		Product description		Revision no 	Page: 1
Receiver		From			
Company name Respons. Department Person in charge Phone number Fax no E-mail address					
Pos.no	Qty.	Description			
1	0,4				
1.1	1	<p>Centrifugal pump: IR100-200A</p> <p>CLOSE-COUPLED END-SUCTION ELECTRIC PUMPS</p> <p>3000 1/min</p> <p>IR100-200A</p> <p>DESCRIPTION</p> <p>Close-coupled electric pump with axial suction and pump body with normalized dimensions according to EN733</p> <p>Pumps and motors according to Directive 2009/125/CE (ErP).</p> <p>USES</p> <p>Suitables for recirculation, heating and heat recovery system, water supply facilities, pressurisation groups</p> <p>MEI index according to EU Regulation 547/2012</p> <p>MEI > 0,4</p> <p>CONSTRUCTIVE CHARACTERISTICS</p> <p>Back pull out design: the motor group and the rotating part of the pump, can be removed without having to remove the pump body from the piping of the plant</p> <p>Hydraulics: pump body with dimensions and performances according to EN733 standard (for the sizes covered), dynamically balanced closed impeller and balancing holes for balancing the axial thrust. All stainless steel shaft</p> <p>IMPELLER</p> <p>Impeller material: Cast iron EN-GJL-250</p> <p>Impeller diameter: 219 mm</p> <p>Shaft material: Stainless steel AISI 431 (1.4057)</p> <p>FLANGES</p> <p>TYPE: UNI EN 1092-1/2</p> <p>- Outlet: DN 100</p> <p>- Suction: DN 125</p> <p>Flanges PN: 16</p> <p>MOTOR</p> <p>Type: SAER MT2 - IE3 - 250-2P-75</p> <p>Nominal power: 55 kW</p> <p>Voltage / Frequency / N. phases: 400 V / 50 Hz / 3~</p> <p>Poles: 2</p> <p>Motor efficiency: 94.7 %</p> <p>Efficiency class according to IEC 60034-30: IE3</p> <p>Insulation class: F</p> <p>Protection: IP 55</p> <p>Motor origin: SAER Made in Italy</p> <p>COATING</p> <p>Two-component epoxy coating suitable for contact with drinking water.</p> <p>Resistance to the corrosion corresponding to the cycle C3 durability medium according to EN12944-6 (on request cycle C5 durability medium)</p> <p>REQUESTED DATA</p> <p>Q=270 m³/h</p> <p>H=50 m</p> <p>CHARACTERISTIC DATA AT 3000 1/min</p> <p>Q=276 m³/h - Qmax=374.9 m³/h</p> <p>H=52.24 m</p> <p>Power requested at the duty point P2=49.3 kW</p> <p>Max power requested along the curve P2max=51.94 kW</p> <p>Temperature of the pumped liquid: from -15°C up to +90°C (+120°C on request)</p> <p>Maximum working pressure (maximum pressure allowable considering the sum of the maximum pressure in suction and of the head at shut off): PN16</p> <p>Max environment temperature: 40°C (for higher temperature, please, verify).</p> <p>INSTALLATION AND OPERATION CHARACTERISTICS</p> <p>The pumps series IR and IR4P can be positioned with horizontal axis, inclined or vertical as well but always with motor upward (vertical installation with motor upward allowed up to frame size 160 included.</p> <p>Contact SAER technical assistance for further information). The working features of this technical data sheet, the catalog and the plate are intended for continuous service and clean water (specific weight = 1000 kg/m3, kinematic viscosity = 1 mm2/s, temperature = 20°C)</p> <p>ACCESSORIES ON REQUEST</p> <p>Kit counterflanges</p> <p>PERFORMANCE TOLERANCES</p> <p>Pumps: UNI EN ISO 9906: 2012- Grade 3B, other levels on request.</p> <p>Motors: IEC 60034-1</p>			
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					2025-03-31
					2025-03-31

<div><div>SAER®</div><div>ELETTROPOMPE</div></div>	Technical data		Revision no		Page:	
	IR100-200A				2	
Receiver		From				
Company name						
Respons. Department						
Person in charge						
Phone number						
Fax no						
E-mail address						
<div><div><div><div><div>H / m</div><div>Head</div></div><div><div>60</div><div>55</div><div>52.24</div><div>45</div><div>40</div><div>35</div><div>30</div><div>25</div><div>20</div><div>15</div><div>10</div><div>5</div><div>0</div></div><div><div>0</div><div>40</div><div>80</div><div>120</div><div>160</div><div>200</div><div>240</div><div>276</div><div>320</div><div>360</div></div></div><div><div><div>49.33</div><div>Shaft power P2</div></div><div><div>79.51</div><div>Hydraulic efficiency</div></div><div><div>5.456</div><div>NPSH-values</div></div></div><div><div>Eff. 79.7%</div><div>A1</div></div></div><div><div>Q / m³/h</div><div>276</div></div><div><div>EN ISO 9906:2012 grade 3B</div></div></div>		<div>Operating data specification</div> <div><div>Nominal flow</div><div>m³/h</div><div>270</div></div> <div><div>Nominal head</div><div>m</div><div>50</div></div> <div><div>Static head</div><div>m</div><div>0</div></div> <div><div>NPSH - value of plant</div><div>m</div><div></div></div> <div><div>Inlet pressure</div><div>kPa</div><div>0</div></div> <div><div>Fluid</div><div>Water</div><div></div></div> <div><div>Operating temperature t A</div><div>°C</div><div>20</div></div> <div><div>Density at t A</div><div>kg/m³</div><div>998.3</div></div> <div><div>Kin. viscosity at t A</div><div>mm²/s</div><div>1.005</div></div>				

