1510	325	285	290	50	70	400	168



FRONT VIEW SIDE INSPECTION
(standard configuration: SV)



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

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