

HMR EVO



LONG CASE FAN WITH BACKWARD IMPELLER

MANUFACTURING FEATURES:

- Reinforced fan casing manufactured in rolling steel sheet. Polyester powder finishing coat. Housing with motor access door.
- High efficiency backward impeller with self-cleaning system in steel sheet, balanced static and dynamically in origin. High efficiency impeller with built-in diffuser, which eliminates the need to use a scroll or spiral casing to obtain performance.
- Models with AC motor inside the air flow. Standard asynchronous squirrel cage motor with IP-55 protection and Class F insulation. Standard voltages of 230V 50Hz for single phase motors, 230/400V 50Hz for three phase motors up to 4kW and 400/690V 50Hz for higher powers 1 speed and 400V for 2 speed motors.

- Maximum working temperature 60°C.

APPLICATIONS:

Designed for inline installation, they are suitable for:

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

Accessories



DBIC



INT



PO



RP



SFC

Technical data

Single-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. A 230V	Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
261310343	HMR EVO 315 M4 0,25kW	1410	1,6	0,25	2.080	-	35	1
261350343	HMR EVO 355 M4 0,25kW	1410	1,6	0,25	2.980	-	40,50	1
261400343	HMR EVO 400 M4 0,75kW	1400	5,21	0,75	4.550	-	52	1

Three-phase motor / 2 poles

Code	Model	R.P.M.	Rated I. A		Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
			230V	400V					
261310623	HMR EVO 315 T2 1,1kW	2800	4,05	2,33	1,10	4.150	-	36	2

Three-phase motor / 4 poles

Code	Model	R.P.M.	Rated I. A		Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
			230V	400V					
261310643	HMR EVO 315 T4 0,25kW	1400	1,38	0,79	0,25	2.080	-	35	2
261350643	HMR EVO 355 T4 0,25kW	1400	1,38	0,79	0,25	2.980	-	40,50	2
261400643	HMR EVO 400 T4 0,75kW	1390	3,5	2,00	0,75	4.550	-	52	2
261450643	HMR EVO 450 T4 1,1kW	1450	4,33	2,49	1,10	6.790	-	68	2
261500643	HMR EVO 500 T4 1,5kW	1450	5,67	3,26	1,50	8.930	-	89	2
261560643	HMR EVO 560 T4 3kW	1420	10,7	6,17	3,00	12.670	-	120	2
261630643	HMR EVO 630 T4 5,5kW	1460	-	10,5	5,50	18.760	-	170	2

Three-phase motor / 6 poles

Code	Model	R.P.M.	Rated I. A		Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
			230V	400V					
261500663	HMR EVO 500 T6 0,55kW	925	3,39	1,95	0,75	5.860	-	90	2
261560663	HMR EVO 560 T6 0,75kW	910	3,79	2,18	0,75	8.320	-	118	2
261630663	HMR EVO 630 T6 1,5kW	940	6,45	3,71	1,50	12.490	-	164	2

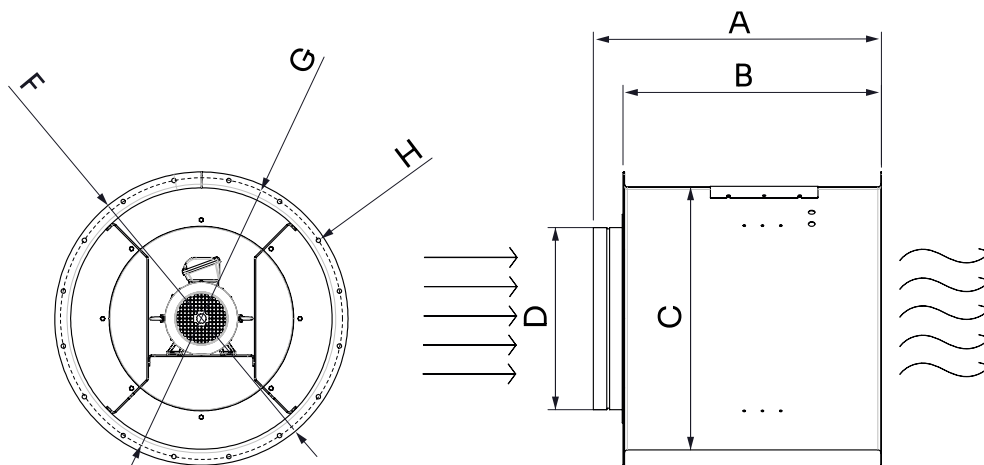
2 speed motor / 4/8 poles

Code	Model	R.P.M.	Rated I. A 400V	Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weig ht kg	Connect. diagram
2613106432V	HMR EVO 315 T4/T8 0,25/0,03kW	1370	1,13/0,37	0,25	2.080	-	35	3
2613506432V	HMR EVO 355 T4/T8 0,25/0,03kW	1370	1,13/0,37	0,25	2.980	-	40,50	3
2614006432V	HMR EVO 400 T4/T8 0,75/0,12kW	1400	2,03/0,68	0,75	4.550	-	52	3
2614506432V	HMR EVO 450 T4/T8 1,1/0,18kW	1400	2,67/1,08	1,10	6.790	-	68	3
2615006432V	HMR EVO 500 T4/T8 1,5/0,25kW	1400	3,46/1,27	1,50	8.930	-	89	3
2615606432V	HMR EVO 560 T4/T8 3/0,55kW	1430	6,53/2,33	3,00	12.670	-	120	3
2616306432V	HMR EVO 630 T4/T8 5,5/1,1kW	1450	10,73/3,82	5,50	18.760	-	170	3

