

### APPLICATION

Fan designed for transporting non-aggressive and non-explosive gases without contamination. Typical applications:

- pneumatic transport,
- blowing in drying systems (eg graphic machines and plastics processing),
- air blowing systems in combustion / heat treatment systems (eg melting furnaces).

### CONSTRUCTION

- medium-pressure centrifugal fan with direct drive,
- riveted impeller from aluminium sheet with forward curved blades, dynamically balanced according to ISO 1940-1,
- aluminium cast housing,
- galvanized protective mesh at the inlet,
- model 600 is equipped with a motor support,
- fan painted grey RAL 7042,
- maximum temperature of the transported medium is 80°C,
- ambient temperature range from -20°C to + 40°C,
- figure LG270.

### MOTOR

- asynchronous, single-phase, 230V, 50Hz (power from 0.75 to 1.5kW),
- asynchronous, three-phase, 230 / 400V, 50Hz (power from 0.75 to 1.5kW),
- asynchronous, three-phase, 400 / 690V, 50Hz (with power 4.0kW and 11.0kW),
- efficiency class IE3 (power from 0.75 kW) or IE1 (0.75 kW, 230V),
- degree of protection IP55,
- insulation class F,
- three-phase motors are adapted for frequency converter,
- for voltage regulation (single phase motors 1.1kW).

### SPECIAL EXECUTIONS

- optional configuration LG/RD,
- colour other than standard,
- impeller made of galvanized steel sheet,
- impeller made of stainless steel 1.4301,
- impeller made of acid-proof steel 1.4404,
- motor with voltage and frequency of power different than standard,
- motor with other than standard degree of protection,
- motor equipped with sensors or additional cooling,
- sealing between the housing and the motor,
- maximum temperature of the transported medium above 80°C,
- ambient temperature range below -20°C and above +40°C.



