

DIRECT DRIVE MOTOR

MC

**Extremely robust, medium pressure and single inlet centrifugal fans
with sheet steel casing and impeller
Designed for dusty air**



*The images are provided only for illustrative purposes, the product may vary depending on its size, specifications and position.

Fan:

- Sheet steel casing.
- Impeller with reaction blades in extremely robust sheet steel, specially designed for air that is very dusty and with small size materials suspended in the air.
- Motor coupled directly.

Motor:

- IE3 efficiency motors for powers equal to or higher than 0.75 kW except single-phase, 2-speed and 8-poles.
- Class F motors with ball bearings and IP55 protection.
- Three-phase 230/400 V-50 Hz (up to 4 kW) and 400/690 V-50 Hz (powers higher than 4 kW).
- Maximum temperature of air to be carried: -25°C +90°C.

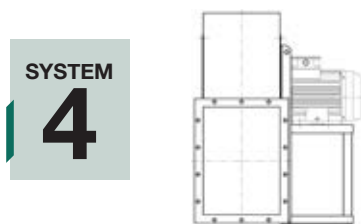
Finish:

- Anti-corrosive finish of polyester resin polymerised at 190°C, previously degreased with phosphate-free nanotechnological treatment.

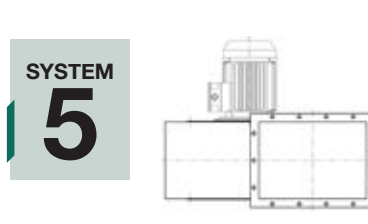
On request:

- Special windings for different voltages.
- Fan prepared for air transmission of up to +150°C.
- Special executions for temperatures of +300°C.
- Stainless steel fan.
- Category 2 ATEX certification.
- System 8 elastic coupling.

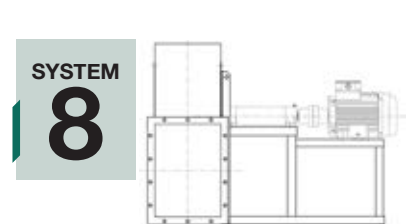
Direct drive motor construction method



Direct drive, impeller mounted on the motor shaft, mounted on the pedestal.

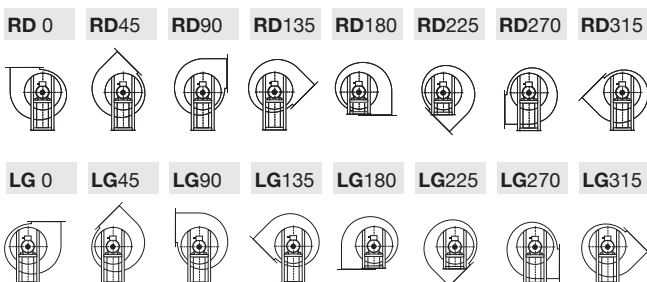


Direct drive, impeller mounted on the motor shaft, flange motor mounted on the fan casing.



Elastic coupling drive, impeller mounted on the support shaft, mounted on the motor via an elastic coupling. Everything mounted together on a fan pedestal.

Orientations



BELT-DRIVEN MOTOR

MC/R

Belt-driven, medium pressure fans fitted with electric motors and a standardised set of pulleys, belts and protectors in accordance with standard ISO 13857
Designed for dusty air

**Motor:**

- IE3 efficiency motors.
- Class F motors with ball bearings and IP55 protection.
- Three-phase 230/400 V-50 Hz (up to 4 kW) and 400/690 V-50 Hz (powers higher than 4 kW).
- Maximum temperature of air to be carried: -25°C +90°C.

Finish:

- Anti-corrosive finish of polyester resin polymerised at 190°C, previously degreased with phosphate-free nanotechnological treatment.

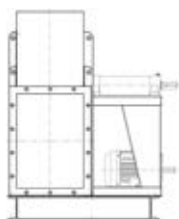
On request:

- Special windings for different voltages.
- Fan prepared for air transmission of up to +300°C.
- Stainless steel fan.
- Category 2 ATEX certification.
- System 8 elastic coupling.

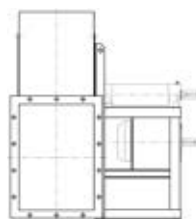
Fan:

- Sheet steel casing.
- Impeller with reaction blades in extremely robust sheet steel, specially designed for air that is dusty or with small size materials suspended in the air.
- Motor assembled on the general bench.

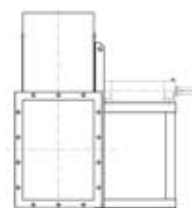
*The images are provided only for illustrative purposes, the product may vary depending on its size, specifications and position.

Belt-driven motor construction method**SYSTEM 12**

Transmission drive, identical to SYSTEM 1, with the motor and fan mounted on the common bench. Motor positions "W" or "Z" and exceptionally "X" or "Y".

SYSTEM 9

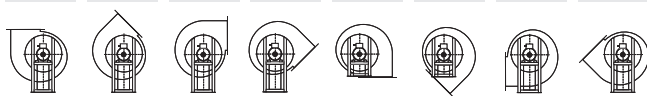
Transmission drive, identical to SYSTEM 1, with the motor mounted on the side of the pedestal, in position "W" or "Z".

SYSTEM 1

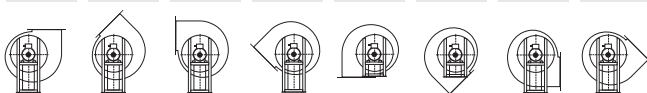
Transmission drive, impeller mounted on the support shaft. Support mounted on the pedestal.

Orientations

RD 0 RD45 RD90 RD135 RD180 RD225 RD270 RD315



LG 0 LG45 LG90 LG135 LG180 LG225 LG270 LG315



QUICK SELECT SYSTEM 4

Impulsion characteristics

						V m³/s														
MOD.	FRAME	kW abs.	kW inst.	RPM	dB	0.16	0.18	0.2	0.23	0.26	0.3	0.33	0.36	0.41	0.46	0.51	0.58	0.66	0.75	0.83
						Pt kgf/m²=mmH₂O														
MC 360	80 B/2	1	1.1	2820	73	238	235	231	223	214	203	190	180	155	130					
MC 380	90 S/2	1.3	1.5	2840	76		290	284	280	275	268	262	250	225	202	180				
MC 410	90 L/2	2	2.2	2840	79				330	326	319	313	306	292	276	260	237	205		
MC 440	100 LA/2	2.8	3	2850	81							390	384	375	362	355	334	294	265	
MC 470	112 M/2	3.8	4	2860	82								440	433	425	419	408	392	375	353
MC 500	132 SA/2	5.2	5.5	2900	84												489	481	475	465
MC 520	132 SB/2	7.2	7.5	2900	86													533	524	512
MC 550	160 MA/2	8.8	11	2910	87															565
MC 560	160 MA/2	10.5	11	2910	89															
MC 600	160 MB/2	14.5	15	2930	91															

						V m³/s							
MOD.	FRAME	kW abs.	kW inst.	RPM	dB	0.93	1.05	1.16	1.33	1.5	1.66	1.86	2.08
						Pt kgf/m²=mmH₂O							
MC 360	80 B/2	1	1.1	2820	73								
MC 380	90 S/2	1.3	1.5	2840	76								
MC 410	90 L/2	2	2.2	2840	79								
MC 440	100 LA/2	2.8	3	2850	81								
MC 470	112 M/2	3.8	4	2860	82	324	275						
MC 500	132 SA/2	5.2	5.5	2900	84	445	418	350					
MC 520	132 SB/2	7.2	7.5	2900	86	500	482	456	420	370			
MC 550	160 MA/2	8.8	11	2910	87	548	524	502	483	458	420	360	
MC 560	160 MA/2	10.5	11	2910	89		573	557	538	505	486	452	
MC 600	160 MB/2	14.5	15	2930	91				635	624	608	576	550