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

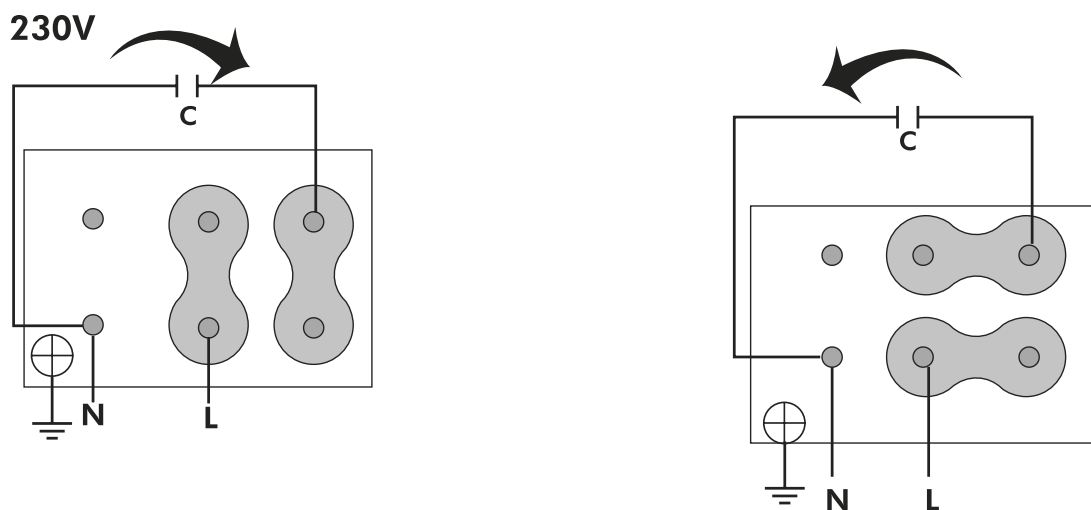
Dimensions



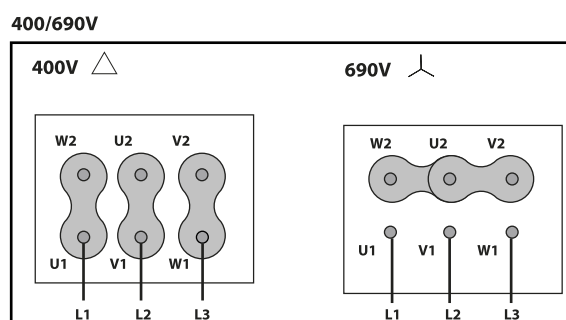
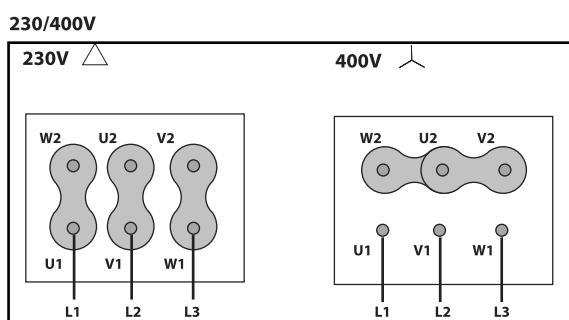
Model	A	B	C	D	F	G	H
HMR EVO 315 M4 0,25kW	579	498	508	353	600	560	Ø12x12
HMR EVO 315 T2 1,1kW	579	498	508	353	600	560	Ø12x12
HMR EVO 315 T4 0,25kW	579	498	508	353	600	560	Ø12x12
HMR EVO 315 T4/T8 0,25/0,03kW	579	498	508	353	600	560	Ø12x12
HMR EVO 355 M4 0,25kW	642	561	563	398	646	620	Ø12x12
HMR EVO 355 T4 0,25kW	642	561	563	398	646	620	Ø12x12
HMR EVO 355 T4/T8 0,25/0,03kW	642	561	563	398	646	620	Ø12x12
HMR EVO 400 M4 0,75kW	701	630	637	448	725	690	Ø12x12
HMR EVO 400 T4 0,75kW	701	630	637	448	725	690	Ø12x12
HMR EVO 400 T4/T8 0,75/0,12kW	701	630	637	448	725	690	Ø12x12
HMR EVO 450 T4 1,1kW	788	707	719	498	802	770	Ø12x16
HMR EVO 450 T4/T8 1,1/0,18kW	788	707	719	498	802	770	Ø12x16
HMR EVO 500 T4 1,5kW	866.5	785.5	805	558	892	860	Ø12x16
HMR EVO 500 T6 0,55kW	866.5	785.5	805	558	892	860	Ø12x16
HMR EVO 500 T4/T8 1,5/0,25kW	866.5	785.5	805	558	892	860	Ø12x16
HMR EVO 560 T4 3kW	964.5	883.5	908.5	628	1000	970	Ø12x16
HMR EVO 560 T6 0,75kW	964.5	883.5	908.5	628	1000	970	Ø12x16
HMR EVO 560 T4/T8 3/0,55kW	964.5	883.5	908.5	628	1000	970	Ø12x16
HMR EVO 630 T4 5,5kW	1094.5	993.5	1019	708	1116	1070	Ø12x16
HMR EVO 630 T6 1,5kW	1094.5	993.5	1019	708	1116	1070	Ø12x16
HMR EVO 630 T4/T8 5,5/1,1kW	1094.5	993.5	1019	708	1116	1070	Ø12x16

