

## BOX RL PLUS



VENTILATION BOX WITH BACKWARD TURBINE

MANUFACTURING FEATURES:

- Casing with profile structure made of aluminium 30 mm, nylon corners, steel sandwich panel with inner rock wool insulation.
- Circular inlets for duct connection.
- High efficiency backward turbine in steel sheet, balanced static and dynamically in origin.
- Standard asynchronous squirrel-cage motor with IP-55 protection and Class F insulation. Standard voltages 230/400V 50Hz .
- Maximum working temperature 60°C.

APPLICATIONS:

Designed for inline installation, they are suitable for:

- Air renewal in buildings and industries.
- Smoke extraction.

## Accessories



FILTRO  
EMC



INT



JE-45



SFC

## Technical data

### Three-phase motor / 2 poles

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)*	Weight	Connect. diagram
246310106	BOX RL PLUS 315 T2 1,1kW	2800	2,33	1,10	4.400	51	64	1
246350106	BOX RL PLUS 355 T2 2,2kW	2800	4,58	2,20	6.740	54	73	1

### Three-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)*	Weight	Connect. diagram
246311106	BOX RL PLUS 315 T4 0,25kW	1400	0,79	0,25	2.220	46	60	1
246351106	BOX RL PLUS 355 T4 0,55kW	1400	1,49	0,55	3.400	49	68	1
246400106	BOX RL PLUS 400 T4 0,75kW	1390	1,63	0,75	5.040	52	84	1
246450106	BOX RL PLUS 450 T4 1,1kW	1400	2,49	1,10	6.940	56	120	1

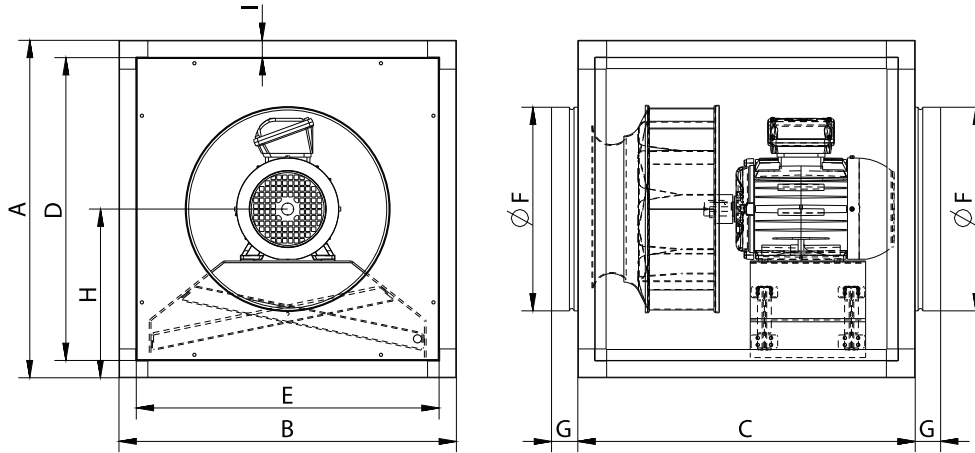
### Three-phase motor / 6 poles

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow m3/h	Sound db (A)*	Weight	Connect. diagram
246500106	BOX RL PLUS 500 T6 0,75kW	920	1,95	0,75	6.150	55	-	1
246560106	BOX RL PLUS 560 T6 0,75kW	920	1,95	0,75	8.300	58	-	1

**Notes:**

\* Total sound pressure level at the point of maximum flow measured in dB(A) in the suction measured in free field at a distance of 6m from the source

## Dimensions

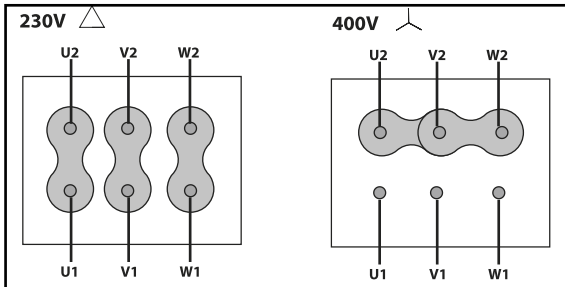


Model	A	B	C	D	E	G	H	I	ØF
BOX RL PLUS 315 T2 1,1kW	525	525	525	465	465	70	262,5	30	298
BOX RL PLUS 315 T4 0,25kW	525	525	525	465	465	70	262,5	30	298
BOX RL PLUS 355 T2 2,2kW	585	585	585	525	525	70	292,5	30	353
BOX RL PLUS 355 T4 0,55kW	585	585	585	525	525	70	292,5	30	353
BOX RL PLUS 400 T4 0,75kW	650	650	650	590	590	70	325	30	398
BOX RL PLUS 450 T4 1,1kW	725	725	725	665	665	70	362,5	30	448
BOX RL PLUS 500 T6 0,75kW	-	-	-	-	-	-	-	-	-
BOX RL PLUS 560 T6 0,75kW	890	890	890	830	830	70	445	30	558