WWW

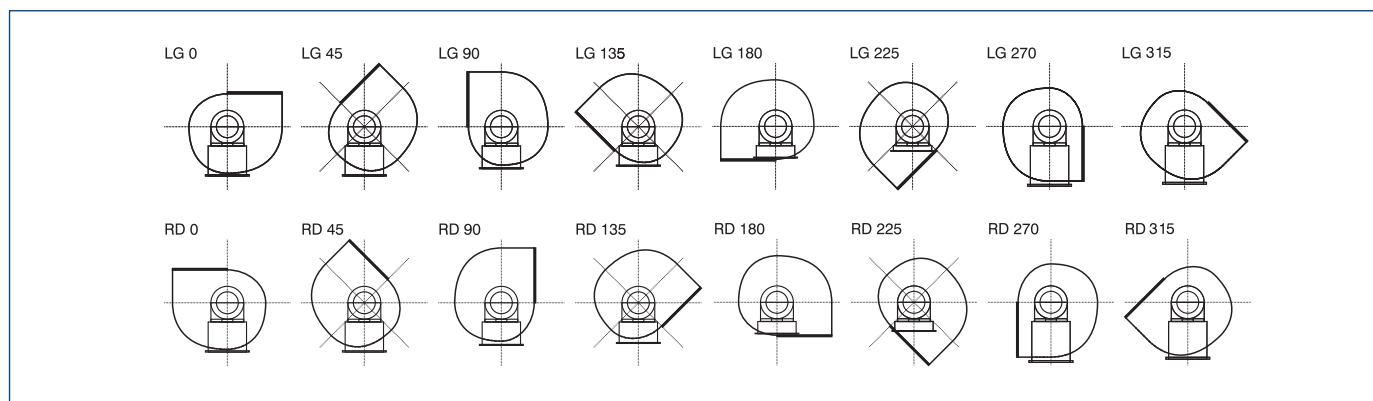


DTR



CE

### FIGURES



## TECHNICAL CHARACTERISTICS

Type	airflow max	pressure max	maximum absorbed power	speed	maximum absorbed current	voltage	capacitor	sound pressure level*	weight	article number
	[m³/h]	[Pa]	[kW]	[r.p.m.]	[A]	[V]	[µF]	[dB(A)]	[kg]	
MRA 200T	890	2750	0,75	2890	2,95 / 1,70	230/400	-	80	24	436510330
MRA 200S	890	2750	0,75	2880	5	230	25	80	24	46510332
MRA 260T	1550	2680	1,1	2890	3,8 / 2,5	230/400	-	78	36	436510335
MRA 260S	1150	2730	1,1	2900	5,8	230	70	78	36	436510338
MRA 300T	1290	3560	1,5	2880	5,25/3,00	230/400	-	90	36	436510340
MRA 300S	1560	3490	1,5	2740	9,1	230	40	79	35	46510345
MRA 400T	2890	4320	4	2895	7,3 / 4,2	400/690	-	88	65	436510360
MRA 600T	6080	6780	11	2900	19,1/11,1	400/690	-	96	163	436510374

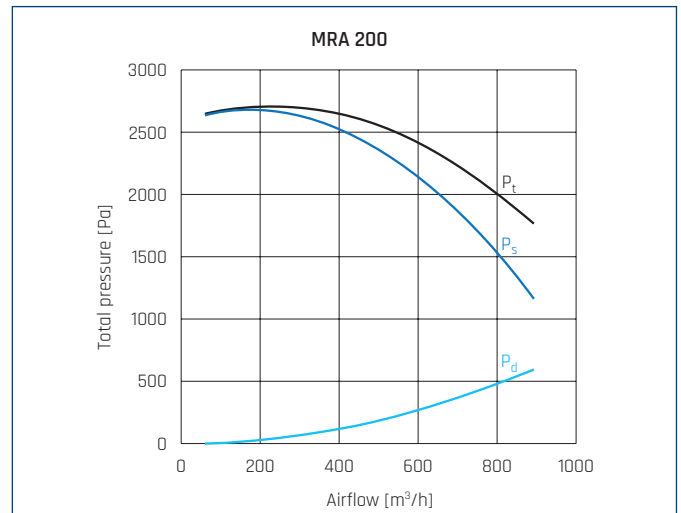
\* sound pressure measured at a distance of 1,5m from the fan at  $q=2/3 \cdot Q_{max}$ .

## PERFORMANCE CURVES

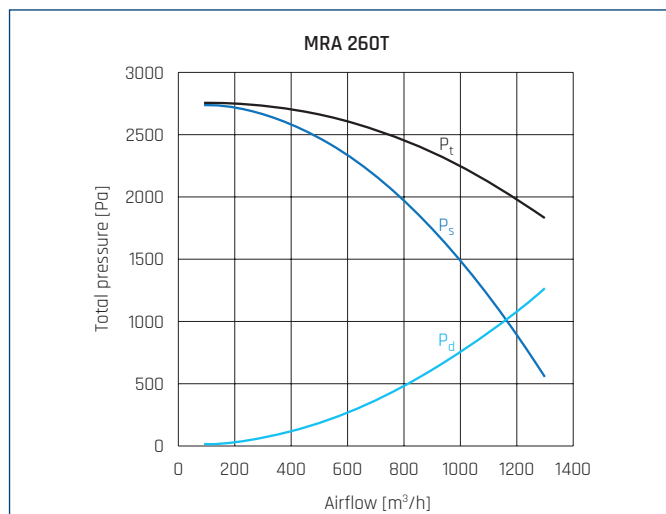
- $p_t$  - total pressure
- $p_s$  - static pressure
- $p_d$  - dynamic pressure

