



Low profile

External rotor motor to limit the height of the fan.

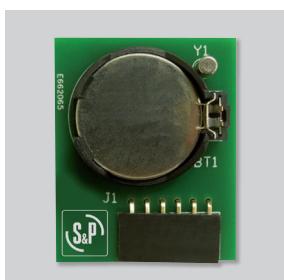


Bird proof guard



Programming device PROSYS ECOWATT

To modify parameters and adjust setting values.



Module for TIMER RTC ECOWATT programmable timer, as an accessory.

It allows programming schedules via PROSYS ECOWATT programming device.

Centrifugal roof mounted fan in horizontal discharge format fitted with:
 - EC external rotor motor.
 - Centrifugal backward curved impeller.
 - Steel finger guard.
 - Base manufactured from galvanized sheet steel.
 - ON-OFF electrical isolated switched.

Motors

High-performance and low-energy-consumption brushless motor with external rotor, 230V ±10% 50/60 Hz power supply, IP44 rating, ball bearings and a thermal protector.

MODELS 250 TO 355

With built-in plug and play control, pre-configured to work at a constant pressure (COP) and a set point of 100 Pa. The PROSYS ECOWATT programming console will allow you to adjust the settings of the constant pressure (COP) mode and three additional modes:

- Constant Flow (CAV).
- Proportional (VAV).
- Minimum-maximum.
- Time programmer (Timer [RTC] accessory needed).

Constant pressure operating mode

- Minimum fan speed between 0-50%.
- Maximum fan speed between 50-100%.
- Night position adjustable between 25-100% of the pressure in high speed.

Constant volume operating mode

- Minimum fan speed between 0-50%.
- Maximum fan speed between 50-100%.
- Night position adjustable between 50-100% of the volume in high speed.

Proportional operating mode

- 2 analogical inputs 0-10V or 4-20mA.
- The control operates in function of the maximum demand parameter.
- Minimum fan speed between 0-50%.
- Maximum fan speed between 50-100%.
- Alarm relay output.

Min-max operating mode

- Function of the contact position connected to digital input, the fan runs at high speed or at low speed.
- Minimum fan speed between 0-50%.
- Maximum fan speed between 50-100%.

Timer (RTC)

By purchasing the Timer (RTC) accessory alongside the PROSYS ECOWATT programming console you will be able to programme a time period for it to operate.

- Up to three time periods with the chosen set point.
- Holiday periods.

MODELS 400 AND 450

With built-in plug and play control, pre-configured to work at a constant pressure (COP) with a set point of 100 Pa. These models feature:

- Remote on/off relay.
- Boost relay.
- Night mode relay.
- Two-way alarm relay.

In addition, its built-in electronic system allows you to manually configure the following operating modes:

- Constant Flow (CAV).
- Proportional (VAV).
- Minimum-maximum.
- Modbus RTU communications.

N.B.: The PROSYS ECOWATT programming console and the TIMER RTC ECOWATT timer module are not compatible with these models.



CONSTANT
PRESSURE

CONSTANT
FLOW



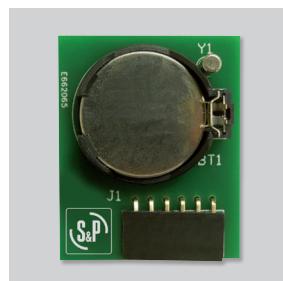
Backward curved centrifugal impellers

To prevent accumulation of dirt.



Programming device PROSYS ECOWATT

To modify parameters and adjust setting values.



Module for TIMER RTC ECOWATT programmable timer, as an accessory.

It allows programming schedules via PROSYS ECOWATT programming device.

Centrifugal roof mounted fan in vertical discharge format fitted with:

- EC external rotor motor.
- Centrifugal backward curved impeller.
- Steel finger guard.
- Base manufactured from galvanized sheet steel.
- Cowl manufactured from galvanized steel and aluminium cover with very low profile design.
- ON-OFF electrical isolated switched.

Motors

High-performance and low-energy-consumption brushless motor with external rotor, 230V ±10% 50/60 Hz power supply, IP44 rating, ball bearings and a thermal protector.

MODELS 250 TO 355

With built-in plug and play control, pre-configured to work at a constant pressure (COP) and a set point of 100 Pa. The PROSYS ECOWATT programming console will allow you to adjust the settings of the constant pressure (COP) mode and three additional modes:

- Constant Flow (CAV).
- Proportional (VAV).
- Minimum-maximum.
- Time programmer (Timer [RTC] accessory needed).

Constant pressure operating mode

- Minimum fan speed between 0-50%.
- Maximum fan speed between 50-100%.
- Night position adjustable between 25-100% of the pressure in high speed.

Constant volume operating mode

- Minimum fan speed between 0-50%.
- Maximum fan speed between 50-100%.
- Night position adjustable between 50-100% of the volume in high speed.

Proportional operating mode

- 2 analogical inputs 0-10V or 4-20mA.
- The control operates in function of the maximum demand parameter.
- Minimum fan speed between 0-50%.
- Maximum fan speed between 50-100%.
- Alarm relay output.

Min-max operating mode

- Function of the contact position connected to digital input, the fan runs at high speed or at low speed.
- Minimum fan speed between 0-50%.
- Maximum fan speed between 50-100%.

Timer (RTC)

By purchasing the Timer (RTC) accessory alongside the PROSYS ECOWATT programming console you will be able to programme a time period for it to operate.

- Up to three time periods with the chosen set point.
- Holiday periods.

MODELS 400 AND 450

With built-in plug and play control, pre-configured to work at a constant pressure (COP) with a set point of 100 Pa.

These models feature:

- Remote on/off relay.
 - Boost relay.
 - Night mode relay.
 - Two-way alarm relay.
- In addition, its built-in electronic system allows you to manually configure the following operating modes:
- Constant Flow (CAV).
 - Proportional (VAV).
 - Minimum-maximum.
 - Modbus RTU communications.

N.B.: The PROSYS ECOWATT programming console and the TIMER RTC ECOWATT timer module are not compatible with these models.

AUTORREGULATED LOW CONSUMPTION ROOF MOUNTED FANS

CRHB-N / CRVB-N ECOWATT PLUS Series



TECHNICAL CHARACTERISTICS

Before installation check that the product electrical characteristics listed on the data plate label (Voltage, power, frequency, etc.) match those of the intended electrical supply.

