

MB31/12-45/18



MEDIUM PRESSURE CENTRIFUGAL FAN WITH FORWARD IMPELLER

MANUFACTURING FEATURES:

- Rolling steel sheet housing.
- Completely joined or welded housing.
- Galvanised steel sheet simple inlet forward curved impeller.
- Polyester powder finishing coat.
- Standard asynchronous squirrel-cage motor with IP-55 protection and Class F insulation. Manufactured with standard voltages: 230/400V 50Hz for three phase motors up to 4kW and 400/690V 50Hz for higher powers

- Available positions (to be indicated in case of order): LG270, LG0, LG45, LG90, LG135, LG180, LG225, LG315, RD0, RD45, RD90, RD135, RD180, RD225, RD270, RD315.
- The indicated codes correspond to the model in position LG270

Accessories



AB



AC



AVR



AVS



BA-400



EI



FS



INT



JE 45



RA



RBS



SFC

APPLICATIONS:

Designed for inline installation, they are suitable for:

- Industrial applications, extraction or injection of air.
- Cooling of machines and parts.
- Suitable for transporting totally clean air without dust.
- Maximum working temperature: carried air: 130°C, environment 60°C.

UNDER REQUEST:

- Special voltages.
- 2 speed motors.
- Fan for air working temperatures up to 250°C.
- Fans provided with cooling disk for high temperature.
- Option with support for models where it is not included, and without support for models where it is included.

Technical data

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					
253420106	MB 31/12 T4 2,2kW	1435	8,07	4,64	2,20	5.400	63	54	1
253480106	MB 35/14 T4 3kW	1420	10,7	6,17	3,00	5.870	65	63	1
253490106	MB 35/14 T4 4kW	1440	14,5	8,32	4,00	8.020	64	69	1
253510121	MB 40/16 T4 5,5kW	1460	-	10,5	5,50	8.340	68	101	1
253510106	MB 40/16 T4 7,5kW	1455	-	14,1	7,50	10.570	72	110	1
253530120	MB 45/18 T4 7,5kW	1455	-	14,1	7,50	9.160	75	119	1
253530121	MB 45/18 T4 11kW	1455	-	21,2	11,00	12.500	76	190	1

