



Product description

Revision no

Page:

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Receiver

From

Company name

Respons. Department

Person in charge

Phone number

Fax no

E-mail address

Pos.no Qty. Description

Centrifugal pump: eco 65-160A

NORMALIZED CENTRIFUGAL ELECTRIC PUMPS

3000 1/min

2P 65-160A

DESCRIPTION

Complete electric pump with elastic coupling and base, with axial suction and pump body with normalized dimensions according to EN733, petrol supply systems, pressurization groups.

Pumps and motors according to Directive 2009/125/CE (ErP).

USES

petrol station, oil refineries, petrol supply systems, pressurization groups MEI index according to EU Regulation 547/2012

CONSTRUCTIVE CHARACTERISTICS

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. (spacer coupling needed and supplied upon request)

Hydraulics: pump body with dimensions and performances according to EN 733 standard (for the sizes covered), dynamically balanced closed impeller and balancing holes for balancing the axial thrust. All stainless steel shaft.

IMPELLER

Impeller material: Cast iron EN-GJL-250

Impeller diameter: 174 mm

Shaft material: Stainless steel AISI 431 (1.4057)

FLANGES

TYPE: UNI EN 1092-1/2/UNI EN 1092-2

- Outlet: DN 65

- Suction: DN 80

Flanges PN: up to DN 150: PN16, from DN 200: PN10.

MOTOR

Type: euomotori MOT. 3~D5C - 160-2P-10,

Nominal power: 7.5 kW

Voltage / Frequency / N. phases: 380 V / 50 Hz

Motor efficiency: 92.6 %

Efficiency class according to IEC 60034-30: IE3

Insulation class: F

Protection: IP 55

COATING

PUMP AND MOTOR

Painting cycle with resistance according to Cycle C3 Durability Medium ISO 12944-6.

On request SAER Painting cycle with resistance according to Cycle C5 Durability Medium ISO 12944-6. BASE AND COUPLING

Cataphoresis epoxy coating

CHARACTERISTIC DATA AT 3000 1/min

Q= - Qmax=50 m³/h H= 60 m

Power requested at the duty point P2= 7.5 kw

Max power requested along the curve P2max=20 kw

Temperature of the pumped liquid: from -15°C up to +90°C (+120°C on request)

Maximum working pressure allowable considering the sum of the maximum pressure in suction and of the head at shut off PN10 (on request PN16)

are intended for continuous service and petrol (specific weight = 1000 kg/m³, kinematic viscosity = 1 mm²/s, temperature = 20°C)

ACCESSORIES ON REQUEST

Kit counterflanges

PERFORMANCE TOLERANCES

Pumps: UNI EN ISO 9906: 2012- Grade 3B, other levels on request.

Motors: IEC 60034-1



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Technical data ECO 65-160A

Revision no

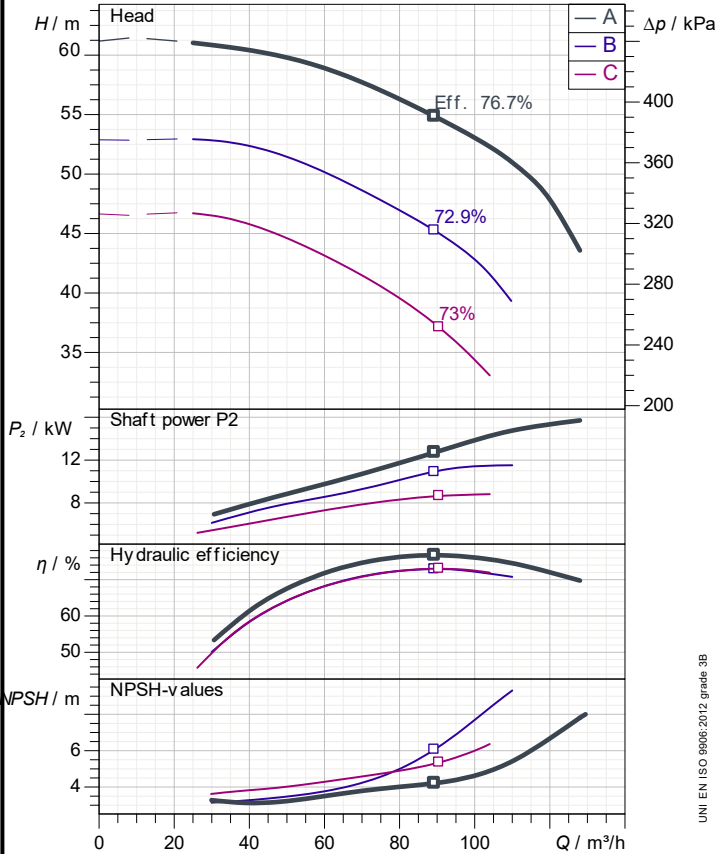
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Operating data specification