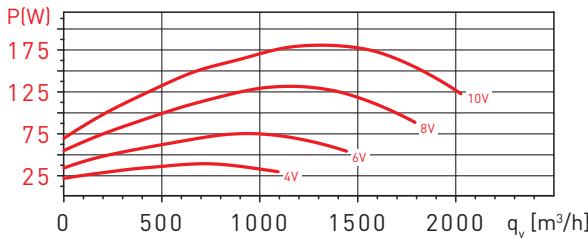
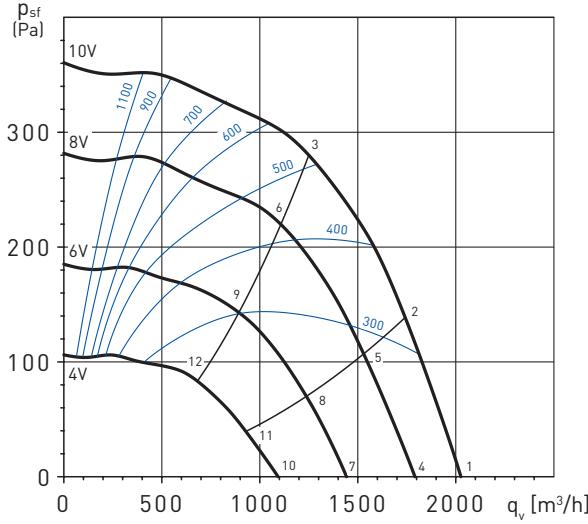
Model	Input signal voltage (V-Hz)	Speed (r.p.m.)	Maximum absorbed power (W)	Maximum absorbed current (A)	Maximum airflow (m³/h)	Sound pressure level* at 4m (dB(A))		Weight (kg)
						Inlet	Outlet	
HORIZONTAL DISCHARGE MODELS								
CRHB-280 N ECOWATT PLUS	10	1800	180	0,8	2.026	44	51	16
	8	1592	131	0,6	1.593	42	49	
	6	1288	75	0,4	1.439	37	44	
	4	979	39	0,2	1.093	31	38	
CRHB-315 N ECOWATT PLUS	10	1700	276	0,8	2.812	49	52	18
	8	1493	200	0,6	2.498	47	50	
	6	1295	127	0,3	2.204	44	48	
	4	1091	78	0,3	1.826	39	43	
CRHB-355 N ECOWATT PLUS	10	1499	338	1,4	3.456	46	54	22
	8	1332	238	1,0	3.082	43	51	
	6	1098	143	0,6	3.644	39	47	
	4	859	73	0,3	2.024	34	42	
CRHB-400 N ECOWATT PLUS	10	1770	917	3,8	5.730	55	62	32
	8	1580	664	2,8	4.990	53	60	
	6	1250	345	1,5	3.990	48	54	
	4	950	167	0,7	2.960	42	48	
CRHB-450 N ECOWATT PLUS	10	1400	861	3,6	6.280	53	60	35
	8	1230	594	2,5	5.520	50	57	
	6	1020	340	1,4	4.540	46	53	
	4	820	188	0,8	3.650	41	48	
VERTICAL DISCHARGE MODELS								
CRVB-250 N ECOWATT PLUS	10	2640	216	1,4	1.320	47	51	11,5
	8	2280	142	1	1.150	44	48	
	6	1770	71	0,5	890	38	43	
	4	1260	31	0,3	640	31	35	
CRVB-280 N ECOWATT PLUS	10	1799	183	0,8	1.823	46	55	18
	8	1576	129	0,6	1.593	43	52	
	6	1273	74	0,4	1.283	38	47	
	4	967	30	0,3	988	32	41	
CRVB-315 N ECOWATT PLUS	10	1700	270	0,8	2.703	51	58	20
	8	1468	183	0,6	2.411	47	55	
	6	1276	124	0,3	2.087	43	50	
	4	1078	81	0,2	1.756	38	44	
CRVB-355 N ECOWATT PLUS	10	1499	348	1,5	3.388	43	49	25
	8	1332	242	1,0	3.016	40	46	
	6	1105	143	0,6	2.530	36	43	
	4	862	74	0,4	2.051	31	37	
CRVB-400 N ECOWATT PLUS	10	1770	953	3,9	5.560	55	58	34
	8	1560	646	2,7	4.920	52	55	
	6	1270	366	1,5	3.980	48	51	
	4	960	173	0,8	2.900	41	45	
CRVB-450 N ECOWATT PLUS	10	1400	839	3,5	6.050	47	59	37
	8	1260	654	2,7	5.460	45	57	
	6	1030	362	1,5	4.440	40	52	
	4	820	196	0,8	3.540	35	47	

* Sound pressure level measured at 4 m, roof fan installed on a plan, at the 3 - 7 - 11 - 15 and 19 working points of the performance curve.

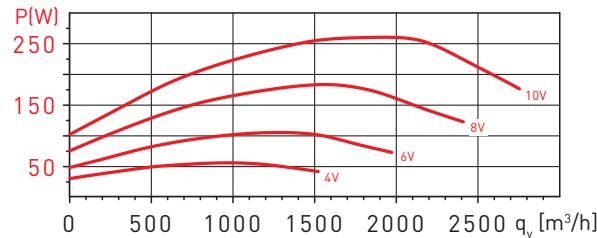
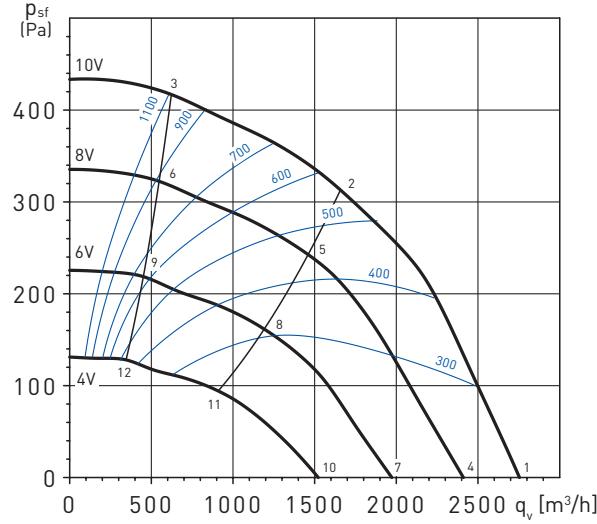
PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS

- q_v : Airflow in m^3/h .
- p_{sf} : Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in $\text{W}/\text{m}^3/\text{s}$ (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

CRHB-280 N ECOWATT PLUS



CRHB-315 N ECOWATT PLUS



	Working point	63	125	250	500	1.000	2.000	4.000	8.000	LwA
1	Inlet	37	51	59	64	62	62	63	53	69
	Outlet	38	53	64	68	72	70	68	58	76
2	Inlet	35	46	56	61	61	61	60	51	67
	Outlet	35	47	62	66	71	68	65	55	75
3	Inlet	33	43	55	61	61	61	58	49	67
	Outlet	33	45	59	64	71	68	63	54	74
4	Inlet	34	48	56	61	59	59	60	50	67
	Outlet	35	50	61	65	69	67	65	55	74
5	Inlet	32	43	53	58	58	58	57	48	65
	Outlet	32	44	59	63	68	65	62	52	72
6	Inlet	30	40	52	58	58	58	55	46	64
	Outlet	30	42	56	61	68	65	60	51	71
7	Inlet	27	41	49	54	52	52	53	43	60
	Outlet	31	46	57	61	65	63	61	51	69
8	Inlet	28	39	49	54	54	54	53	44	60
	Outlet	28	40	55	59	64	61	58	48	67
9	Inlet	26	36	48	54	54	54	51	42	60
	Outlet	26	38	52	57	64	61	56	47	67
10	Inlet	24	38	46	51	49	49	50	40	56
	Outlet	25	40	51	55	59	57	55	45	63
11	Inlet	22	33	43	48	48	48	47	38	54
	Outlet	22	34	49	53	58	55	52	42	61
12	Inlet	20	30	42	48	48	48	45	36	54
	Outlet	20	32	46	51	58	55	50	41	61