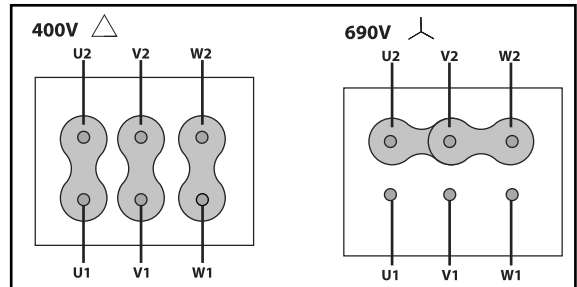
## Wiring diagram

DIAGRAM Nº 1

230/400V



400/690V

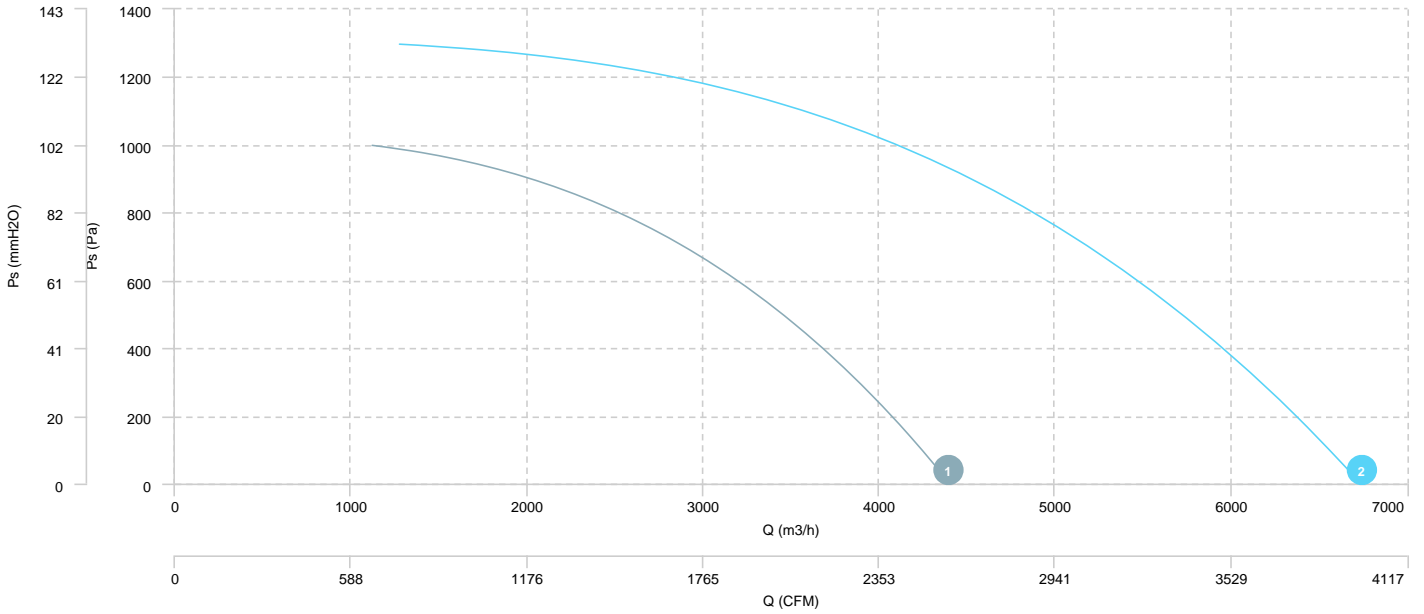


# CHARACTERISTIC CURVE

