

## DIRECT DRIVE MOTOR

**TA**

**Extremely robust, open blade and single inlet centrifugal fans with sheet steel casing and impeller**  
**Designed for air that is very dusty and with materials suspended in the 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 materials suspended in the air.
- Motor coupled directly.
- All casings continuously welded.

**Motor:**

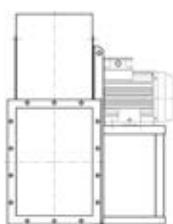
- IE3 efficiency motors for powers equal to or higher than 0.75 kW except single-phase, 2-speed and 8-poles.
- Class F motors with ball bearings and IP55 protection.
- Three-phase 230/400 V-50 Hz (up to 4 kW) and 400/690 V-50 Hz (powers higher than 4 kW).
- Maximum temperature of air to be carried: -25°C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

**Finish:**

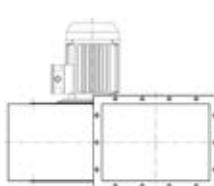
- Anti-corrosive finish of polyester resin polymerised at 190°C, previously degreased with phosphate-free nanotechnological treatment.

**On request:**

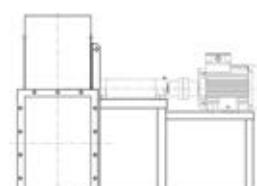
- Special windings for different voltages.
- Fan prepared for air transmission of up to +150°C.
- Special executions for temperatures of +300°C.
- Stainless steel fan.
- Category 2 ATEX certification.
- System 8 elastic coupling.

**Direct drive motor construction method**
**SYSTEM  
4**


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

**SYSTEM  
5**


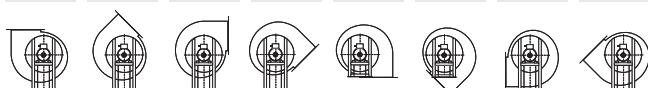
Direct drive, impeller mounted on the motor shaft, flange motor mounted on the fan casing.

**SYSTEM  
8**


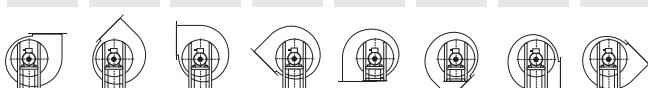
Elastic coupling drive, impeller mounted on the support shaft, mounted on the motor via an elastic coupling. Everything mounted together on a fan pedestal.

**Orientations**

**RD 0 RD45 RD90 RD135 RD180 RD225 RD270 RD315**



**LG 0 LG45 LG90 LG135 LG180 LG225 LG270 LG315**



**BELT-DRIVEN MOTOR****TA/R**

**Centrifugal, open blade, belt driven fans fitted with electric motors and a standardised set of pulleys, belts and protectors in accordance with standard ISO 13857**  
**Designed for air that is very dusty and with materials suspended in the 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 materials suspended in the air.
  - Motor assembled on the general bench.
  - All casings continuously welded.

**Motor:**

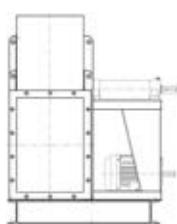
- IE3 efficiency motors.
- Class F motors with ball bearings and IP55 protection.
- Three-phase 230/400 V-50 Hz (up to 4 kW) and 400/690 V-50 Hz (powers higher than 4 kW).
- Maximum temperature of air to be carried: -25°C +90°C.

**Finish:**

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

**On request:**

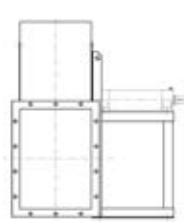
- Special windings for different voltages.
- Fan prepared for air transmission of up to +300°C.
- Stainless steel fan.
- Category 2 ATEX certification.
- System 8 elastic coupling.

**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**

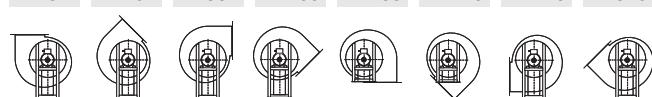
Transmission drive, identical to SYSTEM 1, with the motor mounted on the side of the pedestal, in position "W" or "Z".

**SYSTEM 1**

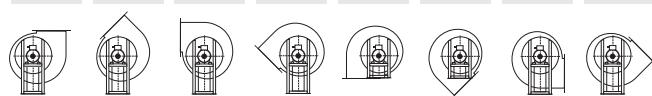
Transmission drive, impeller mounted on the support shaft. Support mounted on the pedestal.