Wiring diagram

Wiring diagram N° 1

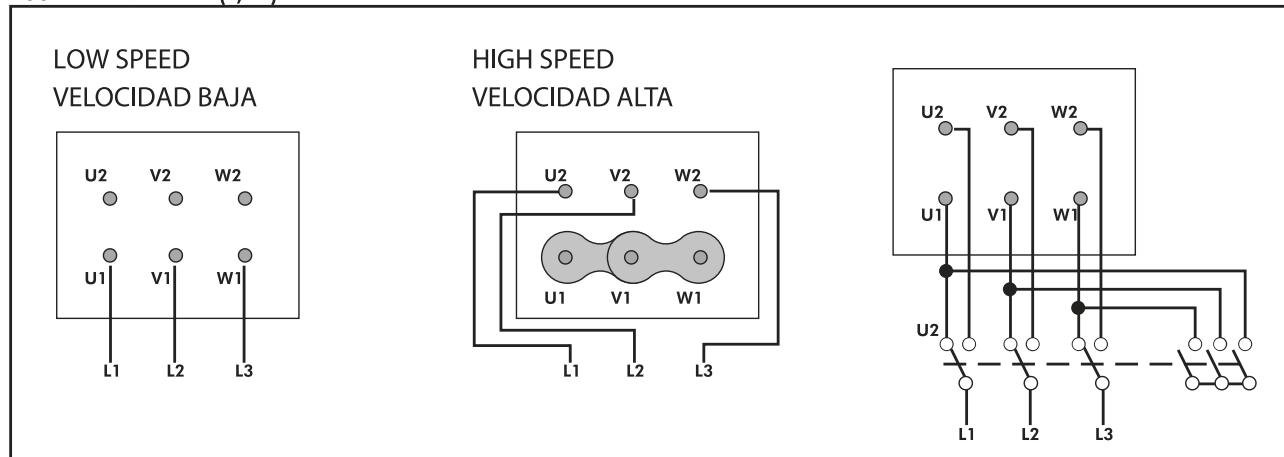


Wiring diagram N° 2



Wiring diagram Nº 3

400V DAHLANDER (Y,YY)