	Working point	63	125	250	500	1.000	2.000	4.000	8.000	LwA
1	Inlet	39	53	64	65	65	65	66	56	72
	Outlet	41	56	68	72	74	70	70	59	78
2	Inlet	33	45	59	60	61	62	58	50	67
	Outlet	39	47	63	67	72	67	62	54	75
3	Inlet	51	59	63	62	63	63	60	52	70
	Outlet	52	61	66	69	73	70	66	59	77
4	Inlet	36	50	61	62	62	62	63	53	69
	Outlet	38	53	65	69	71	67	67	56	76
5	Inlet	30	42	56	57	58	59	55	47	65
	Outlet	36	44	60	64	69	64	59	51	72
6	Inlet	48	56	60	59	60	60	57	49	67
	Outlet	49	58	63	66	70	67	63	56	74
7	Inlet	29	43	54	55	55	55	56	46	62
	Outlet	33	48	60	64	66	62	62	51	71
8	Inlet	25	37	51	52	53	54	50	42	60
	Outlet	31	39	55	59	64	59	54	46	67
9	Inlet	43	51	55	54	55	55	52	44	62
	Outlet	44	53	58	61	65	62	58	51	69
10	Inlet	26	40	51	52	52	52	53	43	59
	Outlet	28	43	55	59	61	57	57	46	65
11	Inlet	20	32	46	47	48	49	45	37	54
	Outlet	26	34	50	54	59	54	49	41	61
12	Inlet	38	46	50	49	50	50	47	39	56
	Outlet	39	48	53	56	60	57	53	46	63

AUTORREGULATED LOW CONSUMPTION ROOF MOUNTED FANS

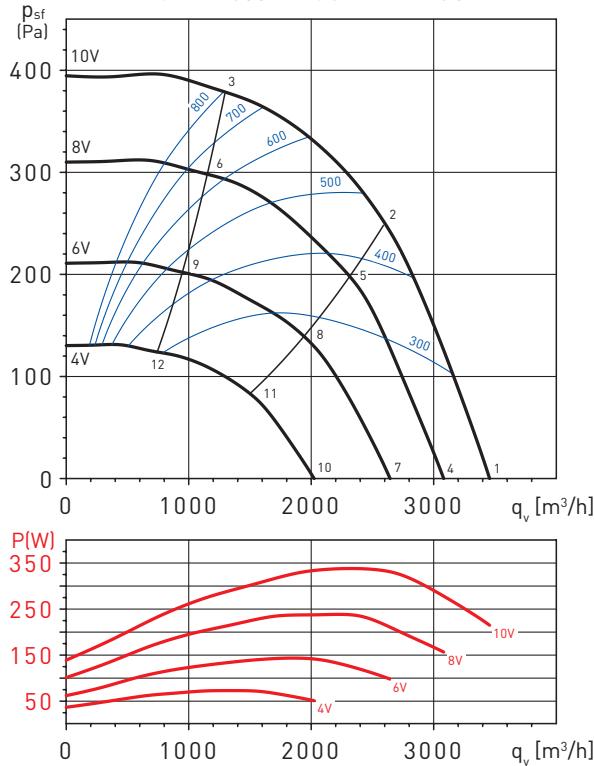
CRHB-N ECOWATT PLUS Series



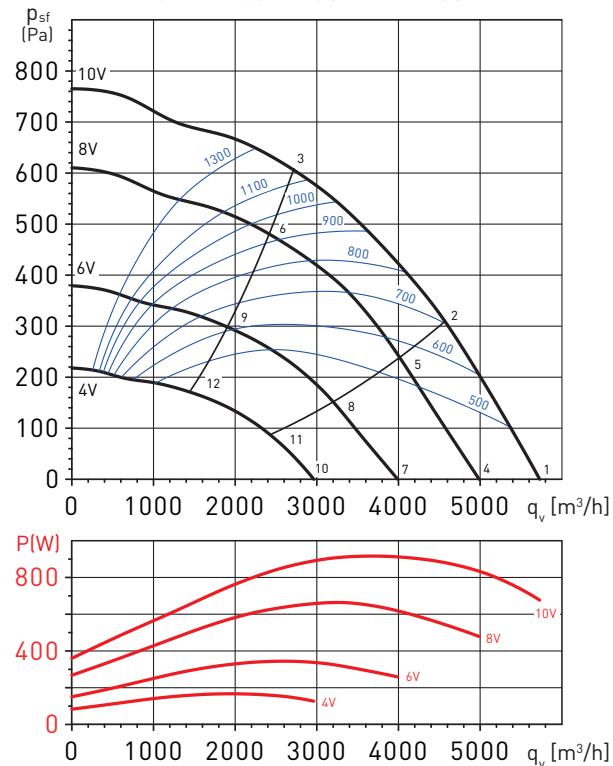
PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS

- q_v : Airflow in m^3/h .
- p_{sf} : Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in $\text{W}/\text{m}^3/\text{s}$ (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

CRHB-355 N ECOWATT PLUS



CRHB-400 N ECOWATT PLUS



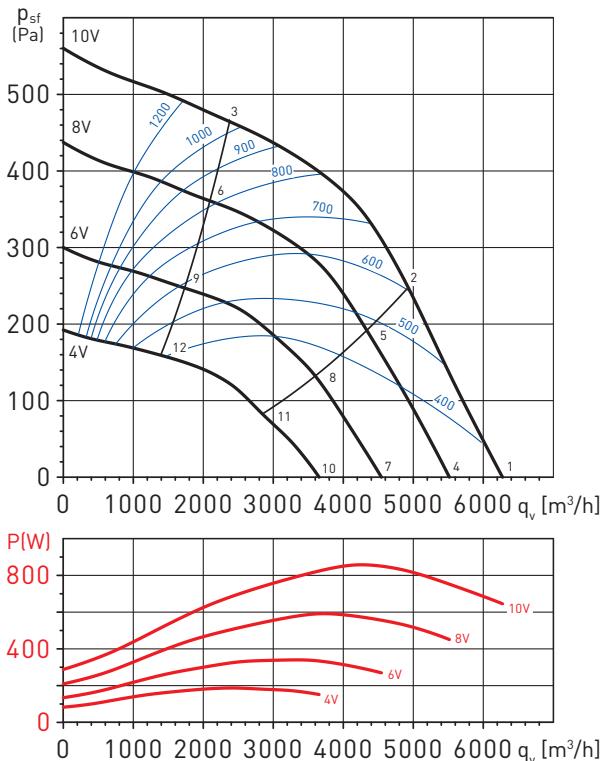
Working point		63	125	250	500	1.000	2.000	4.000	8.000	LwA
1	Inlet	40	57	65	65	65	65	56	72	
	Outlet	41	63	67	72	76	73	71	80	
2	Inlet	35	52	57	58	61	65	63	55	69
	Outlet	36	58	62	68	73	71	68	60	77
3	Inlet	42	55	60	60	63	63	59	52	69
	Outlet	42	58	61	68	74	72	68	61	78
4	Inlet	37	54	62	62	62	62	62	53	70
	Outlet	38	60	64	69	73	70	68	59	77
5	Inlet	32	49	54	55	58	62	60	52	67
	Outlet	33	55	59	65	70	68	65	57	74
6	Inlet	39	52	57	57	60	60	56	49	66
	Outlet	39	55	58	65	71	69	65	58	75
7	Inlet	31	48	56	56	56	56	56	47	63
	Outlet	34	56	60	65	69	66	64	55	73
8	Inlet	28	45	50	51	54	58	56	48	62
	Outlet	29	51	55	61	66	64	61	53	70
9	Inlet	35	48	53	53	56	56	52	45	62
	Outlet	35	51	54	61	67	65	61	54	71
10	Inlet	28	45	53	53	53	53	53	44	60
	Outlet	29	51	55	60	64	61	59	50	68
11	Inlet	23	40	45	46	49	53	51	43	57
	Outlet	24	46	50	56	61	59	56	48	65
12	Inlet	30	43	48	48	51	51	47	40	57
	Outlet	30	46	49	56	62	60	56	49	65