**Orientations**

**RD 0 RD45 RD90 RD135 RD180 RD225 RD270 RD315**



**LG 0 LG45 LG90 LG135 LG180 LG225 LG270 LG315**

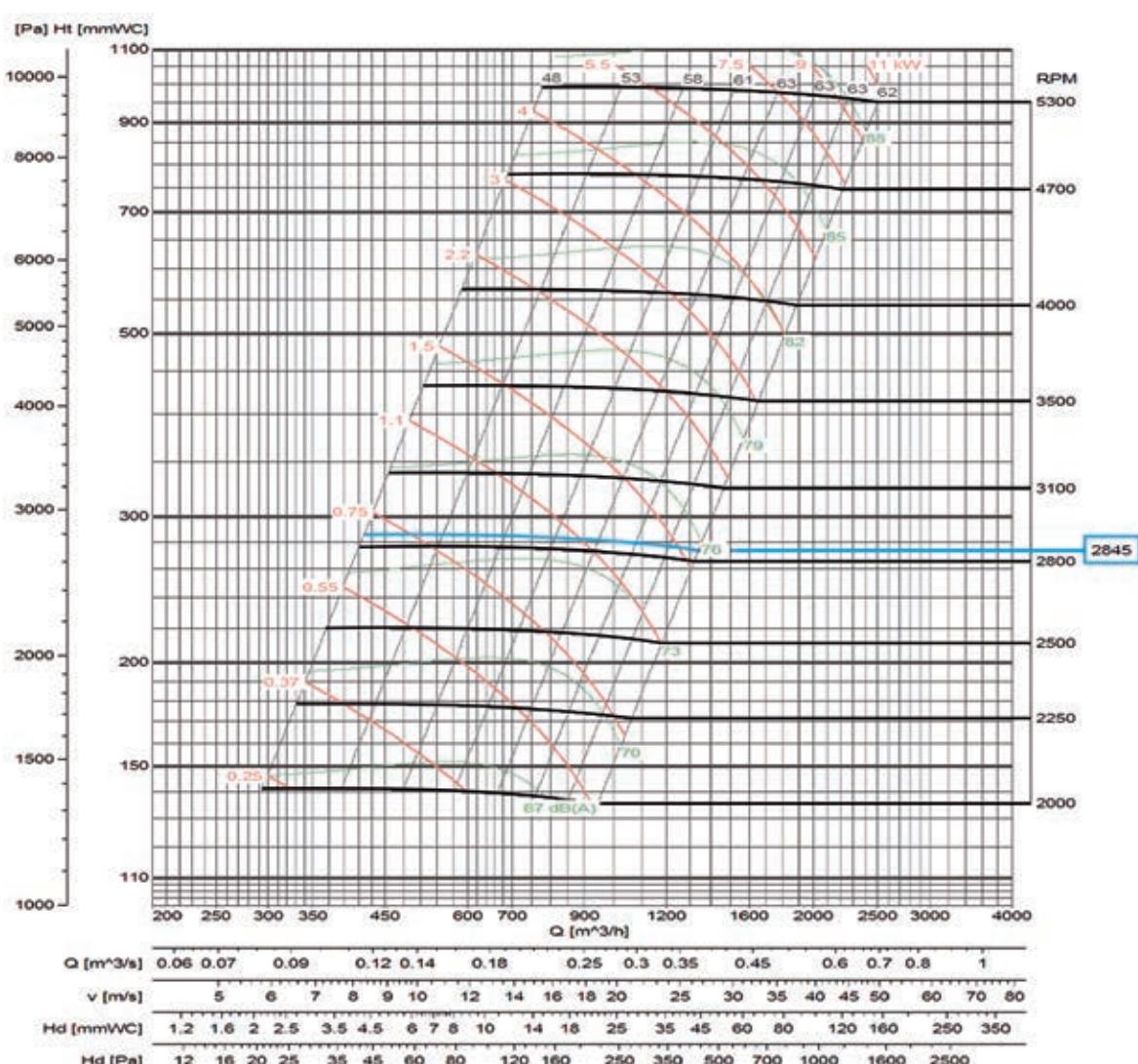


## QUICK SELECT SYSTEM 4

### *Impulsion characteristics*

Model	kW inst.	RPM	V m³/s																Pt kgf/m²=mmH₂O																						
			0.13	0.15	0.17	0.18	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.60	0.70	0.80	0.90	1.00	1.20	1.40	1.60	0.13	0.15	0.17	0.18	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.60	0.70	0.80	0.90	1.00	1.20	1.40	1.60	
TA 400	2.2	2840	284	284	283	283	282	280	278	274																															
TA 450	3	2850			362	362	361	360	358	356	353																														
TA 450	4	2910			379	378	377	375	373	370	365																														
TA 500	5.5	2900			464	464	463	462	460	459	454	448																													
TA 560	11	2900			588	588	588	587	585	582	578	573	567																												
TA 630	15	2900			743	743	742	740	738	735	728																														
TA 630	18.5	2920			746	745	743	741	738	731	720																														
TA 710	22	2910			952	952	951	950	947																																
TA 710	30	2930			950	949	948	945	939	933																															
TA 710	37	2930			952	951	950	947	939	933																															
TA 800	7.5	1430			288	288	287	287	286	284	282	278																													
TA 900	11	1440			369	369	369	368	367	365	363																														
TA 900	15	1445			372	372	371	370	368	366																															
TA 1000	18.5	1445			459	459	459	458	457																																
			V m³/s																Pt kgf/m²=mmH₂O																						
			Model	kW inst.	RPM	1.80	2.00	2.15	2.40	2.6	2.8																														
			Pt kgf/m²=mmH₂O																																						
			TA 710	30	2930	925																																			
			TA 710	37	2930	925	920	916																																	
			TA 900	11	1440	360	356	355																																	
			TA 900	15	1445	363	360	357																																	
			TA 1000	18.5	1445	455	453	452	449	446	443																														

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

***Characteristic curves*****TA 400**

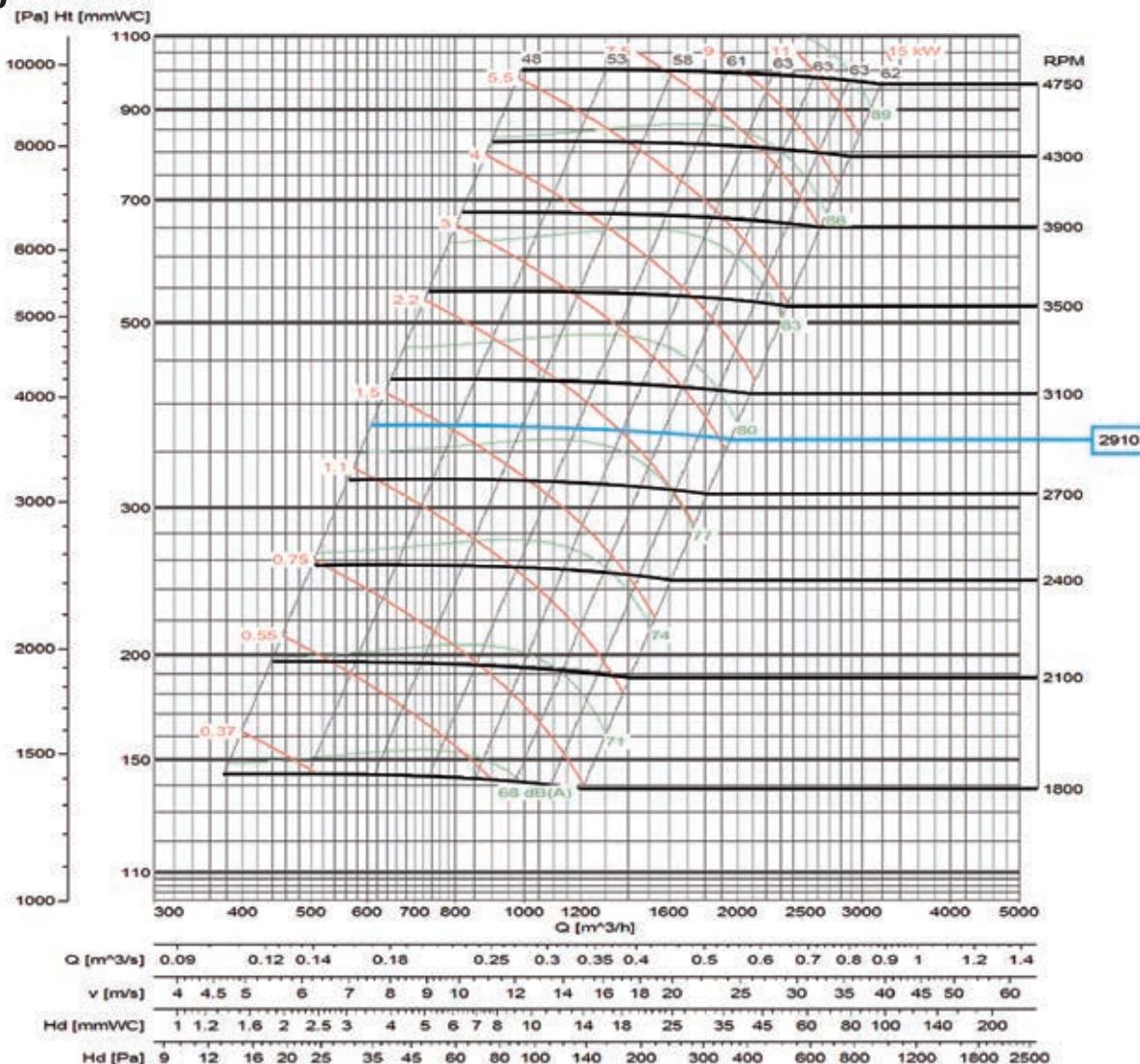
Flow margin  $\pm 5\%$   
Noise level margin +3..5 dB  
Margin of kW absorbed  $\pm 3\%$