### ErP

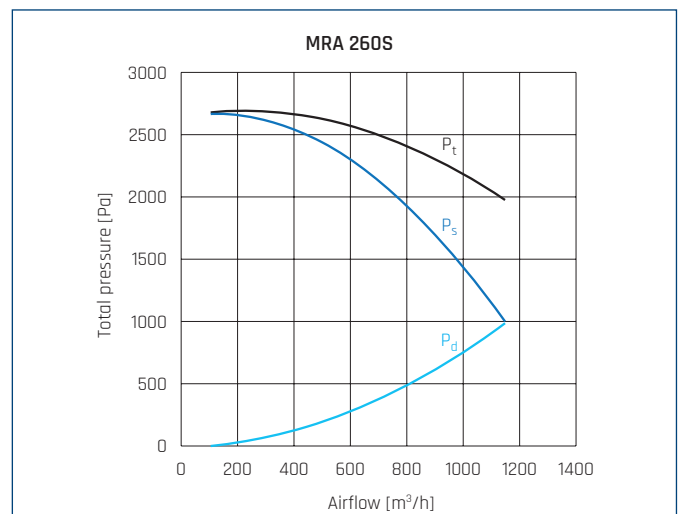
MC	Measurement category
EC	Efficiency category
VSD	Speed control: supplied with the fan
SR	Specific ratio
$\eta$ [%]	Efficiency
N	Efficiency grade
[kW]	Absorbed power
[m³/h]	Airflow
[Pa]	Static pressure
[RPM]	Speed



MRA 200T									
MC	EC	VSD	SR	$\eta$ [%]	N	[kW]	[m³/h]	[Pa]	[RPM]
B	Total	No	1	52,2	59,3	0,74	576	2429	2890

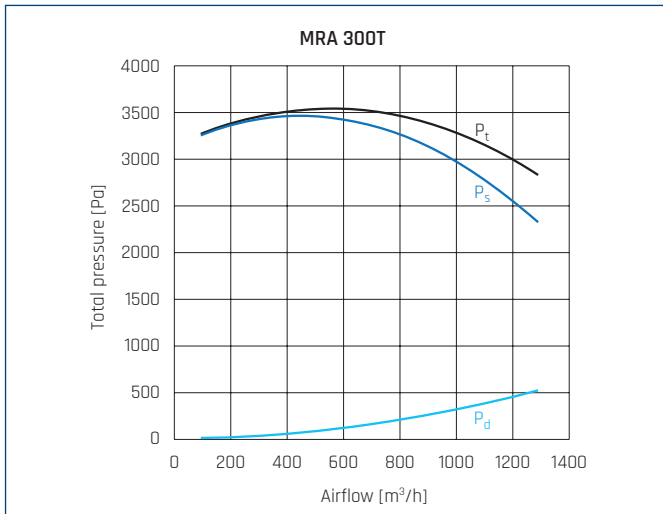


MC	EC	VSD	SR	$\eta$ [%]	N	[kW]	[m³/h]	[Pa]	[RPM]
B	Total	No	1	55,9	62,2	1,02	874	2369	2939

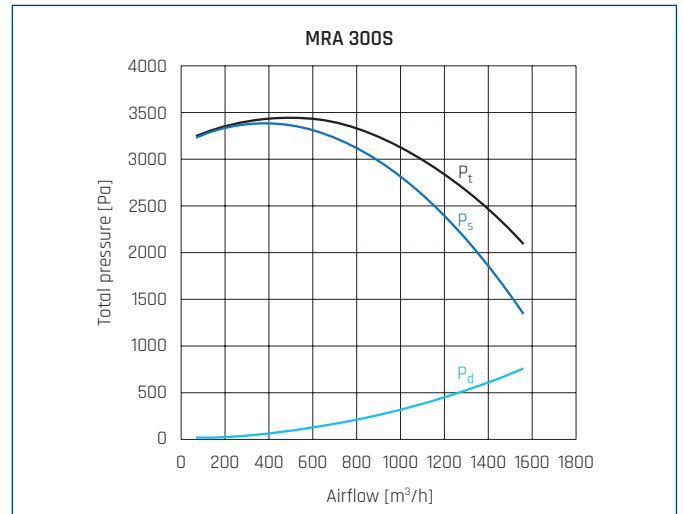


MC	EC	VSD	SR	$\eta$ [%]	N	[kW]	[m³/h]	[Pa]	[RPM]
B	Total	No	1	51,6	57,7	1,12	906	2287	2900