Nominal flow	m³/h
Nominal head	m
Static head	m
NPSH - value of plant	m
Inlet pressure	kPa 0
Fluid	Water
Operating temperature t A	°C 20
Density at t A	kg/m³ 998.3
Kin. viscosity at t A	mm²/s 1.005

Pump

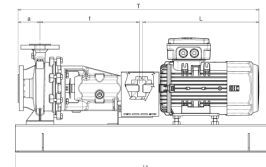
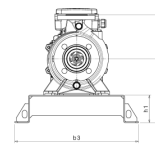
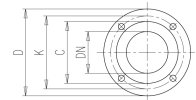
Pump name	eco 65-160A		
Size	80/65/160		
MEI (Reg. 547/2002 EU) >	0,5		
Speed	1/min	3000	No of stages
Impeller type	1		
Flow	Nominal	m³/h	45
	Max-	m³/h	50
	Min-	m³/h	25
Head	Nominal	m	50
	Max-	m	60
	Min-	m	40
Head H(Q=0)	m 60		
NPSH 3%	m		
Max working pressure	kPa 440		
Shaft power	kW		
Efficiency	%		
Max absorbed power	kW 20		

Materials Pump

Shaft	Stainless steel AISI 431 (1.4057)		
Impeller	Bronze		
Pump body	Cast iron EN-GJL-250		
Seal disc	Cast iron EN-GJL-250		
Gasket	Aramid fiber		
Bearing frame	Cast iron EN-GJL-250		
Mech. seal EN 12756			
Seal face	Carbon impregnated with resin		
Seat	Alumina oxide		
Rubber elements	Rubber EPDM		
Spring and metal bellows	Stainless steel AISI 316 (1.4401)		
Motor	Manufacturer / Type		euomotori 160-2P-10
Efficiency	IEC 60034-30		IE3
Rated power	kW	7.5 SF 1	Efficiency 4/4 92.6 %
Number of poles	2		Frame size 160
Electric current	A	14.3 A	Speed 1/min 2959
Electric voltage	V	380 V	3~ Hz 50
Starting mode	Unknown		
Degree of protection	IP 55	Insulation class	F

Dimensions in mm

a	100	DNM	DNA
b3	480	C 122	C 138
f	361	D 185	D 200
H	260	DN 65	DN 80
h1	100	K 145	K 160
h2	200	n° 4 x 18	n° 8 x 18 r
L	652		
l1	1090		
T	1127		



Remarks:

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Performance curves ECO 65-160A