Pump

Pump name

IR100-200A

Size

125/100/200

MEI (Reg. 547/2002 EU) >

0,4

Speed

1/min

3000

No of stages

1

Impeller type

Flow

Nominal

m³/h

276

Max-

m³/h

375

Min-

m³/h

90

Head

Nominal

m

52.2

Max-

m

61.4

Min-

m

34.5

Head H(Q=0)

m

62.1

NPSH 3%

m

5.46

Max. working pressure

kPa

608

Shaft power

kW

49.3

Efficiency

%

79.5

Max absorbed power

kW

51.948

3/8" G

ON DEMAND

h1

h2

3/8" G

3/8" G

DNM

DNA

m1

x1

n1

n2

a

m2

x2

z1

z2

b

f

D

K

C

DN

8

18

mm

SAER Elettropompe spa - V. Circonvallazione, 22 - 42016 Guastalla (RE) Italy - tel. +390522830941 - fax +390522826948 - www.saerelettropompe.com - Modification without advise!

Receiver

From

Company name

Respons. Department

Person in charge

Phone number

Fax no

E-mail address

Operating area

Flow

Head

Impeller type

Operating data specification

270

m³/h

50

m

Impeller construction

Closed

Pump data

276

m³/h

52.2

m

Sense of rotation

Clockwise from the drive end

Outlet width

DN100

Speed

1/min

3000

Frequency

Hz

50 Hz

Min.

Max.

 η

Max.

H(Q=0)

 η

Max.

P2(Q=0)

Max.

 η

Max.