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

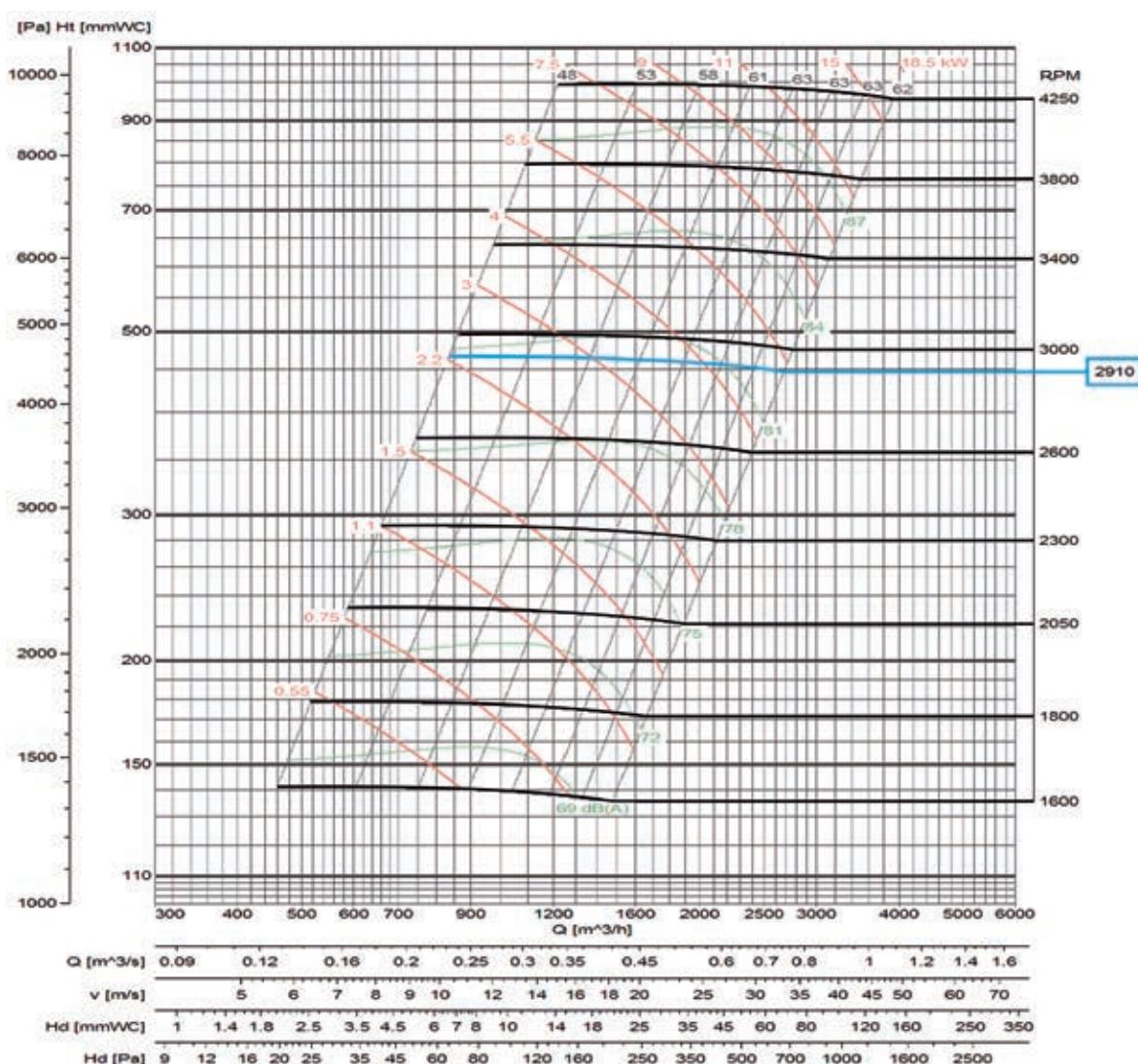
### TA 450



Flow margin ±5%  
 Noise level margin +3..5 dB  
 Margin of kW absorbed ±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*****TA 500**

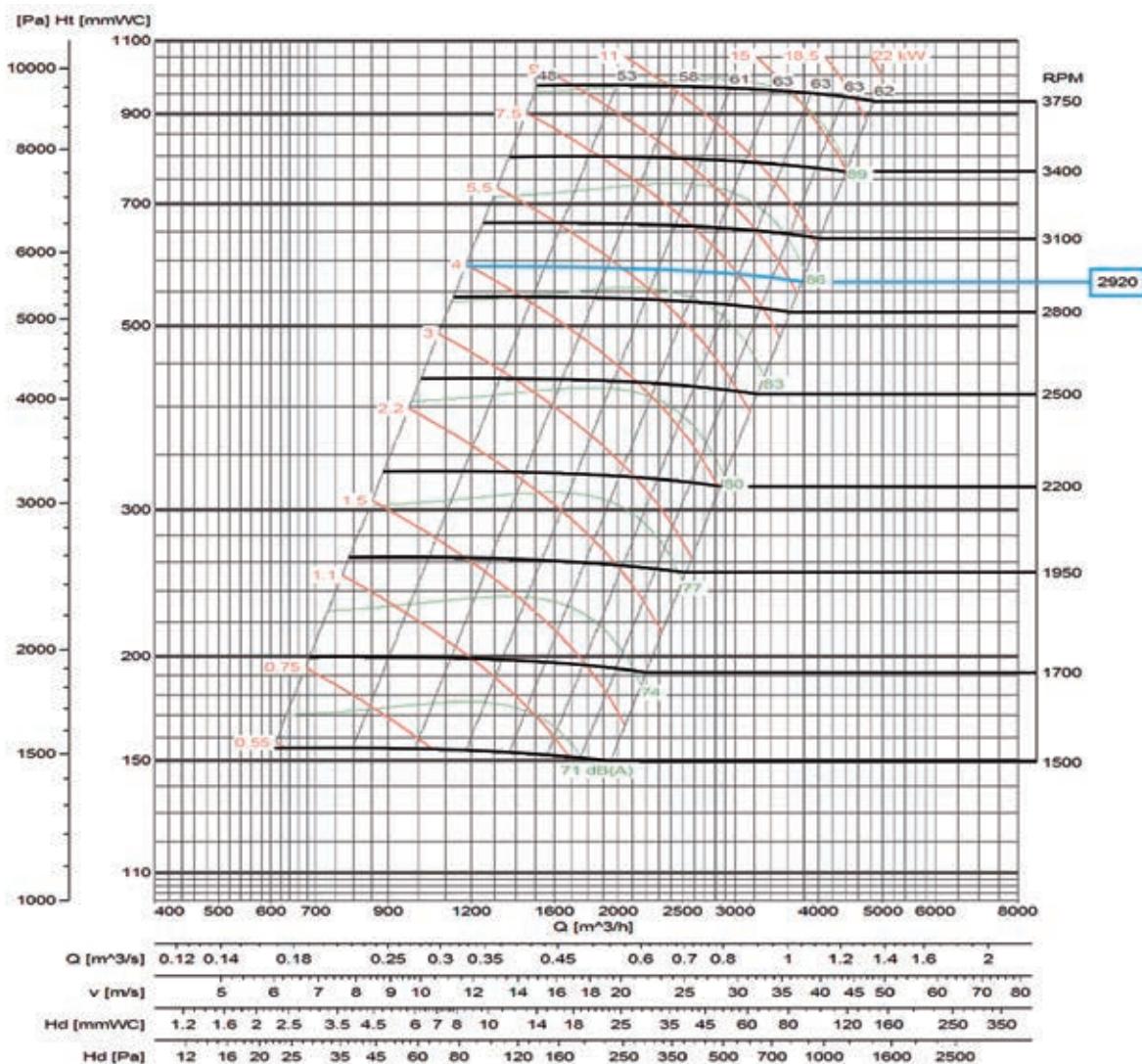
Flow margin  $\pm 5\%$   
 Noise level margin +3..5 dB  
 Margin of kW absorbed  $\pm 3\%$