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Operating area

Flow

Head

Impeller type

Operating data specification

m³/h

m

Impeller construction

Closed

Pump data

m³/h

m

Sense of rotation

Clockwise from the drive end

Outlet width

DN65

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

25

113

89.3

44.9

39.9

6.94

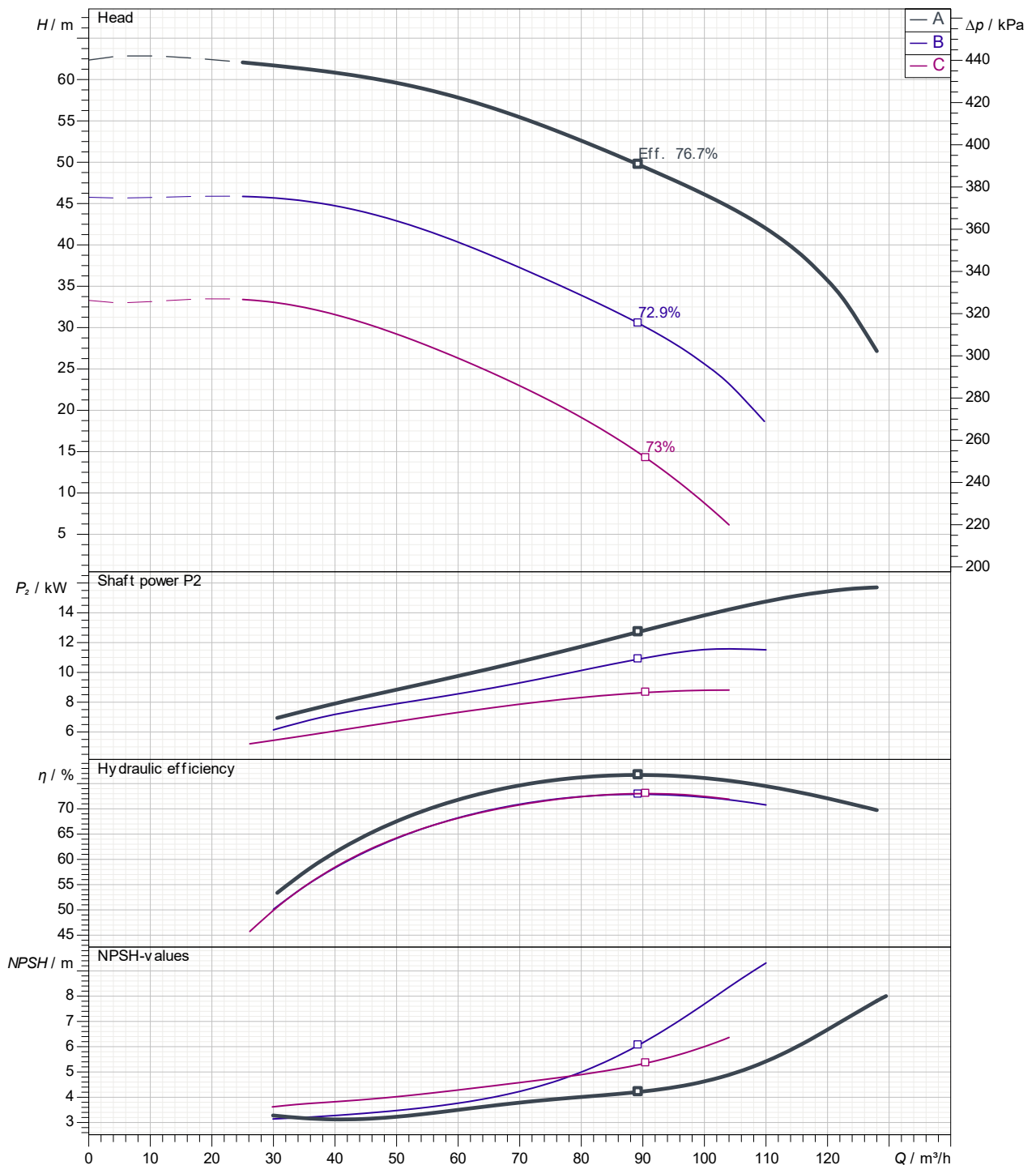
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Performance data based to:

