



Technical data

Date	9/23/2025
Offer N.	---
Pump Type	4MA50-160A

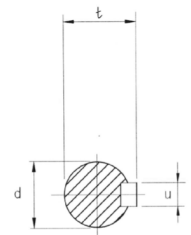
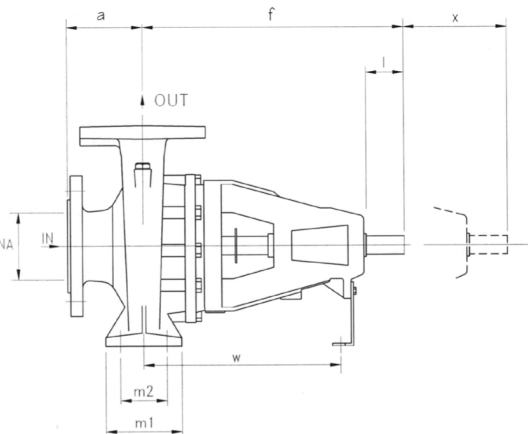
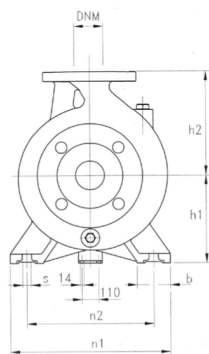
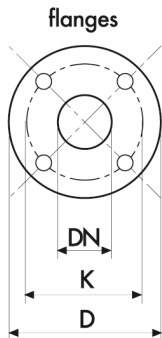
Client	EES GmbH	Reference	---
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Pump data

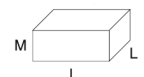
Pump body and rear shield	Cast iron GJL-250	Bare-shaft centrifugal pumps manufactured in accordance with EN 733 and widely used in water supply, pressure boosting and fire fighting systems. The pumps are equipped with counter flanges and can be provided with the motor assembled on a common base frame. In the standard version the pumps have cast iron impeller and mechanical seal. On request are available bronze or stainless steel AISI316 impeller and gland packing seal. In the "X" version all the wet parts of the pump are made of AISI 316.
Impeller	Cast iron GJL-250 On request bronze or stainless steel AISI 316	
Pump bearings support	Cast iron GJL-250	
Type of seal	Mechanical ceramic-graphite On request: gland packing graphite	
Pump shaft end	Stainless steel AISI 316 EN X5CrNiMo17-12-2	
Liquid temperature	-10°C +90°C	
Operating pressure	Max 10 bar	

P2	Motor Size	Q (m3/h - l/min)																
(kW)		0	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48
		0	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
		H (m)																
1,1	90S	9.3	9.4	9.5	9.5	9.6	9.5	9.4	9.1	8.7	8.2	7.7	7.2	6.6	5.9	5.2	4.3	3.4

Technical Sheet



DIMENSIONS (mm)				
DN	D	K	holes	
			n°	Ø
32	140	100	4	18
40	150	110	4	18
50	165	125	4	18
65	185	145	4	18
80	200	160	8	18
100	220	180	8	18
125	250	210	8	18



DNA	DNM	DIMENSIONS (mm)																			Kg
		a	f	h1	h2	m1	m2	n1	n2	s	b	l	d	t	u	x	w	l	L	M	
65	50	100	360	160	180	100	70	265	212	14	50	50	24	27	8	100	260	535	320	445	44

Notes

The information may be subject to change without notice. It is always advisable to contact our commercial department in order to get further information about the products, their technical specifications and warranty conditions. The Company is expressly relieved of any liability for the purchasing of a product not in line with the customer's needs, if not consulted beforehand for a specific consultancy.

