Product description

Revision no	Page:
	1

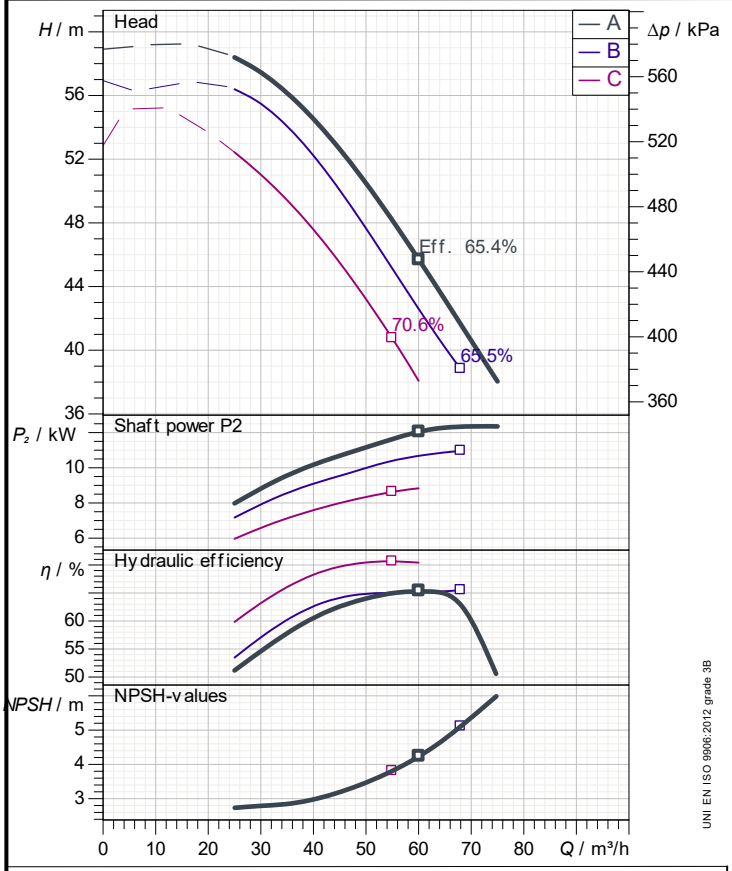
	Receiver	From
Company name		
Respons. Department		
Person in charge		
Phone number		
Fax no		
E-mail address		

Pos.no	Qty.	Description
13		**0,1**
13.1	1	Centrifugal pump: IR50-200A NORMALIZED CENTRIFUGAL ELECTRIC PUMPS 3000 1/min IR50-200A DESCRIPTION Close-coupled electric pump with axial suction and pump body with normalized dimensions according to EN733 USES Suitables for recirculation, heating and heat recovery system, water supply facilities, pressurisation groups 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 Hydraulics: pump body with dimensions and performances according to EN733 standard (for th sizes covered), dynamically balanced closed impeller and balacing holes for balacing the axial thrust. All stainless steel shaft IMPELLER Impeller material: Cast iron EN-GJL-250 Impeller diameter: 214 mm Shaft material: Stainless steel AISI 431 (1.4057) FLANGES TYPE: UNI EN 1092-2/UNI EN 1092-1/2 - Outlet: DN 50 - Suction: DN 65 Flanges PN: up to DN 150: PN16, from DN 200: PN10. MOTOR Type: SAER MT2 - IE3 - 132-2P-20 , made in Italy Nominal power: 15 kW Voltage / Frequency / N. phases: 400 V / 50 Hz / 3~ Poles: 2 Motor efficiency: 92.1 % Efficiency class according to IEC 60034-30: IE3 Insulation class: F Protection: IP 55 COATING Two-component epoxy coating suitable for contact with drinking water. Resistance to the corrosion corresponding to the cycle C3 durability medium according to EN12944-6 (on request cycle C5 durability medium) REQUESTED DATA Q= H= CHARACTERISTIC DATA AT 3000 1/min Q= - Qmax=75 m³/h H= Power requested at the duty point P2= Max power requested along the curve P2max=12.35 kW Temperature of the pumped liquid: from -15°C up to +90°C (+120°C on request) Maximum working pressure (maximum pressure allowable considering the sum of the maximum pressure in suction and of the head at shut off): PN10 (on request PN16) Max environment temperature: 40°C (for higher temperature, please, verify). INSTALLATION AND OPERATION CHARACTERISTICS 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. 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) ACCESSORIES ON REQUEST Kit counterflanges PERFORMANCE TOLERANCES Pumps: UNI EN ISO 9906: 2012- Grade 3B, other levels on request. Motors: IEC 60034-1