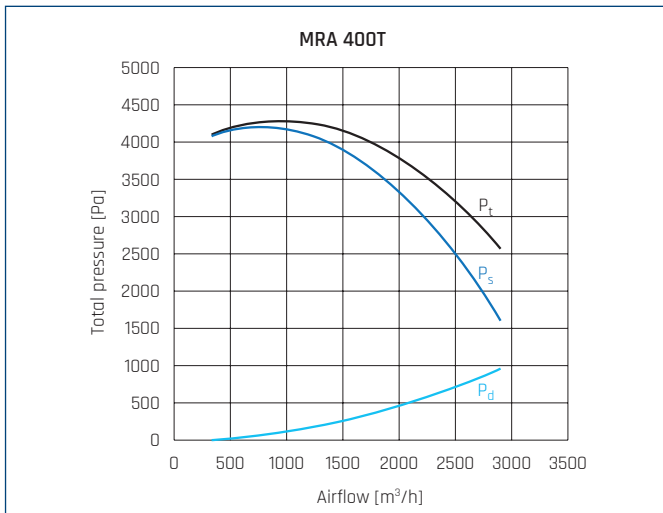
PERFORMANCE CURVES



MC	EC	VSD	SR	η[%]	N	[kW]	[m³/h]	[Pa]	[RPM]
B	Total	No	1	57,5	59,0	1,42	863	3409	2900



MC	EC	VSD	SR	η[%]	N	[kW]	[m³/h]	[Pa]	[RPM]
B	Total	No	1	48,8	53,3	1,93	1221	2778	2880

