Technical Data

Pump Name MD 50-125/3.06

Customer	Date	2024-07-02	Company
Contact	Item no.		Issued by
Phone	Project		Phone
E-mail	Project ID	Proiect redenumit 2024-07-02 22:34:23	E-mail

Requested data

1	Pump type	CENTRIFUGAL PUMPS	Fluid		Water
2	Number of pumps / Reserve	1 / 0	Liquid temperature	°C	20
3	Flow m³/h		Kin. viscosity	mm²/s	1.005
4	Head m		Vapour pressure	bar	0.0234
5	Geodetic head m		PH value		
6	Inlet pressure (pin) bar	0	Density	kg/m³	998.3
7	Available system NPSH		Solids	Weight %	0
8	Ambient temperature °C	20			

Pump

9	Pump Name	MD 50-125/3.06	Frequency		Hz	60
10	Design	CENTRIFUGAL PUMPS	Installation type			STANDARD
11	Manufacturer	EBARA	Impeller Diameter	Max.	mm	125
12	Speed rpm	3450		Designed	mm	125
13	No. of Stage	1		Min.	mm	125
14	Connection Suction side	DIN 2532	Flow	Operating	m³/h	
15	Connection Discharge side	DIN 2532		Max-	m³/h	60
16	Max Working Pressure bar			Min-	m³/h	24
17	Shut-off head bar	2.31	Head	Operating	m	
18	Total weight kg	See the table of "Dimensions".		- (Qmax.)	m	13.6
19	Shaft power kW			- (Qmin.)	m	21.9
20			Max. Shaft Power at max. impeller		kW	3.07
21	Required pump NPSH m		Efficiency		%	

Materials

22				
23				
24				
25				
26				
27				

Motor

28	Manufacturer	EPE Standard	Insulation class		F
29	Type	TEFC_MD 50-125/3.06_380_Three Phase	Phases		3~
30	Specific design	- / 60 Hz / Pole pairs 1	Frame size		
31	Rated power kW	3	Weight	kg	
32	Number of poles	2	Electric voltage	V	380
33	Speed rpm	3450	Electric current	A	6.1
34	Degree of protection	IP 55			
35					