Working point		63	125	250	500	1.000	2.000	4.000	8.000	LwA
1	Inlet	44	59	74	78	76	74	76	65	83
	Outlet	47	63	80	83	85	81	80	70	89
2	Inlet	44	56	70	72	71	72	70	61	78
	Outlet	45	60	77	78	81	77	73	66	85
3	Inlet	42	53	64	67	66	68	63	57	73
	Outlet	44	57	71	74	76	75	71	65	81
4	Inlet	42	57	72	75	73	72	73	63	80
	Outlet	44	61	78	81	83	78	77	68	87
5	Inlet	42	53	68	70	69	70	67	58	76
	Outlet	43	57	74	76	78	75	71	64	83
6	Inlet	40	50	62	64	63	66	61	55	71
	Outlet	42	55	69	71	74	73	69	62	79
7	Inlet	37	52	67	70	68	67	68	57	75
	Outlet	39	56	73	75	78	73	72	62	82
8	Inlet	36	48	63	65	63	65	62	53	71
	Outlet	38	52	69	71	73	70	66	59	77
9	Inlet	34	45	57	59	58	61	56	50	66
	Outlet	36	50	64	66	69	67	63	57	73
10	Inlet	31	46	61	64	62	61	62	51	69
	Outlet	33	50	67	69	72	67	66	56	76
11	Inlet	30	42	57	59	57	59	56	47	65
	Outlet	32	46	63	65	67	64	60	53	71
12	Inlet	28	39	51	53	52	55	50	44	60
	Outlet	30	44	58	60	63	61	57	51	67

PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS

- q_v : Airflow in m^3/h .
- p_{sf} : Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in $\text{W}/\text{m}^3/\text{s}$ (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

CRHB-450 N ECOWATT PLUS



Working point		63	125	250	500	1.000	2.000	4.000	8.000	LwA
1	Inlet	43	61	68	73	72	73	72	63	79
	Outlet	45	69	74	80	82	80	79	71	87
2	Inlet	42	58	66	70	68	71	66	58	76
	Outlet	51	65	72	74	77	77	74	69	83
3	Inlet	50	62	69	71	67	69	64	58	76
	Outlet	42	66	70	76	77	76	72	66	82
4	Inlet	40	58	66	71	69	70	69	60	76
	Outlet	43	66	71	77	79	77	76	68	84
5	Inlet	39	55	63	67	65	68	63	55	73
	Outlet	48	62	69	71	75	75	71	66	80
6	Inlet	48	59	66	68	65	66	62	56	73
	Outlet	40	63	68	73	75	73	69	63	80
7	Inlet	36	54	62	67	65	66	65	56	72
	Outlet	39	62	67	73	75	73	72	64	80
8	Inlet	35	51	59	63	61	64	59	51	69
	Outlet	44	58	65	67	71	71	67	62	76
9	Inlet	43	55	62	64	61	62	57	52	69
	Outlet	36	59	64	69	71	69	65	59	75
10	Inlet	32	49	57	62	60	61	60	51	67
	Outlet	34	58	62	68	70	68	67	59	75
11	Inlet	30	47	54	58	56	60	54	46	64
	Outlet	39	54	60	62	66	66	62	57	71
12	Inlet	39	50	57	59	56	57	53	47	64
	Outlet	31	54	59	64	66	65	60	54	71

AUTORREGULATED LOW CONSUMPTION ROOF MOUNTED FANS

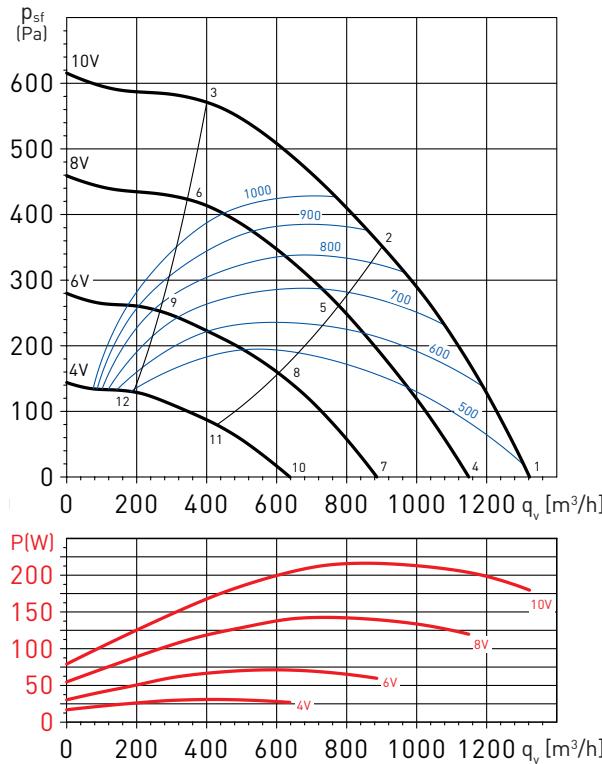
CRVB-N ECOWATT PLUS Series



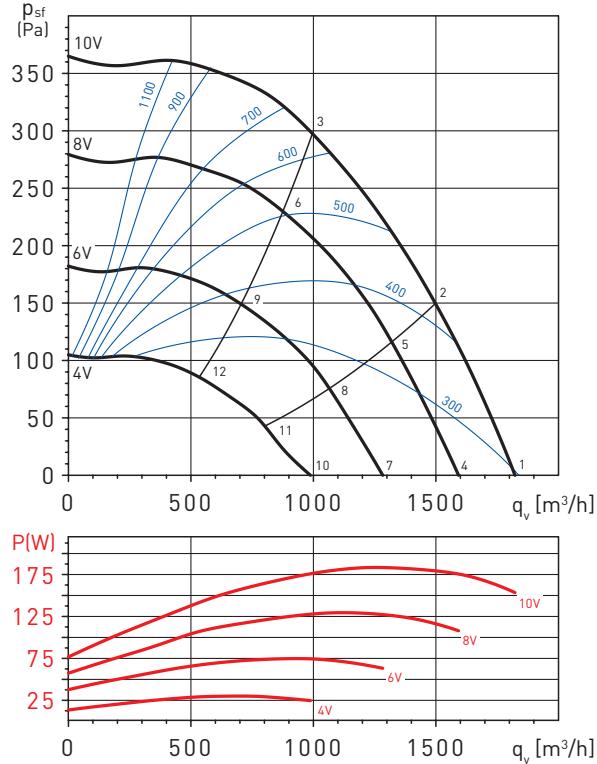
PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS

- q_v : Airflow in m^3/h .
- p_{sf} : Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in $\text{W}/\text{m}^3/\text{s}$ (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

CRVB-250 N ECOWATT PLUS



CRVB-280 N ECOWATT PLUS



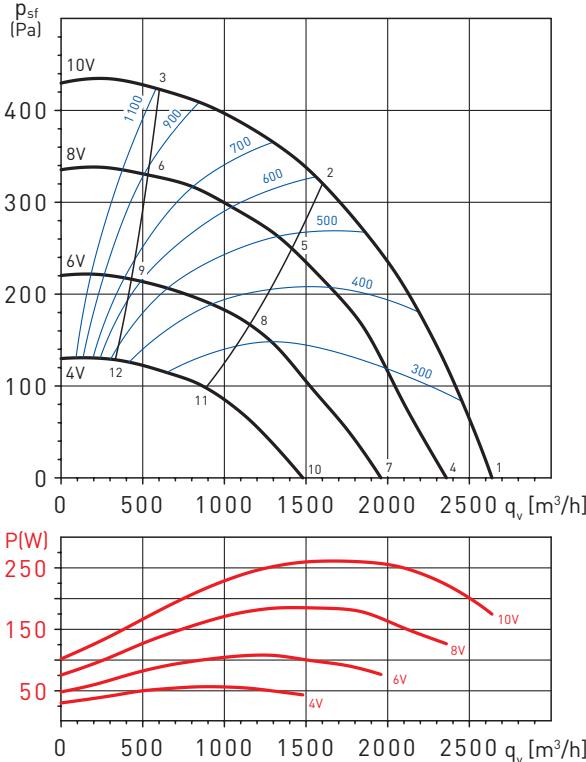
Working point		63	125	250	500	1.000	2.000	4.000	8.000	LwA
1	Inlet	36	49	63	66	69	68	69	62	75
	Outlet	43	51	65	69	73	75	72	65	79
2	Inlet	35	46	62	61	64	64	62	57	70
	Outlet	37	45	62	64	68	71	66	60	74
3	Inlet	35	49	61	64	65	69	64	59	73
	Outlet	35	48	61	66	70	75	71	64	78
4	Inlet	33	46	60	63	66	65	66	58	72
	Outlet	40	47	62	66	69	72	69	62	76
5	Inlet	32	43	58	58	60	61	59	54	67
	Outlet	34	42	59	60	65	68	63	56	71
6	Inlet	32	46	58	61	62	66	61	56	70
	Outlet	32	45	58	63	67	72	68	61	75
7	Inlet	27	40	55	57	61	60	60	53	66
	Outlet	34	42	56	60	64	66	63	56	70
8	Inlet	27	37	53	53	55	55	54	48	61
	Outlet	28	37	53	55	59	62	57	51	66
9	Inlet	27	40	53	55	57	61	56	50	64
	Outlet	27	39	53	58	61	66	62	55	69
10	Inlet	20	33	47	50	53	52	53	46	59
	Outlet	27	35	49	53	57	59	56	49	63
11	Inlet	19	30	46	45	48	48	46	41	54
	Outlet	21	29	46	48	52	55	50	44	58
12	Inlet	19	33	45	48	49	53	48	43	57
	Outlet	19	32	45	50	54	59	55	48	62

Working point		63	125	250	500	1.000	2.000	4.000	8.000	LwA
1	Inlet	37	48	60	64	63	64	61	53	70
	Outlet	41	51	71	71	75	72	65	55	79
2	Inlet	34	44	58	63	62	63	59	51	69
	Outlet	37	46	68	72	74	71	62	52	78
3	Inlet	33	43	55	61	61	61	58	49	67
	Outlet	33	45	59	64	71	68	63	54	74
4	Inlet	34	45	57	61	60	61	58	50	67
	Outlet	38	48	68	68	72	69	62	52	76
5	Inlet	31	41	55	60	59	60	56	48	66
	Outlet	34	43	65	69	71	68	59	49	75
6	Inlet	30	40	55	59	59	60	54	47	65
	Outlet	33	43	59	68	70	66	58	49	74
7	Inlet	27	38	50	54	53	54	51	43	59
	Outlet	34	44	64	64	68	65	58	48	71
8	Inlet	27	37	51	56	55	56	52	44	61
	Outlet	30	39	61	65	67	64	55	45	70
9	Inlet	26	36	51	55	55	56	50	43	61
	Outlet	29	39	55	64	66	62	54	45	69
10	Inlet	24	35	47	51	50	51	48	40	56
	Outlet	28	38	58	58	62	59	52	42	65
11	Inlet	21	31	45	50	49	50	46	38	55
	Outlet	24	33	55	59	61	58	49	39	64
12	Inlet	20	30	45	49	49	50	44	37	55
	Outlet	23	33	49	58	60	56	48	39	63

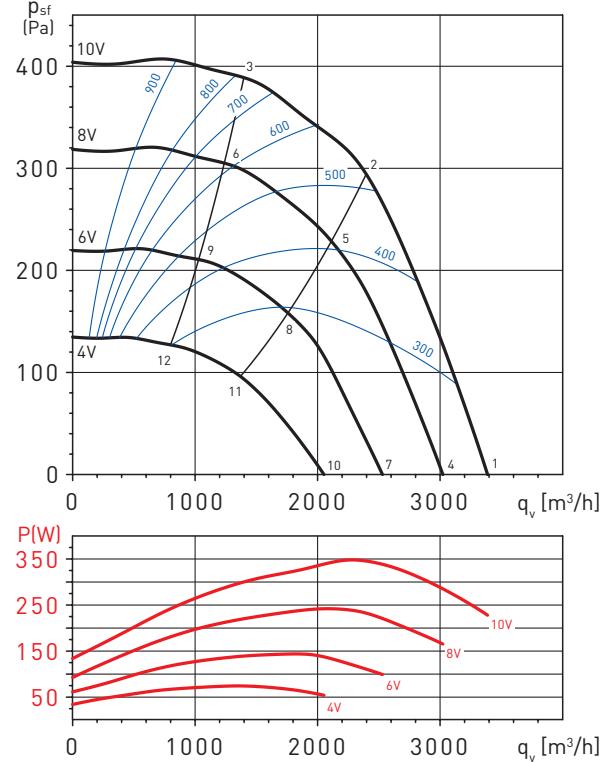
PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS

- q_v : Airflow in m^3/h .
- p_{sf} : Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in $\text{W}/\text{m}^3/\text{s}$ (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