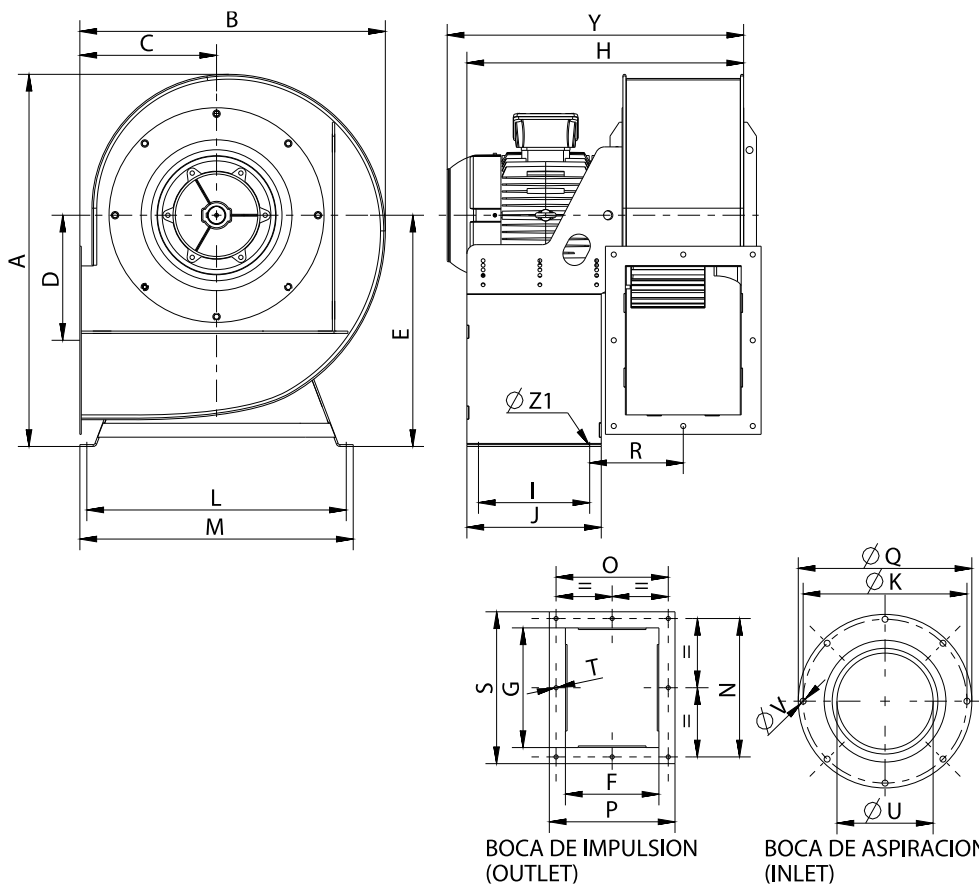
Three-phase motor / 6 poles

Code	Model	R.P.M.	Rated I. A		Rated power kW	Max. Airflow m³/h	Sound db (A)**	Weight kg	Connect. diagram
			230V	400V					
253500106	MB 35/14 T6 1,1kW	925	4,83	2,78	1,10	5.200	58	53	1
253520106	MB 40/16 T6 1,5kW	940	6,45	3,71	1,50	5.650	59	94	1
253540106	MB 40/16 T6 2,2kW	965	10,3	5,94	2,20	7.530	59	94	1
253560106	MB 45/18 T6 2,2kW	965	10,3	5,94	2,20	6.060	64	112	1

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

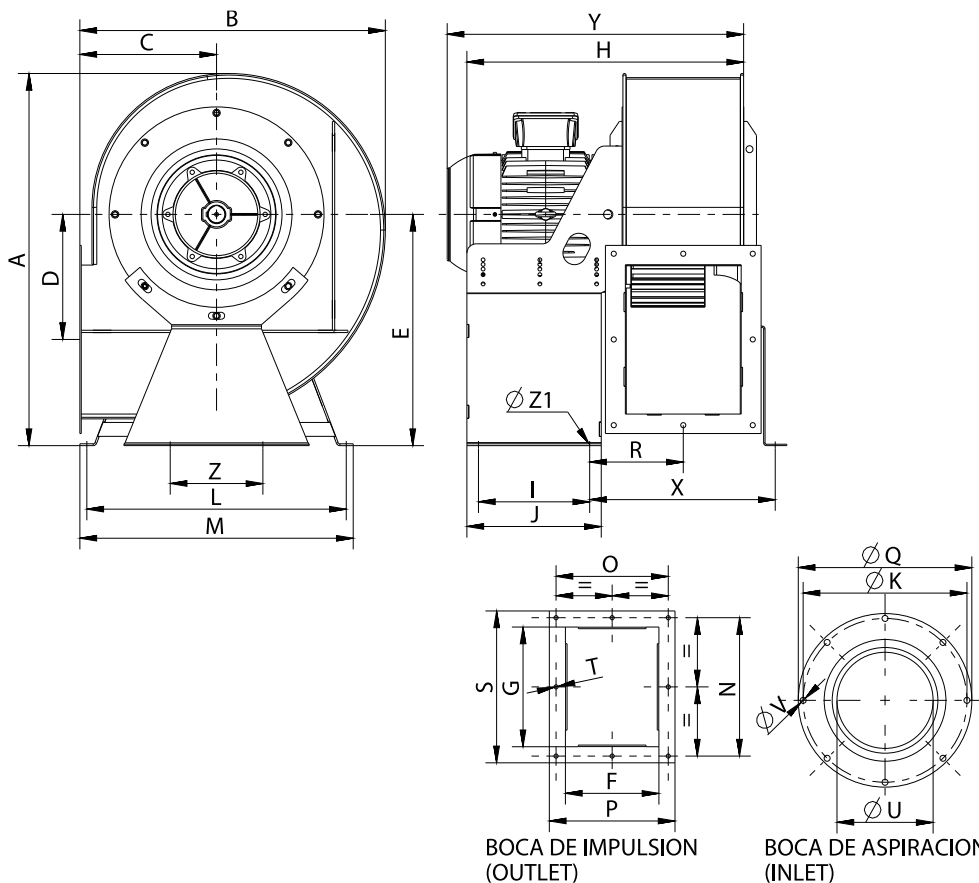
Dimensions



Model	A	B	C	D	E	F	G	H	I
MB 31/12 T4 2,2kW	646	537	249	186	406	198	319	538	240
MB 35/14 T4 3kW	722	593	270	249,5	451	224	280	564	240
MB 35/14 T4 4kW	722	593	270	249,5	451	224	280	564	240
MB 35/14 T6 1,1kW	722	593	270	249,5	451	224	280	564	240