Flow margin ±5%
Noise level margin +3...5 dB

Inlet characteristics

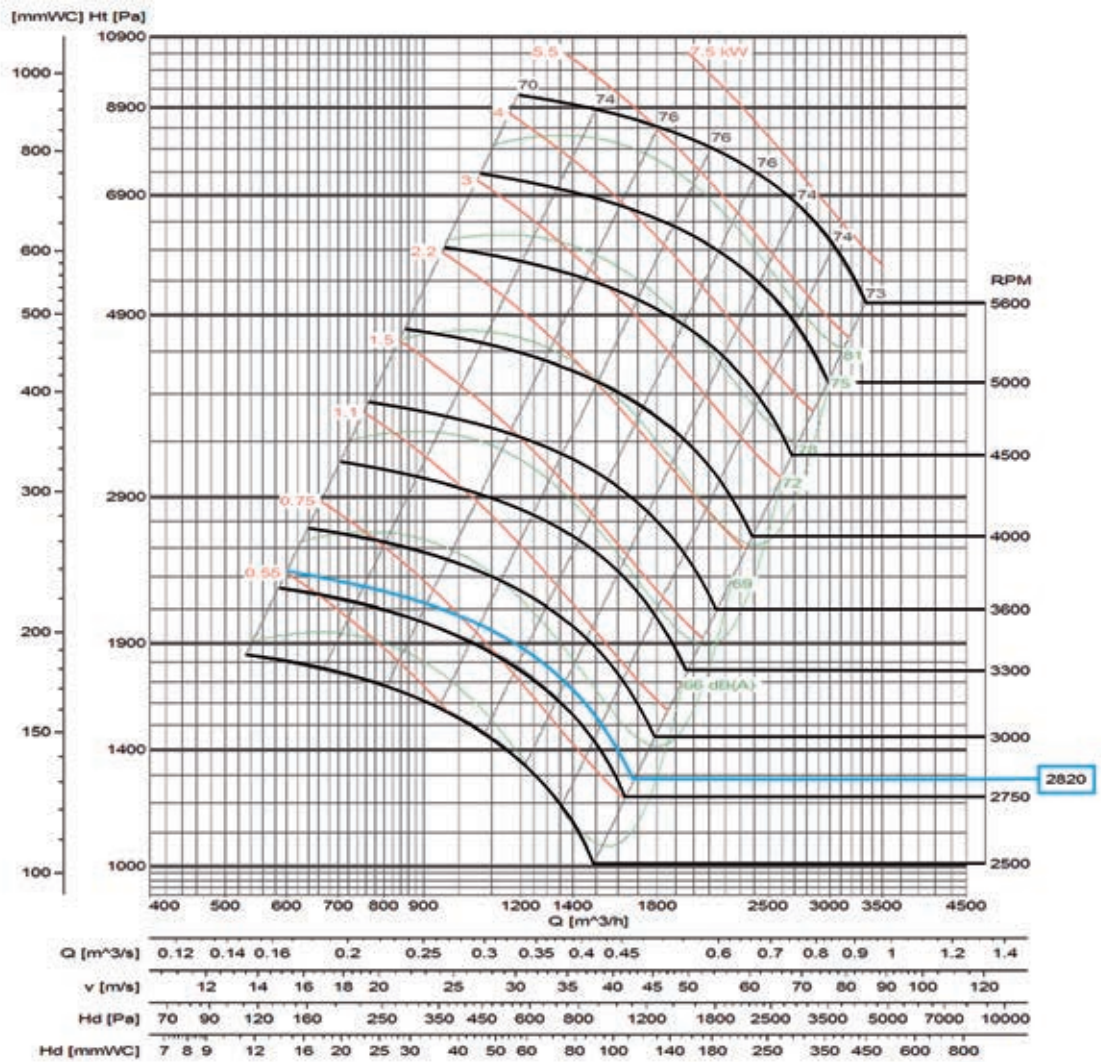
						V m³/s														
MOD.	FRAME	kW abs.	kW inst.	RPM	dB	0.16	0.18	0.2	0.23	0.26	0.3	0.33	0.36	0.41	0.46	0.51	0.58	0.66	0.75	0.83
						Pt kgf/m²=mmH₂O														
MC 360	80 B/2	1	1.1	2820	76	214	212	208	201	193	183	171	162	140	117					
MC 380	90 S/2	1.3	1.5	2840	78		261	256	252	248	241	236	225	203	182	162				
MC 410	90 L/2	2	2.2	2840	82				297	293	287	282	275	263	248	234	213	185		
MC 440	100 LA/2	2.8	3	2850	84							351	346	338	326	320	301	265	239	
MC 470	112 M/2	3.8	4	2860	85								396	390	383	377	367	353	338	318
MC 500	132 SA/2	5.2	5.5	2900	87												440	433	428	419
MC 520	132 SB/2	7.2	7.5	2900	89													480	472	461
MC 550	160 MA/2	8.8	11	2910	90															509
MC 560	160 MA/2	10.5	11	2910	92															
MC 600	160 MB/2	14.5	15	2930	94															

						V m³/s							
MOD.	FRAME	kW abs.	kW inst.	RPM	dB	0.93	1.05	1.16	1.33	1.5	1.66	1.86	2.08
						Pt kgf/m²=mmH₂O							
MC 360	80 B/2	1	1.1	2820	76								
MC 380	90 S/2	1.3	1.5	2840	78								
MC 410	90 L/2	2	2.2	2840	82								
MC 440	100 LA/2	2.8	3	2850	84								
MC 470	112 M/2	3.8	4	2860	85	292	248						
MC 500	132 SA/2	5.2	5.5	2900	87	401	376	315					
MC 520	132 SB/2	7.2	7.5	2900	89	450	434	410	378	333			
MC 550	160 MA/2	8.8	11	2910	90	493	472	452	435	412	378	324	
MC 560	160 MA/2	10.5	11	2910	92		516	501	484	455	437	407	
MC 600	160 MB/2	14.5	15	2930	94				572	562	547	518	495