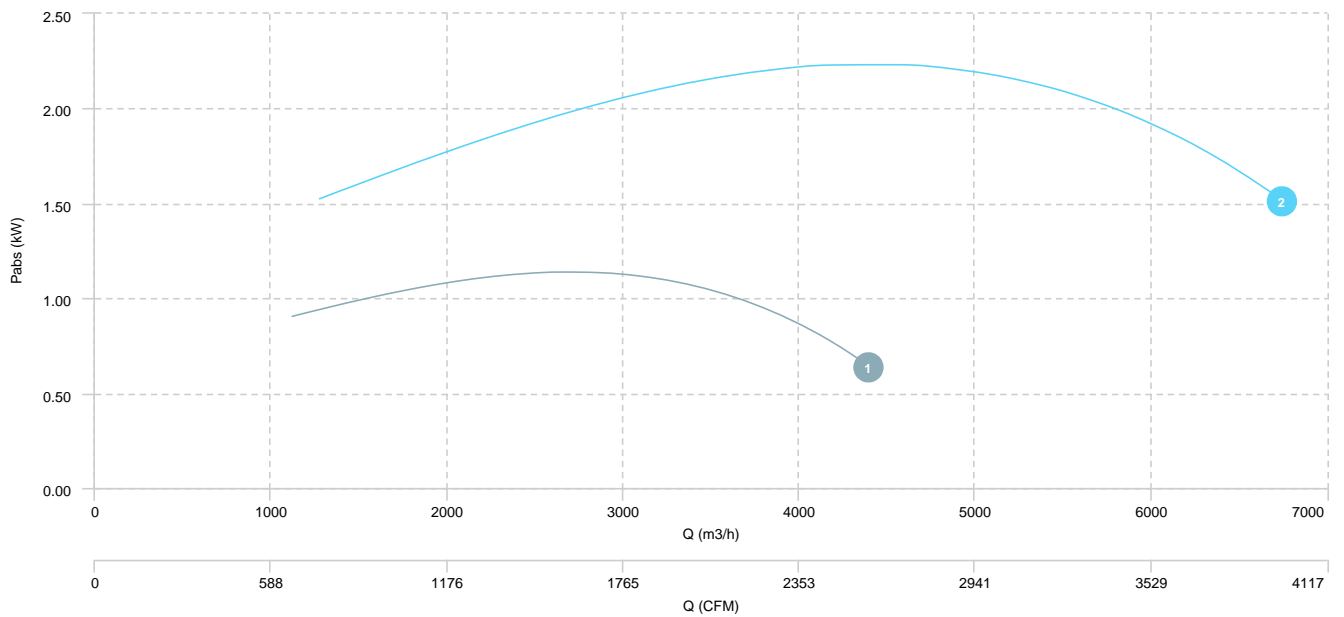
1 BOX RL PLUS 315 T2 1,1kW

2 BOX RL PLUS 355 T2 2,2kW

## AIR FLOW - PRESSURE

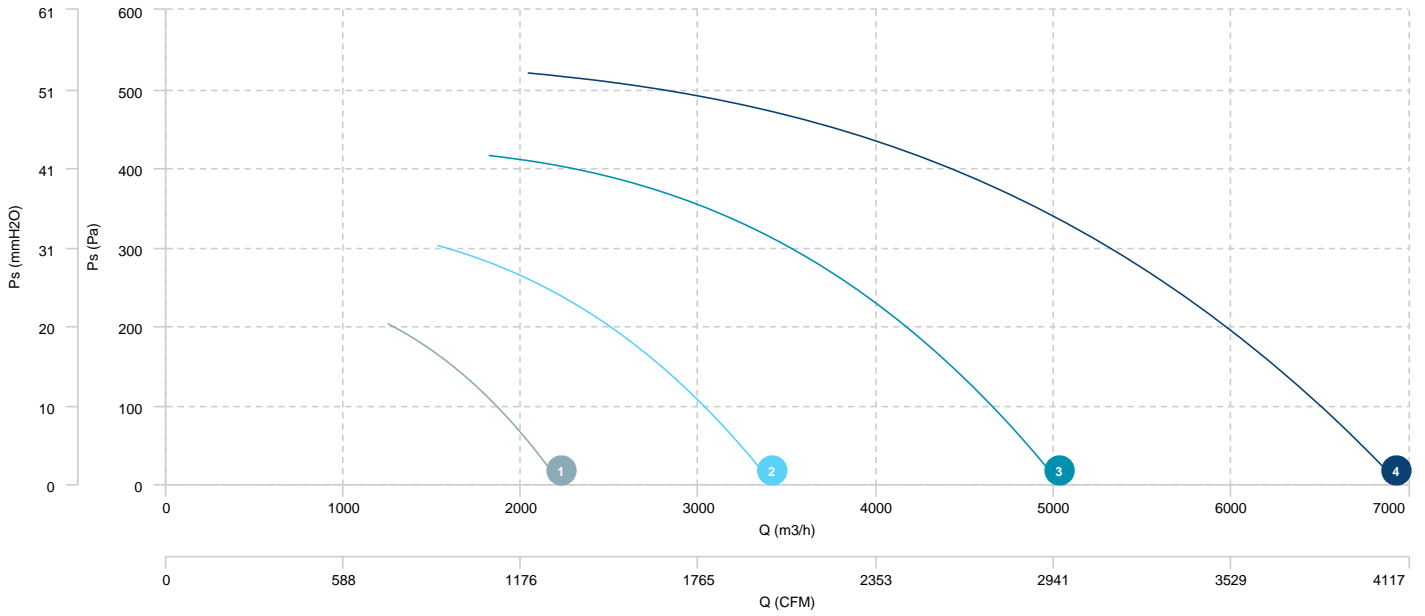