Model	J	K	L	M	N	O	P	Q	R
MB 31/12 T4 2,2kW	290	354,5	457	482	360	240	274	382	171
MB 35/14 T4 3kW	290	394,5	449	474	318	266	300	422	184
MB 35/14 T4 4kW	290	394,5	449	474	318	266	300	422	184
MB 35/14 T6 1,1kW	290	394,5	449	474	318	266	300	422	184

Model	S	TØ	UØ	VØ	Y	Z1
MB 31/12 T4 2,2kW	395	11	257	11	539,5	13
MB 35/14 T4 3kW	356	11	289	11	565,75	13
MB 35/14 T4 4kW	356	11	289	11	600	13
MB 35/14 T6 1,1kW	356	11	289	11	540	13



Model	A	B	C	D	E	F	G	H	I
MB 40/16 T4 5,5kW	802	658	295	279	499	250	320	595	240
MB 40/16 T4 7,5kW	802	658	295	279	499	250	320	595	240
MB 40/16 T6 1,5kW	802	658	295	279	499	250	320	595	240
MB 40/16 T6 2,2kW	802	658	295	279	499	250	320	595	240
MB 45/18 T4 7,5kW	891	737	329	314,5	553	280	360	791	250
MB 45/18 T4 11kW	891	737	329	314,5	553	280	360	791	400
MB 45/18 T6 2,2kW	891	737	329	314,5	553	280	360	791	250

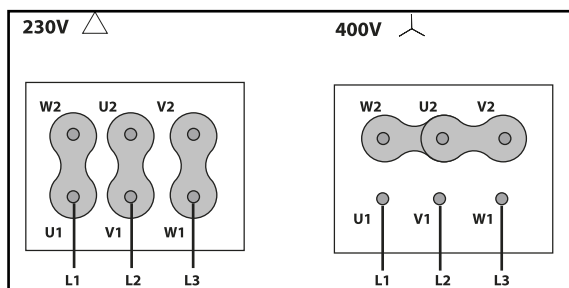
Model	J	K	L	M	N	O	P	Q	R
MB 40/16 T4 5,5kW	290	438	560	590	370	300	336	464	202
MB 40/16 T4 7,5kW	290	438	560	590	370	300	336	464	202
MB 40/16 T6 1,5kW	290	438	560	590	370	300	336	464	202
MB 40/16 T6 2,2kW	290	438	560	590	370	300	336	464	202
MB 45/18 T4 7,5kW	300	485	602	632	404	328	356	515	207
MB 45/18 T4 11kW	450	485	602	632	404	328	356	515	207
MB 45/18 T6 2,2kW	300	485	602	632	404	328	356	515	207

Model	S	TØ	UØ	VØ	X	Y	Z	Z1
MB 40/16 T4 5,5kW	406	11	325	11	400	667,75	200	13
MB 40/16 T4 7,5kW	406	11	325	11	400	707,75	200	13
MB 40/16 T6 1,5kW	406	11	325	11	400	612,75	200	13
MB 40/16 T6 2,2kW	406	11	325	11	400	612,75	200	13
MB 45/18 T4 7,5kW	436	11	365	11	415	726,75	200	13
MB 45/18 T4 11kW	436	11	365	11	430	802,75	200	13
MB 45/18 T6 2,2kW	436	11	365	11	415	631,75	200	13