Flow margin ±5%
Noise level margin +3...5 dB

Characteristic curves

MC 360

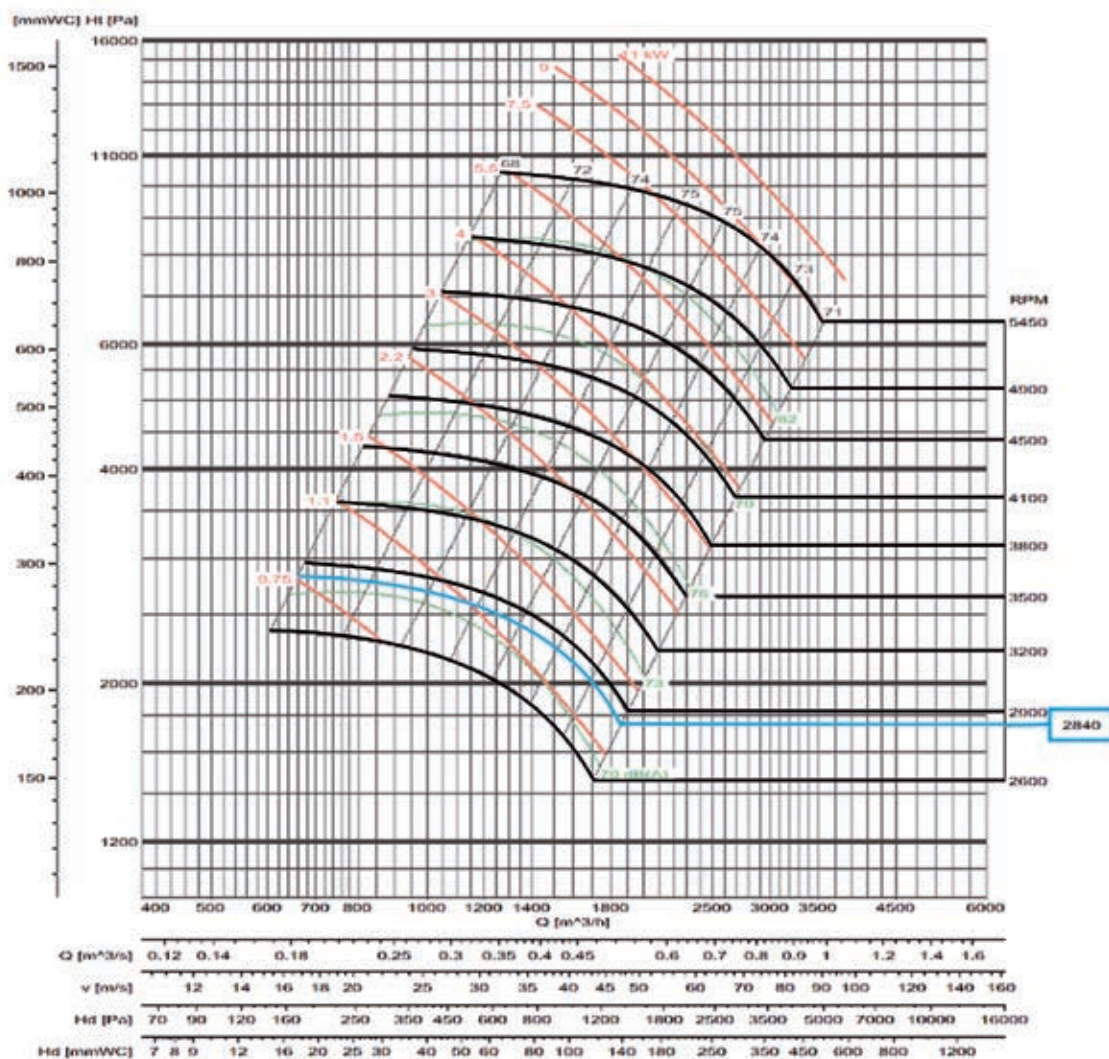


Flow margin $\pm 5\%$
Noise level margin $+3...5$ dB
Margin of kW absorbed $\pm 3\%$
Impulsion characteristics

RPM Characteristics for:
system 4 and 5 in direct
drive motor with 2/4/6/8
poles depending on the
model.

Characteristic curves

MC 380



Flow margin $\pm 5\%$
Noise level margin $+3...5$ dB
Margin of kW absorbed $\pm 3\%$

Impulsion characteristics

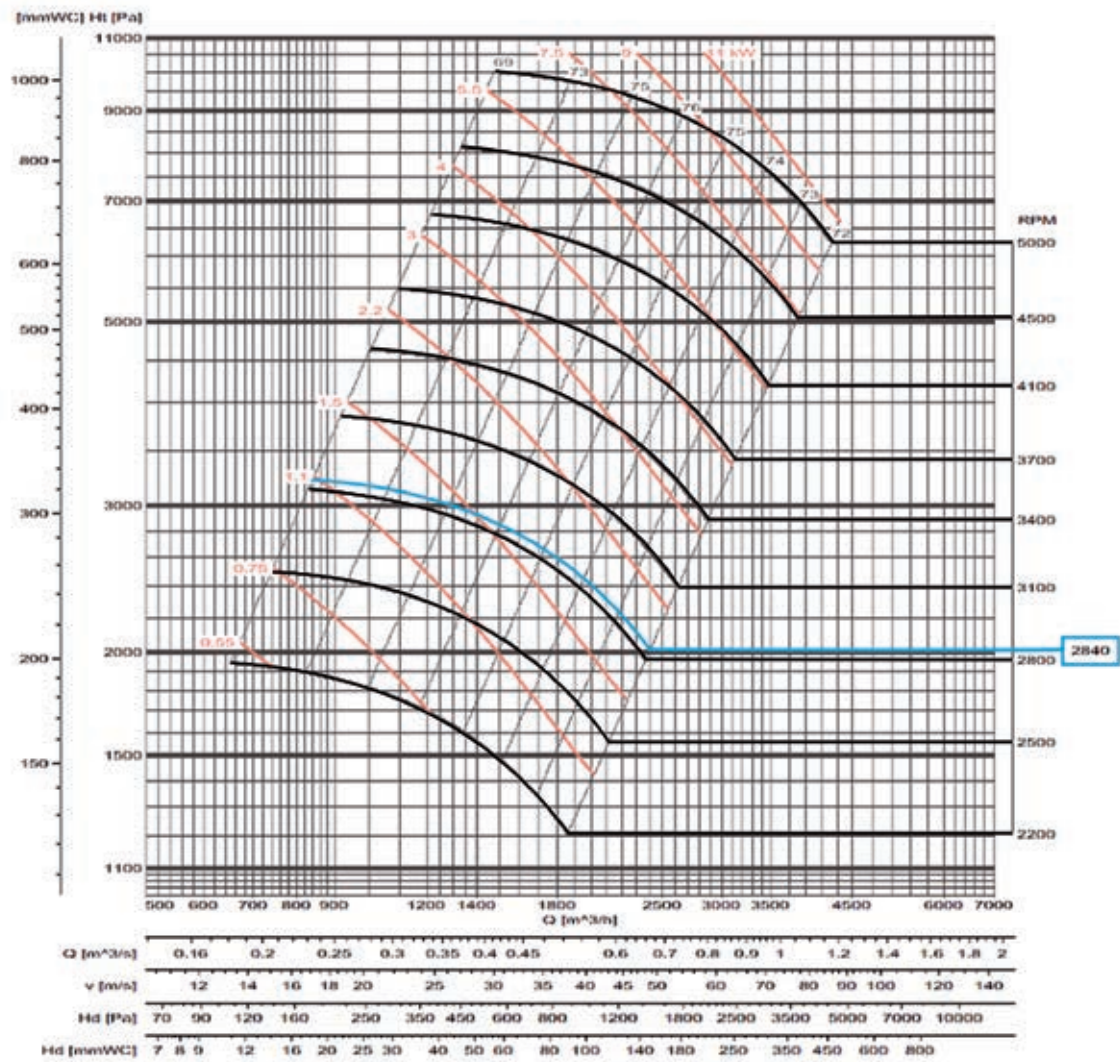
RPM

Characteristics for:
system 4 and 5 in direct
drive motor with 2/4/6/8
poles depending on the
model.