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

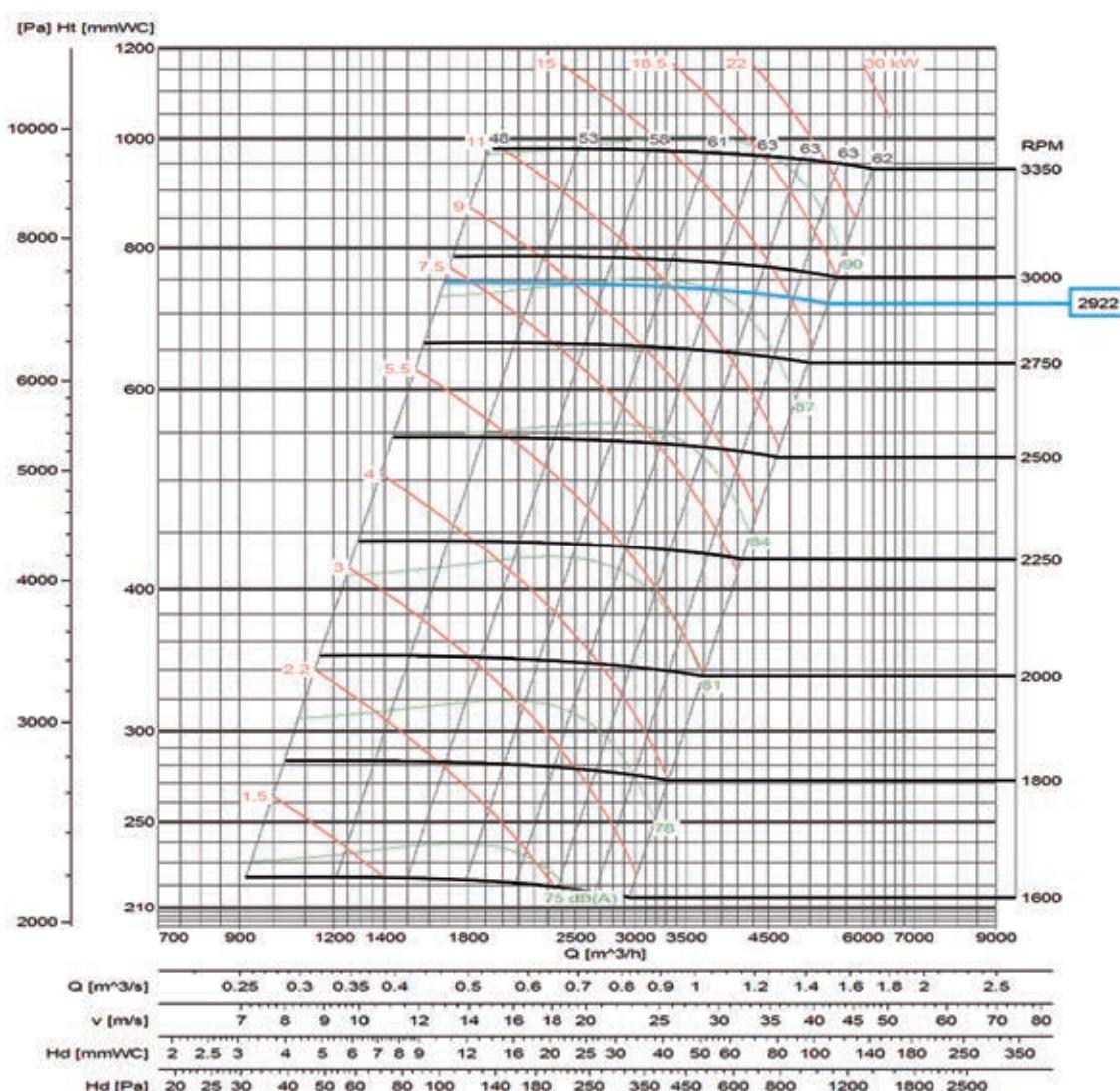
### TA 560



Flow margin ±5%  
 Noise level margin +3..5 dB  
 Margin of kW absorbed ±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*****TA 630**

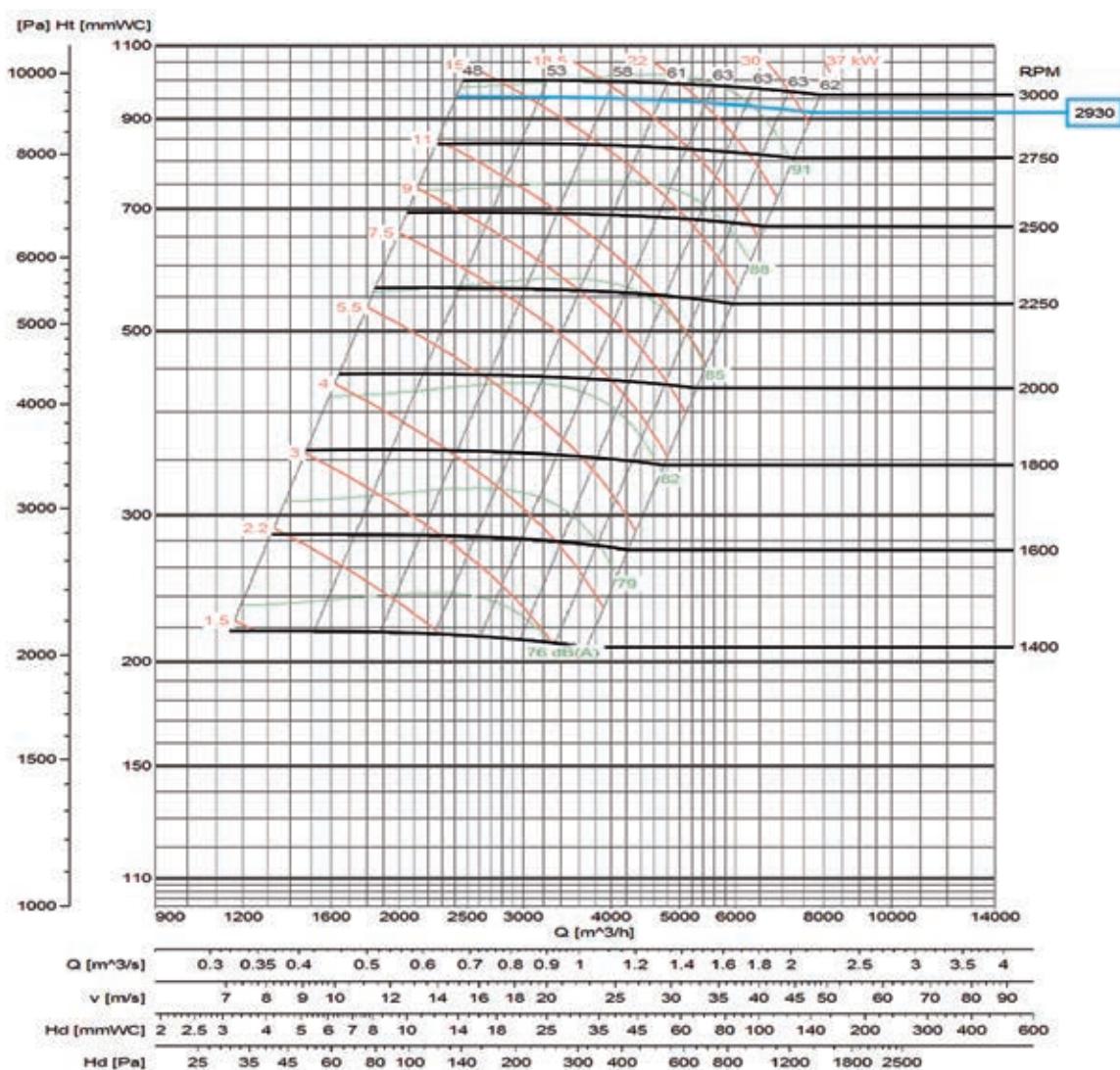
Flow margin ±5%  
Noise level margin +3..5 dB  
Margin of kW absorbed ±3%