Water; 20°C; 998.3kg/m³; 1.005mm²/s

UNI EN ISO 9906:2012 - Grade 3B



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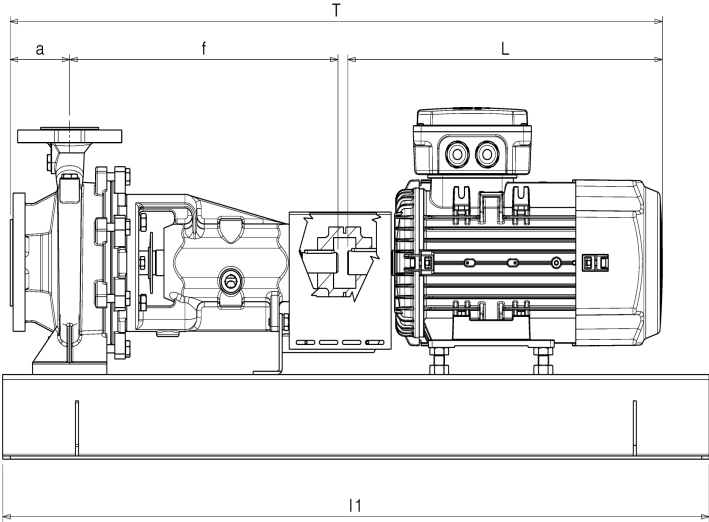
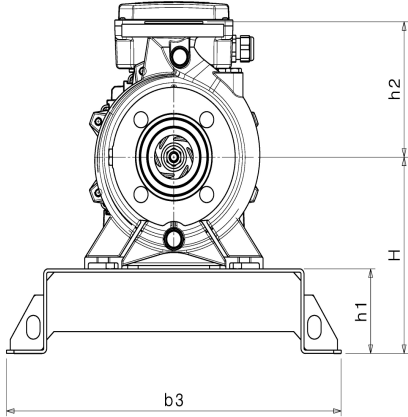
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2025-04-06

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2025-04-06

	Type of installation ECO65-160A	Receiver	From		Page:																																													
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Pump dimensions		Connections Suction side Discharge port DN80 DN65 PN10/16 PN10/16 Dimensions in mm <table><tr><td>a</td><td>100</td><td></td><td></td><td></td></tr><tr><td>b3</td><td>480</td><td></td><td></td><td></td></tr><tr><td>f</td><td>361</td><td></td><td></td><td></td></tr><tr><td>H</td><td>260</td><td></td><td></td><td></td></tr><tr><td>h1</td><td>100</td><td></td><td></td><td></td></tr><tr><td>h2</td><td>200</td><td></td><td></td><td></td></tr><tr><td>L</td><td>652</td><td></td><td></td><td></td></tr><tr><td>l1</td><td>1090</td><td></td><td></td><td></td></tr><tr><td>T</td><td>1127</td><td></td><td></td><td></td></tr></table>				a	100				b3	480				f	361				H	260				h1	100				h2	200				L	652				l1	1090				T	1127			
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		 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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		Receiver			From										
Company name															
Respons. Department															
Person in charge															
Phone number															
Fax no															
E-mail address															
Operating data specification				Data				Unit							
Model				eco 65-160A											
Frame				160LC											
Mounting				B3											
Rated power Pn				7.5				kW							
Rated voltage				380				V							
Rated frequency				50				Hz							
Rated speed n				3000											
Service factor				1											
Rated current In				14.3				A							
Service factor current Isf				-				A							
Nominal motor torque Tn				48.408				Nm							
Thermal class / Temperature rise				F / B											
Starting current Is/In				10.2											
Locked rotor torque Ti/Tn				2.4											
Max. torque Tm/Tn				5.2											
Efficiency Class IEC 60034-30				IE3 = Premium Efficiency											
Efficiency η				50% 75% 100%				%							
				92.3 93 92.6											
Power factor cos φ				0.86											
Sound pressure level LpA - 1 m				71				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				0.04418				kg m²							
Bearing design				Radial ball bearing with permanent grease											
Bearing type				DE: 6309-2Z / NDE: 6309-2Z											
Sense of rotation				CW / CCW											
Terminal box position				At top											
Cable entry (Number x hole type)				2 x PG21											
Weight				90				kg							
Power loss/Rated power at different speed-torque operating points															
25%-25%		25%-100%		50%-25%		50%-50%		50%-100%		90%-50%		90%-100%			
1.5		8		2.1		3.4		8.1		5.1		10		%	
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Operating area

Flow

Head

Impeller type

Operating data specification

m³/h

m

Impeller construction

Closed

Pump data

m³/h

m

Sense of rotation

Outlet width

DN65

Flow			Head		Shaft power P2		
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
45	50	55	60	60	7.5	20	20