Characteristic curves

MC 410



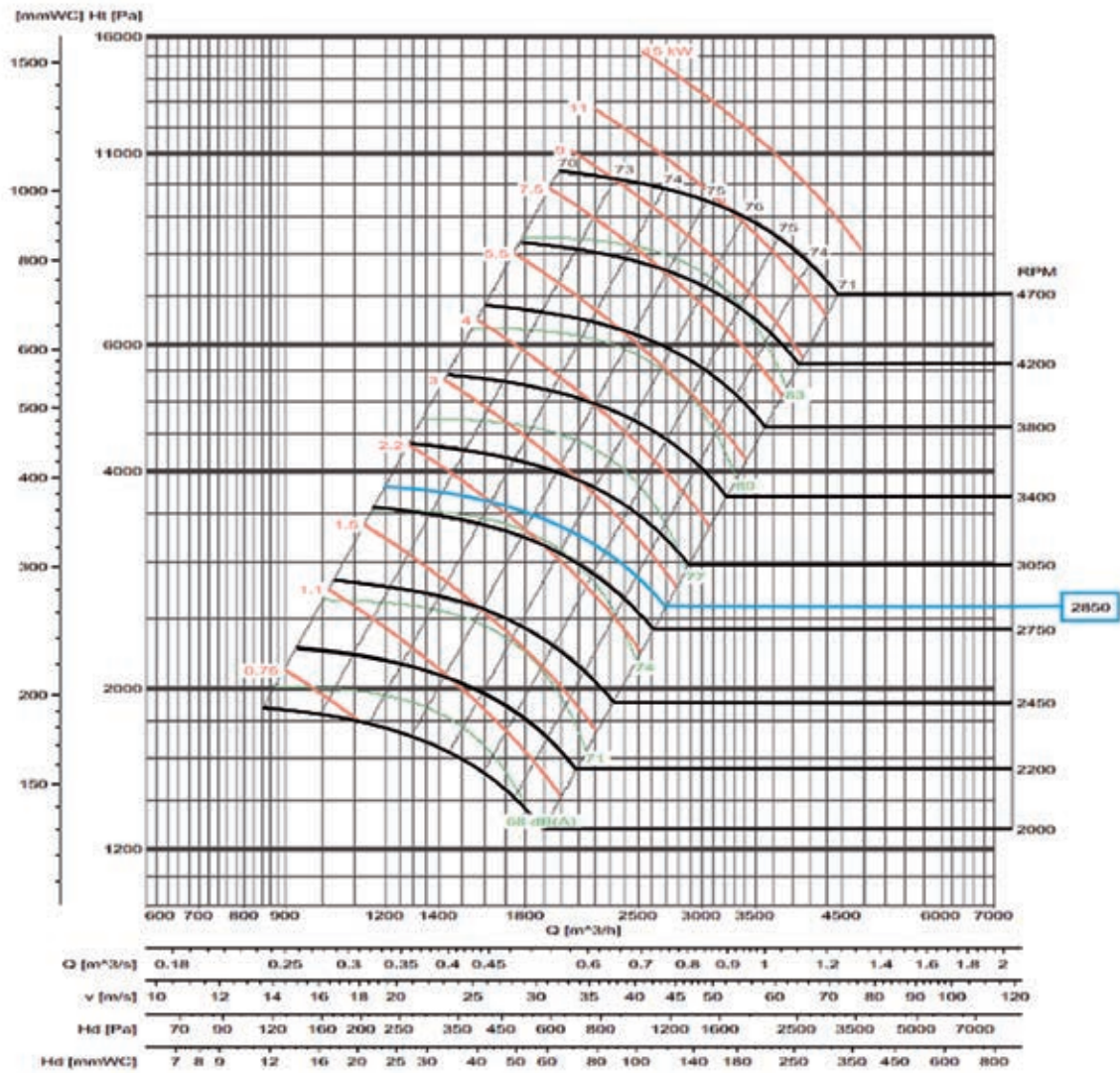
Flow margin $\pm 5\%$
Noise level margin $+3...5$ dB
Margin of kW absorbed $\pm 3\%$
Impulsion characteristics

RPM

Characteristics for:
system 4 and 5 in direct
drive motor with 2/4/6/8
poles depending on the
model.

Characteristic curves

MC 440



Flow margin $\pm 5\%$
Noise level margin $+3...5$ dB
Margin of kW absorbed $\pm 3\%$

Impulsion characteristics

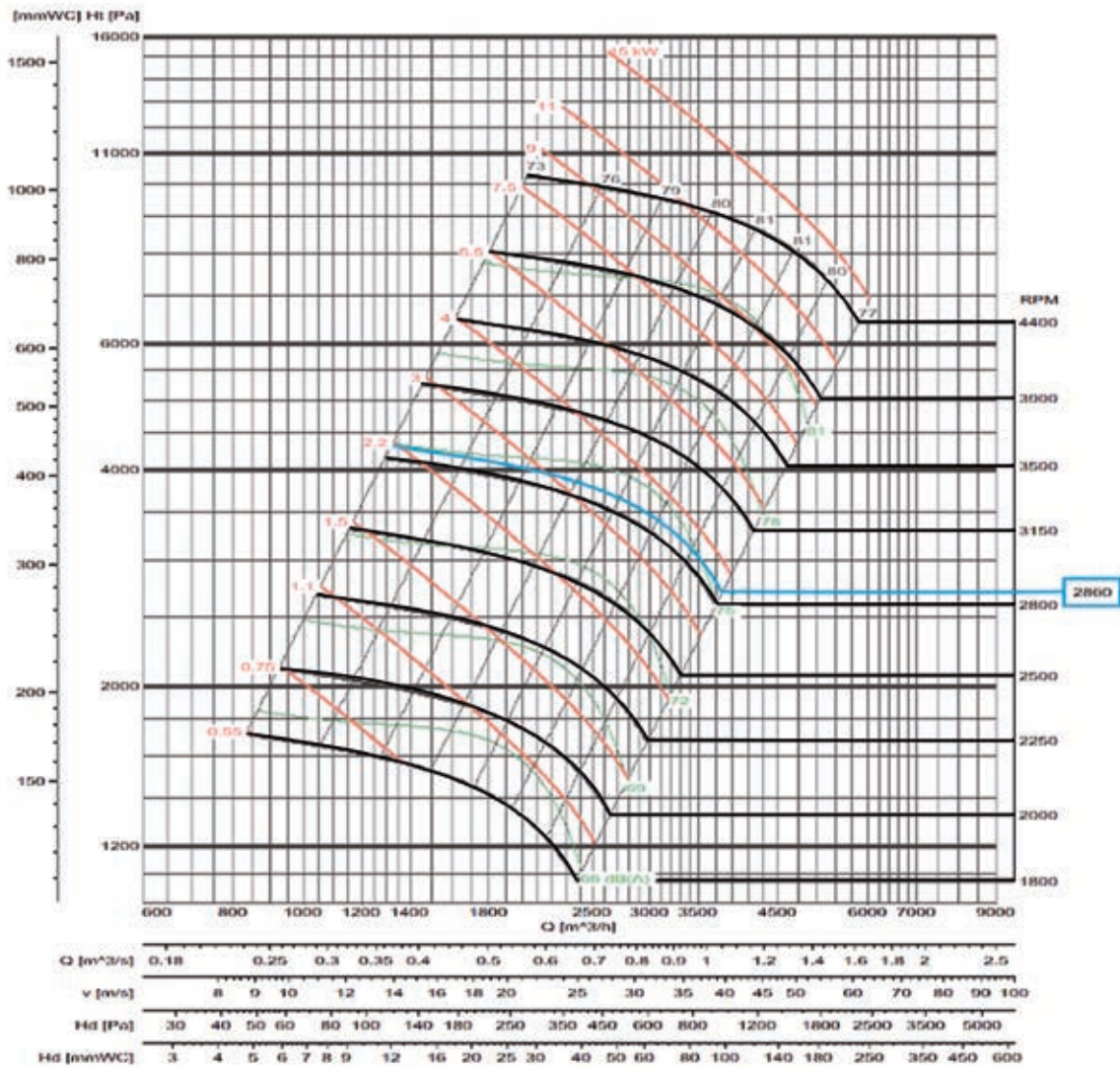
RPM

Characteristics for:
system 4 and 5 in direct
drive motor with 2/4/6/8
poles depending on the
model.