MAIN_PROJECT_TITLE	BUSINESS_PROCESS_ID	OWNER_	ISSUE_DATE	LAST_MODI_DATE
			2024-10-01	**2024-10-01**

SAER ELETTROPOMPE	Technical data IR50-200A	Revision no	Page: 2

Receiver		From	
Company name			
Respons. Department			
Person in charge			
Phone number			
Fax no			
E-mail address			



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		IR50-200A		
Size		65/50/200		
MEI (Reg. 547/2002 EU) >		0,1		
Speed	1/min	3000	No of stages	1
Impeller type				
Flow	Nominal	m³/h		
	Max-	m³/h	75	
	Min-	m³/h	25	
Head	Nominal	m		
	Max-	m	58.4	
	Min-	m	38	
Head H(Q=0)		m	58.9	
NPSH 3%		m		
Max working pressure		kPa	577	
Shaft power		kW		
Efficiency		%		
Max absorbed power		kW	12.355	

Materials Pump

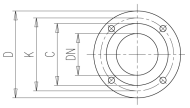
Shaft	Stainless steel AISI 431 (1.4057)
Impeller	Cast iron EN-GJL-250
Pump body	Cast iron EN-GJL-250
Seal disc	Cast iron EN-GJL-250
Gasket	Aramidic fiber
Mech. seal EN 12756	
Seal face	Silicon carbide
Seat	Alumina oxide
Rubber elements	Rubber EPDM
Spring and metal bellows	Stainless steel AISI 316 (1.4401)

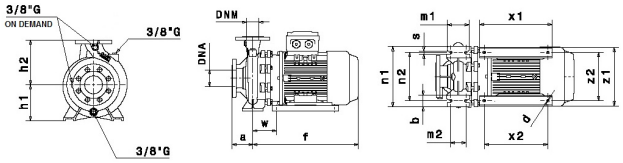
Motor	Manufacturer / Type		SAER	132-2P-20	
Efficiency	IEC 60034-30		IE3		
Rated power	kW	15 SF 1	Efficiency 4/4		92.1 %
Number of poles		2	Frame size		132
Electric current	A	27.4 A	Speed	1/min	2946
Electric voltage	V	400 V	3~	Hz	50
Starting mode		Unknown			
Degree of protection		IP 55	Insulation class		F

Dimensions in mm

a	100	z2	216
b	50		
d	12		
f	564		
h1	160		
h2	200		
m1	100		
m2	70		
n1	265		
n2	212		
s	14		
w	113		
x1	320		
x2	280		
z1	261		

DNM		DNA	
C	102	C	122
D	165	D	185
DN	50	DN	65
K	125	K	145
n°	4 x 18	n°	4 x 18 r





Remarks:

MAIN_PROJECT_TITLE	BUSINESS_PROCESS_ID	OWNER_	ISSUE_DATE	LAST_MODI_DATE
			2024-10-01	2024-10-01

Performance curves
IR50-200A

Revision no

Page: 3

Receiver	From
Company name	
Respons. Department	
Person in charge	
Phone number	
Fax no	
E-mail address	