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

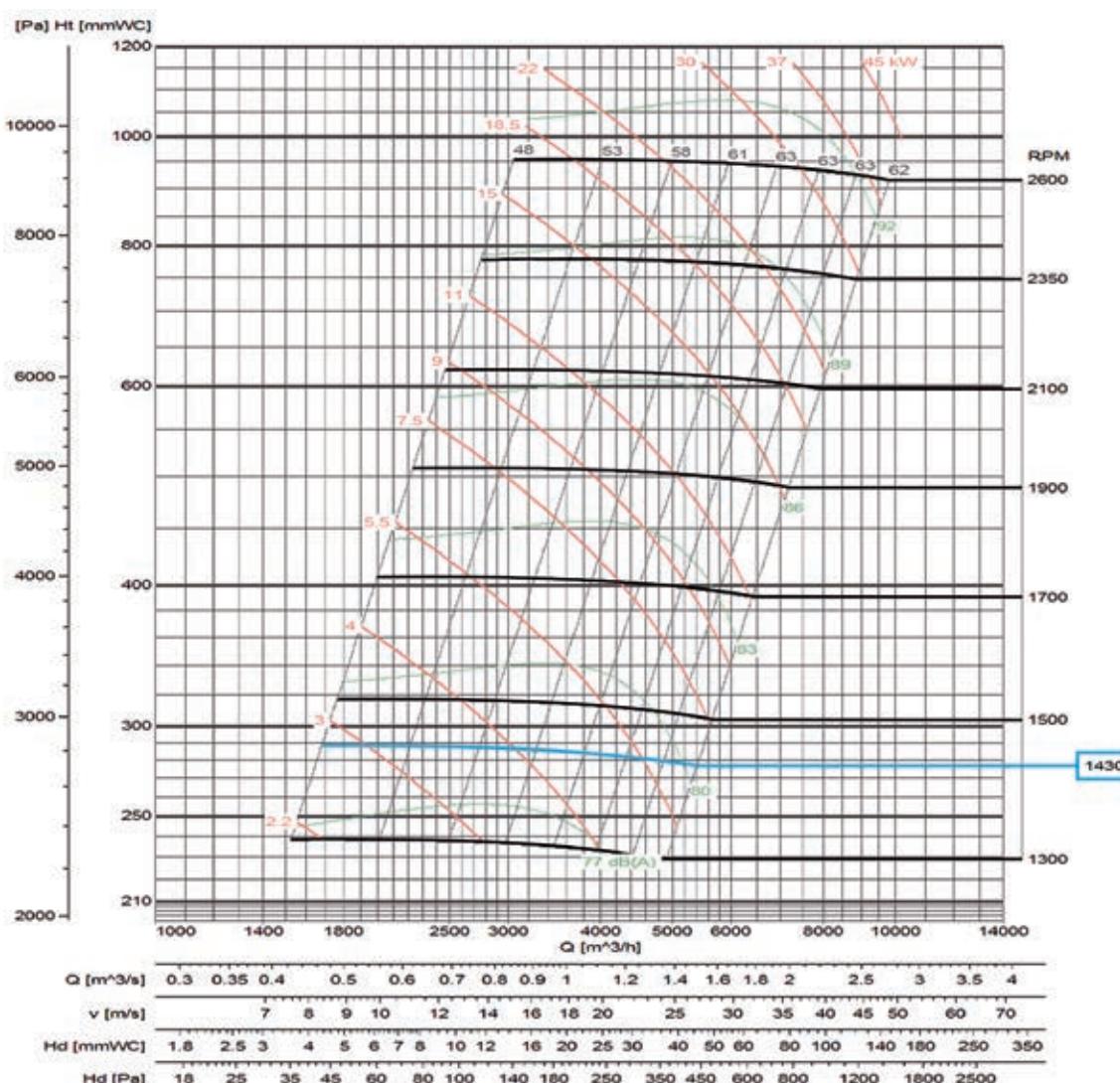
### TA 710



Flow margin ±5%  
 Noise level margin +3..5 dB  
 Margin of kW absorbed ±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*****TA 800**

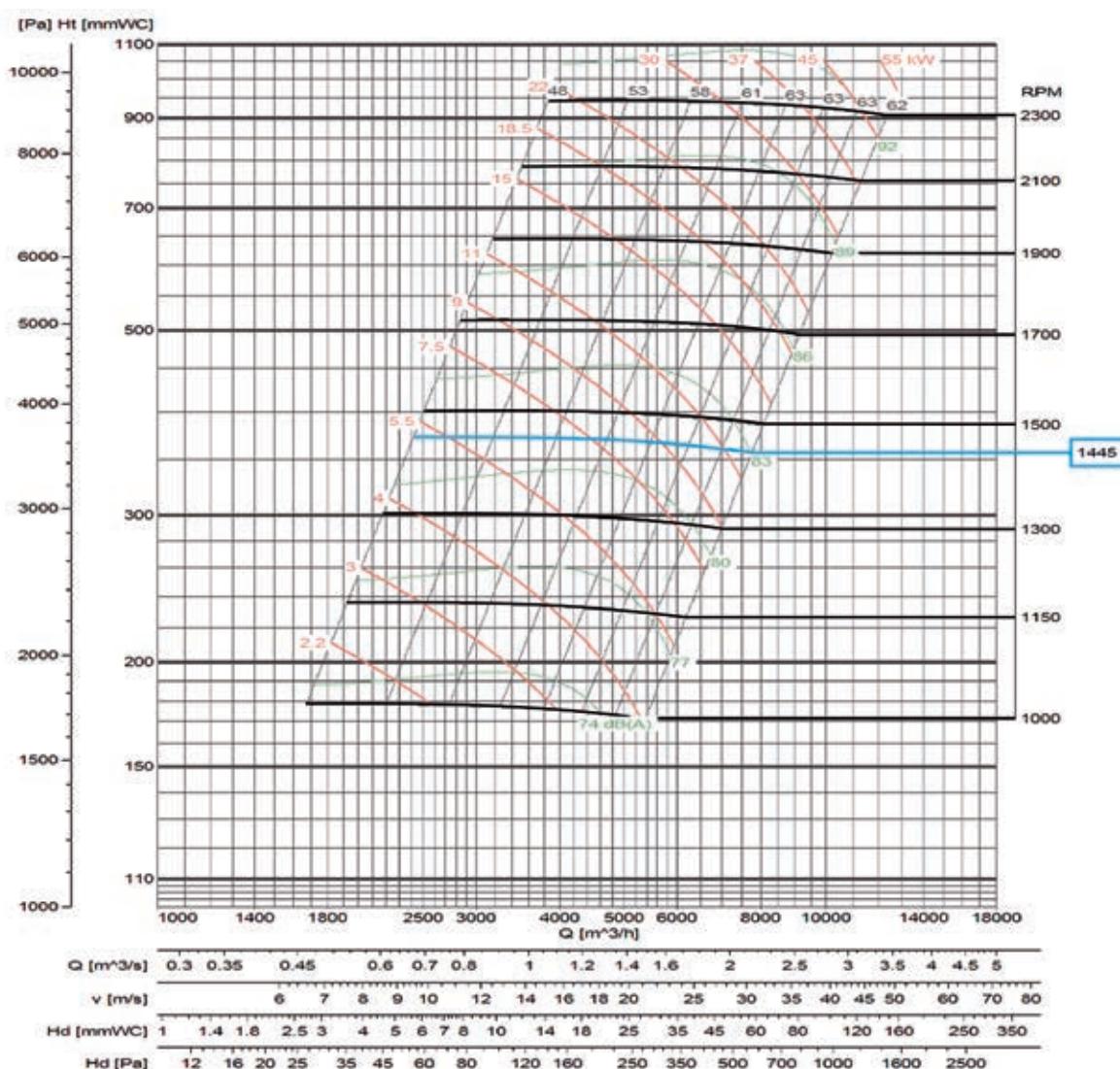
Flow margin  $\pm 5\%$   
 Noise level margin +3..5 dB  
 Margin of kW absorbed  $\pm 3\%$