Characteristic curves

MC 470

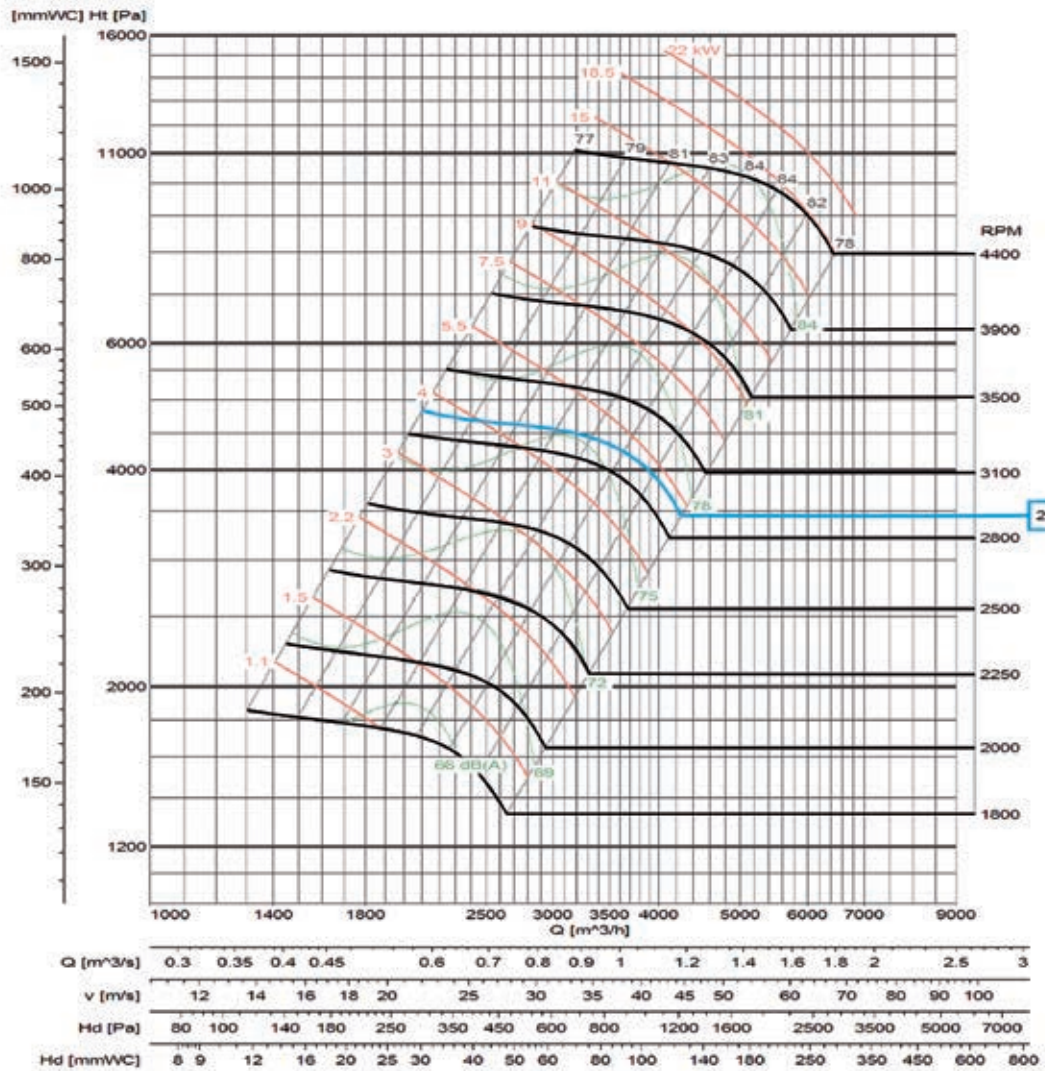


Flow margin $\pm 5\%$
Noise level margin $+3...5$ dB
Margin of kW absorbed $\pm 3\%$
Impulsion characteristics

RPM Characteristics for:
system 4 and 5 in direct
drive motor with 2/4/6/8
poles depending on the
model.

Characteristic curves

MC 500



Flow margin $\pm 5\%$
 Noise level margin $+3...5$ dB
 Margin of kW absorbed $\pm 3\%$

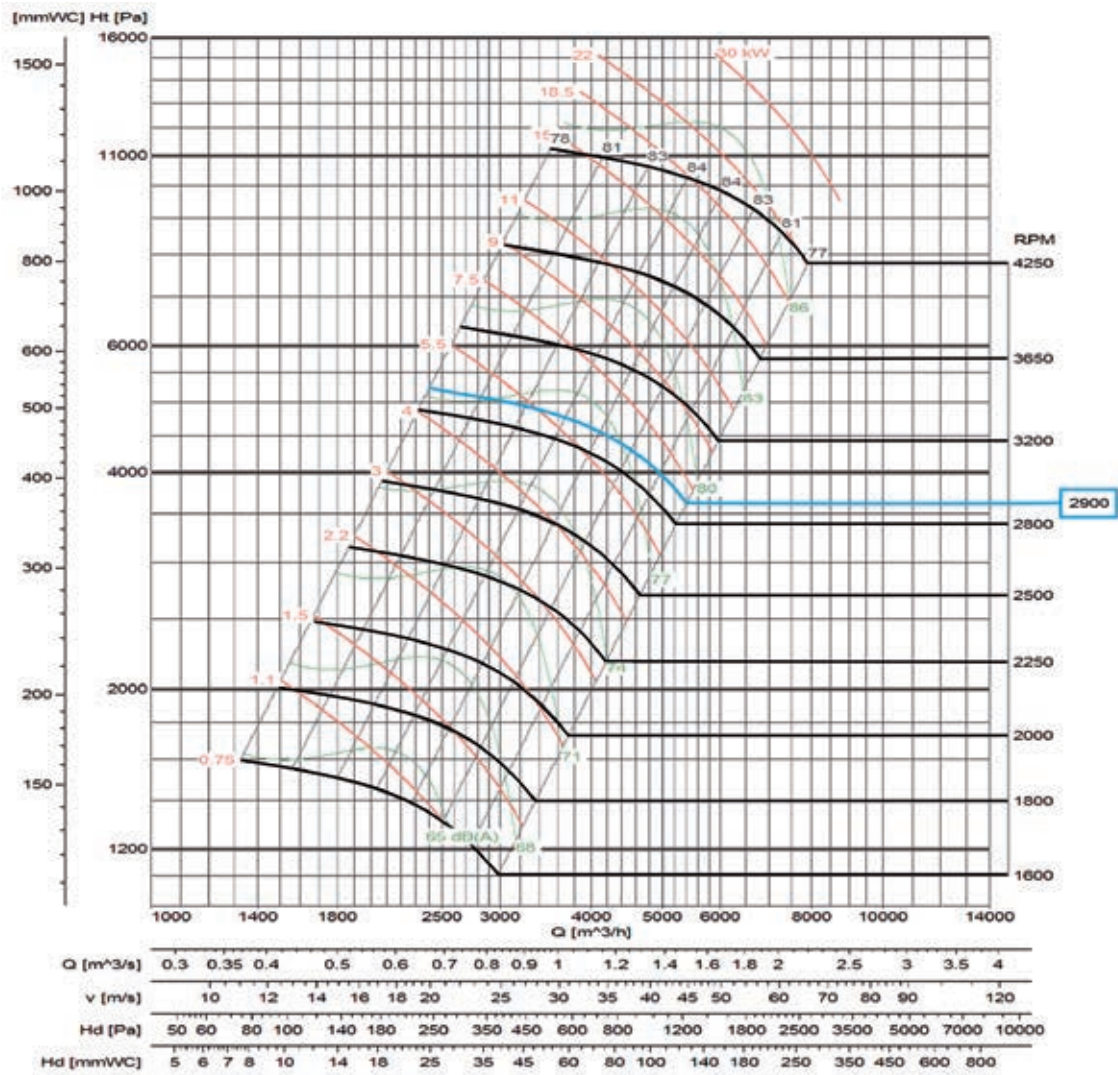
Impulsion characteristics

RPM

Characteristics for:
 system 4 and 5 in direct
 drive motor with 2/4/6/8
 poles depending on the
 model.