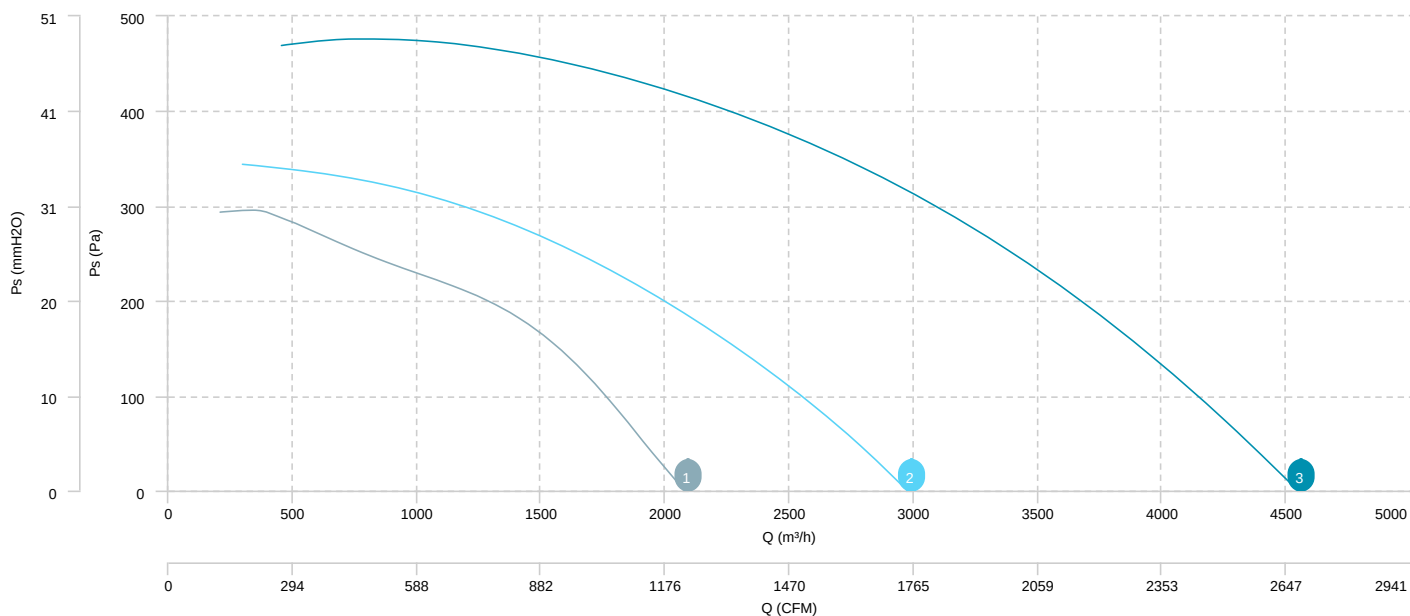
CHARACTERISCTIC CURVE

1 HMR EVO 315 M4 0,25kW

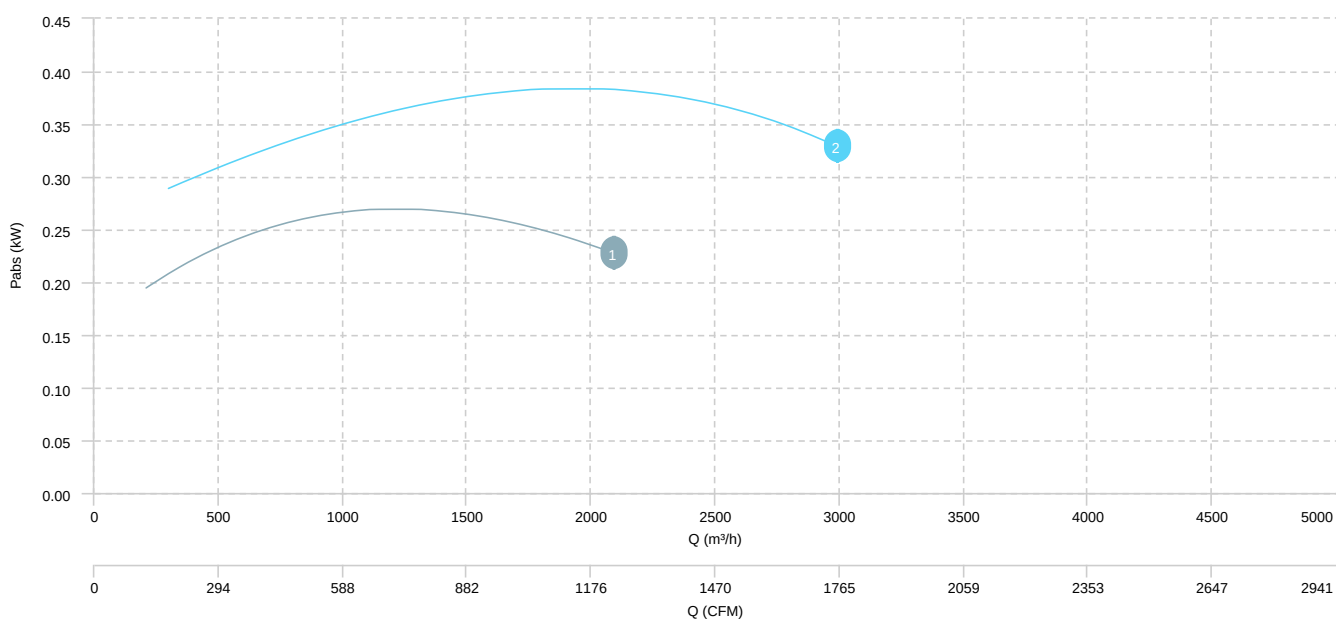
2 HMR EVO 355 M4 0,25kW

3 HMR EVO 400 M4 0,75kW

AIR FLOW - PRESSURE

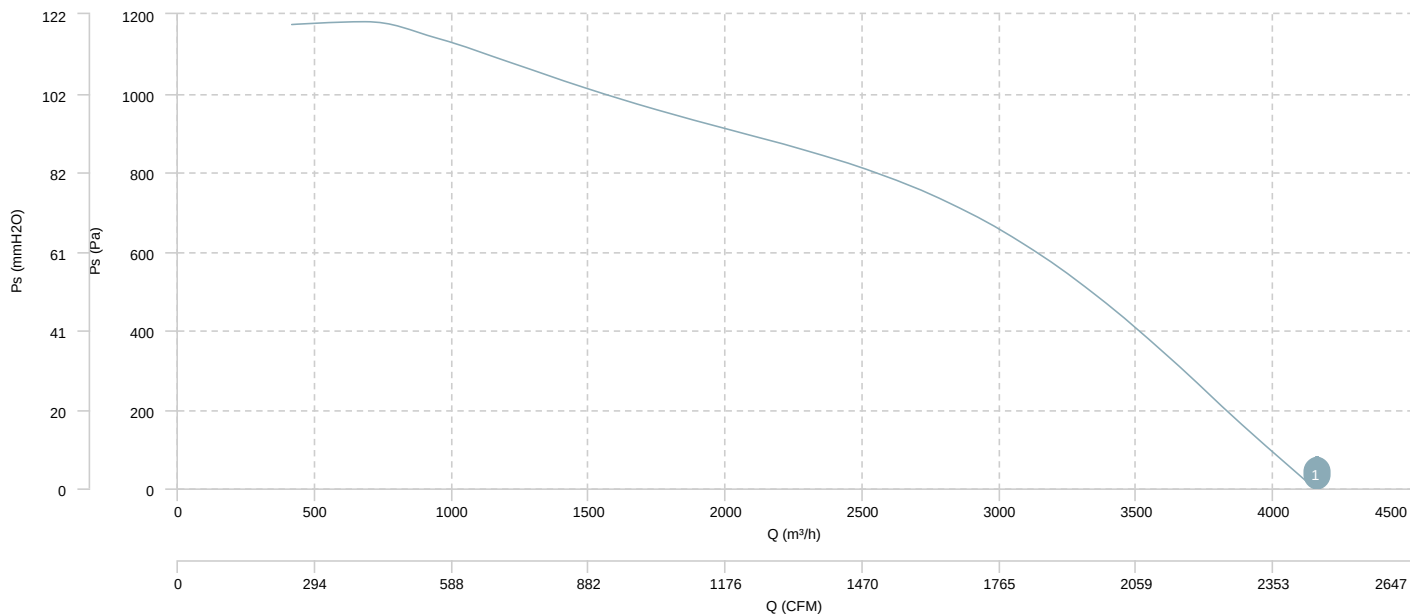


AIR FLOW - ABSORBED POWER

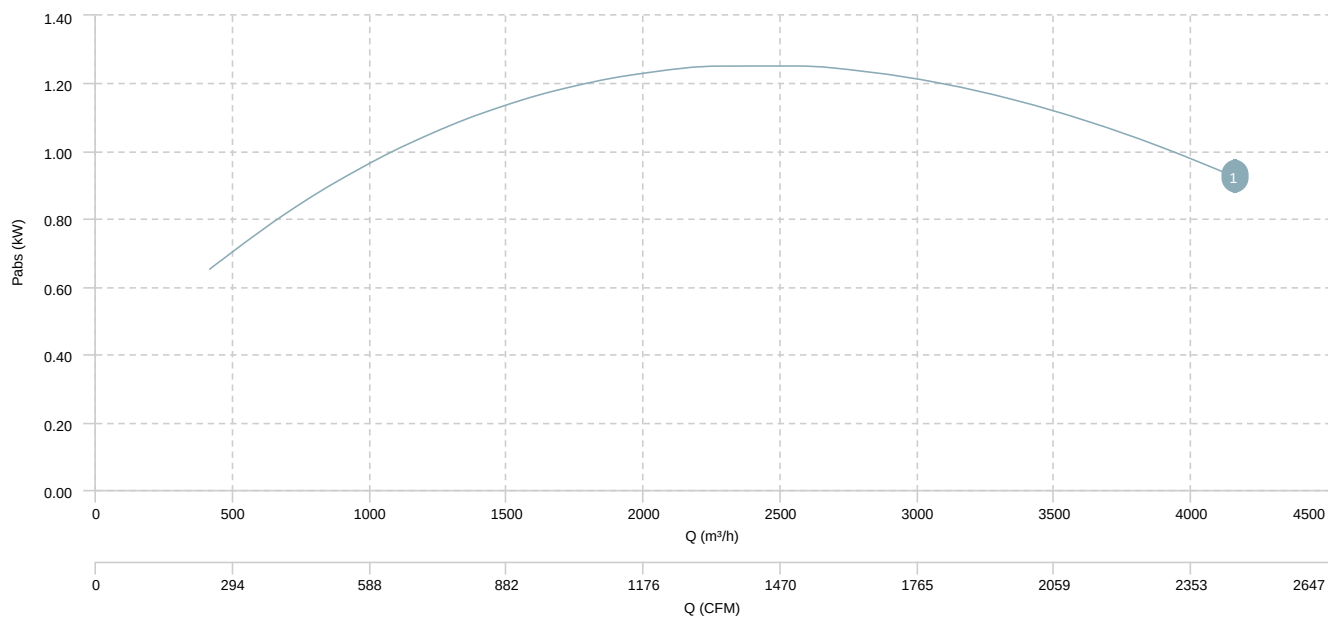


