

## BOX RLQ PLUS



### VENTILATION BOX WITH BACKWARD IMPELLER

#### MANUFACTURING FEATURES

- Ventilation box with 30 mm aluminum profile structure, nylon corners, galvanized sandwich panels with internal insulation rockwool (25mm thickness) class A1 (non-combustible) of 90kg/m<sup>3</sup> density. All panels are equipped with "fastening system" for the quick assembly and disassembly whenever required, either for cleaning, maintenance or exchanging of panels.
- Centrifugal fan with motor coupled directly to the impeller.
- Circular suction mouth to facilitate duct connection. Open lateral drive.
- Standard squirrel cage asynchronous motor, with IP-55 protection and class F insulation. Voltages 230/400V 50Hz for three-phase motors.
- Backward curved single inlet impeller of high performance with self-cleaning system made of steel. Balanced statically and dynamically at origin.
- Interchangeable panels.
- Motor B5 construction located outside the air flow, on the back of the box there is a grid to allow the entry of air to facilitate the cooling of the engine.

### Accessories



BA-400



INT



JE 45



SFC

#### APPLICATIONS

Designed for inline installation, they are suitable for:

- Air renewal in buildings and industries.
- Smoke extraction.
- Maximum temperature of transported air: 80°C.
- Maximum environment temperature: 60°C.

## Technical data

### Three-phase motor / 2 poles

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow w m3/h	Sound db (A)**	Weight t	Connect. diagram
246310106Q	BOX RLQ PLUS 315 T2 1,1kW	2800	2,33	1,10	4.410	57	64	1
246350106Q	BOX RLQ PLUS 355 T2 2,2kW	2800	4,58	2,20	6.830	62	73	1

### Three-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow w m3/h	Sound db (A)**	Weight t	Connect. diagram
246311106Q	BOX RLQ PLUS 315 T4 0,25kW	1400	0,79	0,25	2.220	42	60	1
246351106Q	BOX RLQ PLUS 355 T4 0,55kW	1400	1,49	0,55	3.420	47	68	1
246400106Q	BOX RLQ PLUS 400 T4 0,75kW	1390	1,63	0,75	4.890	50	84	1
246450106Q	BOX RLQ PLUS 450 T4 1,1kW	1400	2,49	1,10	6.960	54	120	1

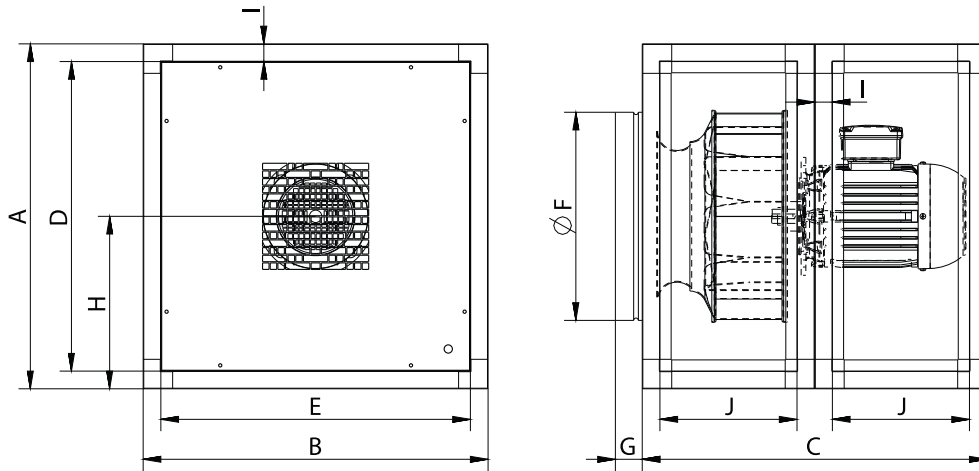
### Three-phase motor / 6 poles

Code	Model	R.P.M.	Rated I. (A) 400V	Rated power kW	Max. Airflow w m3/h	Sound db (A)**	Weight t	Connect. diagram
246500106Q	BOX RLQ PLUS 500 T6 0,75kW	920	1,95	0,75	6.300	48	150	1
246560106Q	BOX RLQ PLUS 560 T6 0,75kW	920	1,95	0,75	8.680	51	180	1
246630106Q	BOX RLQ PLUS 630 T6 1,5kW	940	3,71	1,50	12.360	55	220	1
246710106Q	BOX RLQ PLUS 710 T6 2,2kW	960	5,94	2,20	17.700	58	290	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