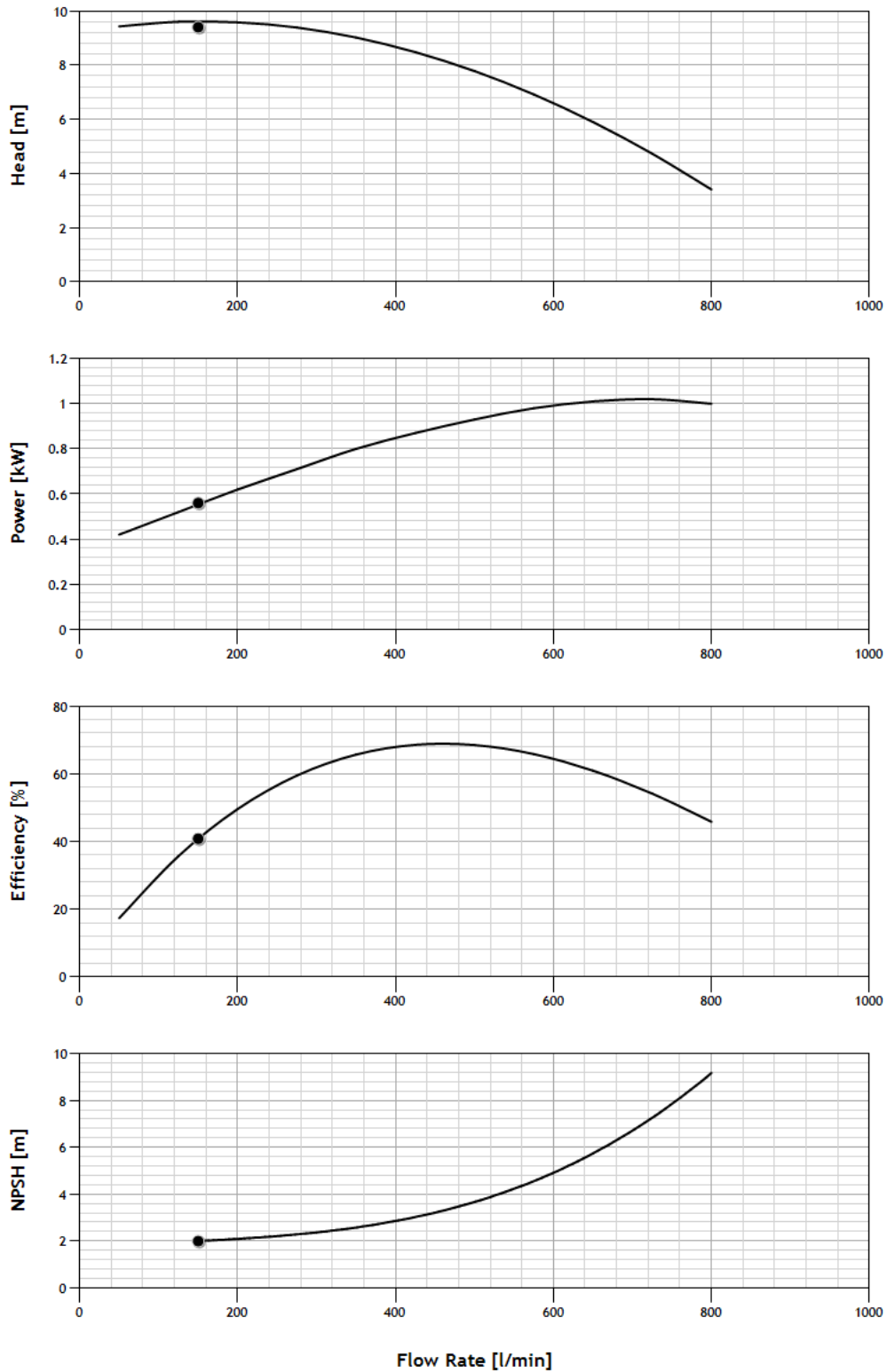


Working Curves

Pump type: 4MA50-160A

Curv n°:	4MA50-160A
Date:	9/23/2025
Pump Speed	1450 rpm

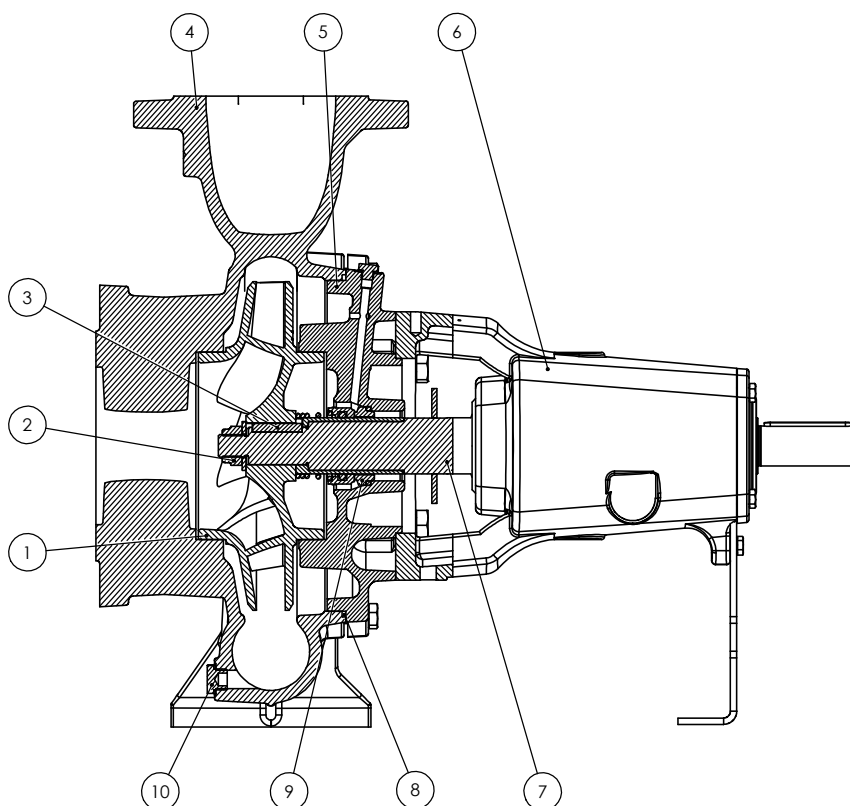
Q (l/min) 150 | H (m) 9.4 | Power [kW] 0.56 | Efficiency % 40.82 | NPSH (m) 1.99



MEI ≥ 0.4 (regulation EU N. 547/2012)
Tolerances according to UNI ISO 9906 grade 3B