1 HMR EVO 315 T2 1,1kW

AIR FLOW - PRESSURE

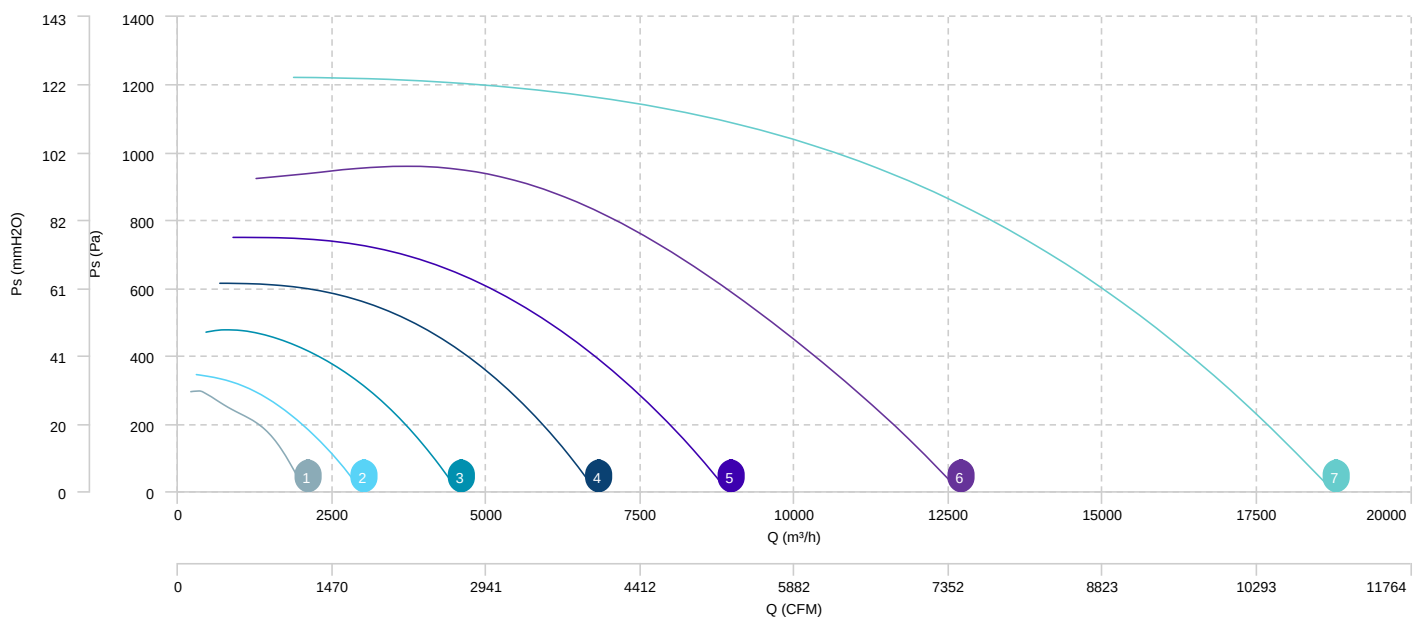


AIR FLOW - ABSORBED POWER

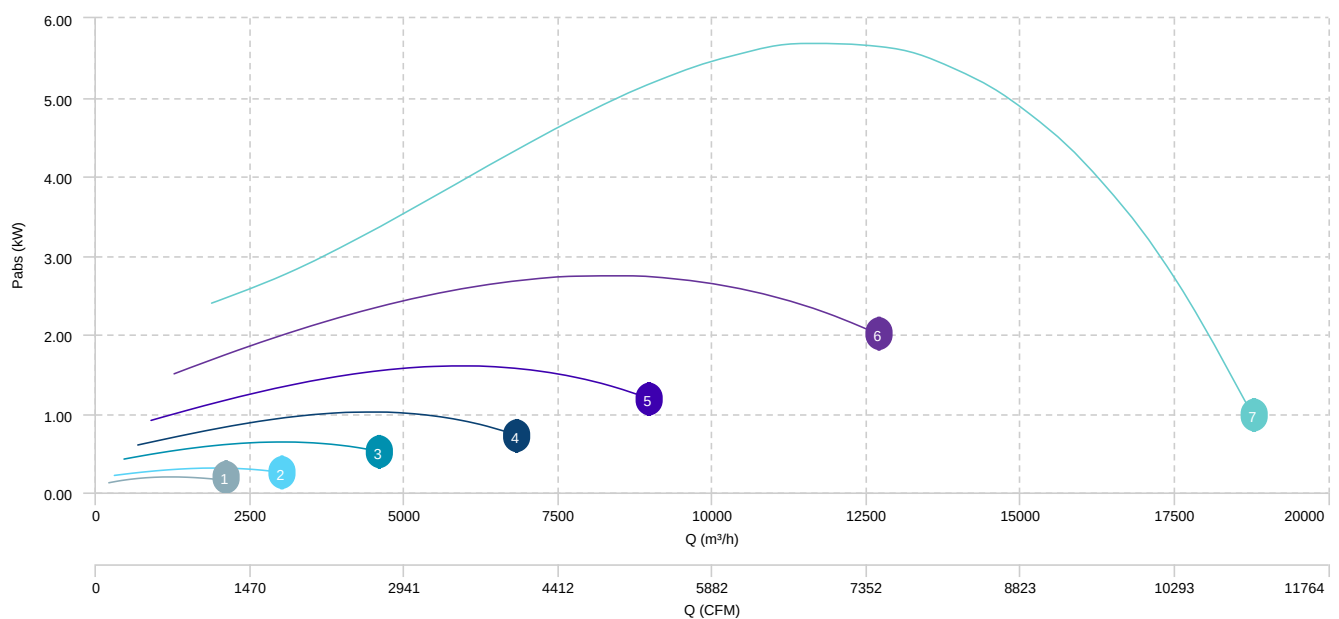


1	HMR EVO 315 T4 0,25kW	2	HMR EVO 355 T4 0,25kW	3	HMR EVO 400 T4 0,75kW	4	HMR EVO 450 T4 1,1kW
5	HMR EVO 500 T4 1,5kW	6	HMR EVO 560 T4 3kW	7	HMR EVO 630 T4 5,5kW		