Remarks

EBARA

Performance Curve

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Requested data

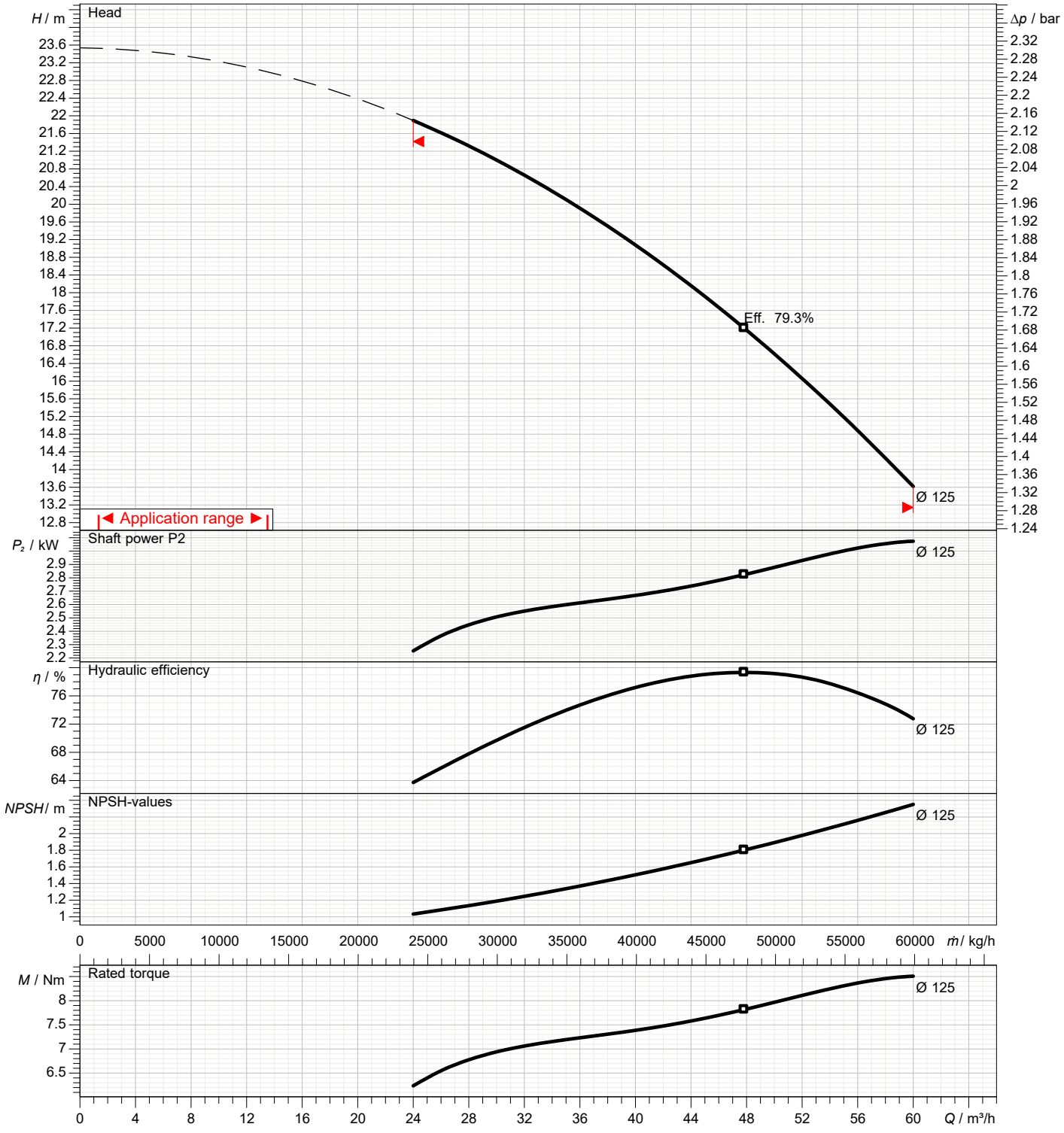
1	Flow	m³/h	
2	Head	m	
3	Geodetic head	m	

Pump

Operating flow	m³/h		Frequency	Hz	60
Operating head	m		Number of poles		2
Impeller diameter designed	mm	125	Speed	rpm	3450