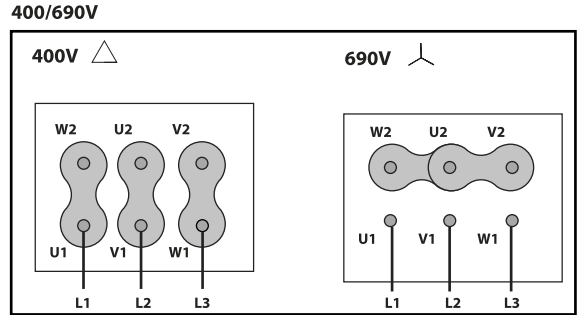
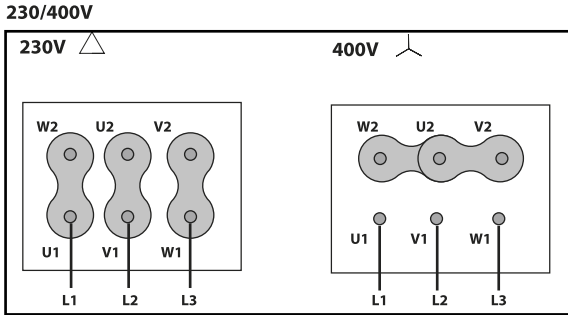


Model	A	B	C	D	E	F	G	H	I
BOX RLQ PLUS 315 T2 1,1kW	525	525	525	465	465	-	45.5	262,5	30
BOX RLQ PLUS 315 T4 0,25kW	525	525	525	465	465	-	45.5	262,5	30
BOX RLQ PLUS 355 T2 2,2kW	585	585	585	525	525	-	45.5	292,5	30
BOX RLQ PLUS 355 T4 0,55kW	585	585	585	525	525	-	45.5	292,5	30
BOX RLQ PLUS 400 T4 0,75kW	650	650	650	590	590	-	45.5	325	30
BOX RLQ PLUS 450 T4 1,1kW	725	725	725	665	665	-	45.5	362,5	30
BOX RLQ PLUS 500 T6 0,75kW	800	800	800	740	740	-	45.5	400	30
BOX RLQ PLUS 560 T6 0,75kW	870	870	870	810	810	-	45.5	435	30
BOX RLQ PLUS 630 T6 1,5kW	945	945	945	885	885	628	45,5	472,5	30
BOX RLQ PLUS 710 T6 2,2kW	-	-	-	-	-	-	-	-	-

Model	J	ØF
BOX RLQ PLUS 315 T2 1,1kW	174,5	298
BOX RLQ PLUS 315 T4 0,25kW	174,5	298
BOX RLQ PLUS 355 T2 2,2kW	232,5	353
BOX RLQ PLUS 355 T4 0,55kW	232,5	353
BOX RLQ PLUS 400 T4 0,75kW	265	398
BOX RLQ PLUS 450 T4 1,1kW	302,5	448
BOX RLQ PLUS 500 T6 0,75kW	340	498
BOX RLQ PLUS 560 T6 0,75kW	375	558
BOX RLQ PLUS 630 T6 1,5kW	412.5	-
BOX RLQ PLUS 710 T6 2,2kW	-	-