## AIR FLOW - ABSORBED POWER

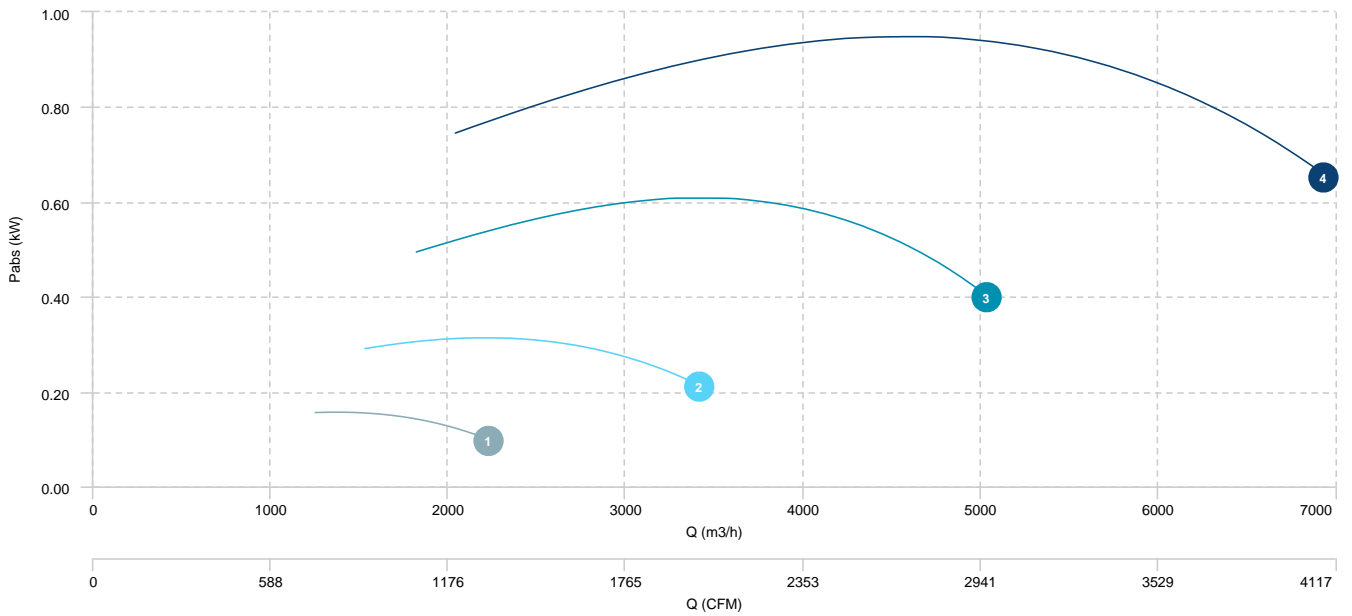


- 1 BOX RL PLUS 315 T4 0, 25kW
- 2 BOX RL PLUS 355 T4 0, 55kW
- 3 BOX RL PLUS 400 T4 0, 75kW
- 4 BOX RL PLUS 450 T4 1,1kW