Characteristic curves

MC 520

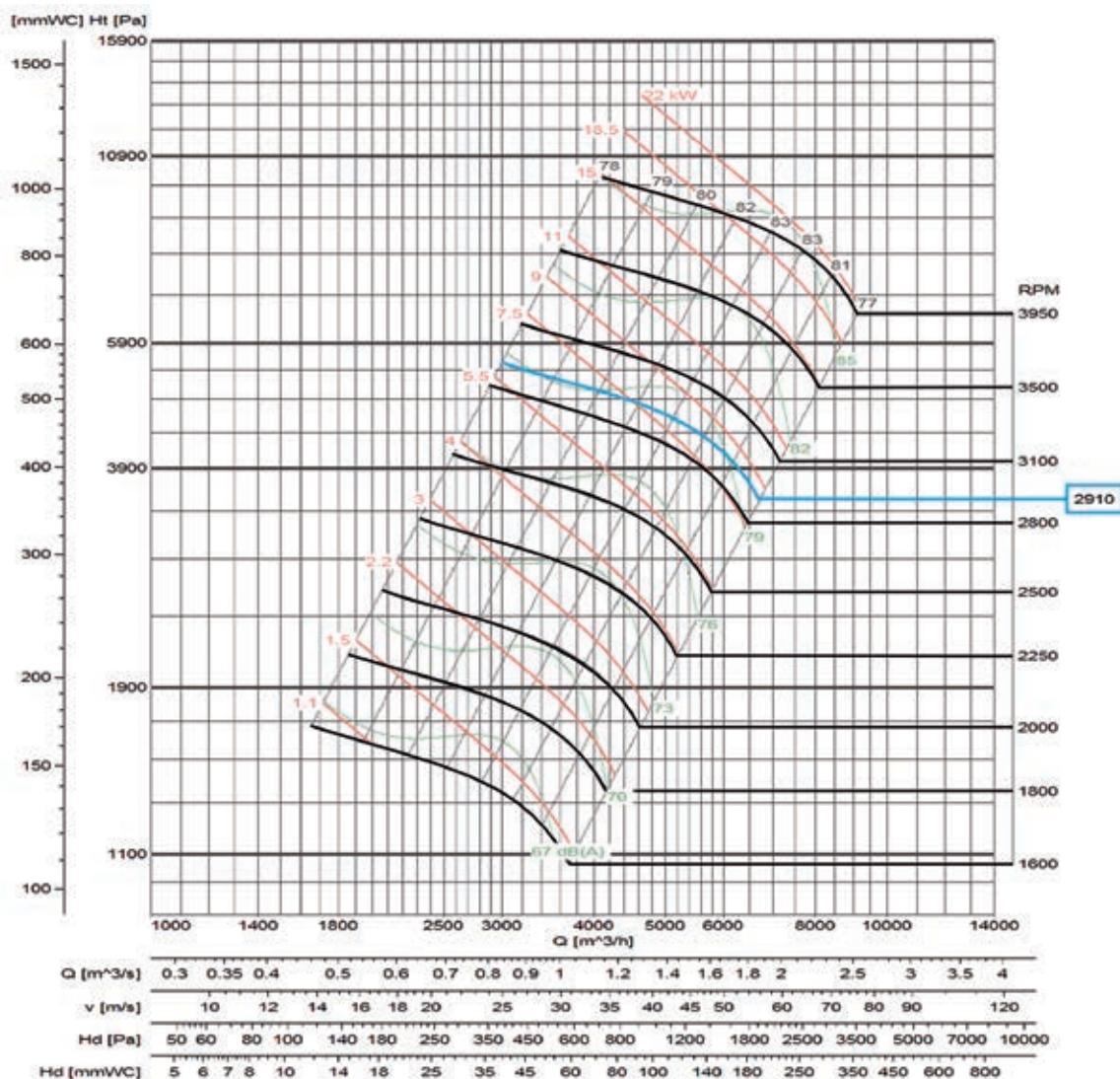


Flow margin $\pm 5\%$
Noise level margin $+3...5$ dB
Margin of kW absorbed $\pm 3\%$
Impulsion characteristics

RPM Characteristics for:
system 4 and 5 in direct
drive motor with 2/4/6/8
poles depending on the
model.

Characteristic curves

MC 550



Flow margin $\pm 5\%$
Noise level margin $+3...5$ dB
Margin of kW absorbed $\pm 3\%$

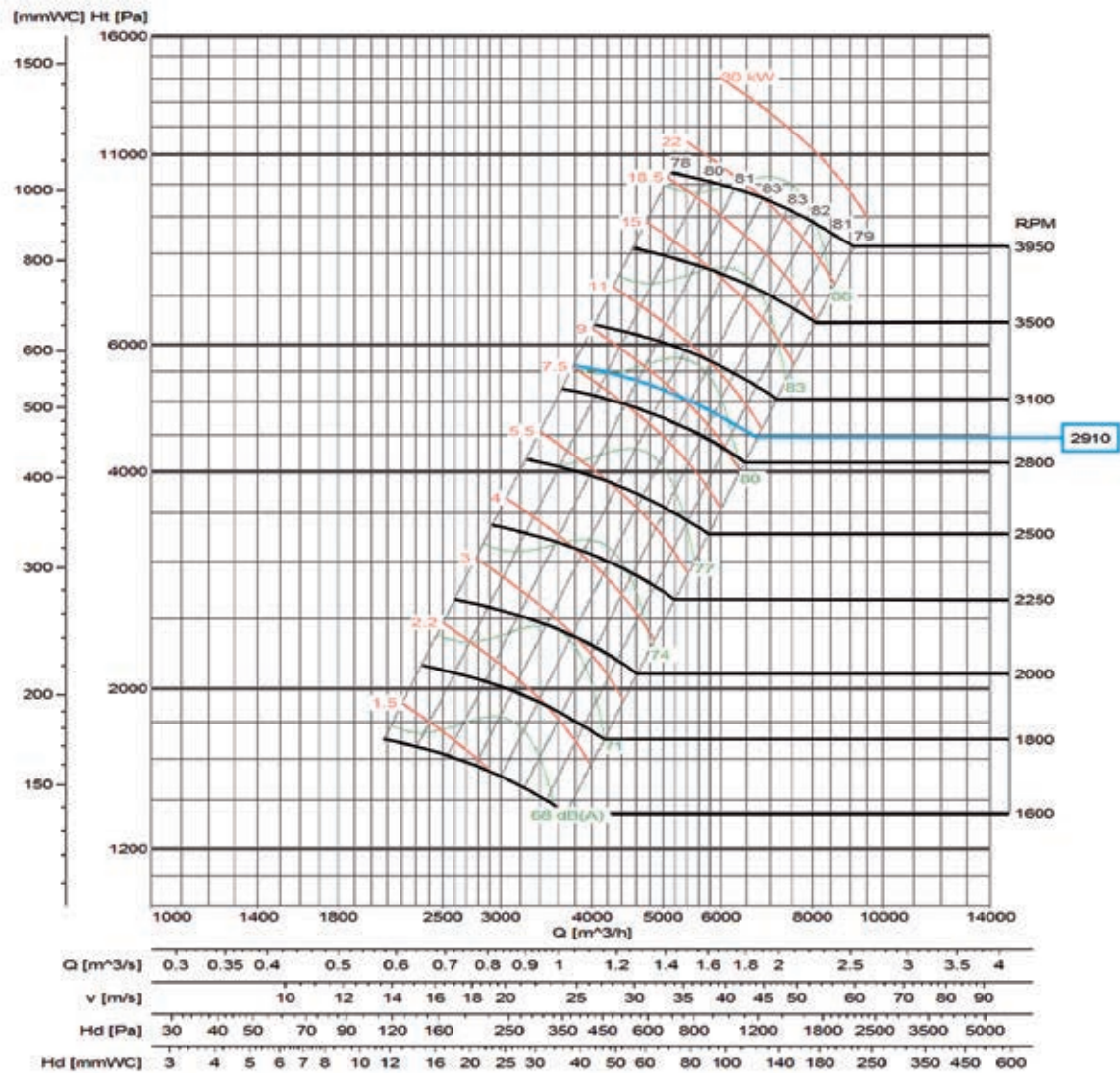
Impulsion characteristics

RPM

Characteristics for:
system 4 and 5 in direct
drive motor with 2/4/6/8
poles depending on the
model.