MA-4MA Series

Models list and materials

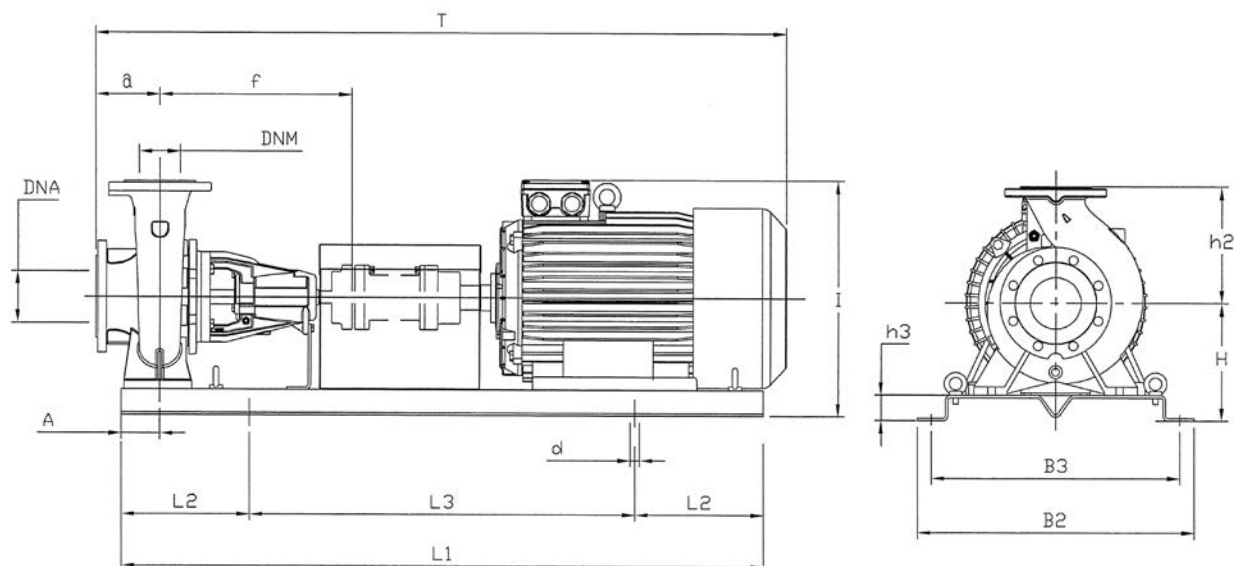


POS. N.	DENOMINATION	VERSION	MATERIAL	REFERENCE STANDARDS	
				EUROPE	USA
1	Impeller	Standard B X	Cast iron G20 Bronze Stainless steel	GJL-200 (JL1030) CuSn10-C (CC480K) X5CrNiMo17-12-2/ 1.4401	ASTM Class 30 UNS C90700 AISI 316
2	Impeller lock nut and washer		Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
3	Impeller key		Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
4	Volute casing	Standard for models up to 80-200 Standard from model 80-250 X	Cast iron G20 Cast iron G25 Stainless steel	GJL-200 (JL1030) GJL-250 (JL1040) X5CrNiMo17-12-2/ 1.4401	ASTM Class 30 ASTM Class 35 AISI 316
5	Casing cover	Standard X	Cast iron G20 Stainless steel	GJL-200 (JL1030) X5CrNiMo17-12-2/ 1.4401	ASTM Class 30 AISI 316
6	Bracket		Cast iron G20	GJL-200 (JL1030)	ASTM Class 30
7	Shaft		Stainless steel	X5CrNiMo17-12-2/ 1.4401	AISI 316
8	O-ring	Standard E V	NBR EPDM FKM		
9	Mechanical seal		(Search for the material in the mechanical seal table)		
10	Fill and drain plugs	Standard X	Brass Stainless steel	CU ZN 40 PB2 UNI 5705/65 X5CrNiMo17-12-2/ 1.4401	C37700 AISI 316

MA-4MA Series-Mechanical seal and bearings

MECHANICAL SEAL	PUMP MODEL	SHAFT Ø		STANDARD MATERIAL	OPTIONAL			
	MA32-160C, MA32-160B, MA32-160A, MA40-125C, MA40-125B, MA40-125A	20mm	<i>Rotating face</i> <i>Stationary face</i> <i>Elastomer</i>	Ceramic Graphite NBR	Ceramic Graphite EPDM	- - -	SiC SiC EPDM	SiC SiC FKM
	MA40-250BM, MA40-250AM	28mm	<i>Rotating face</i> <i>Stationary face</i> <i>Elastomer</i>	Ceramic Graphite EPDM	- - -	- - -	SiC SiC EPDM	SiC SiC FKM