Test standard: ISO 9906:2012 - Grade3B

Water; 20°C; 998.3kg/m³; 1mm²/s



EBARA

Dimensions

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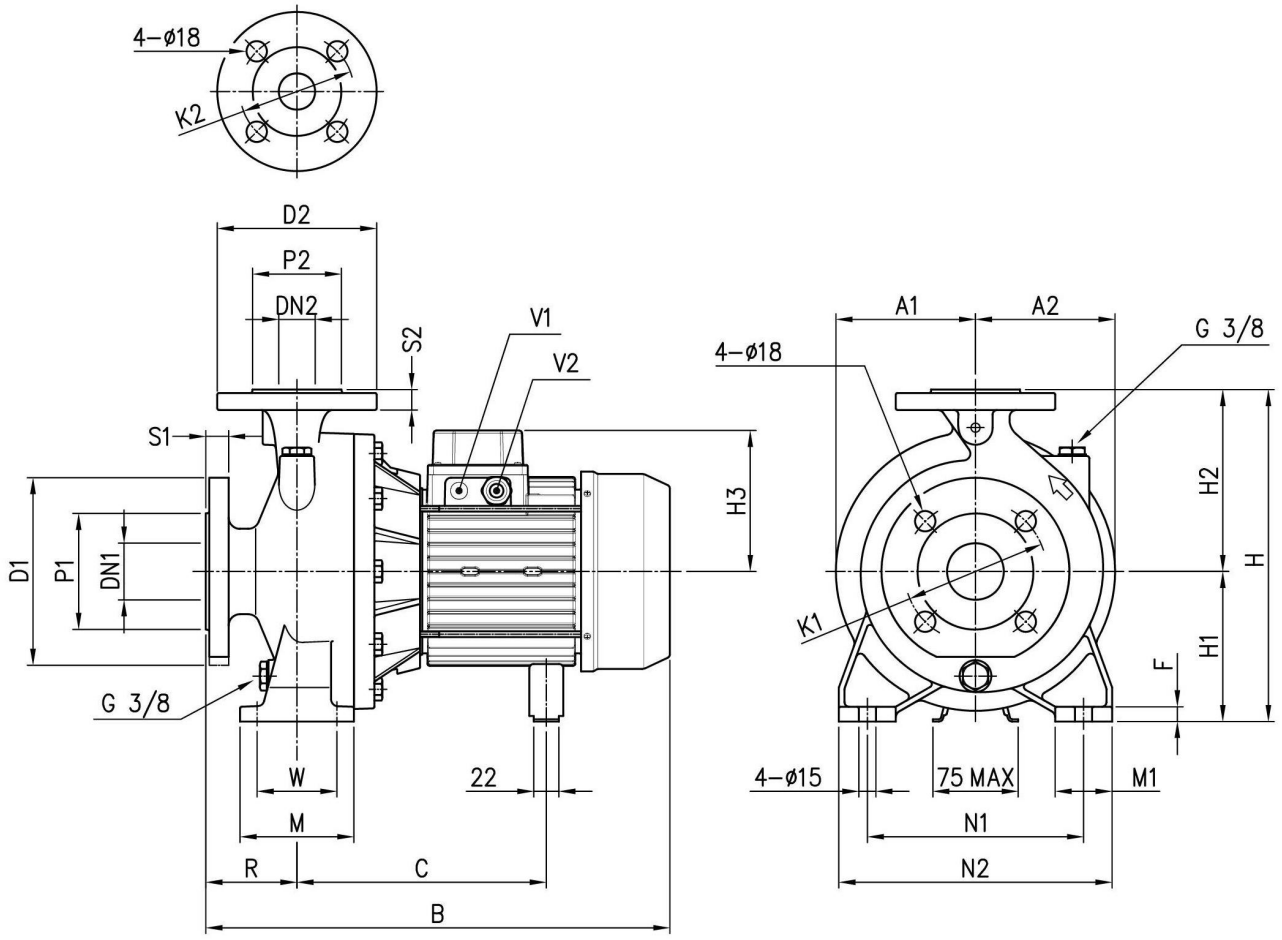

Dimensions in	mm							
1	A1	104	M	100				
2	A2	124	M1	50				
3	B	491	N1	190				
4	C	-11	N2	240				
5	D1	185	P1	122				
6	D2	165	P2	102				
7	DN1	65	R	100				
8	DN2	50	S1	20				
9	F	13	S2	20				
10	H	292	V2	[PG 13].5				
11	H1	132	W	70				
12	H2	160	Weight kg	37.8				
13	H3	124						
14	K1	145						
15	K2	125						