Characteristic curves

MC 560

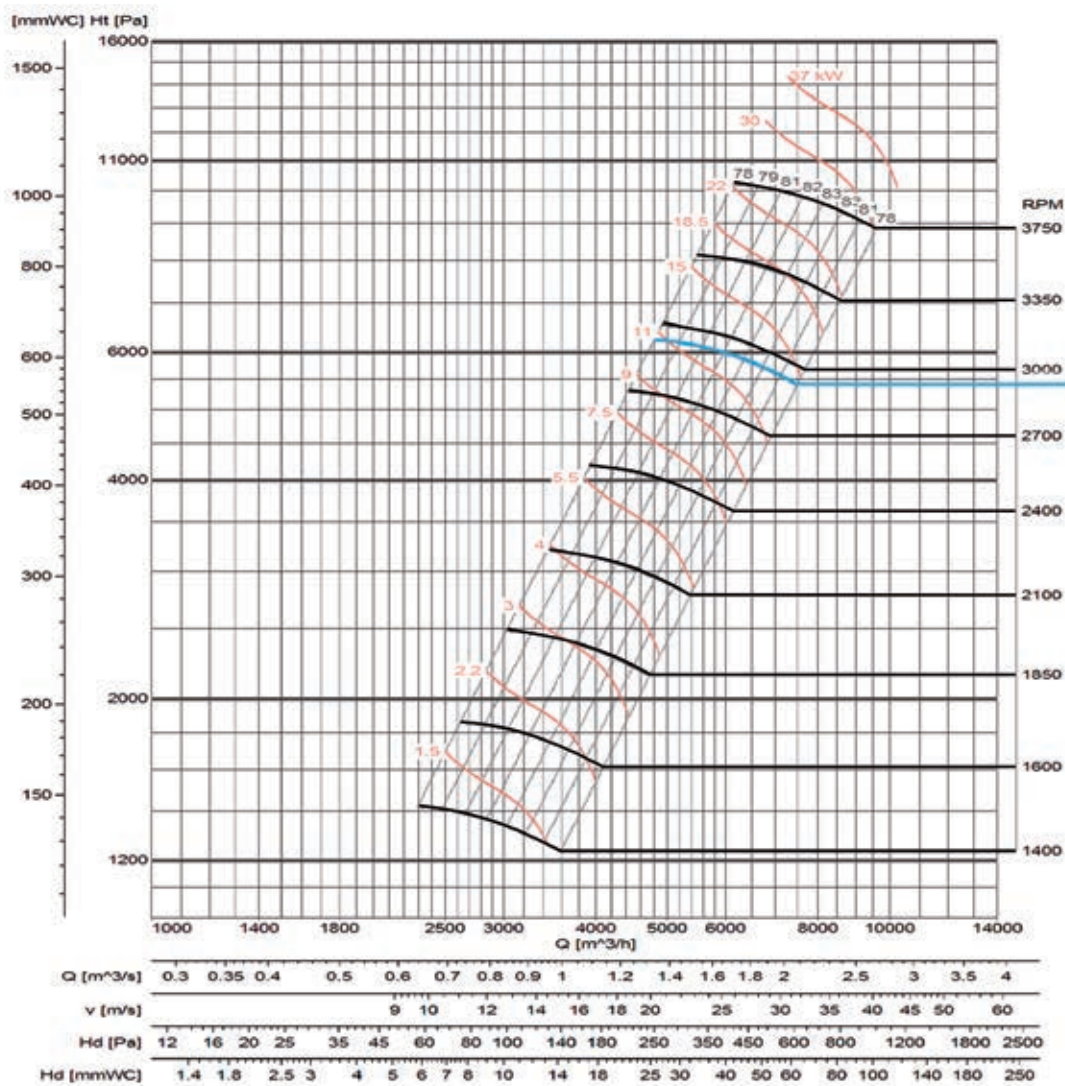


Flow margin $\pm 5\%$
Noise level margin $+3...5$ dB
Margin of kW absorbed $\pm 3\%$
Impulsion characteristics

RPM Characteristics for:
system 4 and 5 in direct
drive motor with 2/4/6/8
poles depending on the
model.

Characteristic curves

MC 600



Flow margin $\pm 5\%$
 Noise level margin $+3...5$ dB
 Margin of kW absorbed $\pm 3\%$

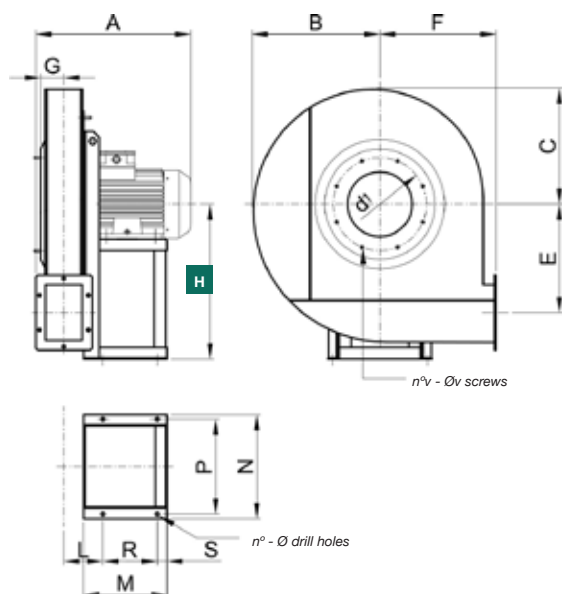
Impulsion characteristics

RPM

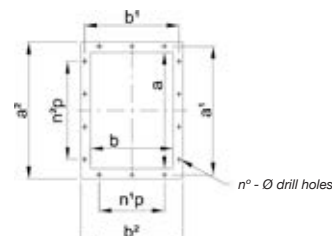
Characteristics for:
 system 4 and 5 in direct
 drive motor with 2/4/6/8
 poles depending on the
 model.

Dimensions mm

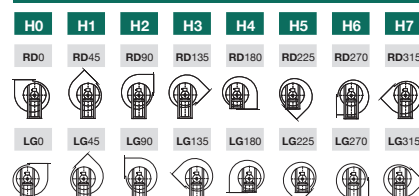
MC 360...600



OUTLET NOZZLE



ORIENTATIONS



H *The measurement of height H (distance between the ground and the axis) varies depending on the orientations

MOD.	FRAME	A*	B	C	E	F	G	HO-1-2-3	H4-5	H6-7	L	M*	N	P	R*	S
MC 360	80 B/2	365	305	275	260	280	53	355	280	355	95	190	244	220	115	25
MC 380	90 S/2	380	305	275	260	280	53	355	280	355	95	215	269	245	140	25
MC 410	90 L/2	415	330	300	280	300	60	400	300	400	101	215	269	245	140	25
MC 440	100 LA/2	455	390	350	335	355	65	450	355	450	106	260	312	280	185	25
MC 470	112 M/2	485	420	380	355	375	77	500	375	500	119	260	312	280	185	25
MC 500	132 SA/2	575	420	380	355	375	77	500	375	500	119	320	342	310	245	25
MC 520	132 SB/2	590	480	453	400	420	85	560	420	560	127	320	342	310	245	25
MC 550	160 MA/2	615	480	453	400	420	85	560	420	560	127	320	342	310	245	25
MC 560	160 MA/2	680	495	445	410	430	93	580	430	580	137	425	440	400	345	30
MC 600	160 MB/2	800	515	460	450	450	110	665	450	665	157	425	440	400	345	30

OUTLET NOZZLE

MOD.	n°	Φ	d¹	n°v	Φv	a	b	a¹	b¹	a²	b²	n¹p	n²p	n¹f	Φf	kg	WD²
MC 360	4	10	200	8	M6	129	84	161	116	179	134	-	1--90	6	8	35	0.3
MC 380	4	10	200	8	M6	129	84	161	116	179	134	-	1--90	6	8	45	0.35
MC 410	4	10	241	8	M6	144	95	176	126	194	145	-	1--90	6	8	55	0.5
MC 440	4	12	241	8	M6	164	105	194	135	214	155	1--90	1--90	8	8	70	0.8
MC 470	4	12	292	8	M8	204	130	235	161	264	190	1--90	2--90	10	10	90	1.35
MC 500	4	12	292	8	M8	204	130	235	161	264	190	1--90	2--90	10	10	120	1.7
MC 520	4	12	332	8	M8	229	146	259	176	289	206	1--90	2--90	10	10	140	2
MC 550	4	12	332	8	M8	229	146	259	176	289	206	1--90	2--90	10	10	155	2.5
MC 560	4	14	366	8	M8	255	166	286	194	315	226	1--90	2--90	10	10	200	2.7
MC 600	4	14	366	8	M8	320	206	356	235	380	266	1-100	3-100	12	10	235	3.3

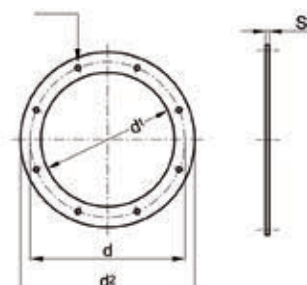
(*) For "HIGH TEMP" constructions, elevations "A-M-R" + 50 mm.
(kg) = Weight of fan with motor.
WD² = Moment of inertia of the impeller, expressed in kg x m²

To obtain the dimensions of systems 1, 9 and 12 consult with our technical team.