	MA32-200C, MA32-200B, MA32-200A, MA32-250C, MA32-250B, MA32-250A, MA40-160B, MA40-160A, MA40-200B, MA40-200A, MA40-250C, MA40-250B, MA40-250A, MA50-125B, MA50-125A, MA50-160B, MA50-160A, MA50-200C, MA50-200B, MA50-200A, MA50-250C, MA50-250B, MA50-250A, MA65-125B, MA65-125A, MA65-160C, MA65-160B, MA65-160A, MA65-200C, MA65-200B, MA65-200A, MA80-160E, MA80-160D, MA80-160C, MA80-160B, MA80-160A	28mm	<i>Rotating face</i> <i>Stationary face</i> <i>Elastomer</i>	Ceramic Graphite NBR	Ceramic Graphite EPDM	Ceramic Graphite FKM	SiC SiC EPDM	SiC SiC FKM
	4MA50-315C, 4MA50-315B, 4MA50-315A, MA65-250B, MA65-250A, 4MA65-315CM, 4MA65-315BM, 4MA65-315AM, MA80-200B, MA80-200A, 4MA80-315B, 4MA80-315A, 4MA100-315	40mm	<i>Rotating face</i> <i>Stationary face</i> <i>Elastomer</i>	CrNi-steel Graphite NBR	CrNi-steel Graphite EPDM	CrNi-steel Graphite FKM	SiC SiC EPDM	SiC SiC FKM
	MA50-315DN, MA50-315CN, MA50-315BN, MA50-315AN, MA65-315CN, MA65-315BN, MA65-315AN, MA80-315BN, MA80-315AN	40mm	<i>Rotating face</i> <i>Stationary face</i> <i>Elastomer</i>	SiC SiC EPDM	- - -	- - -	- - -	SiC SiC FKM
	MA80-250B, MA80-250A, MA100-200B, MA100-200A, MA100-250C, MA100-250B, MA100-250A, 4MA100-250E, 4MA125-250B, 4MA125-250A	45mm	<i>Rotating face</i> <i>Stationary face</i> <i>Elastomer</i>	CrNi-steel Graphite NBR	CrNi-steel Graphite EPDM	CrNi-steel Graphite FKM	SiC SiC EPDM	SiC SiC FKM
	4MA100-400C, 4MA100-400B, 4MA100-400A, 4MA125-315C, 4MA125-315B, 4MA125-315A, 4MA125-400C, 4MA125-400B, 4MA125-400A, 4MA150-315C, 4MA150-315B, 4MA150-315A, 4MA150-400B, 4MA150-400A	55mm	<i>Rotating face</i> <i>Stationary face</i> <i>Elastomer</i>	Graphite SiC FKM	- - -	- - -	SiC SiC EPDM	SiC SiC FKM
	4MA200-315D, 4MA200-315C, 4MA200-315B, 4MA200-315A, 4MA200-400C, 4MA200-400B, 4MA200-400A, 4MA250-315C, 4MA250-315B, 4MA250-315A, 4MA250-400D, 4MA250-400C, 4MA250-400B, 4MA250-400A	70mm	<i>Rotating face</i> <i>Stationary face</i> <i>Elastomer</i>	Graphite SiC FKM	- - -	- - -	SiC SiC EPDM	SiC SiC FKM