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

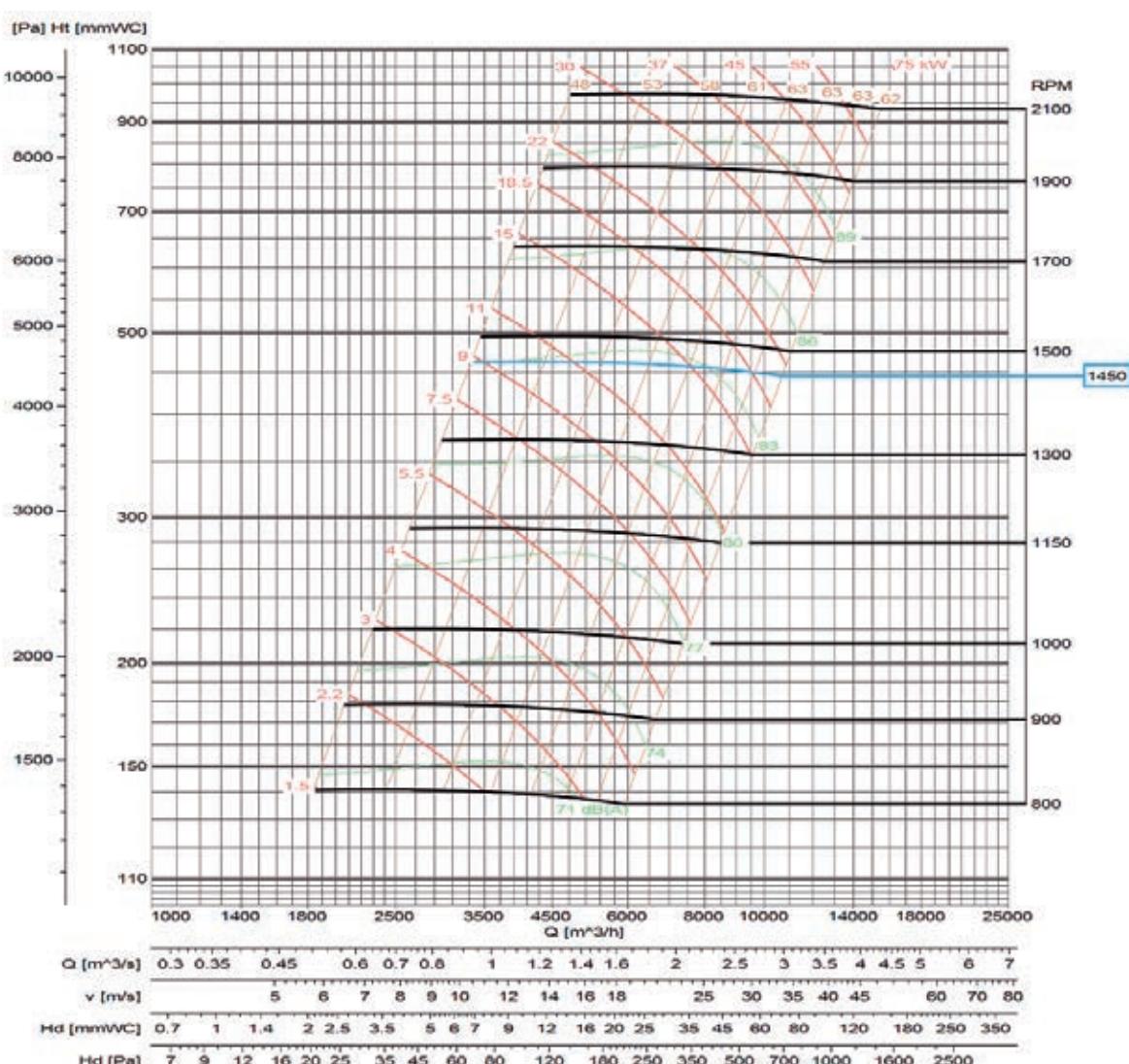
### TA 900



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

Impulsion characteristics

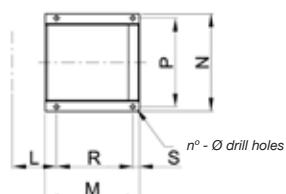
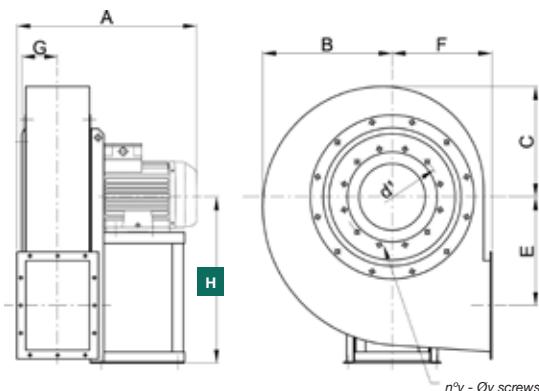
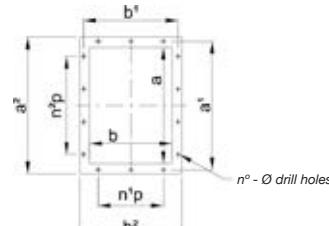
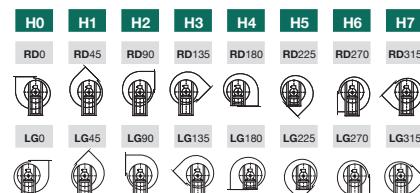
RPM Characteristics for:  
 system 4 and 5 in direct  
 drive motor with 2/4/6/8  
 poles depending on the  
 model.

***Characteristic curves*****TA 1000**

Flow margin ±5%  
Noise level margin +3..5 dB  
Margin of kW absorbed ±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**
**TA 400...500**
**SYSTEM  
4**

**OUTLET NOZZLE**

**ORIENTATIONS**


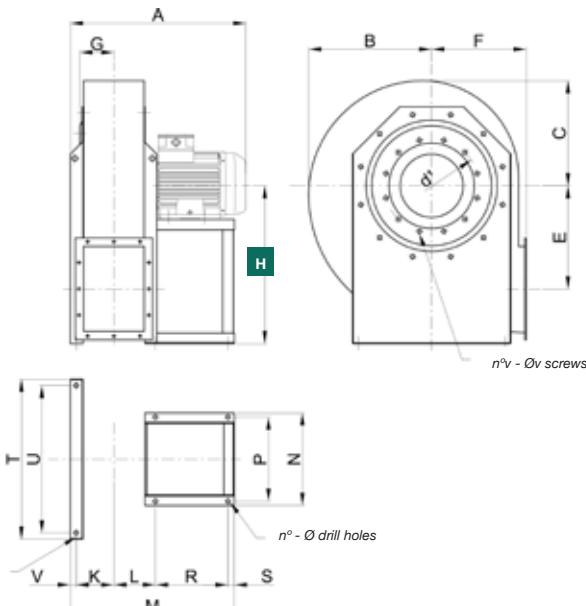
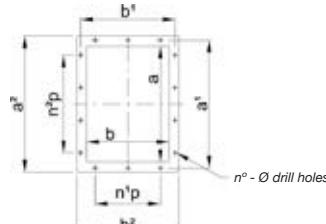
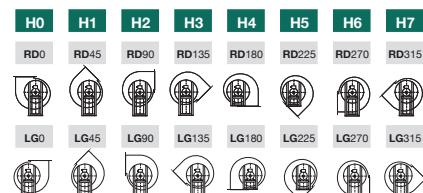
**H** \*The measurement of height H (distance between the ground and the axis) varies depending on the orientations

MOD.	Poles	Power (kW)	Frame	A	B	C	E	F	G	H	L	M	N	P	R	S
TA 400	2	2.2	90L	410	300	274	240	270	71	375	113	215	269	245	140	25
TA 450	2	3	100L	490	332	302	265	300	77	400	120	260	312	280	185	25
TA 450	2	4	112M	500	332	302	265	300	77	400	120	260	312	280	185	25
TA 500	2	5.5	132S	590	374	342	300	335	88	450	127	320	342	310	245	25

**OUTLET NOZZLE**

MOD.	a	b	a1	b1	a2	b2	n1p	n2p	n f	d f	d1	n f	d f			
TA 400	165	117	200	153	235	187	1-112	6	10	219	8	M8				
TA 450	185	131	219	167	255	201	1-112	6	10	241	8	M8				
TA 450	185	131	219	167	255	201	1-112	6	10	241	8	M8				
TA 500	205	146	241	182	275	216	1-112	1-112	8	12	265	8	M8			

(\*) For "HIGH TEMP." constructions, elevations "A-M-R" + 50 mm.  
 (kg) = Weight of fan with motor.  
 WD<sup>2</sup> = Moment of inertia of the impeller, expressed in kg x m<sup>2</sup>

**Dimensions mm****TA 560...630****OUTLET NOZZLE****ORIENTATIONS**

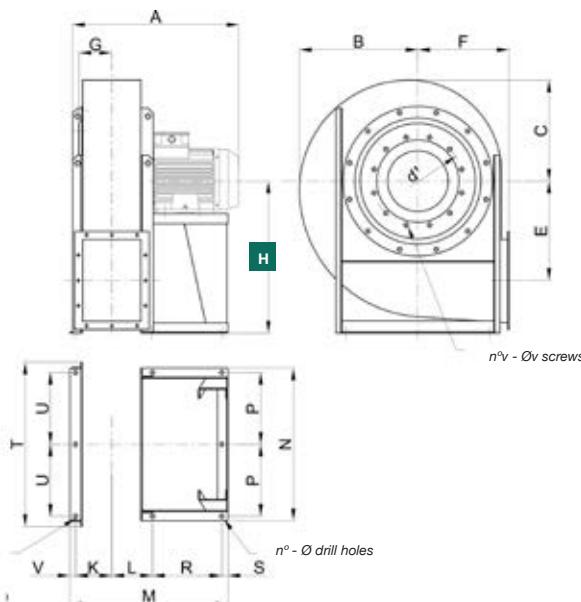
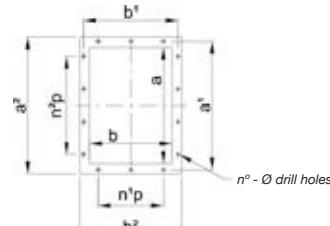
**H** \*The measurement of height H (distance between the ground and the axis) varies depending on the orientations

MOD.	Poles	Power (kW)	Frame	A	B	C	E	F	G	H	L	M	N	P	R	S
TA 560	2	11	160M	732	425	390	340	375	97	500	136	425	440	400	345	30
TA 630	2	15	160M	800	478	440	381	425	106	560	146	425	440	400	345	30
TA 630	2	18.5	160L	835	478	440	381	425	106	560	146	425	440	400	345	30