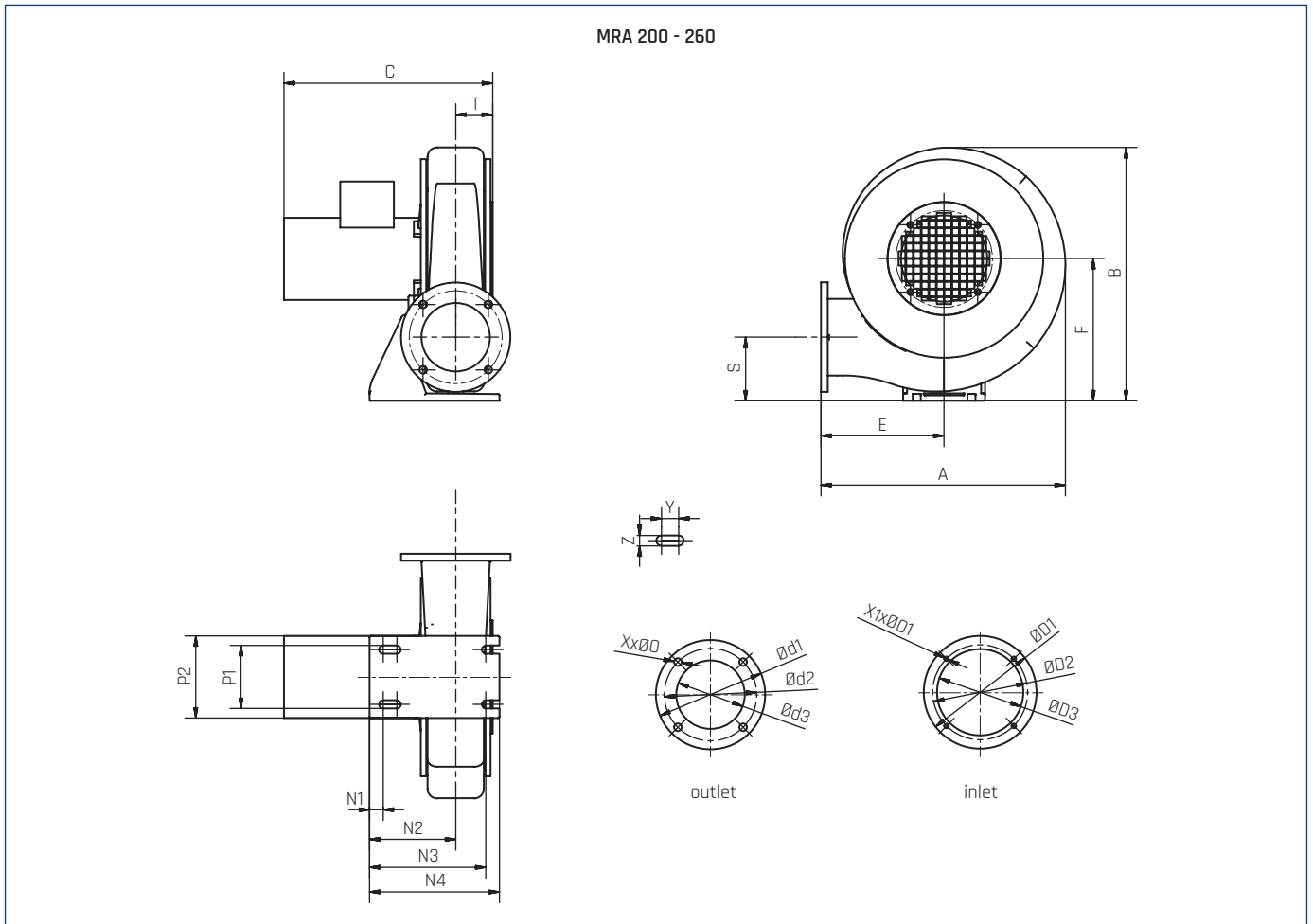


MC	EC	VSD	SR	η[%]	N	[kW]	[m³/h]	[Pa]	[RPM]
B	Total	No	1	58,7	61,9	3,17	1688	4022	2892



MC	EC	VSD	SR	η[%]	N	[kW]	[m³/h]	[Pa]	[RPM]
B	Total	No	1	44,9	51,0	1,07	3311	525	980

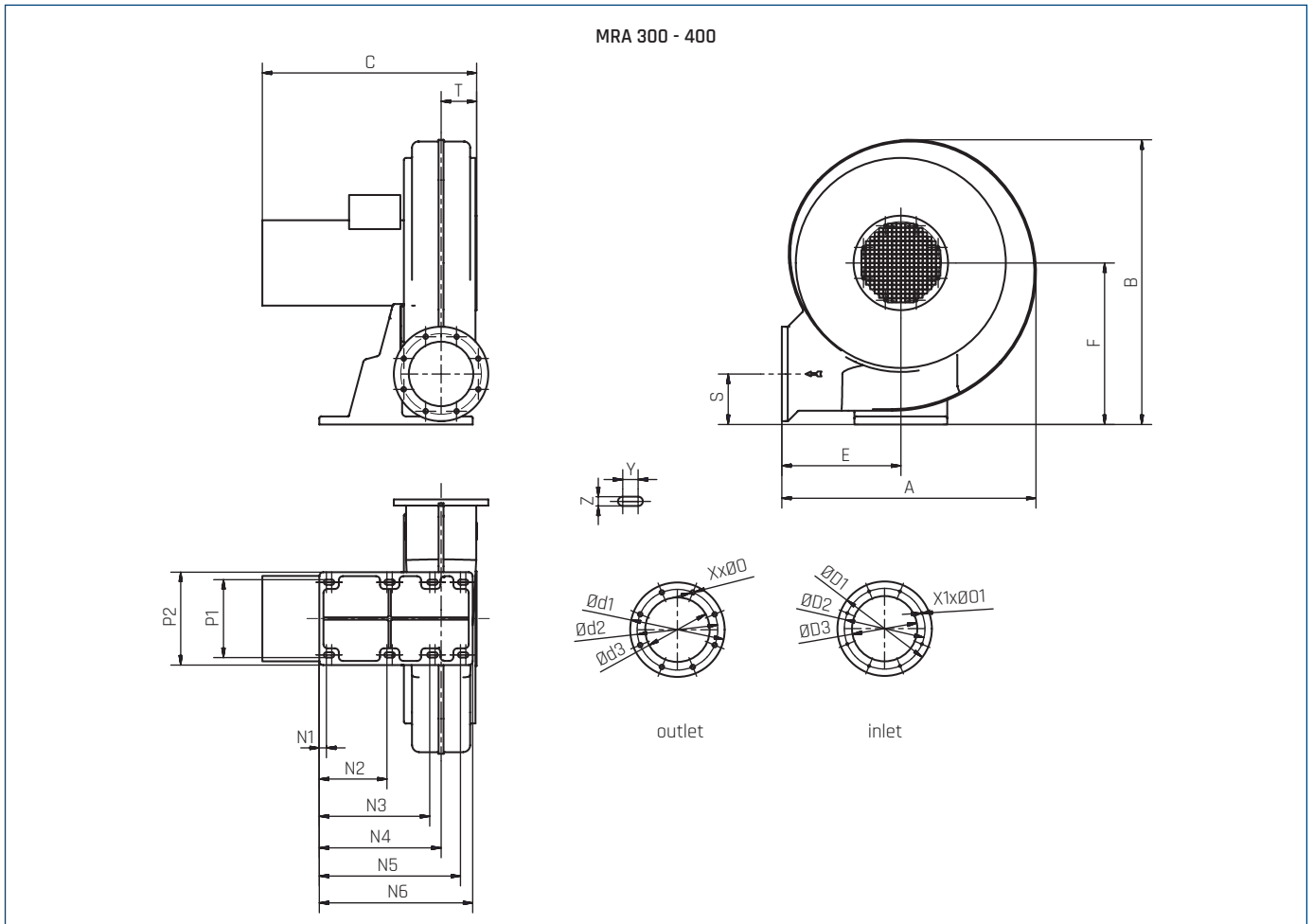
DIMENSIONS [mm]