AIR FLOW - PRESSURE



AIR FLOW - ABSORBED POWER

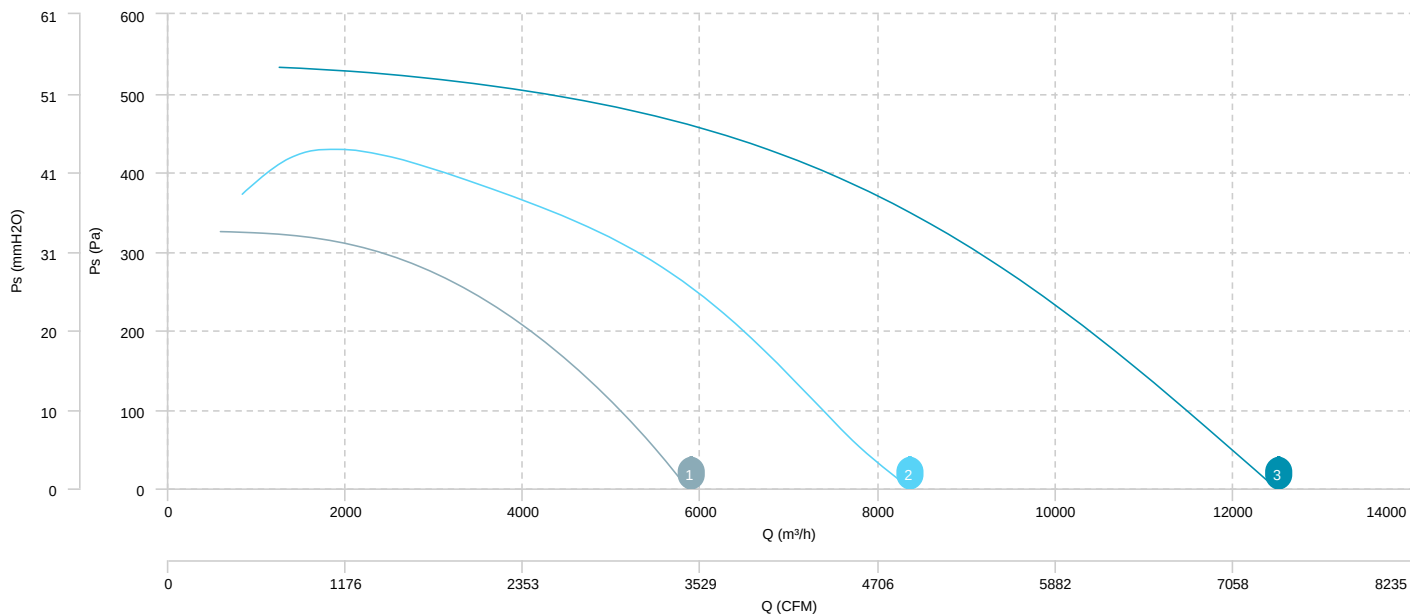


1 HMR EVO 500 T6 0,55kW

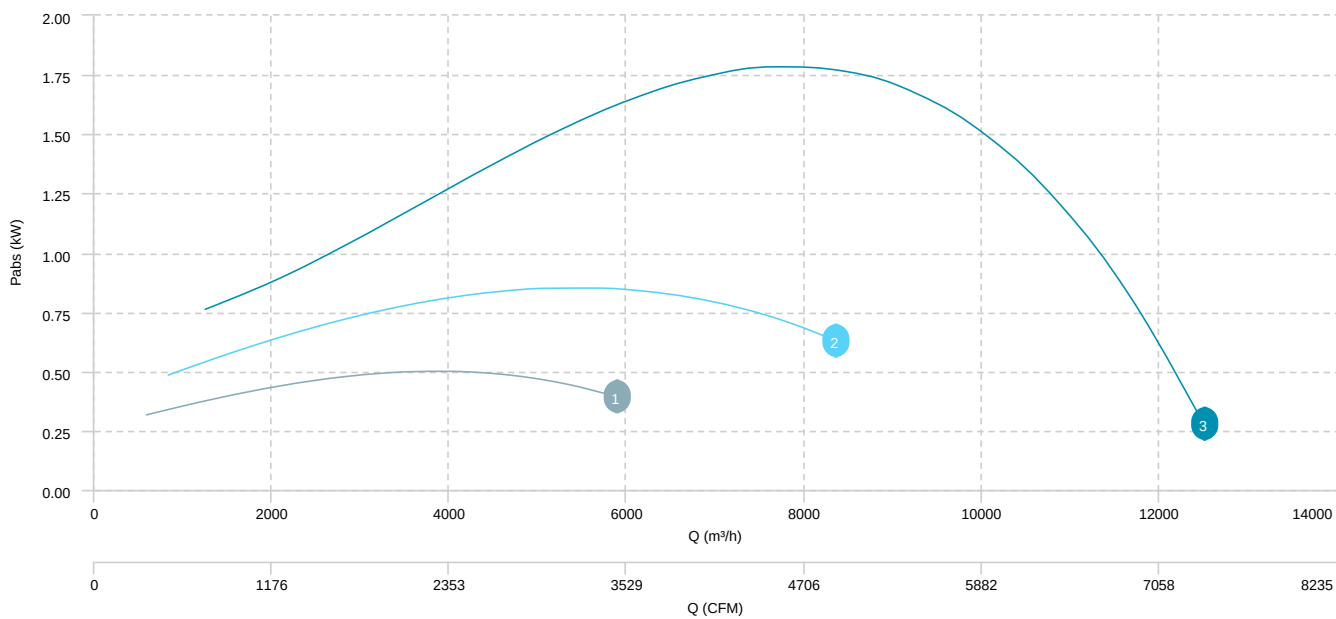
2 HMR EVO 560 T6 0,75kW

3 HMR EVO 630 T6 1,5kW

AIR FLOW - PRESSURE

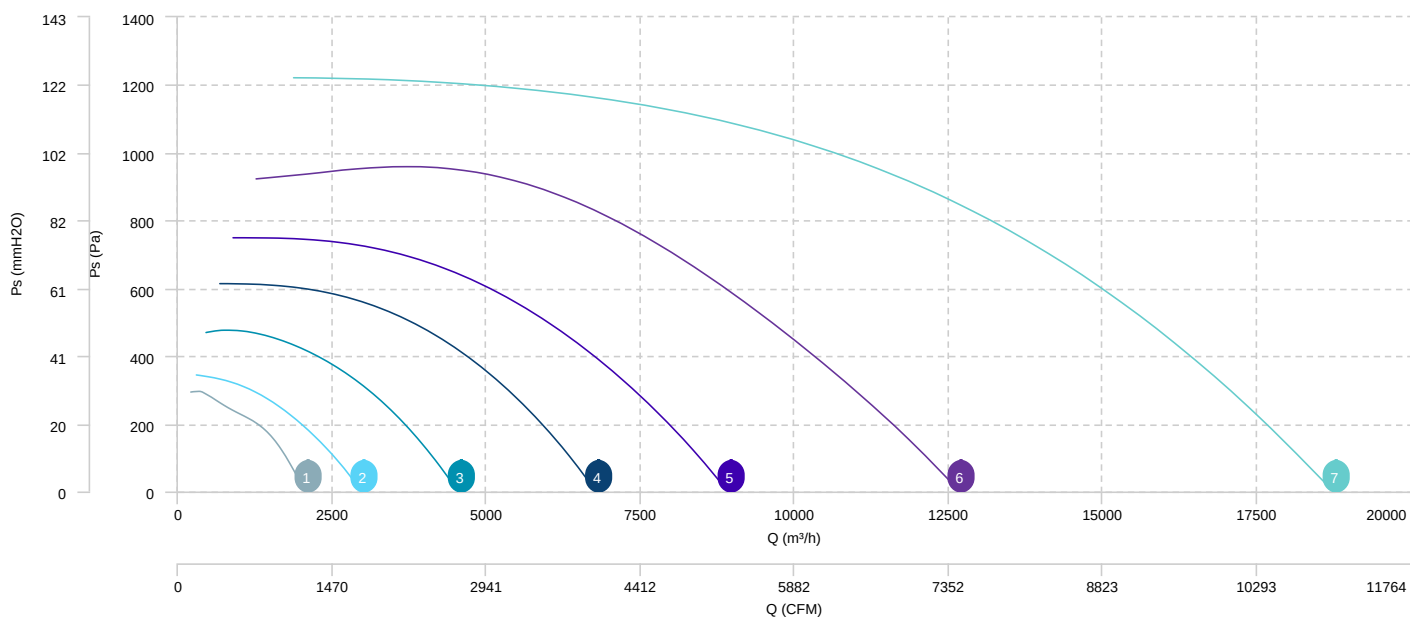