**OUTLET NOZZLE**

MOD.	a	b	a1	b1	a2	b2	n1p	n2p	n f	d f	d1	n f	d f
TA 560	229	164	265	200	299	234	1-112	1-112	8	12	292	8	M8
TA 630	256	183	292	219	326	253	1-112	2-112	10	12	332	8	M8
TA 630	256	183	292	219	326	253	1-112	2-112	10	12	332	8	M8

(\*) For "HIGH TEMP." constructions, elevations "A-M-R" + 50 mm.  
(kg) = Weight of fan with motor.  
WD<sup>2</sup> = Moment of inertia of the impeller, expressed in kg x m<sup>2</sup>

**Dimensions mm**
**TA 710...900**
**SYSTEM  
4**

**OUTLET NOZZLE**

**ORIENTATIONS**

H0	H1	H2	H3	H4	H5	H6	H7
RD0	RD45	RD90	RD135	RD180	RD225	RD270	RD315

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

MOD.	Poles	Power (kW)	Frame	A	B	C	E	F	G	H	L	K	M	N	P	R	S	T	U
TA 710	2	22	180M	860	531	485	425	475	117	630	177	470	550	510	370	30			
TA 710	2	30	200L	890	531	485	425	475	117	630	187	540	608	565	420	40			
TA 710	2	37	200L	890	531	485	425	475	117	630	187	540	608	565	420	40			
TA 800	4	7.5	132M	650	595	545	481	530	129	710	170	320	342	310	245	25			
TA 900	4	11	160M	850	674	616	542	600	143	800	183	425	440	400	345	30			
TA 900	4	15	160L	870	674	616	542	600	143	800	183	425	440	400	345	30			

**OUTLET NOZZLE**

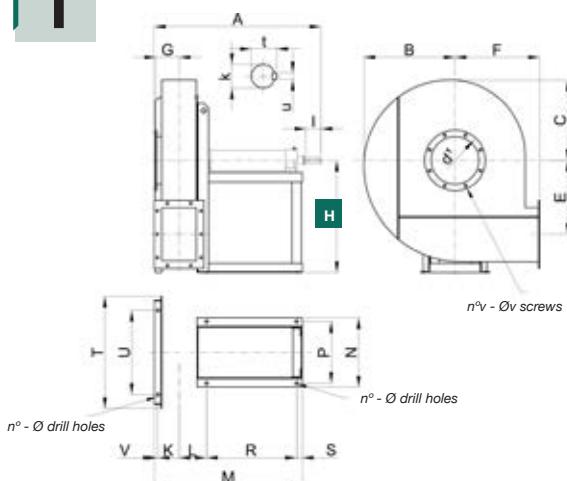
MOD.	a	b	a1	b1	a2	b2	n1p	n2p	n f	d f	d1	n f	d f
TA 710	288	205	332	249	368	285	1-125	2-125	10	12	366	8	M8
TA 710	288	205	332	249	368	285	1-125	2-125	10	12	366	8	M8
TA 710	288	205	332	249	368	285	1-125	2-125	10	12	366	8	M8
TA 800	322	229	366	273	402	309	1-125	2-125	10	12	405	8	M8
TA 900	361	256	405	300	441	336	1-125	2-125	10	12	448	12	M10
TA 900	361	256	405	300	441	336	1-125	2-125	10	12	448	12	M10

(\*) For "HIGH TEMP." constructions, elevations "A-M-R" + 50 mm.

(kg) = Weight of fan with motor.

WD<sup>2</sup> = Moment of inertia of the impeller, expressed in kg x m<sup>2</sup>

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

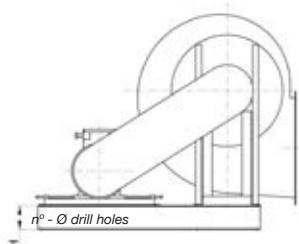
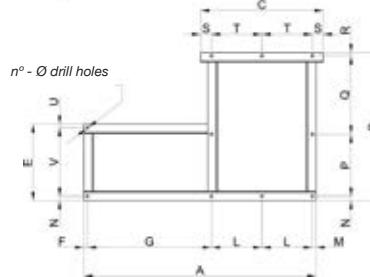
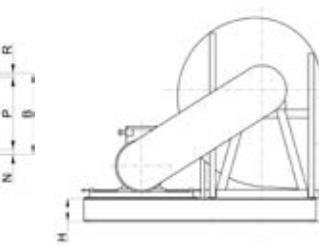
**Dimensions mm****TA 400...900**SYSTEM  
**1**

MOD.	A*	B	C	E	F	G	H	L	K	M*
TA 400	694	300	274	240	270	71	375	113		480
TA 450	807	332	302	265	300	77	400	120		560
TA 500	825	374	342	300	335	88	450	127		560
TA 560	823	425	390	340	375	97	500	136		520
TA 630	842	478	440	381	425	106	560	146		520
TA 710	979	531	485	425	475	117	630	187		605
TA 800	1053	595	545	481	530	129	710	199		655
TA 900	1121	674	616	542	600	143	800	183		705

MOD.	N	P	R*	S	T	U	n°
TA 400	350	310	400	30			4
TA 450	370	330	480	30			4
TA 500	370	330	480	30			4
TA 560	438	385	430	40			4
TA 630	438	385	430	40			4
TA 710	456	395	515	40			4
TA 800	496	435	565	40			4
TA 900	564	500	605	50			4

MOD.	Φ	k	l	t	u
TA 400	14	28 k6	60	31	8
TA 450	14	38 k6	80	41	10
TA 500	14	38 k6	80	41	10
TA 560	17	42 k6	110	45	12
TA 630	17	48 k6	110	51.5	14
TA 710	19	48 k6	110	51.5	14
TA 800	19	55 m6	110	59	16
TA 900	19	65 m6	140	69	18

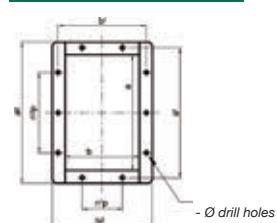
(\*) For "HIGH TEMP." constructions, elevations "A-M-R" +50 mm.  
(kg) = Weight of fan without motor.  
WD<sup>2</sup> = Moment of inertia of the impeller, expressed in kg x m<sup>2</sup>

**TA 630...750**SYSTEM  
**12****TA 800...855**

MOD.	A	B*	H	F	G	L	K	M	N	P
TA 400	900	450	120	20	550	310		20	25	400
TA 450	1055	530	120	25	680	330		20	25	480
TA 500	1055	530	120	25	680	330		20	25	480
TA 560	1265	485	160	25	830	385		25	30	430
TA 630	1445	550	160	25	1010	385		25	30	495
TA 710	1505	575	180	30	1050	395		30	30	515
TA 800	1775	700	180	30	1280	435		30	30	640
TA 900	1880	750	180	30	1320	500		30	35	680

MOD.	R	T	U	n°	Φ	kg
TA 400	25			6	14	40
TA 450	25			6	14	45
TA 500	25			6	14	45
TA 560	25			6	17	70
TA 630	25			6	17	90
TA 710	30			6	19	100
TA 800	30			6	19	130
TA 900	35			6	19	185

(\*) For "HIGH TEMP." constructions, elevations "B-P" +50 mm.  
kg = Weight of the support base

**OUTLET NOZZLE****OUTLET NOZZLE**

MOD.	a	b	a¹	b¹	a²	b²	n¹p	n²p	n¹f	n²f	Φf
TA 400	165	117	200	153	235	187	-	1-112	6	10	
TA 450	185	131	219	167	255	201	-	1-112	6	10	
TA 500	205	146	241	182	275	216	1-112	1-112	8	12	
TA 560	229	164	265	200	299	234	1-112	1-112	8	12	
TA 630	256	183	292	219	326	253	1-112	2-112	10	12	
TA 710	288	205	332	249	368	285	1-125	2-125	10	12	
TA 800	322	229	366	273	402	309	1-125	2-125	10	12	
TA 900	361	256	405	300	441	336	1-125	2-125	10	12	