Type	A	B	C*	Ød1	Ød2	Ød3	Ø01	Ø02	Ø03	E	F	N1	N2	N3	N4	Ø0	Ø01	P1	P2	S	T	Z	X	X1	Y
MRA 200	451	515	360	165	139	100	165	139	106	210	290	46,5	156	215	240	9,5	6,6	140	200	91	59	13	4	4	17
MRA 260	451	515	365	165	139	100	200	182	138	210	290	46,5	156	215	240	9,5	6,6	140	200	91	59	13	4	4	17

\* dimension C dependent on the used motor

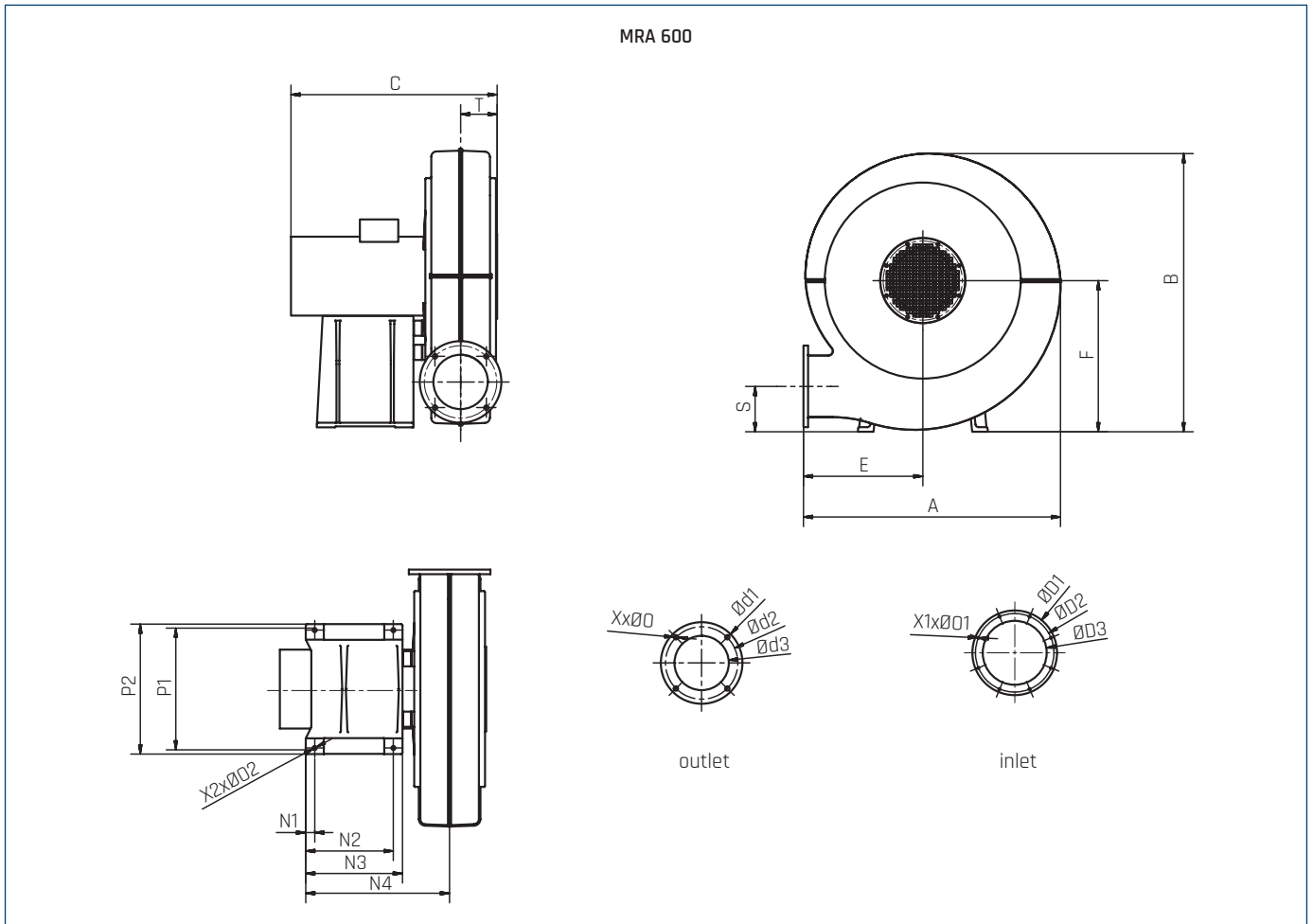
DIMENSIONS [mm]