CRVB-315 N ECOWATT PLUS



CRVB-355 N ECOWATT PLUS



	Working point	63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	41	55	74	68	67	65	65	57	76
	Outlet	41	53	65	59	67	66	64	57	72
2	Inlet	39	51	73	68	65	64	61	53	75
	Outlet	39	51	63	58	65	65	60	53	70
3	Inlet	37	49	68	68	65	62	59	53	73
	Outlet	36	47	58	56	65	64	60	53	69
4	Inlet	38	52	71	65	64	62	62	54	74
	Outlet	38	50	62	56	64	63	61	54	69
5	Inlet	36	48	70	65	62	61	58	50	73
	Outlet	36	48	60	55	62	62	57	50	67
6	Inlet	34	46	65	65	62	59	56	50	70
	Outlet	33	44	55	53	62	61	57	50	66
7	Inlet	31	45	64	58	57	55	55	47	66
	Outlet	33	45	57	51	59	58	56	49	65
8	Inlet	31	43	65	60	57	56	53	45	68
	Outlet	31	43	55	50	57	57	52	45	63
9	Inlet	29	41	60	60	57	54	51	45	65
	Outlet	28	39	50	48	57	56	52	45	61
10	Inlet	28	42	61	55	54	52	52	44	63
	Outlet	28	40	52	46	54	53	51	44	59
11	Inlet	26	38	60	55	52	51	48	40	62
	Outlet	26	38	50	45	52	52	47	40	57
12	Inlet	24	36	55	55	52	49	46	40	59
	Outlet	23	34	45	43	52	51	47	40	56

	Working point	63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	37	50	59	61	62	64	62	50	69
	Outlet	37	58	65	68	69	67	65	53	74
2	Inlet	31	45	56	60	60	61	55	46	66
	Outlet	32	57	63	67	67	65	58	49	72
3	Inlet	44	53	61	62	62	59	53	46	68
	Outlet	44	55	62	68	69	66	59	51	73
4	Inlet	34	47	56	58	59	61	59	47	66
	Outlet	34	55	62	65	66	64	62	50	72
5	Inlet	28	42	53	57	57	58	52	43	63
	Outlet	29	54	60	64	64	62	55	46	69
6	Inlet	41	50	58	59	59	56	50	43	65
	Outlet	41	52	59	65	66	63	56	48	71
7	Inlet	28	41	50	52	53	55	53	41	60
	Outlet	30	51	58	61	62	60	58	46	68
8	Inlet	24	38	49	53	53	54	48	39	59
	Outlet	25	50	56	60	60	58	51	42	66
9	Inlet	37	46	54	55	55	52	46	39	61
	Outlet	37	48	55	61	62	59	52	44	67
10	Inlet	25	38	47	49	50	52	50	38	57
	Outlet	25	46	53	56	57	55	53	41	62
11	Inlet	19	33	44	48	48	49	43	34	54
	Outlet	20	45	51	55	55	53	46	37	60
12	Inlet	32	41	49	50	50	47	41	34	56
	Outlet	32	43	50	56	57	54	47	39	61

AUTORREGULATED LOW CONSUMPTION ROOF MOUNTED FANS

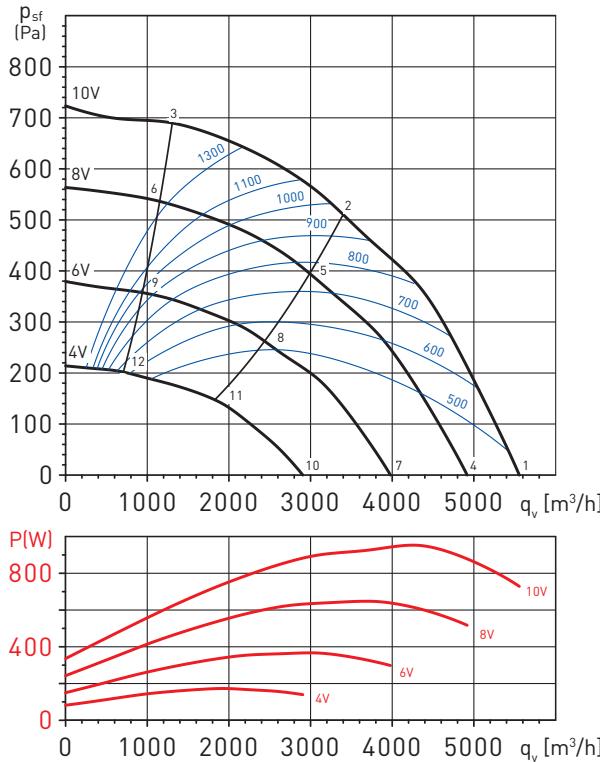
CRHB-N / CRVB-N ECOWATT PLUS Series



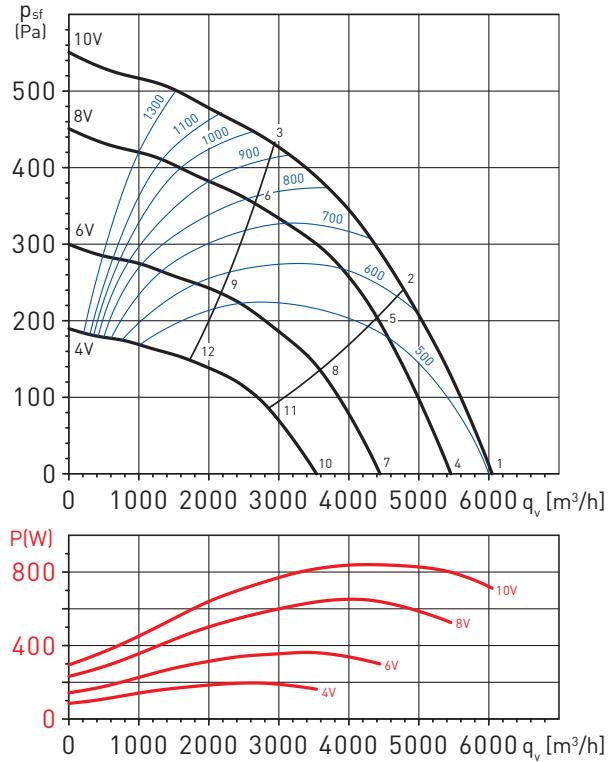
PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS

- q_v : Airflow in m^3/h .
- p_{sf} : Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in $\text{W}/\text{m}^3/\text{s}$ (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.

CRVB-400 N ECOWATT PLUS



CRVB-450 N ECOWATT PLUS



	Working point	63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	44	60	71	73	76	77	74	63	82
	Outlet	52	61	76	80	82	80	77	68	87
2	Inlet	51	61	70	69	72	73	66	60	78
	Outlet	41	55	69	73	75	77	70	64	81
3	Inlet	55	66	73	71	72	73	68	63	79
	Outlet	55	67	74	76	78	78	72	67	83
4	Inlet	41	57	69	71	73	74	71	60	79
	Outlet	49	58	73	78	79	77	74	65	84
5	Inlet	49	58	67	66	69	70	64	57	75
	Outlet	38	52	66	71	73	74	67	61	78
6	Inlet	52	63	70	68	69	70	65	60	76
	Outlet	53	64	71	73	75	75	69	64	81
7	Inlet	37	52	64	66	68	69	67	56	74
	Outlet	44	54	69	73	75	72	70	61	79
8	Inlet	44	54	63	62	64	66	59	53	71
	Outlet	34	48	62	66	68	70	63	57	74
9	Inlet	48	59	65	63	65	66	60	56	72
	Outlet	48	60	67	69	71	71	65	59	76
10	Inlet	31	46	58	60	62	63	60	50	68
	Outlet	38	48	63	67	69	66	63	54	73
11	Inlet	38	48	57	56	58	60	53	47	64
	Outlet	28	41	56	60	62	64	57	51	68
12	Inlet	42	53	59	57	58	59	54	50	65
	Outlet	42	53	60	63	65	65	59	53	70