# Wiring diagram

**DIAGRAM N° 1**

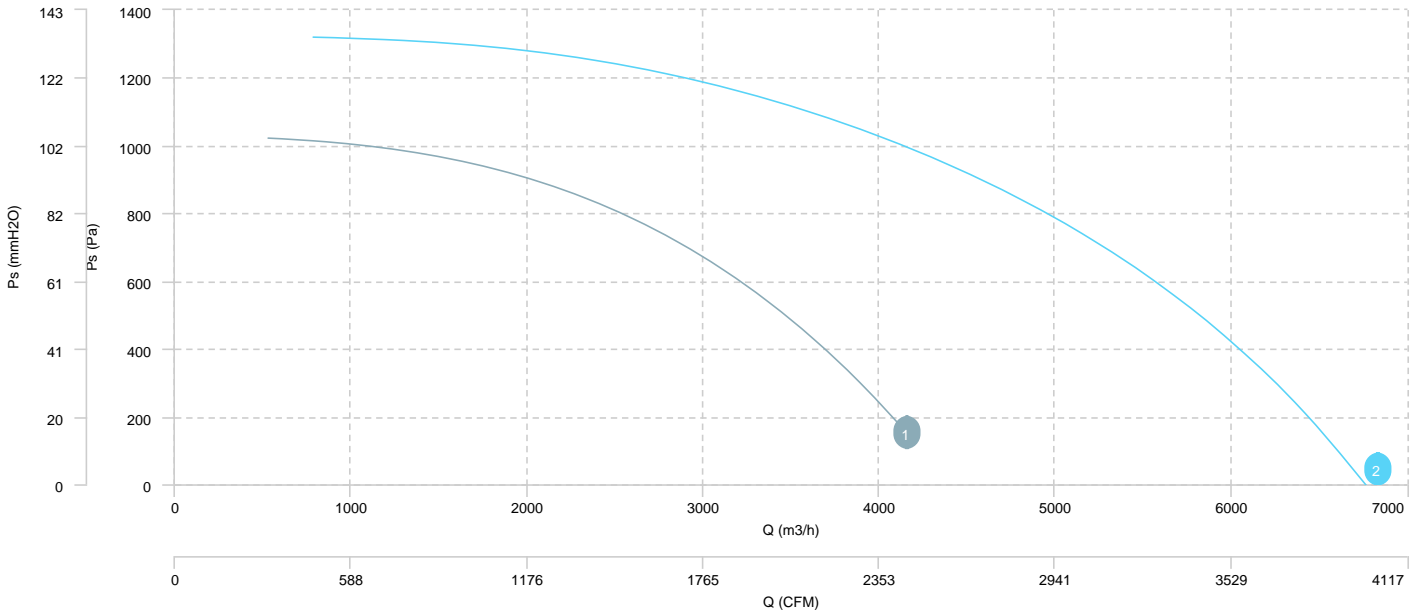


# CHARACTERISTIC CURVE

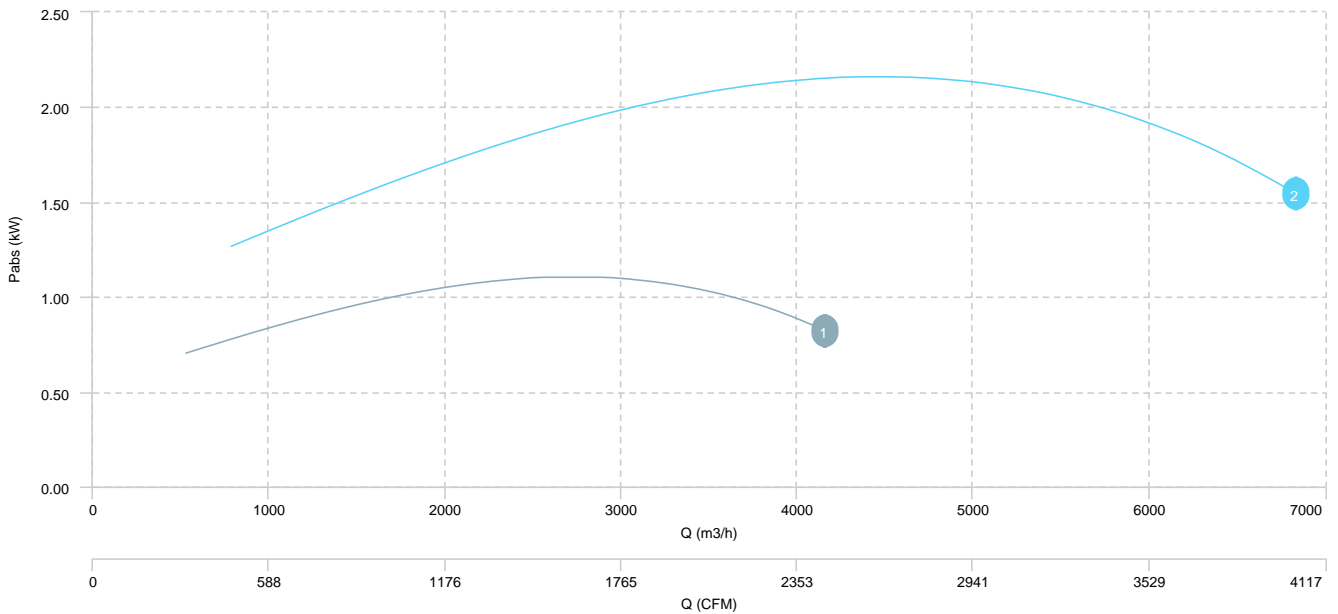