PUMP BEARINGS	PUMP MODEL	TYPE	
	MA32-160C, MA32-160B, MA32-160A, MA32-200C, MA32-200B, MA32-200A, MA32-250C, MA32-250B, MA32-250A, MA40-125C, MA40-125B, MA40-125A, MA40-160B, MA40-160A, MA40-200B, MA40-200A, MA40-250C, MA40-250B, MA40-250A, MA40-250BM, MA40-250AM, MA50-125B, MA50-125A, MA50-160B, MA50-160A, MA50-200C, MA50-200B, MA50-200A, MA50-250C, MA50-250B, MA50-250A, MA65-125B, MA65-125A, MA65-160C, MA65-160B, MA65-160A, MA65-200C, MA65-200B, MA65-200A, MA80-160E, MA80-160D, MA80-160C, MA80-160B, MA80-160A	6306-ZZ C3	6306-ZZ C3
	4MA50-315, MA65-250B, MA65-250A, 4MA65-315CM, 4MA65-315BM, 4MA65-315AM, MA80-200B, MA80-200A, 4MA80-315B, 4MA80-315A, 4MA100-315C, 4MA100-315B, 4MA100-315A	3208-ZZ C3	3208-ZZ C3
	MA50-315DN, MA50-315CN, MA50-315BN, MA50-315AN, MA65-315CN, MA65-315BN, MA65-315AN, MA80-250B, MA80-250A, MA80-315BN, MA80-315AN, MA100-200B, MA100-200A, MA100-250C, MA100-250B, MA100-250A, 4MA100-250E, 4MA125-250B, 4MA125-250A	6209-ZZ C3	6309-ZZ C3
	4MA100-400C, 4MA100-400B, 4MA100-400A, 4MA125-315C, 4MA125-315B, 4MA125-315A, 4MA125-400C, 4MA125-400B, 4MA125-400A, 4MA150-315C, 4MA150-315B, 4MA150-315A, 4MA150-400A, 4MA150-400B	6211-ZZ C3	6311-ZZ C3
	4MA200-315D, 4MA200-315C, 4MA200-315B, 4MA200-315A, 4MA200-400C, 4MA200-400B, 4MA200-400A, 4MA250-315C, 4MA250-315B, 4MA250-315A, 4MA250-400D, 4MA250-400C, 4MA250-400B, 4MA250-400A	6313-ZZ C3	6313-ZZ C3