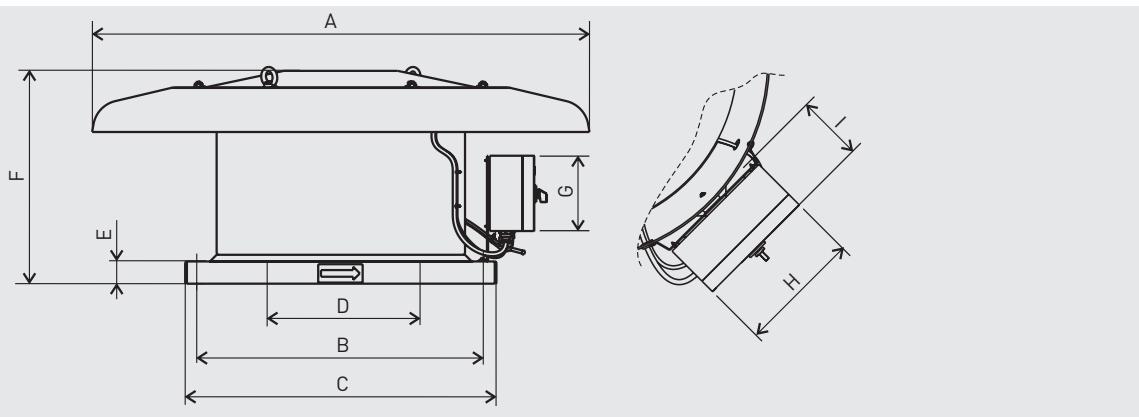
	Working point	63	125	250	500	1000	2000	4000	8000	LwA
1	Inlet	42	61	67	73	72	73	71	65	79
	Outlet	49	66	72	77	81	78	75	68	85
2	Inlet	35	46	62	61	64	64	62	57	70
	Outlet	41	65	70	74	78	76	71	65	82
3	Inlet	35	49	61	64	65	69	64	59	73
	Outlet	43	61	67	71	76	75	71	66	80
4	Inlet	40	58	65	71	70	71	68	62	77
	Outlet	47	63	70	75	78	76	72	66	82
5	Inlet	33	43	59	59	61	62	60	54	68
	Outlet	39	63	67	72	76	73	69	63	80
6	Inlet	33	47	59	62	63	67	62	57	71
	Outlet	41	58	65	68	74	73	69	64	78
7	Inlet	35	54	61	66	65	67	64	58	72
	Outlet	43	59	66	70	74	71	68	62	78
8	Inlet	29	39	55	55	57	57	56	50	63
	Outlet	34	58	63	67	71	69	65	58	75
9	Inlet	29	42	55	57	59	63	58	52	66
	Outlet	37	54	60	64	70	69	65	59	74
10	Inlet	31	49	56	62	60	62	59	53	67
	Outlet	38	54	61	66	69	66	63	57	73
11	Inlet	24	34	50	50	52	52	51	45	58
	Outlet	29	53	58	62	66	64	60	53	70
12	Inlet	24	37	50	53	54	58	53	47	61
	Outlet	32	49	55	59	65	64	60	54	69

AUTORREGULATED LOW CONSUMPTION ROOF MOUNTED FANS

CRHB-N / CRVB-N ECOWATT PLUS Series

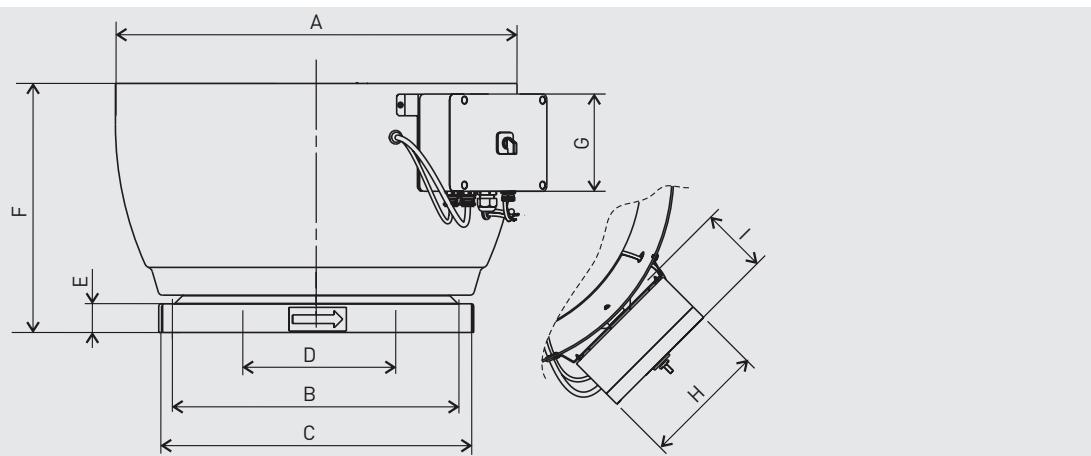


DIMENSIONS (mm) CRHB-N ECOWATT PLUS



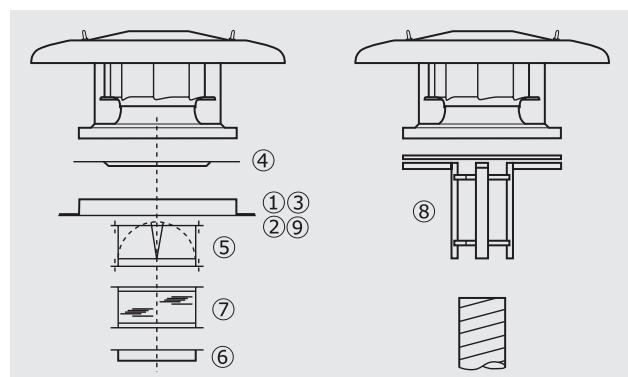
Model	ØA	ØB	ØC	ØD	E	F	G	H	I
280	640	330	435	228	40	273,5	136	171	92
315	895	450	560	257	40	324	136	171	92
355	895	450	560	289	40	367	136	171	92
400	1150	535	630	326	40	363	170	190	110
450	1150	535	630	367	40	397	170	190	110

DIMENSIONS (mm) CRVB-N ECOWATT PLUS



Model	ØA	ØB	ØC	ØD	E	F	G	H	I
250	434	245	326	204	35	260	136	136	92
280	560	330	435	228	40	335	136	171	92
315	754	450	560	257	40	395	136	171	92
355	754	450	560	289	40	395	136	171	92
400	857	535	630	326	40	459	170	190	110
450	857	535	630	367	40	459	170	190	110