AIR FLOW - ABSORBED POWER



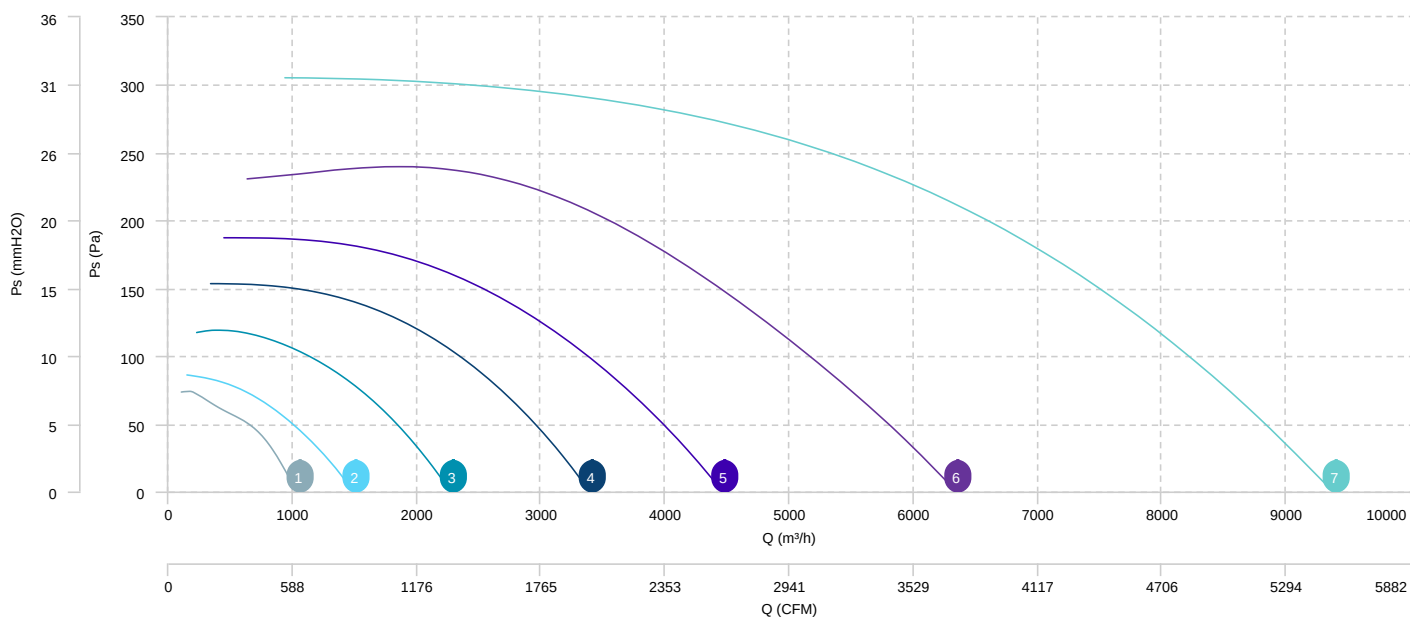
1	HMR EVO 315 T4/T8 0, 25/0,03kW	2	HMR EVO 355 T4/T8 0, 25/0,03kW	3	HMR EVO 400 T4/T8 0, 75/0,12kW	4	HMR EVO 450 T4/T8 1, 1/0,18kW
5	HMR EVO 500 T4/T8 1, 5/0,25kW	6	HMR EVO 560 T4/T8 3/0, 55kW	7	HMR EVO 630 T4/T8 5, 5/1,1kW		