TYPE	kW	Motor Size	DIMENSIONS (mm)																Kg
			DNA	DNM	a	f	H	h2	h3	L1	L2	L3	B2	B3	A	d	T	I	
32-160C	0,37	71M	50	32	80	360	182	160	50	800	130	540	360	320	60	18	820	342	59,4
32-160B	0,37	71M			80	360	182	160	50	800	130	540	360	320	60	18	820	342	59,4
32-160A	0,55	80M			80	360	182	160	50	800	130	540	360	320	60	18	820	342	59,1
32-200C	0,75	80M			80	360	210	180	50	800	130	540	360	320	60	18	820	390	75,1
32-200B	1,1	90S			80	360	210	180	50	800	130	540	360	320	60	18	855	390	88,1
32-200A	1,1	90S			80	360	210	180	50	800	130	540	360	320	60	18	855	390	88,1
32-250C	1,5	90S			100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	106,7
32-250B	1,5	90S			100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	106,7
32-250A	2,2	100L			100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	112,7
40-125C	0,37	71M	65	40	80	360	162	140	50	800	130	540	360	320	60	18	820	302	59,5
40-125B	0,37	71M			80	360	162	140	50	800	130	540	360	320	60	18	820	302	59,5
40-125A	0,55	80M			80	360	162	140	50	800	130	540	360	320	60	18	820	307	59,2
40-160B	0,55	80M			80	360	182	160	50	800	130	540	360	320	60	18	820	342	62,2
40-160A	0,75	80M			80	360	182	160	50	800	130	540	360	320	60	18	820	342	74,2
40-160AP	0,75	80M			80	360	182	160	50	800	130	540	360	320	60	18	820	342	74,2
40-160AP	1,1	90S			80	360	182	160	50	800	130	540	360	320	60	18	855	342	87,2
40-200B	1,1	90S			100	360	210	180	50	900	150	600	390	350	60	18	940	390	93,8
40-200A	1,1	90S			100	360	210	180	50	900	150	600	390	350	60	18	940	390	93,8
40-200A	1,5	90S			100	360	210	180	50	900	150	600	390	350	60	18	940	390	98,8
40-200AP	1,1	90S			100	360	210	180	50	900	150	600	390	350	60	18	940	390	93,8
40-200AP	1,5	90S			100	360	210	180	50	900	150	600	390	350	60	18	940	390	98,8
40-250C	1,5	90S			100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	108,3
40-250B	2,2	100L			100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	114,3
40-250A	2,2	100L			100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	114,3
50-125B	0,55	80M	65	50	100	360	182	160	50	800	130	540	360	320	60	18	840	342	62,1
50-125A	0,75	80M			100	360	182	160	50	800	130	540	360	320	60	18	840	342	74,1
50-160B	0,75	80M			100	360	210	180	50	800	130	540	360	320	60	18	840	390	78,6
50-160A	1,1	90S			100	360	210	180	50	800	130	540	360	320	60	18	875	390	91,6
50-200C	1,1	90S			100	360	210	200	50	900	150	600	390	350	60	18	940	410	97,2
50-200B	1,5	90S			100	360	210	200	50	900	150	600	390	350	60	18	940	410	102,2
50-200A	1,5	90S			100	360	210	200	50	900	150	600	390	350	60	18	940	410	102,2
50-250C	2,2	100L			100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	118,2
50-250B	3	100L			100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	122,2
50-250A	4	112M			100	360	230	225	50	1000	170	660	450	400	75	22	1025	455	128,2
50-315C	5,5	132S			125	470	275	280	50	1120	190	740	490	440	75	22	1170	555	200,1
50-315B	7,5	132M			125	470	275	280	50	1120	190	740	490	440	75	22	1200	555	186,6
50-315A	11	160M			125	470	275	280	50	1250	205	840	540	490	75	22	1303	555	260,1