Type	A	B	C*	Ød1	Ød2	Ød3	ØD1	ØD2	ØD3	E	F	N1	N2	N3	N4	N5	N6	Ø0	Ø01	P1	P2	S	T	Z	X	X1	Y
MRA 300	523	577	421	191	165	125	200	182	140	248	320	17,5	167,5	273,5	297	349,5	380	9,5	M6	180	230	98	72	13	4	8	13
MRA 400	630	705	532	234	200	160	234	200	162	295	400	17,5	167,5	273,5	301,5	349,5	380	11,5	M6	180	230	125	88	13	8	8	13

\* dimension C dependent on the used motor

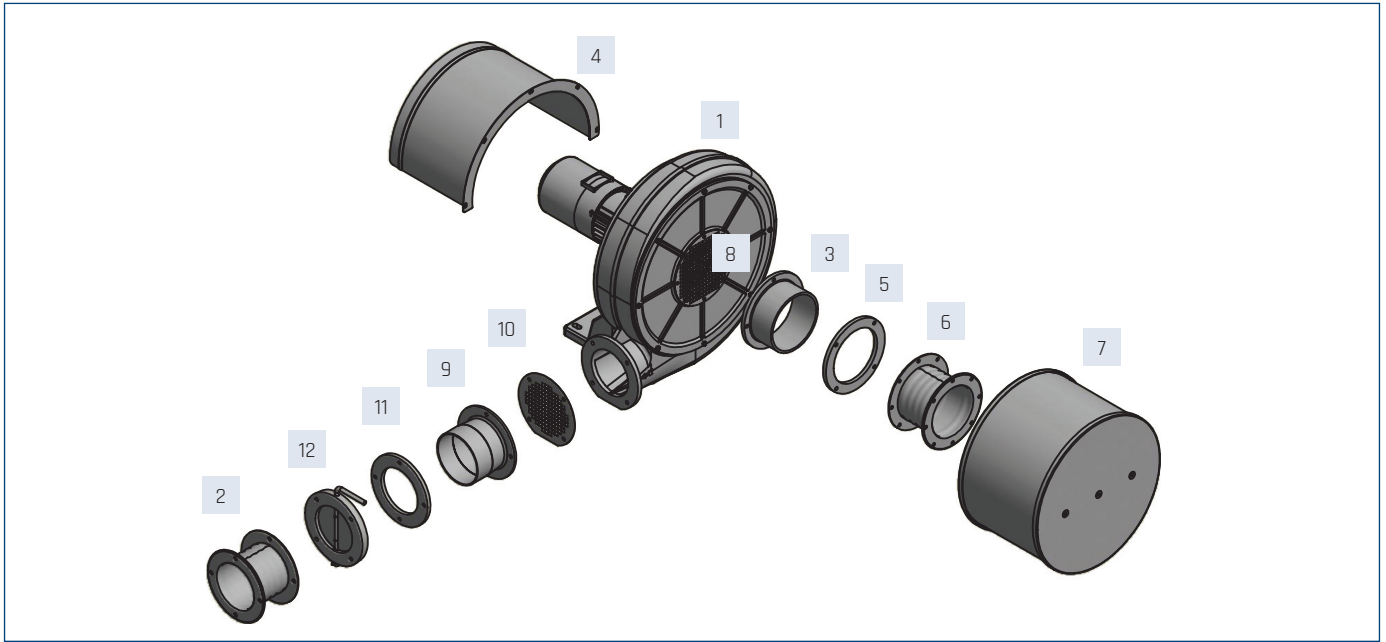
DIMENSIONS [mm]