AIR FLOW - PRESSURE (4 poles)



1	HMR EVO 315 T4/T8 0, 25/0,03kW	2	HMR EVO 355 T4/T8 0, 25/0,03kW	3	HMR EVO 400 T4/T8 0, 75/0,12kW	4	HMR EVO 450 T4/T8 1, 1/0,18kW
5	HMR EVO 500 T4/T8 1, 5/0,25kW	6	HMR EVO 560 T4/T8 3/0, 55kW	7	HMR EVO 630 T4/T8 5, 5/1,1kW		

AIR FLOW - PRESSURE (8 poles)



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
HMR EVO 315 T2 1,1kW	Radiated	65	69	79	76	73	76	77	62	82

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
HMR EVO 315 M4 0,25kW	Radiated	49	53	63	60	56	60	60	45	66
HMR EVO 315 T4 0,25kW	Radiated	49	53	63	60	56	60	60	45	66
HMR EVO 355 M4 0,25kW	Radiated	53	63	61	61	59	66	53	47	68
HMR EVO 355 T4 0,25kW	Radiated	53	63	61	61	59	66	53	47	68
HMR EVO 400 M4 0,75kW	Radiated	56	67	65	64	63	69	56	51	71
HMR EVO 400 T4 0,75kW	Radiated	56	67	65	64	63	69	56	51	71
HMR EVO 450 T4 1,1kW	Radiated	60	68	67	68	67	73	59	53	75
HMR EVO 500 T4 1,5kW	Radiated	64	71	71	72	70	76	63	57	78
HMR EVO 560 T4 3kW	Radiated	84	78	78	77	77	72	61	59	78
HMR EVO 630 T4 5,5kW	Radiated	88	82	81	81	80	77	64	62	83

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
HMR EVO 500 T6 0,55kW	Radiated	55	62	61	62	61	67	54	47	69
HMR EVO 560 T6 0,75kW	Radiated	78	72	72	71	71	67	55	53	72
HMR EVO 630 T6 1,5kW	Radiated	79	72	72	71	71	68	55	53	73

Sound / 4/8 poles

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
HMR EVO 315 T4/T8 0,25/0,03kW (8P)	Radiated	33	37	47	44	41	44	44	30	50
HMR EVO 355 T4/T8 0,25/0,03kW (8P)	Radiated	37	47	45	45	44	50	37	31	52

Sound power Lw dB (A)										
Model		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Total
HMR EVO 400 T4/T8 0,75/0,12kW (8P)	Radiated	40	51	49	48	47	53	40	35	56
HMR EVO 450 T4/T8 1,1/0,18kW ()	Radiated	60	68	67	68	67	73	59	53	75
HMR EVO 500 T4/T8 1,5/0,25kW ()	Radiated	64	71	71	72	70	76	63	57	78
HMR EVO 560 T4/T8 3/0,55kW ()	Radiated	84	78	78	77	77	72	61	59	78
HMR EVO 630 T4/T8 5,5/1,1kW ()	Radiated	88	82	81	81	80	77	64	62	83

Notes:

* To calculate the sound power level at different rpm from those indicated above, use the following formula:

$$Lw \text{ dB(A)}_{rpmA} = Lw \text{ dB(A)}_{rpmB} + 52.5 \cdot \log_{10} \frac{rpmA}{rpmB}$$

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)
HMR EVO 315 T2 1,1kW	1,10	-	46,77	1,25	2.559,30	796,26	3.51	1.759,82

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)
HMR EVO 315 T4 0,25kW	0,25	-	37,53	0,20	1.280,10	200,86	1.75	550,45
HMR EVO 355 T4 0,25kW	0,25	-	38,47	0,31	1.690,76	244,47	1.89	651,51
HMR EVO 400 T4 0,75kW	0,75	-	42,93	0,63	2.634,98	360,20	2.3	863,81
HMR EVO 450 T4 1,1kW	1,10	-	54,98	1,01	4.017,55	478,44	2.75	905,19
HMR EVO 500 T4 1,5kW	1,50	-	55,45	1,58	5.184,67	588,14	2.83	1.098,23
HMR EVO 560 T4 3kW	3	-	59,81	2,71	7.212,05	789,47	3.09	1.351,39
HMR EVO 630 T4 5,5kW	5,50	-	58,89	5,68	11.415,06	949,20	3.89	1.789,59

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)
HMR EVO 500 T6 0,55kW	0,75	-	48,94	0,50	3.407,64	248,96	1.86	523,65
HMR EVO 560 T6 0,75kW	0,75	-	53,22	0,84	4.657,71	334,55	2	649,05
HMR EVO 630 T6 1,5kW	1,50	-	50,77	1,77	7.354,58	402,91	2.51	868,46