Accessories

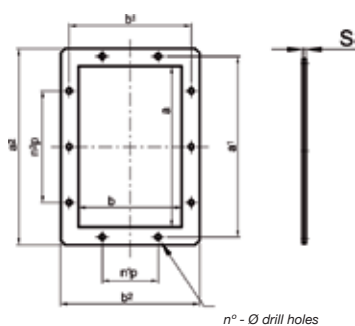
Inlet counter-flange

n° - Ø drill holes



MOD.	d	d'	d ²	n°	Φ	s	kg
MC 360	200	165	235	8	9	4	0.65
MC 380	200	165	235	8	9	4	0.65
MC 410	241	205	275	8	9	4	0.75
MC 440	241	205	275	8	9	4	0.75
MC 470	292	255	325	8	11	4	1
MC 500	292	255	325	8	11	4	1
MC 520	332	286	366	8	11	5	1.6
MC 550	332	286	366	8	11	5	1.6
MC 560	366	321	401	8	11	5	1.8
MC 600	366	321	401	8	11	5	1.8

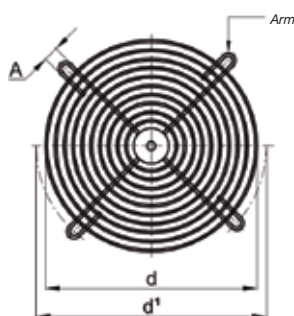
Impulsion counter-flange



n° - Ø drill holes

MOD.	a	b	a'	b'	a ²	b ²	n'p	n ² p	n ⁰	Φ	s	kg
MC 360	129	85	161	116	179	135	-	1--90	6	8	4	0.4
MC 380	129	85	161	116	179	135	-	1--90	6	8	4	0.4
MC 410	144	95	176	126	194	145	-	1--90	6	8	4	0.45
MC 440	164	105	194	135	214	155	1--90	1--90	8	8	4	0.5
MC 470	204	130	235	161	264	190	1--90	2--90	10	10	4	0.7
MC 500	204	130	235	161	264	190	1--90	2--90	10	10	4	0.7
MC 520	229	146	259	176	289	206	1--90	2--90	10	10	4	0.8
MC 550	229	146	259	176	289	206	1--90	2--90	10	10	4	0.8
MC 560	255	166	286	194	315	226	1--90	2--90	10	10	4	0.9
MC 600	320	206	356	235	380	266	1-100	3-100	12	10	4	1

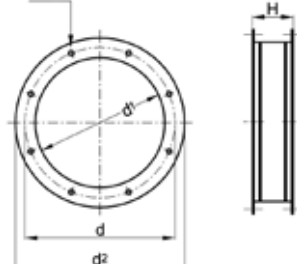
Inlet protection net



MOD.	d	d'	A	n°	kg
MC 360	165	200	9	4	0.15
MC 380	165	200	9	4	0.15
MC 410	205	241	9	4	0.2
MC 440	205	241	9	4	0.2
MC 470	255	292	11	4	0.3
MC 500	255	292	11	4	0.3
MC 520	286	332	11	4	0.35
MC 550	286	332	11	4	0.35
MC 560	321	366	11	4	0.4
MC 600	321	366	11	4	0.4

Inlet anti-vibration seal

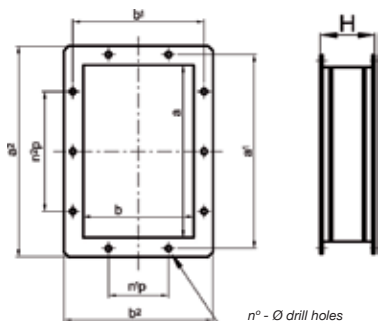
n° - Ø drill holes



MOD.	d	d'	d ²	n°	Φ	H	kg
MC 360	200	165	235	8	9	200	1.5
MC 380	200	165	235	8	9	200	1.5
MC 410	241	205	275	8	9	200	1.7
MC 440	241	205	275	8	9	200	1.7
MC 470	292	255	325	8	11	200	2.2
MC 500	292	255	325	8	11	200	2.2
MC 520	332	286	366	8	11	200	3.4
MC 550	332	286	366	8	11	200	3.4
MC 560	366	321	401	8	11	200	3.8
MC 600	366	321	401	8	11	200	3.8

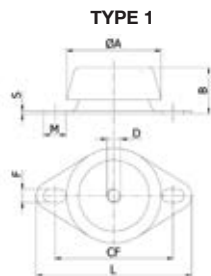
Accessories

Impulsion anti-vibration seal



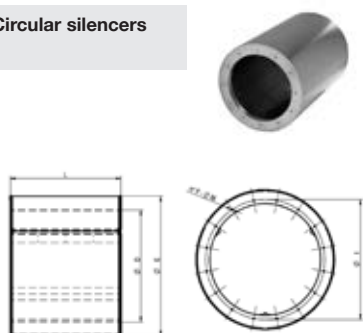
MOD.	a	b	a'	b'	a''	b''	n°p	n°p	n°	Φ	H	kg
MC 360	129	85	161	116	179	135	-	1--90	6	8	200	1
MC 380	129	85	161	116	179	135	-	1--90	6	8	200	1
MC 410	144	95	176	126	194	145	-	1--90	6	8	200	1.1
MC 440	164	105	194	135	214	155	1--90	1--90	8	8	200	1.2
MC 470	204	130	235	161	264	190	1--90	2--90	10	10	200	1.6
MC 500	204	130	235	161	264	190	1--90	2--90	10	10	200	1.6
MC 520	229	146	259	176	289	206	1--90	2--90	10	10	200	1.8
MC 550	229	146	259	176	289	206	1--90	2--90	10	10	200	1.8
MC 560	255	166	286	194	315	226	1--90	2--90	10	10	200	2
MC 600	320	206	356	235	380	266	1-100	3-100	12	10	200	2.2

Shock-absorbers



MOD.	SHOCK-ABSORBERS MODEL	TYPE	øA	B	D	CF	CF1	CF2	F	øF1	L	M	S
MC 360	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
MC 380	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
MC 410	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
MC 440	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
MC 470	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
MC 500	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
MC 520	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
MC 550	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
MC 560	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
MC 600	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2

Circular silencers



Silencers are used to lower the noise level at air conditioning or ventilation installation manufactured using galvanised steel

- Upon request: other constructions using different materials.

øD	øE	L	øI	F	øM	øD	øE	L	øI	F	øM
315	515	ØD,1.5ØD, 2ØD	355	8	M8	900	1100	ØD,1.5ØD, 2ØD	970	16	M10
355	555	ØD,1.5ØD, 2ØD	395	8	M8	1000	1200	ØD,1.5ØD, 2ØD	1070	16	M10
400	600	ØD,1.5ØD, 2ØD	450	8	M8	1120	1320	ØD,1.5ØD, 2ØD	1190	20	M10
450	650	ØD,1.5ØD, 2ØD	500	8	M8	1250	1450	ØD,1.5ØD, 2ØD	1320	20	M10
500	700	ØD,1.5ØD, 2ØD	560	12	M8	1400	1600	ØD,1.5ØD, 2ØD	1470	20	M10
560	760	ØD,1.5ØD, 2ØD	620	12	M8	1500	1700	ØD,1.5ØD, 2ØD	1570	20	M10
630	830	ØD,1.5ØD, 2ØD	690	12	M8	1600	1800	ØD,1.5ØD, 2ØD	1680	24	M14
710	910	ØD,1.5ØD, 2ØD	770	16	M8	1700	1900	ØD,1.5ØD, 2ØD	1780	24	M14
800	1000	ØD,1.5ØD, 2ØD	860	16	M8	1800	2000	ØD,1.5ØD, 2ØD	1880	24	M14