Type	A	B	C*	Ød1	Ød2	Ød3	ØØ1	ØØ2	ØØ3	E	F	N1	N2	N3	N4	ØØ	ØØ1	ØØ2	P1	P2	S	T	X	X1	X2
MRA 600	850	920	678	270	240	180	280	260	187	395	500	30	290	320	476	14	M8	13	390	430	150	120	4	8	4

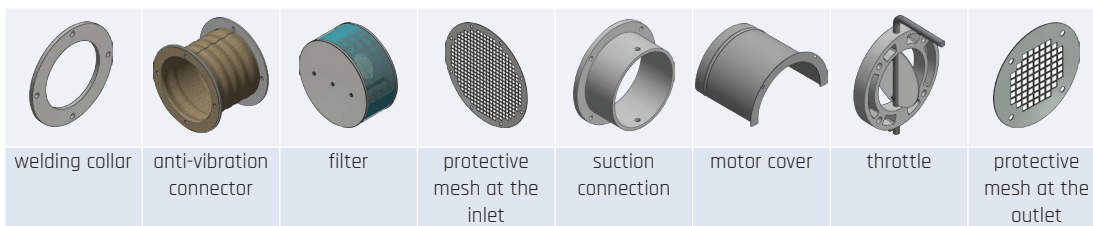
\* dimension C dependent on the used motor

ACCESSORY ASSEMBLY



Outlet					
1	9	10	11	12	2
Type	outlet connection	protective mesh	welding collar	throttle	anti-vibration connector
MRA 200	46515040-01	26510224	45515500	-	42519937
MRA 260	46515040-01	26510224	45515500	-	42519937
MRA 300	46515060-10	25511503	45516580	25511347	42519940
MRA 400	46515065-01	26510173	45516587	25511348	42519941
MRA 600	46515065-13	26510179	45516585	-	42519938

Inlet						
1	3	4	5	6	7	8
Type	suction connection	motor cover	welding collar	anti-vibration connector	filter	protective mesh
MRA 200	46515040	25511593	45515440	42519930	25511485	26510223
MRA 260	46515050	25511593	45515510	42519932	25511486-10	25511384
MRA 300	46515050	25511595	45515510	42519932	25511486-14	25511508
MRA 400	46515052	25511596	45516588	42519933	25511486-16	25511528
MRA 600	46515051	25511597	45516586	42519934	25511486-18	25511547



## ELECTRICAL ACCESSORIES

Type	thyristor regulator	transformer regulator		transformer regulator 2-adjustable	inverter	service switch
		RMB	RVS			
MRA 200T	-	-	-	-	40016312	91040908
MRA 260T	-	-	-	-	40016322	91040908
MRA 260S RU	40025055	40025080	40025236	40025259	-	91040907-01
MRA 300T	-	-	-	-	40016322	91040908
MRA 400T	-	-	-	-	40016352	91040908
MRA 600T	-	-	-	-	40016383	91040908