EBARA

(1/2)
Construction

Pump name MD 50-125/3.06

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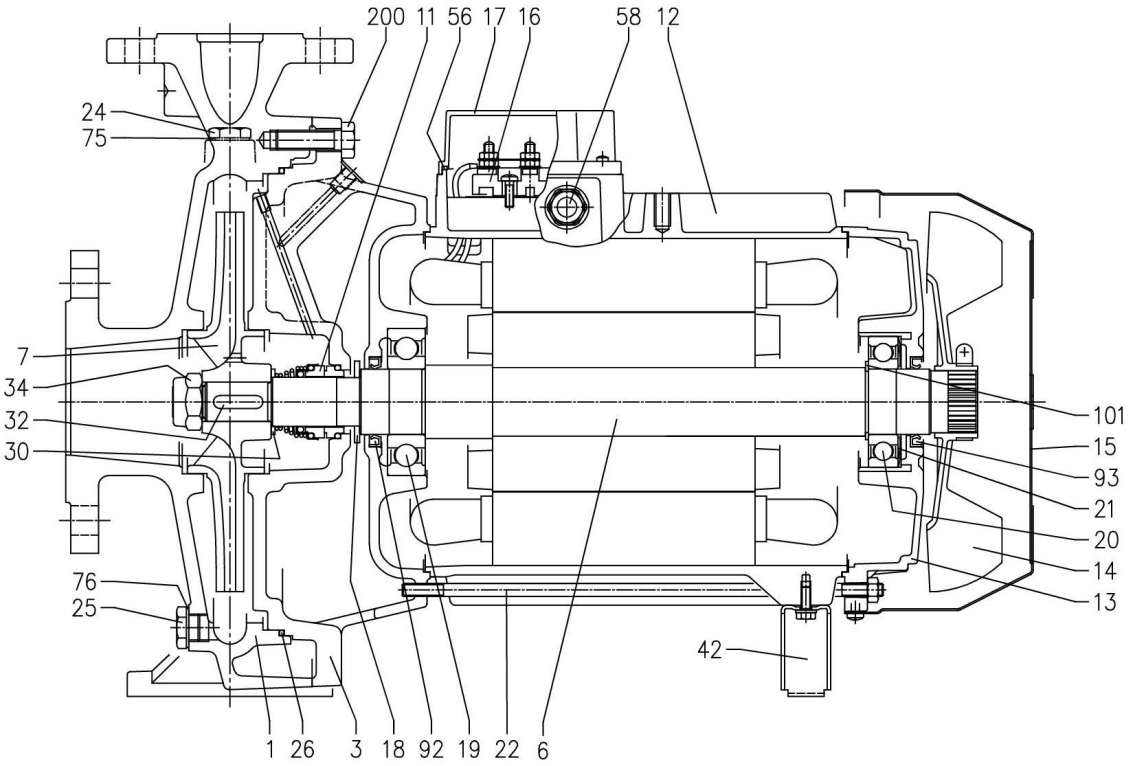
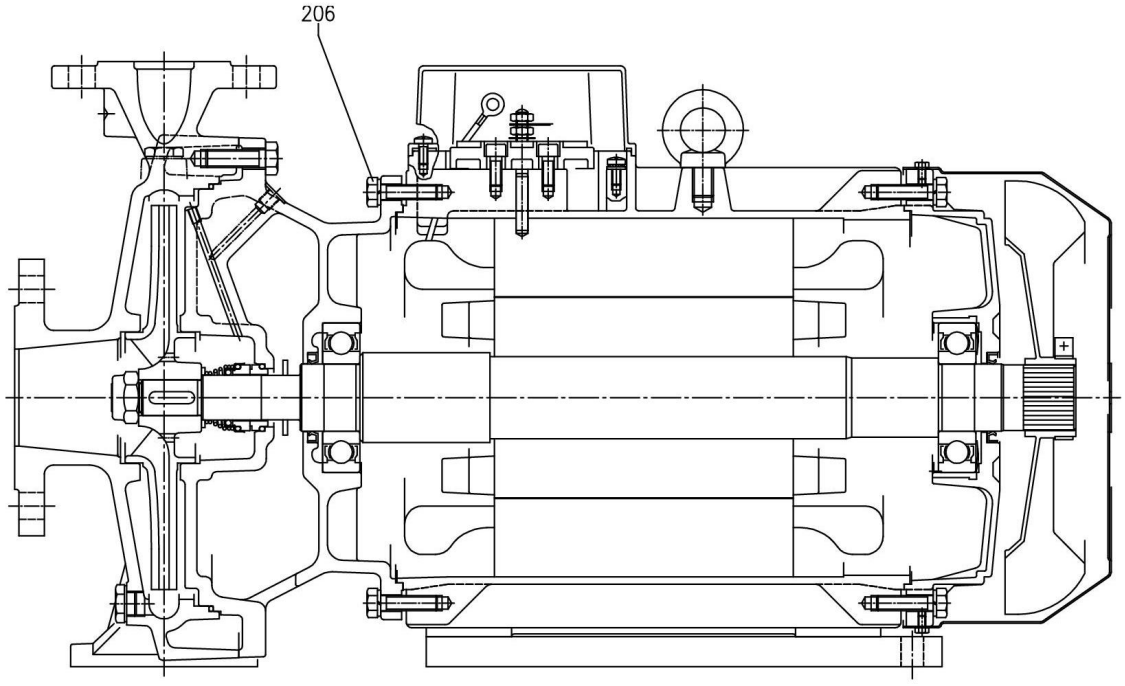
UP TO 13 kW