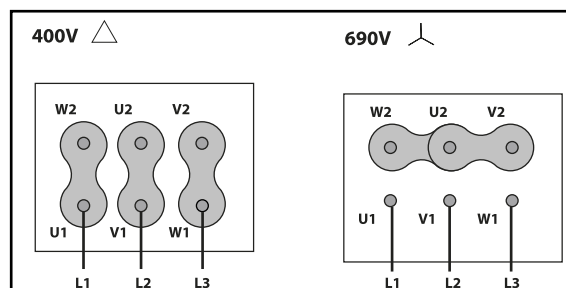
Wiring diagram

Wiring diagram N° 1

230/400V



400/690V



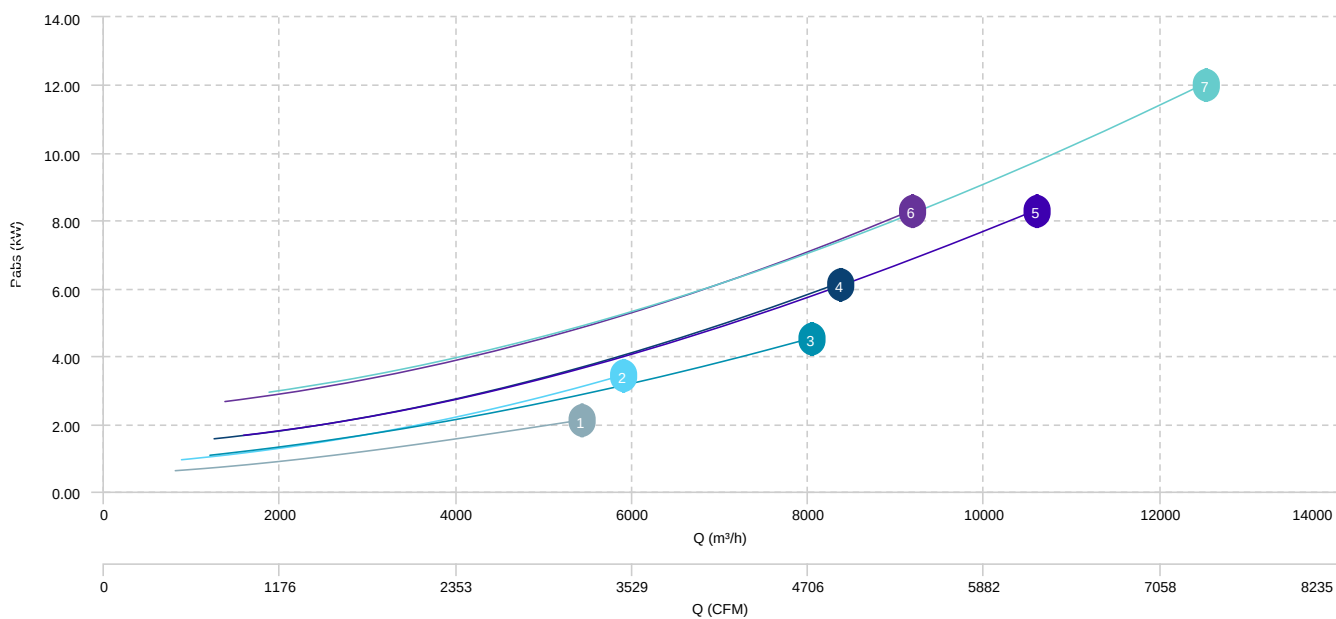
CHARACTERISTIC CURVE

1	MB 31/12 T4 2,2kW	2	MB 35/14 T4 3kW	3	MB 35/14 T4 4kW	4	MB 40/16 T4 5,5kW
5	MB 40/16 T4 7,5kW	6	MB 45/18 T4 7,5kW	7	MB 45/18 T4 11kW		