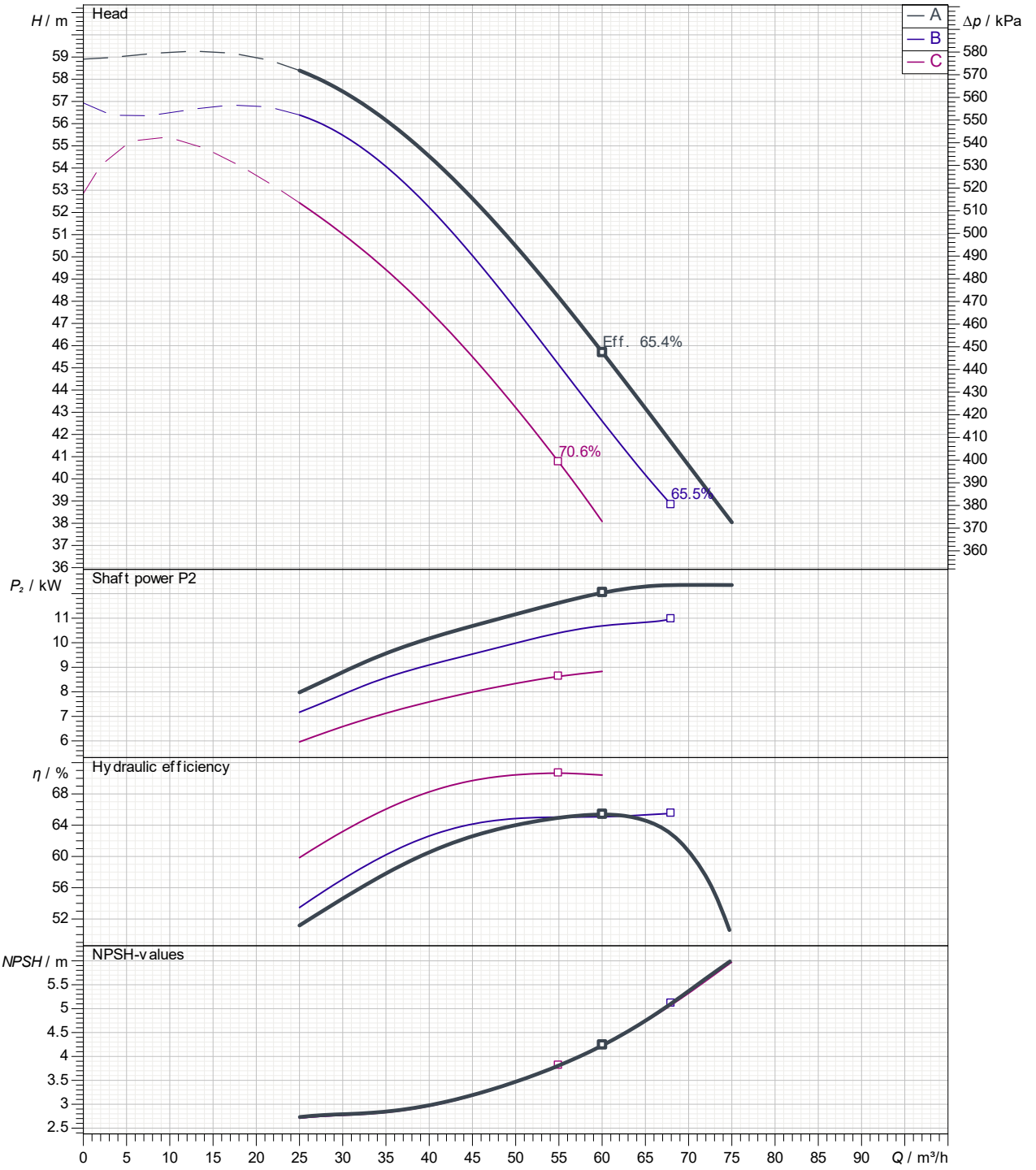
Operating area	Flow	Head
Operating data specification	m³/h	m
Pump data	m³/h	m

	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
	25	75	60.1	58.9	45.7	7.98	12.4	12

Impeller type		
Impeller construction	Closed	
Sense of rotation	Clockwise from the drive end	
Outlet width	DN50	
Speed	1/min	3000
Frequency	Hz	50 Hz

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

UNI EN ISO 9906:2012 - Grade 3B



MAIN_PROJECT_TITLE	BUSINESS_PROCESS_ID	OWNER_	ISSUE_DATE	LAST_MODI_DATE
			2024-10-01	2024-10-01

SAER ELETTROPOMPE

Revision no

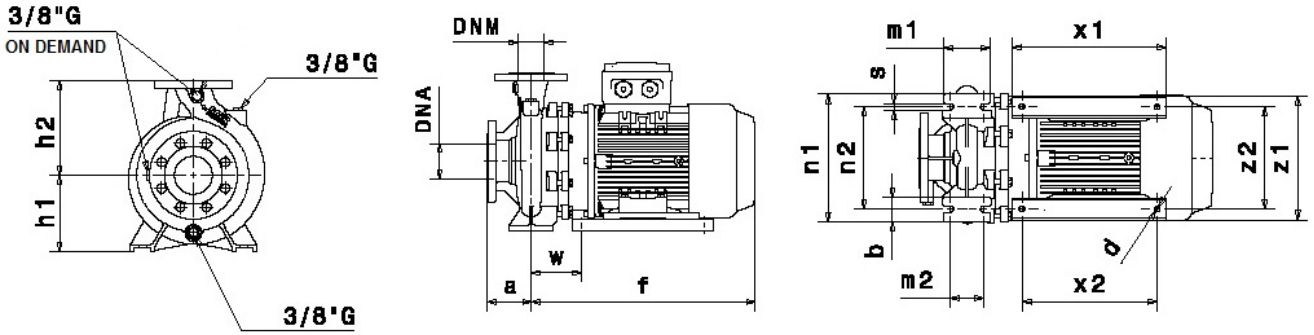
Type of installation

IR50-200A

Receiver

From

Pump dimensions



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.

Connections

Suction side	Discharge port
DN65	DN50
PN10/16	PN10/16

Dimensions in mm

a	100		
b	50		
d	12		
f	564		
h1	160		
h2	200		
m1	100		
m2	70		
n1	265		
n2	212		
s	14		
w	113		
x1	320		
x2	280		
z1	261		
z2	216		