INSTALLATION CRHB-N / CRVB-N ECOWATT PLUS - MOUNTING ACCESSORIES



Model of fan	① Sealing frame	② Flat roof insulated up stand	③ Acoustic up stand	④ Accessory adapter plate	⑤ Back draft shutter	⑥ Flange with spigot	⑦ Flexible coupling	⑧ Circular adapter	⑨ Support base for inclined curb installations
250N	JMS-300	JBS-300	JAA-300	JPA-300	JCA-300	JBR-300 N	JAE-300 N	JCC-300	BI-3
280N	JMS-435	JBS-435	JAA-435	JPA-435	JCA-435	JBR-435	JAE-435	JCC-435	BI-4
315N	JMS-560	JBS-560	JAA-560	JPA-560	JCA-560	JBR-560	JAE-560	JCC-560	BI-5
355N	JMS-560	JBS-560	JAA-560	JPA-560	JCA-560	JBR-560	JAE-560	JCC-560	BI-5
400N	JMS-630	JBS-630	JAA-630	JPA-630	JCA-630	JBR-630	JAE-630	JCC-630	BI-6
450N	JMS-630	JBS-630	JAA-630	JPA-630	JCA-630	JBR-630	JAE-630	JCC-630	BI-6

AUTORREGULATED LOW CONSUMPTION ROOF MOUNTED FANS

CRHB-N / CRVB-N ECOWATT PLUS Series



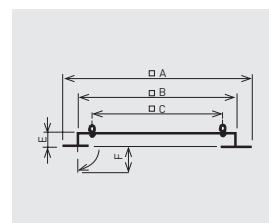
MOUNTING ACCESSORIES



JMS

Sealing frame

- For mounting a roof fan on an up stand or base.
- Supplied with screws and gasket for a complete weatherproof seal.



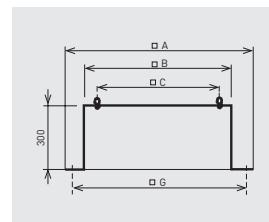
Model	□ A	□ B	□ C	E	F
JMS-300	470	290	245	50	70
JMS-435	600	420	330	50	70
JMS-560	725	545	450	50	70
JMS-630	795	615	535	50	70



JBS

Flat roof up stand

- For mounting a fan on a flat roof without up stands.
- For use on horizontal roofs.
- Internal insulation to prevent condensation.
- Supplied with screws and gasket for a complete weather seal.



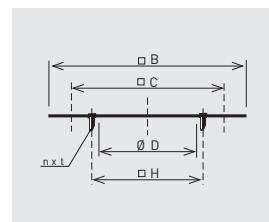
Model	□ A	□ B	□ C	E	□ G
JBS-300	470	289	245	300	380
JBS-435	600	419	330	300	510
JBS-560	725	544	450	300	635
JBS-630	795	614	535	300	705



JPA

Accessory adapter plate

- Used when mounting the accessories (JCA, JBR, JAE).
- Allows the fan to be disconnected from the upstand without having to remove the duct.



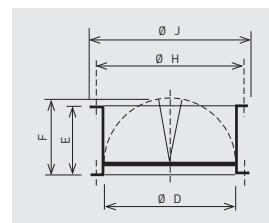
Model	□ B	□ C	Ø D	nxt	Ø H
JPA-300	289	245	182	4xM6	205
JPA-435	419	330	252	4xM8	280
JPA-560	544	450	358	8xM8	395
JPA-630	614	535	403	8xM10	450



JCA / JCA N

Backdraft shutter

- Prevents backdraft when the fan is not operating.
- To be mounted at the fan inlet with the JPA plate.



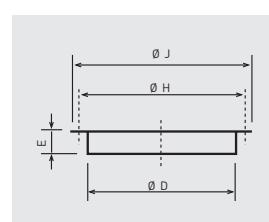
Model	Ø D	E	F	Ø H	Ø J
JCA-300	182	100	124	205	219
JCA-435	252	145	174	280	300
JCA-560 N	358	210	227	395	415
JCA-630 N	403	240	250	450	474



JBR N

Flange

- For use when circular connection is required directly to the fan.
- To be mounted at the fan inlet with the JPA plate or fixed directly to the fan base (rivets or screws not supplied).



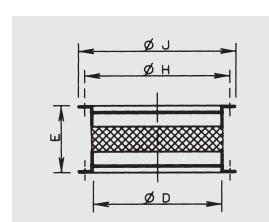
Model	Ø D	E	Ø H	Ø J
JBR-300 N	182	55	205	219
JBR-435 N	252	55	280	300
JBR-560 N	358	55	395	415
JBR-630 N	403	63	450	474



JAE N

Flexible coupling

- Reduces the transmission of vibrations when the duct is connected directly to the fan.
- To be mounted at the fan inlet with JPA plate.



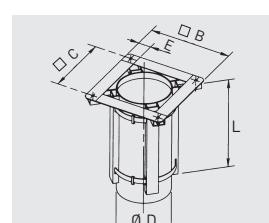
Model	Ø D	E	Ø H	Ø J
JAE-300 N	182	164	205	219
JAE-435 N	252	164	280	300
JAE-560 N	358	164	395	415
JAE-630 N	403	164	450	474



JCC

Adapter for circular duct

- For use when fitting the models up to 400, directly to a spirally wound circular duct.



Model	Ø B	Ø C	Ø D	E	L
JCC-300	290	245	180	45	350
JCC-435	390	330	250	60	350
JCC-560	520	450	355	70	350
JCC-630	605	535	400	70	350

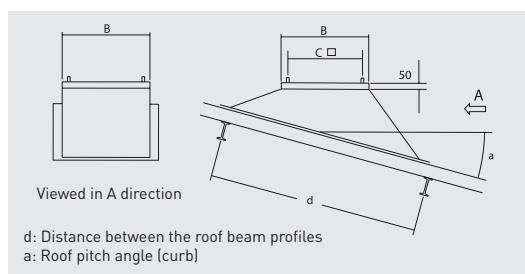
MOUNTING ACCESSORIES



⑨

BI Support base for inclined curb mounted installations

- To ensure a proper installation of the CRHB-CRHT roof fan it is essential to specify the roof pitch angle and the distance between the roof beam profiles.



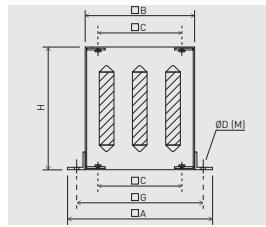
	B	C
BI-3	289	245
BI-4	419	330
BI-5	544	450
BI-6	614	535



③

JAA Acoustic up stand

- Reduces in duct and radiated noise.
- For use when mounting a fan on a flat roof without up stands.
- Supplied with screws and gasket for a complete weather seal.



Model	□A	□B	□C	Ø D (M)	H	□G
JAA-300	470	290	245	13 (M10)	750	380
JAA-435	600	419	330	15 (M12)	750	510
JAA-560	725	545	450	15 (M12)	750	635
JAA-630	795	615	535	15 (M12)	750	705

Acoustic attenuation in dB(A) at the corresponding frequency band in Hz.

Model	125	250	500	1000	2000	4000	8000
JAA-300	1	5	13	22	23	16	12
JAA-435	1	7	16	23	25	18	13
JAA-560	2	8	16	29	32	26	17
JAA-630	2	8	14	24	27	19	13

JAA Attenuator pressure drops