AIR FLOW - PRESSURE



AIR FLOW - ABSORBED POWER



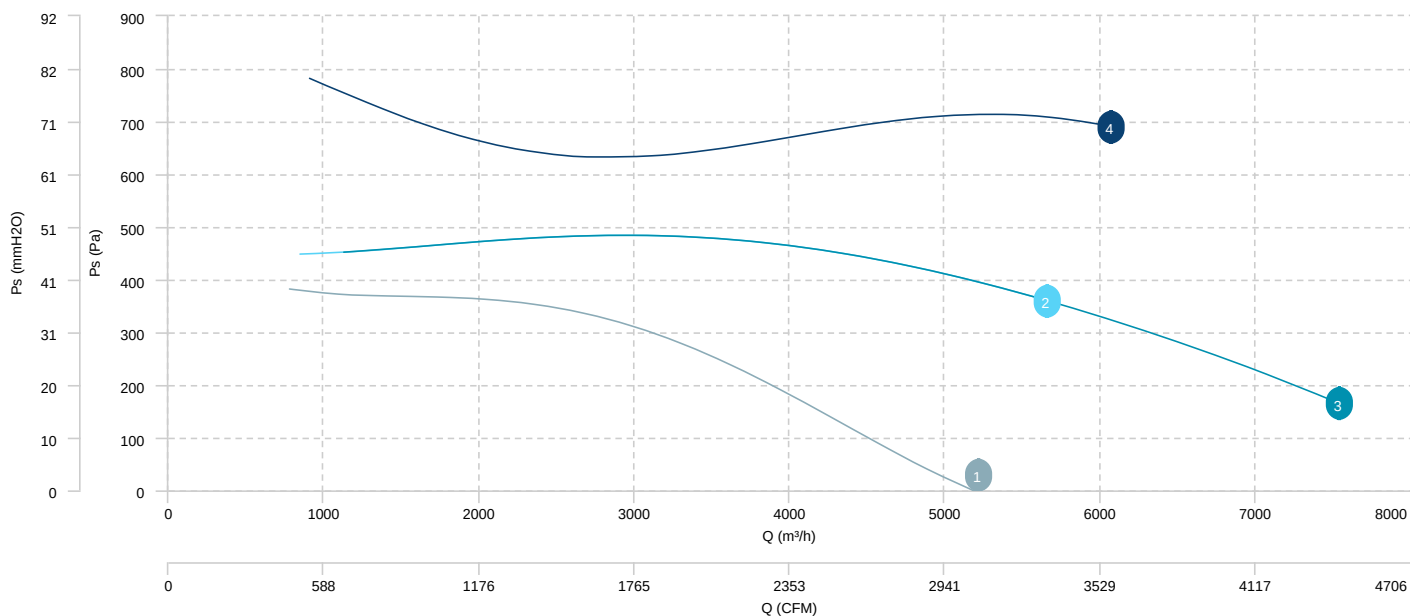
1 MB 35/14 T6 1,1kW

2 MB 40/16 T6 1,5kW

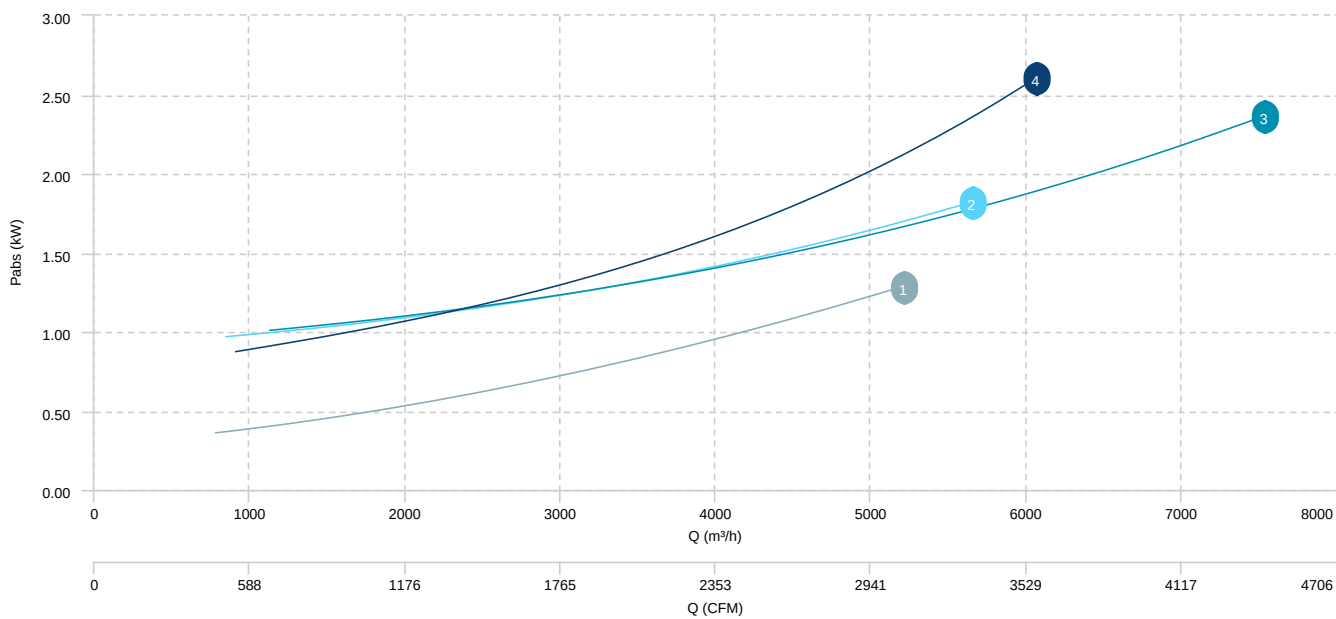
3 MB 40/16 T6 2,2kW

4 MB 45/18 T6 2,2kW

AIR FLOW - PRESSURE



AIR FLOW - ABSORBED POWER



Sound data

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
MB 31/12 T4 2,2kW	Inlet	58	71	77	78	83	84	80	77	89
MB 35/14 T4 3kW	Inlet	60	73	79	80	85	86	82	79	91
MB 35/14 T4 4kW	Inlet	59	72	78	79	84	85	81	78	90
MB 40/16 T4 5,5kW	Inlet	63	76	82	83	88	89	85	82	94
MB 40/16 T4 7,5kW	Inlet	67	80	86	87	92	93	89	86	98
MB 45/18 T4 7,5kW	Inlet	70	83	89	90	95	96	92	89	101
MB 45/18 T4 11kW	Inlet	71	84	90	91	96	97	93	90	102

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
MB 35/14 T6 1,1kW	Inlet	53	66	72	73	78	79	75	72	84
MB 40/16 T6 1,5kW	Inlet	56	68	71	79	79	80	76	72	85
MB 40/16 T6 2,2kW	Inlet	56	68	71	79	79	80	76	72	85
MB 45/18 T6 2,2kW	Inlet	60	73	76	84	84	85	80	76	90

erp data

ERP	
Fan type	Centrifugal fan radial or forward blades
Installation category	B
Efficiency category	Total
The fan has to be installed with FSC	No