**ORIENTATIONS**

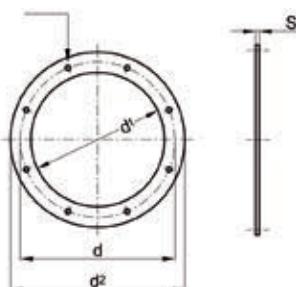
H0	H1	H2	H3	H4	H5	H6	H7
RD0	RD45	RD90	RD135	RD180	RD225	RD270	RD315
LG0	LG45	LG90	LG135	LG180	LG225	LG270	LG315

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

## Accessories

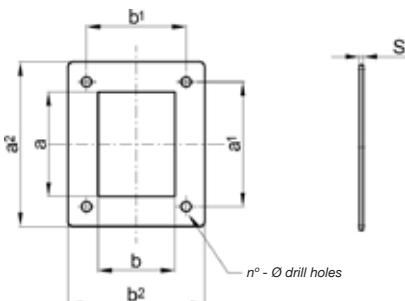
### Inlet counter-flange

n° - Ø drill holes



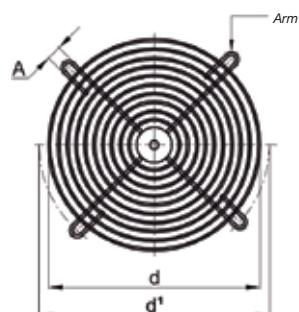
MOD.	d	d <sup>1</sup>	d <sup>2</sup>	n°	Φ
TA 400	219	185	255	8	M8
TA 450	241	205	275	8	M8
TA 500	265	229	299	8	M8
TA 560	292	255	325	8	M8
TA 630	332	286	366	8	M8
TA 710	366	321	401	8	M8
TA 800	405	361	441	8	M8
TA 900	448	406	486	12	M10
TA 1000	497	456	536	12	M10

### Impulsion counter-flange



MOD.	a	b	a <sup>1</sup>	b <sup>1</sup>	a <sup>2</sup>	b <sup>2</sup>	n <sup>1</sup> p	n <sup>2</sup> p	n°	Φ	s
TA 400	165	117	200	153	235	187	-	1-112	6	10	4
TA 450	185	131	219	167	255	201	-	1-112	6	10	4
TA 500	205	146	241	182	275	216	1-112	1-112	8	12	4
TA 560	229	164	265	200	299	234	1-112	1-112	8	12	5
TA 630	256	183	292	219	326	253	1-112	2-112	10	12	5
TA 710	288	205	332	249	368	285	1-125	2-125	10	12	5
TA 800	322	229	366	273	402	309	1-125	2-125	10	12	5
TA 900	361	256	405	300	441	336	1-125	2-125	10	12	5
TA 1000	404	288	448	332	484	362	2-126	3-127	14	12	5

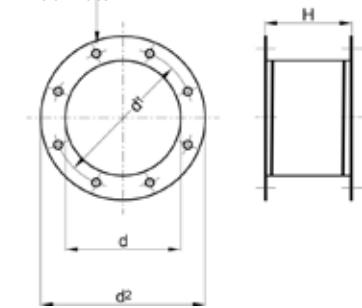
### Inlet protection net



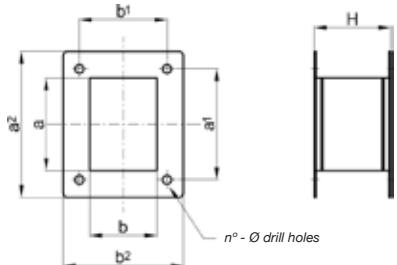
MOD.	d	d <sup>1</sup>	d <sup>2</sup>	A	n°
TA 400	185	219	255	9	4
TA 450	205	241	275	11	4
TA 500	229	265	299	11	4
TA 560	255	292	325	11	4
TA 630	286	332	366	11	8
TA 710	321	366	401	11	8
TA 800	361	405	441	11	8
TA 900	406	448	486	11	8
TA 1000	456	497	536	11	8

### Inlet anti-vibration seal

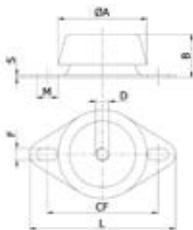
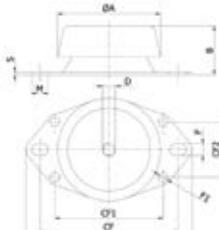
n° - Ø drill holes



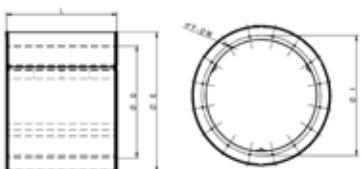
MOD.	d	d <sup>1</sup>	d <sup>2</sup>	n°	Φ	H
TA 400	119	185	255	8	M8	200
TA 450	241	205	275	8	M8	200
TA 500	265	229	299	8	M8	200
TA 560	292	255	325	8	M8	200
TA 630	332	286	366	8	M8	200
TA 710	366	321	401	8	M8	200
TA 800	405	361	441	8	M8	200
TA 900	448	406	486	12	M10	200
TA 1000	497	456	536	12	M10	200

**Accessories****Impulsion anti-vibration seal**

MOD.	a	b	a <sup>1</sup>	b <sup>1</sup>	a <sup>2</sup>	b <sup>2</sup>	n <sup>1</sup> p	n <sup>2</sup> p	n <sup>0</sup>	Φ	H
TA 400	165	117	200	153	235	187	-	1-112	6	10	200
TA 450	185	131	219	167	255	201	-	1-112	6	10	200
TA 500	205	146	241	182	275	216	1-112	1-112	8	12	200
TA 560	229	164	265	200	299	234	1-112	1-112	8	12	200
TA 630	256	183	292	219	326	253	1-112	2-112	10	12	200
TA 710	288	205	332	249	368	285	1-125	2-125	10	12	200
TA 800	322	229	366	273	402	309	1-125	2-125	10	12	200
TA 900	361	256	405	300	441	336	1-125	2-125	10	12	200
TA 1000	404	288	448	332	484	362	2-126	3-127	14	12	200

**Shock-absorbers****TYPE 1****TYPE 2**

MOD.	MODEL SHOCK-ABSORBERS	TYPE	øA	B	D	CF	CF1	CF2	F	øF1	L	M	S
TA 400	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
TA 450	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
TA 500	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
TA 560	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
TA 630	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
TA 710	CF 623110	1	67	33...34	10	76.5	-	-	9	-	90.5	16	2
TA 800	CF 924512	2	92	44...45	12	120	98	50	10.5	8.5	130	15.5	2.5
TA 900	CF 924512	2	92	44...45	12	120	98	50	10.5	8.5	130	15.5	2.5
TA 1000	CF 924512	2	92	44...45	12	120	98	50	10.5	8.5	130	15.5	2.5

**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	øl	F	øM
315	515	ØD,1.5ØD,2ØD	355	8	M8
355	555	ØD,1.5ØD,2ØD	395	8	M8
400	600	ØD,1.5ØD,2ØD	450	8	M8
450	650	ØD,1.5ØD,2ØD	500	8	M8
500	700	ØD,1.5ØD,2ØD	560	12	M8
560	760	ØD,1.5ØD,2ØD	620	12	M8
630	830	ØD,1.5ØD,2ØD	690	12	M8
710	910	ØD,1.5ØD,2ØD	770	16	M8
800	1000	ØD,1.5ØD,2ØD	860	16	M8

øD	øE	L	øl	F	øM
900	1100	ØD,1.5ØD,2ØD	970	16	M10
1000	1200	ØD,1.5ØD,2ØD	1070	16	M10
1120	1320	ØD,1.5ØD,2ØD	1190	20	M10
1250	1450	ØD,1.5ØD,2ØD	1320	20	M10
1400	1600	ØD,1.5ØD,2ØD	1470	20	M10
1500	1700	ØD,1.5ØD,2ØD	1570	20	M10
1600	1800	ØD,1.5ØD,2ØD	1680	24	M14
1700	1900	ØD,1.5ØD,2ØD	1780	24	M14
1800	2000	ØD,1.5ØD,2ØD	1880	24	M14