15 kW AND ABOVE (NO 65-160/156)



(2/2)
Construction

Pump name MD 50-125/3.06

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E-mail	Project ID	Proiect redenumit 2024-07-02 22:34:23	E-mail

N°	PART NAME		MATERIAL	DIMENSIONS	STANDARD	N. FOR 1 UNIT
1	Casing		Cast iron EN-GJL-200-EN 1561			1
3	Motor bracket		Cast iron EN-GJL-200-EN 1561			1
6	Shaft with rotor		AISI 304 (Part in contact with liquid)			1
7	Impeller	Md xx-125, Md xx-160, Mdxx-200	Cast iron EN-GJL-200-EN 1561			1
		Md xx-250	Bronze			
11	Mechanical seal		Carbon/Ceramic/NBR			1
12	Motor frame with stator		-			1
13	Motor cover		Aluminium			1
14	Fan		PP			1
15	Fan cover		Fe P04 Zincate			1
16	Terminal box		-			1
17	Terminal box cover		Plastic [1] - Aluminium [2]			1
18	Splash ring	Up to 7.5 kW	NBR	40x21.5x3	EPE DRAWING	1
		9.2 kW and above		50x29.5x3		
19	Pump side ball bearing		-			1
20	Fan side ball bearing		-			1
21	Adjusting ring		Steel C70			1
22	Tie rod	Up to 13 kW and MD 65-160/15	Fe 42 Zincate		EPE DRAWING	4
	Screw	15kW and above	Zn. steel 8.8 strenght class ISO 898/1		UNI 5739	
24	Priming plug		Brass		EPE DRAWING	1
25	Drain plug		Brass		EPE DRAWING	1
26	O-ring	Md xx-125	NBR	147x3,53	EPE DRAWING	1
		Md xx-160		176x3,53		
		Md xx-200		220x3,53		
		Md xx-250		277x3,53		
30	Spacer		AISI 304	22,5x26,9x2,5 (up to 7,5kW)	EPE DRAWING	1
				30,5x40x2,5 (9,2 kW and above)		
32	Key		AISI 316	6x6x25 (up to 7,5kW)	UNI 6604	1
				8x7x30 (9,2 kW and above)		
34	Impeller nut		AISI 304	M16x1,5 (up to 7,5kW)	UNI 7474	1
				M20x1,5 (9,2 kW and above)		
42	Foot		Fe P04		EPE DRAWING	1
56	Box gasket		NBR			1
58	Cable entry[2]		-			1
75	Washer		Aluminium	Ø 17 - G3/8		1
76	Washer		Aluminium	Ø 17 - G3/8		1
85*	Kit counterflange	Flange	Zincate steel		EPE DRAWING	2
		Screw for flange	AISI 304	M16x55	UNI 5737	8
		Gasket	EPDM			2
92	Lip seal	Up to 3 kW	-	25x40x7	DIN 3760 without spring	1
		From 4 to 7,5 kW		30x47x7		
		From 9,2 to 13 kW and 65-160/15		40x55x7		
		From 15 to 22 kW		45x60x7		
93	Lip seal	Up to 4 kW	-	25x40x7	DIN 3760 without spring	1
		From 5,5 to 7,5 kW		30x47x7		
		From 9,2 to 13 kW and 65-160/15		40x55x7		
		From 15 to 22 kW		45x60x7		
101	Snap ring (only for 9,2-11-13 kW)		Carbon tool steels TC 80	Ø 40	UNI 7435	1
200	Screw	Md xx-125	Zn. steel 8.8 strenght class ISO 898/1	M8x30	UNI 5739	8
		Md xx-160		M10x35		10
		Md xx-200				12
		Md xx-250		M12x40		12
206	Screw	From 15kW and above (no 65-160/15)	Zn. steel 8.8 strenght class ISO 898/1	M10x40	UNI 5739	4

[1] Only for single-phase
[2] Only for three-phase

*On request