1 BOX RLQ PLUS 315 T2 1, 1kW

2 BOX RLQ PLUS 355 T2 2, 2kW

## AIR FLOW - PRESSURE

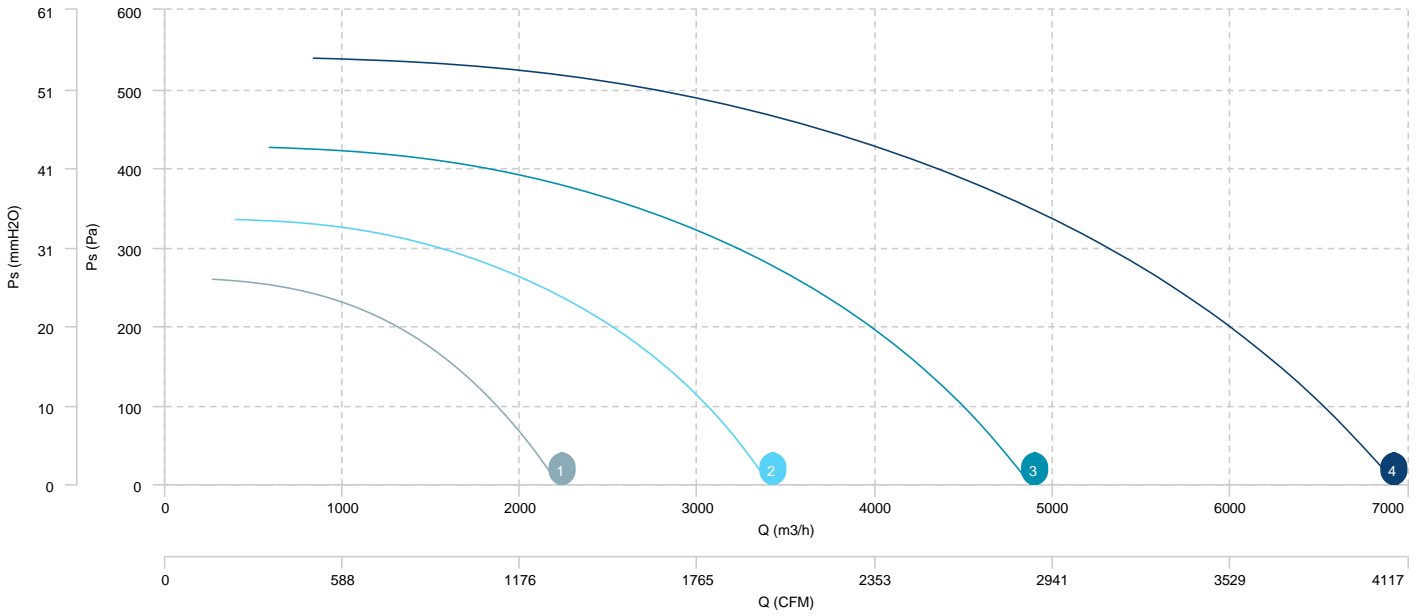


## AIR FLOW - ABSORBED POWER