ERP / 4 poles

Model	Motor power (kW)	Maximum efficiency point data						
		Max. efficiency (%)	Efficiency grade (N) (N)	Air Flow (m³/h)	Pt (Pa)	Pabs (kW)	speed (rpm)	Specific ratio
MB 31/12 T4 2,2kW	2,20	47,46	53,53	2.705,56	707,01	1,10	1435	1,00
MB 35/14 T4 3kW	3	60,09	63,60	4.988,18	1.215,55	2,80	1420	1,00
MB 35/14 T4 4kW	4	52,76	56,68	4.584,62	1.015,10	2,41	1440	1,00
MB 40/16 T4 5,5kW	5,50	66,21	67,73	7.948,60	1.731,90	5,77	1460	1,00
MB 40/16 T4 7,5kW	7,50	67,29	68,97	7.684,01	1.715,96	5,45	1455	1,00
MB 45/18 T4 7,5kW	7,50	61,59	62,13	9.160	1.988,41	8,29	1455	1,00
MB 45/18 T4 11kW	11	61,57	61,90	9.848,68	2.012,84	8,92	1455	1,00

ERP / 6 poles

Model	Motor power (kW)	Maximum efficiency point data						
		Max. efficiency (%)	Efficiency grade (N) (N)	Air Flow (m³/h)	Pt (Pa)	Pabs (kW)	speed (rpm)	Specific ratio
MB 35/14 T6 1,1kW	1,10	47,21	54,49	2.931,66	417,92	0,71	925	1,00
MB 40/16 T6 1,5kW	1,50	50,94	55,70	5.484,56	592,39	1,77	940	1,00
MB 40/16 T6 2,2kW	2,20	53,14	57,65	6.266,46	589,07	1,95	965	1,00
MB 45/18 T6 2,2kW	2,20	56,78	60,83	5.546,04	851,70	2,30	965	1,00