## AIR FLOW - PRESSURE



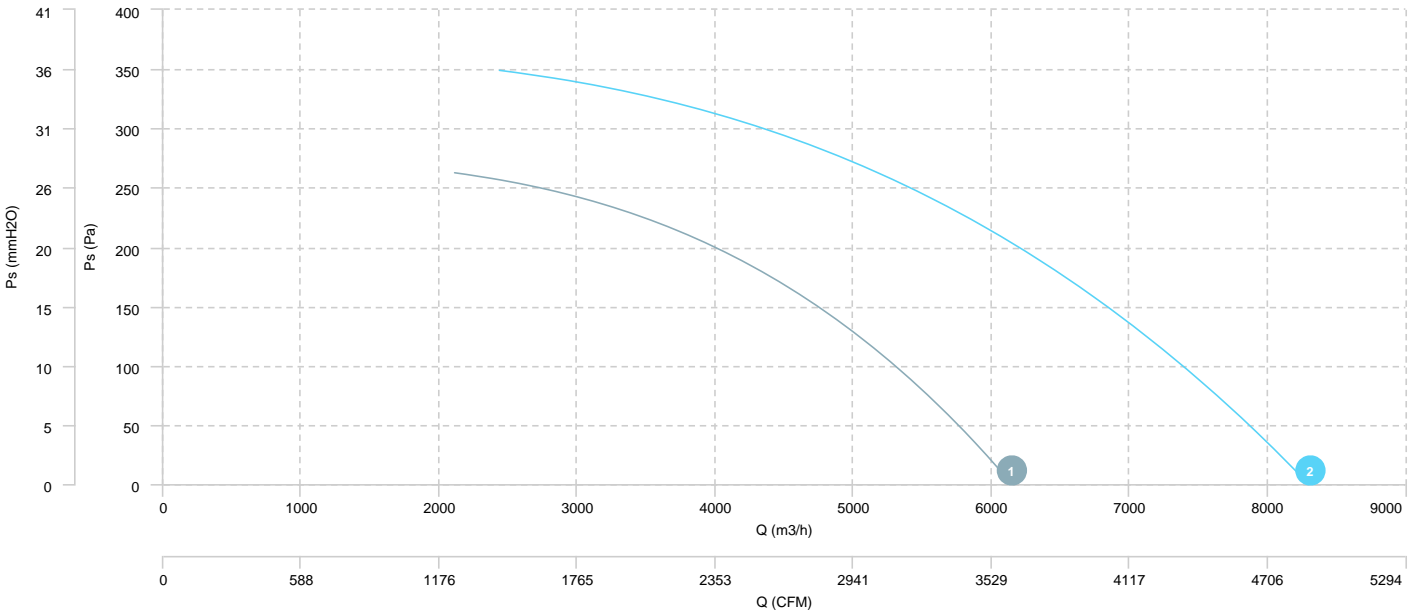
## AIR FLOW - ABSORBED POWER



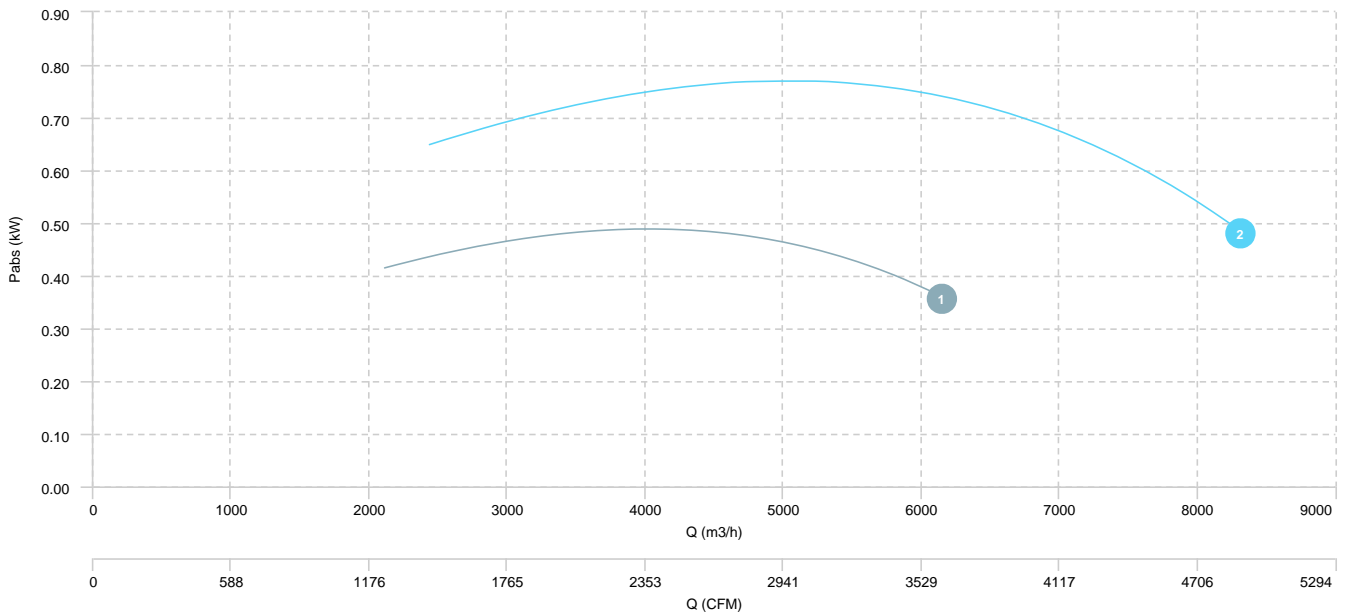
1 BOX RL PLUS 500 T6 0,  
75kW

2 BOX RL PLUS 560 T6 0,  
75kW

## AIR FLOW - PRESSURE



## AIR FLOW - ABSORBED POWER



## Sound data

### Sound / 2 poles

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
BOX RL PLUS 315 T2 1,1kW	Inlet	50	69	70	68	69	70	68	54	77
BOX RL PLUS 355 T2 2,2kW	Inlet	53	72	73	71	72	73	71	57	80

### Sound / 4 poles

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
BOX RL PLUS 315 T4 0,25kW	Inlet	45	64	65	63	64	65	63	49	72
BOX RL PLUS 355 T4 0,55kW	Inlet	48	67	68	66	67	68	66	52	75
BOX RL PLUS 400 T4 0,75kW	Inlet	51	70	71	69	70	71	69	55	78
BOX RL PLUS 450 T4 1,1kW	Inlet	55	74	75	73	74	74	73	59	82

### Sound / 6 poles

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
BOX RL PLUS 500 T6 0,75kW	Inlet	54	75	72	76	72	70	62	57	81
BOX RL PLUS 560 T6 0,75kW	Inlet	57	78	75	80	76	73	65	61	84



## erp data

ERP	
Fan type	Unit for non-residential ventilation (LOT 6)
Typology	Unidirectional
Others	None
Type of driver	None