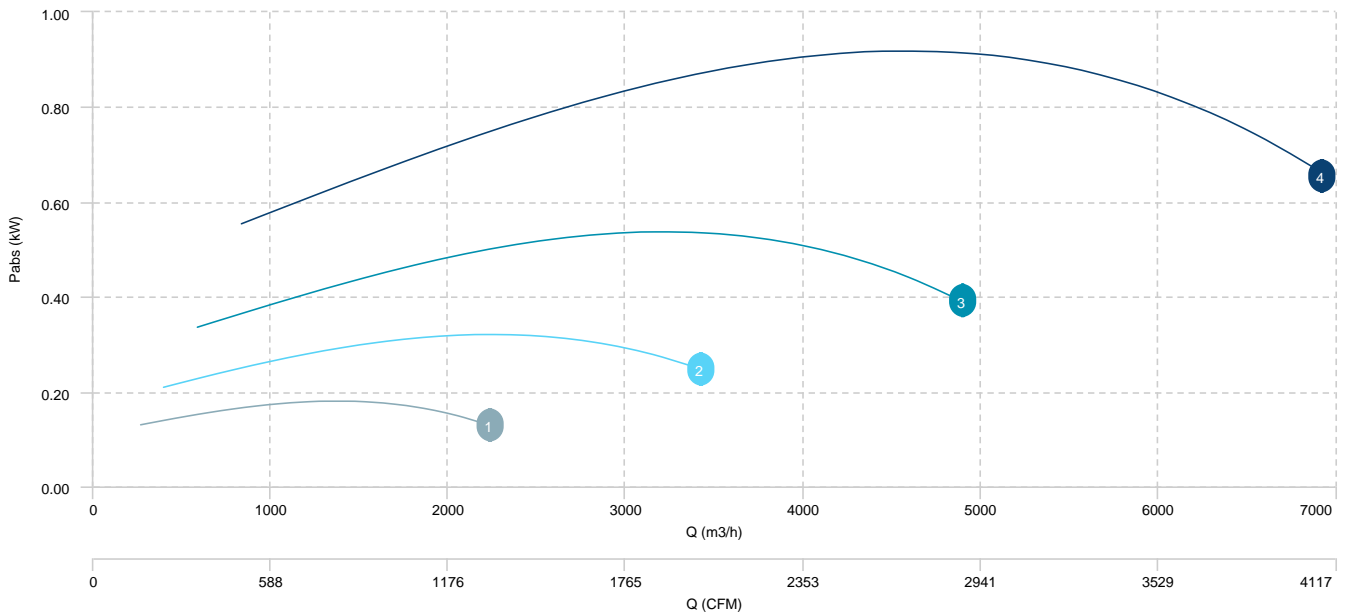


- 1 BOX RLQ PLUS 315 T4 0, 25kW
- 2 BOX RLQ PLUS 355 T4 0, 55kW
- 3 BOX RLQ PLUS 400 T4 0, 75kW
- 4 BOX RLQ PLUS 450 T4 1, 1kW