TYPE	kW	Motor Size	DIMENSIONS (mm)																Kg
			DNA	DNM	a	f	H	h2	h3	L1	L2	L3	B2	B3	A	d	T	I	
65-125B	0,75	80M	80	65	100	360	210	180	50	800	130	540	360	320	60	18	840	390	80,4
65-125A	1,1	90S			100	360	210	180	50	800	130	540	360	320	60	18	875	390	93,4
65-160C	1,5	90S			100	360	210	200	50	900	150	600	390	350	60	18	940	410	105,5
65-160B	1,5	90S			100	360	210	200	50	900	150	600	390	350	60	18	940	410	105,5
65-160A	2,2	100L			100	360	210	200	50	900	150	600	390	350	60	18	940	410	111,5
65-200C	2,2	100L			100	360	230	225	50	1120	190	740	490	440	75	22	1145	455	124,8
65-200B	3	100L			100	360	230	225	50	1120	190	740	490	440	75	22	1145	455	128,8
65-200A	3	100L			100	360	230	225	50	1120	190	740	490	440	75	22	1145	455	128,8
65-250B	4	112M			100	470	250	250	50	1120	190	740	490	440	90	22	1130	500	159,0
65-250B	5,5	132S			100	470	250	250	50	1120	190	740	490	440	90	22	1175	500	183,0
65-250A	5,5	132S			100	470	250	250	50	1120	190	740	490	440	90	22	1175	500	183,0
65-315CM	7,5	132M			125	470	275	280	50	1250	205	840	540	490	90	22	1285	555	194,0
65-315BM	11	160M	100	80	125	470	275	280	50	1250	205	840	540	490	90	22	1343	555	262,5
65-315AM	11	160M			125	470	275	280	50	1250	205	840	540	490	90	22	1343	555	262,5
80-160E	1,1	90S			125	360	230	225	50	1000	170	660	450	400	75	22	1050	455	115,1
80-160D	1,5	90S			125	360	230	225	50	1000	170	660	450	400	75	22	1050	455	120,1
80-160C	1,5	90S			125	360	230	225	50	1000	170	660	450	400	75	22	1050	455	120,1
80-160B	2,2	100L			125	360	230	225	50	1000	170	660	450	400	75	22	1050	455	126,1
80-160A	3	100L			125	360	230	225	50	1000	170	660	450	400	75	22	1050	455	130,1
80-200B	4	112M			125	470	230	250	50	1120	190	740	490	440	75	22	1170	480	157,8
80-200A	5,5	132S			125	470	230	250	50	1120	190	740	490	440	75	22	1200	480	181,8
80-250B	5,5	132S			125	470	250	280	50	1250	205	840	540	490	90	22	1285	530	203,8
80-250A	7,5	132M			125	470	250	280	50	1250	205	840	540	490	90	22	1285	530	190,3
80-315B	11	160M			125	470	300	315	50	1250	205	840	540	490	90	22	1343	615	273,8
80-315A	15	160L			125	470	300	315	50	1400	230	940	610	550	90	26	1435	615	305,8
100-200B	5,5	132S	125	100	125	470	250	280	50	1120	190	740	490	440	90	22	1200	530	205,8
100-200A	7,5	132M			125	470	250	280	50	1120	190	740	490	440	90	22	1240	530	192,3
100-250E	7,5	132M			140	470	275	280	50	1250	205	840	540	490	90	22	1300	555	205,3
100-250D	7,5	132M			140	470	275	280	50	1250	205	840	540	490	90	22	1300	555	205,3
100-250D	11	160M			140	470	275	280	50	1250	205	840	540	490	90	22	1358	555	273,8
100-250A	11	160M			140	470	275	280	50	1250	205	840	540	490	90	22	1358	555	273,8
100-315B	15	160L			140	470	300	315	50	1400	230	940	610	550	90	26	1450	615	327,7
100-315A	18,5	180M			140	470	300	315	50	1400	230	940	610	550	90	26	1450	615	348,3
100-400C	22	180L			140	530	365	355	85	1600	270	1060	660	600	110	26	1630	720	469,5
100-400B	30	200L			140	530	365	355	85	1600	270	1060	660	600	110	26	1630	720	540,8
100-400A	37	225S			140	530	365	355	85	1600	270	1060	660	600	110	26	1630	720	554,3
125-250B	11	160M	150	125	140	470	300	355	50	1250	205	840	540	490	90	22	1358	655	308,1
125-250A	15	160L			140	470	300	355	50	1400	230	940	610	550	90	26	1450	655	340,1
125-315C	22	180L			140	530	365	355	85	1600	270	1060	660	600	110	26	1630	720	464,4
125-315B	30	200L			140	530	365	355	85	1600	270	1060	660	600	110	26	1630	720	535,8
125-315A	37	225S			140	530	365	355	85	1600	270	1060	660	600	110	26	1630	720	549,3
125-400C	45	225M			140	530	400	400	85	1600	270	1060	660	600	110	26	1630	800	659,2
125-400B	55	250M			140	530	400	400	85	1600	270	1060	660	600	110	26	1630	800	756,0
125-400A	75	280S			140	530	400	400	85	1800	300	1200	730	670	110	26	1830	805	939,4
150-315D	30	200L	200	150	160	530	365	400	85	1800	300	1200	730	670	110	26	1850	765	570,7
150-315C	37	225S			160	530	365	400	85	1800	300	1200	730	670	110	26	1850	765	584,2
150-315B	45	225M			160	530	365	400	85	1800	300	1200	730	670	110	26	1850	765	672,1
150-315A	55	250M			160	530	365	400	85	1800	300	1200	730	670	110	26	1850	765	768,9
150-400C	75	280S			160	530	400	450	85	1800	300	1200	730	670	110	26	1850	850	951,4
150-400B	75	280S			160	530	400	450	85	1800	300	1200	730	670	110	26	1850	850	962,8
150-400A	90	280M			160	530	400	450	85	1800	300	1200	730	670	110	26	1850	850	1057,8