### ERP / 2 poles

Model	Motor power (kW)	Maximum efficiency point data						
		Eff.Heat recovery (%)	Max. efficiency (%)	Pabs (kW)	Air Flow (m3/h)	Ps (Pa)	Speed (m/s)	SFP (W/m3/s)
BOX RL PLUS 315 T2 1,1kW	1,1	-	53,90	1,14	2.780,16	732,49	9.91	1.473,09
BOX RL PLUS 355 T2 2,2kW	2,2	-	54,85	2,23	4.094,03	1.001,50	11.49	1.956,29

### ERP / 4 poles

Model	Motor power (kW)	Maximum efficiency point data						
		Eff.Heat recovery (%)	Max. efficiency (%)	Pabs (kW)	Air Flow (m3/h)	Ps (Pa)	Speed (m/s)	SFP (W/m3/s)
BOX RL PLUS 315 T4 0,25kW	0,25	-	49,24	0,16	1.397,01	183,91	4.98	403,20
BOX RL PLUS 355 T4 0,55kW	0,55	-	50,44	0,31	2.075,92	255,49	5.83	541,76
BOX RL PLUS 400 T4 0,75kW	0,75	-	53,05	0,60	3.046,42	349,22	6.73	709,61
BOX RL PLUS 450 T4 1,1kW	1,1	-	55,52	0,95	4.259,02	413,57	7.44	798,71

### ERP / 6 poles

Model	Motor power (kW)	Maximum efficiency point data						
		Eff.Heat recovery (%)	Max. efficiency (%)	Pabs (kW)	Air Flow (m3/h)	Ps (Pa)	Speed (m/s)	SFP (W/m3/s)
BOX RL PLUS 500 T6 0,75kW	0,75	-	48,44	0,49	3.741,20	213,09	5.29	468,35
BOX RL PLUS 560 T6 0,75kW	0,75	-	52,90	0,77	5.233,79	259,67	5.9	528,84