m³/h

m³/h

m³/h

m

m

kW

kW

kW

90

375

289

62.1

50.7

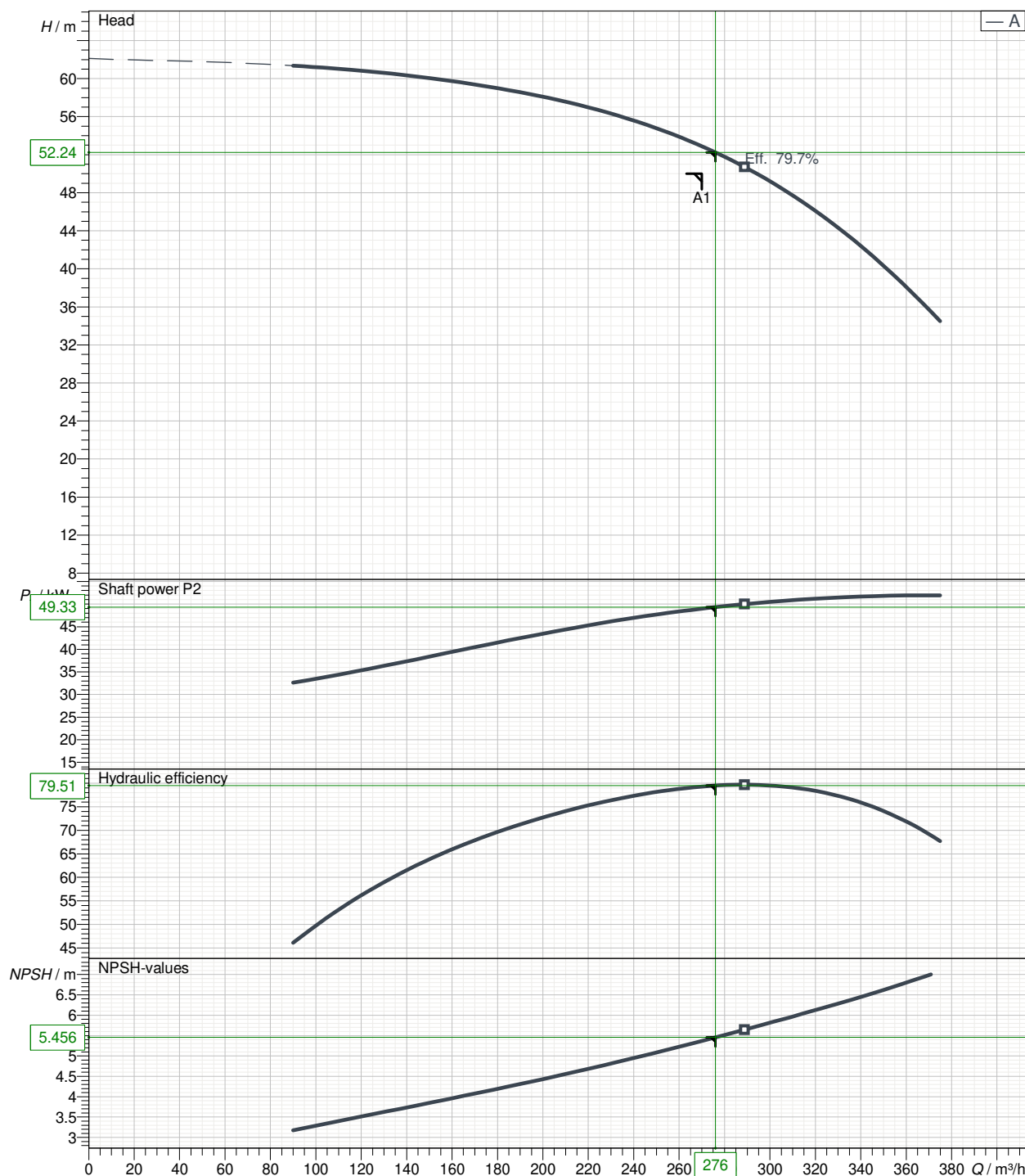
32.6

51.9

50

Performance data based to: Water; 20°C; 998.3kg/m³; 1.005mm²/s

UNI EN ISO 9906:2012 - Grade 3B



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Revision no

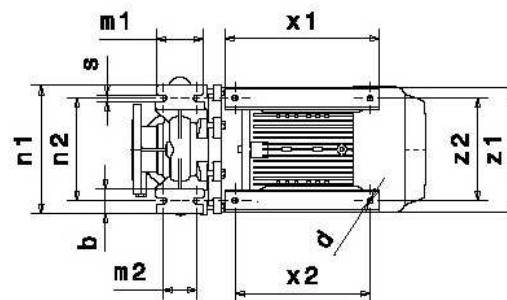
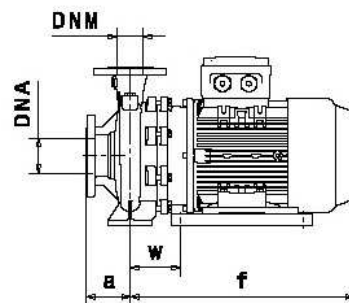
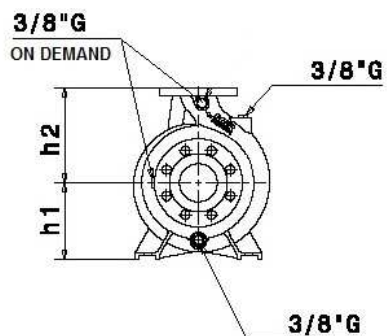
Pump dimensions

Connections

Suction side	Discharge port
DN125	DN100
PN10/16	PN10/16

Dimensions in mm

a	125
b	80
h2	280
m1	160
m2	120
n1	360
n2	280
s	18



Disegni dimensionali e immagini non vincolanti. Saer si riserva il diritto di effettuare cambiamenti senza alcun preavviso.
Dimensional drawing and picture are not binding. Saer reserves the right to make changes without prior notice.

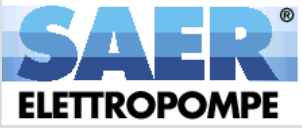
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2025-03-31

	Technical data IR100-200A		Revision no <div></div>		Page: 5	
	Receiver		From			
Company name Respons. Department Person in charge Phone number Fax no E-mail address						
Operating data specification		Data			Unit	
Type		SAER MT2 - IE3				
Frame		250MC				
Mounting		Pump dimensions				
Rated power	Pn	55			kW	
Rated voltage		400			V	
Rated frequency		50			Hz	
Rated speed	n	2980				
Service factor		1				
Rated current	In	94.4			A	
Service factor current	Isf	-			A	
Nominal motor torque	Tn	176.25			Nm	
Thermal class / Temperature rise		F / B				
Starting current	Is/In	8.9				
Locked rotor torque	Ti/Tn	1.5				
Max. torque	Tm/Tn	4				
Efficiency Class IEC 60034-30		IE3 = Premium Efficiency				
Efficiency	η	50%	75%	100%		
		94.1	94.8	94.7	%	
Power factor	cos φ	0.89				
Sound pressure level LpA - 1 m		78			dBA	
Type of duty		S1				
Cooling		IC411				
Degree of protection		IP 55				
Ambient temperature		40			°C	
Max. installation site elevation		1000				
Moment of inertia J		0.37546			kg m²	
Bearing design		Radial ball bearing with greaser				
Bearing type		DE: 6314-Z / NDE: 6314-Z				
Sense of rotation		CW / CCW				
Terminal box position		At top				
Cable entry (Number x hole type)		2+1 x n°2 PG42 + n°1 PG9				
Weight		320				
Power loss/Rated power at different speed-torque operating points						
25%-25%	25%-100%	50%-25%	50%-50%	50%-100%	90%-50%	90%-100%
1	4.6	1.6	2.5	5.5	4.1	7.5
						%
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					2025-03-31	2025-03-31