Speed

1/min

3000

Frequency

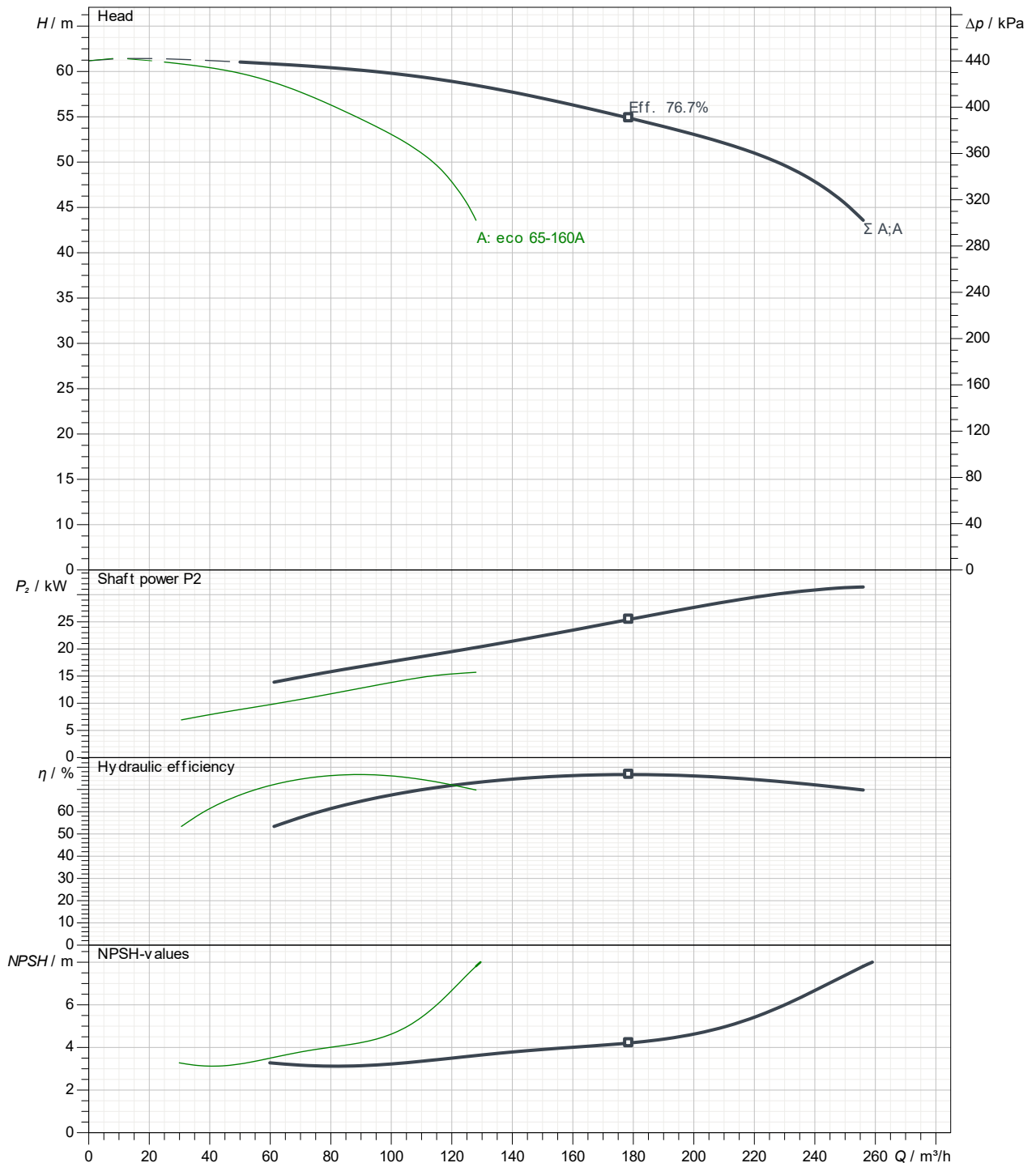
Hz

50 Hz

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Water; 20°C; 998.3kg/m³; 1.005mm²/s

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