## AIR FLOW - PRESSURE

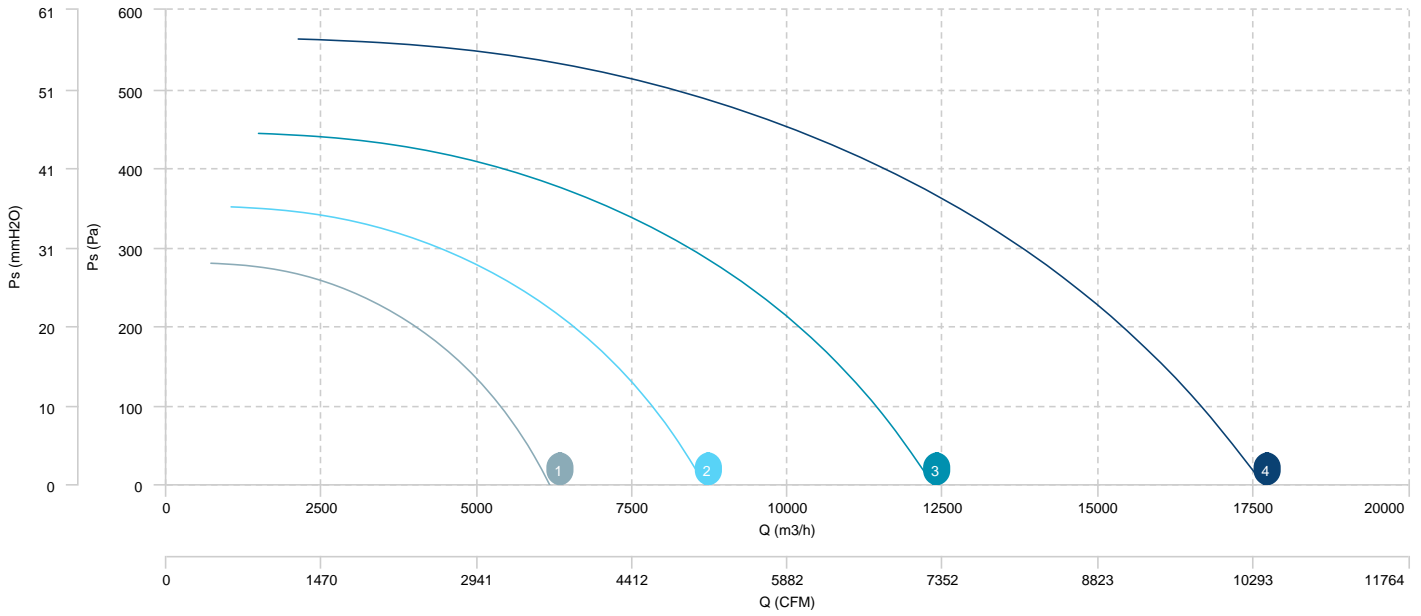


## AIR FLOW - ABSORBED POWER

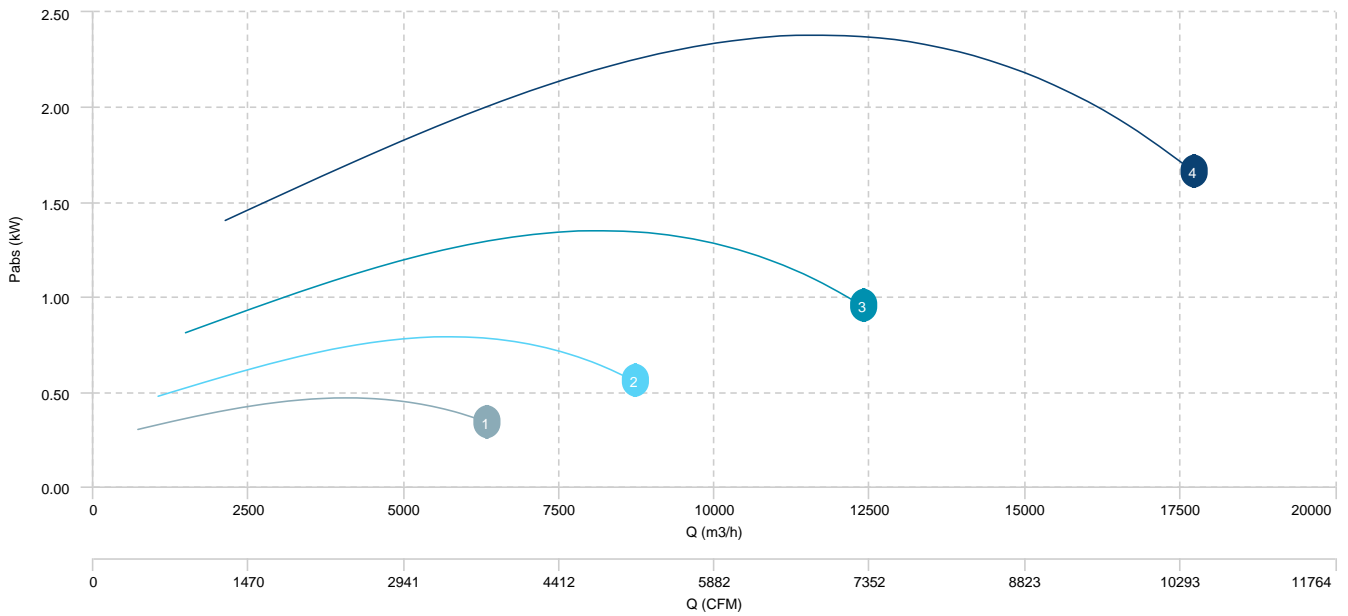


- 1 BOX RLQ PLUS 500 T6 0, 75kW
- 2 BOX RLQ PLUS 560 T6 0, 75kW
- 3 BOX RLQ PLUS 630 T6 1, 5kW
- 4 BOX RLQ PLUS 710 T6 2, 2kW

## 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 RLQ PLUS 315 T2 1,1kW	Inlet	61	69	73	76	78	76	73	70	83
BOX RLQ PLUS 355 T2 2,2kW	Inlet	66	74	78	82	83	81	78	75	88

### 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 RLQ PLUS 315 T4 0,25kW	Inlet	46	54	58	62	63	61	58	55	68
BOX RLQ PLUS 355 T4 0,55kW	Inlet	51	59	64	67	68	66	63	60	73
BOX RLQ PLUS 400 T4 0,75kW	Inlet	54	62	67	70	71	69	66	63	76
BOX RLQ PLUS 450 T4 1,1kW	Inlet	58	66	70	73	75	73	70	67	80

### 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 RLQ PLUS 500 T6 0,75kW	Inlet	52	60	65	68	69	67	64	61	74
BOX RLQ PLUS 560 T6 0,75kW	Inlet	55	63	67	71	72	70	67	64	77
BOX RLQ PLUS 630 T6 1,5kW	Inlet	58	66	71	74	75	74	70	68	81
BOX RLQ PLUS 710 T6 2,2kW	Inlet	62	70	75	78	79	77	74	71	84



## erp data

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

### 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 RLQ PLUS 315 T2 1,1kW	1,10	-	54,02	1,11	2.708,64	756,62	9.65	1.468,55
BOX RLQ PLUS 355 T2 2,2kW	2,20	-	56,61	2,15	4.151,88	996,77	11.65	1.865,66

### 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 RLQ PLUS 315 T4 0,25kW	0,25	-	41,97	0,18	1.365,04	191,70	4.87	474,42
BOX RLQ PLUS 355 T4 0,55kW	0,55	-	48,23	0,32	2.096,54	252,12	5.88	548,47
BOX RLQ PLUS 400 T4 0,75kW	0,75	-	52,63	0,54	2.994,39	321,25	6.62	642,97
BOX RLQ PLUS 450 T4 1,1kW	1,10	-	55,61	0,91	4.251,47	407,55	7.43	773,91

### 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 RLQ PLUS 500 T6 0,75kW	0,75	-	50,64	0,47	3.821,08	209,01	5.41	438,30
BOX RLQ PLUS 560 T6 0,75kW	0,75	-	52,52	0,79	5.304,94	264,97	5.98	532,81
BOX RLQ PLUS 630 T6 1,5kW	1,50	-	55,38	1,34	7.556,35	334,89	6.73	639,14
BOX RLQ PLUS 710 T6 2,2kW	2,20	-	57,17	2,37	10.795,10	426,66	7.57	789,28