Product description
IR50-160A

Revision no

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Receiver	From
Company name	
Respons. Department	
Person in charge	
Phone number	
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Item	Quant.	Description
	1	**SERIES IR**
	1	**CLOSE COUPLED END-SUCTION ELECTRICPUMPS-2900 1/min**

IR50-160A

USES

Recircling plants, heating, air conditioning, heat recovery, plants of water supply procurement, pressurising units.

CONSTRUCTIVE CHARACTERISTICS

The motor unit and the rotating part of the pump can be taken away without removing the pump body from the system piping.

Hydraulics: pump body with dimension and performances according to EN 733 rules, closed impeller dynamically balanced and with balance holes for the balancing of the axial thrust. Shaft completely in stainless steel.

IMPELLER

Impeller material:Cast iron EN-GJL-250

Shaft material: Stainless steel AISI 431 (1.4057)

Impeller diameter: 174 mm

FLANGES

TYPE : UNI EN 1092-2

- Outlet : DN 50
- Inlet : DN 65

Flangie (UNI EN 1092-2): fino a DN 150: PN16, da DN 200: PN10.

INPUT DATA

Q=0 m³/h

H=0 m

OUTPUT DATA AT 2900 1/min

Q= - Qmax=75 m³/h

H=

Absorbed power - duty point P2=

Max absorbed power P2max=7,462 kW

Temperature of the pumped liquid: from -15°C up to +120°C

Max operation pressure (max allowed pressure in consideration of the sum of max. suction pressure and of the head with null flow rate): PN10 (upon request PN16)

Max environment temperature: 40°C (for higher temperature, please, verify).

MOTOR

7,5 kW -400 V-50 Hz-3~

Motor efficiency: 0 %

Insulation class:: F - Protection: IP 55

Poles n.: 2

INSTALLATION AND OPERATION CHARACTERISTICS

The IR and 6IR pumps can be positioned with horizontal, sloping or vertical axis always with the motor upwards (please, verify with our technical dep.). The operating characteristics of the catalogue and label are to be understood for continuous service and with clear water (specific weight = 1000 kg/m3) with a max manometric suction height of approximately 1,5 m. For higher manometric heights and up to a max of approximately 6 m, the characteristics decrease in the various delivery data.

ACCESSORIES ON REQUEST

Kit counterflanges

PERFORMANCE TOLERANCES

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

Subtotal:

Total price excl. VAT	VAT in %	Total price incl. VAT
0,00 Euro	16	0,00 Euro

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SAER ELETTROPOMPE	**Technical data** IR50-160A	Revision no	Page: 2

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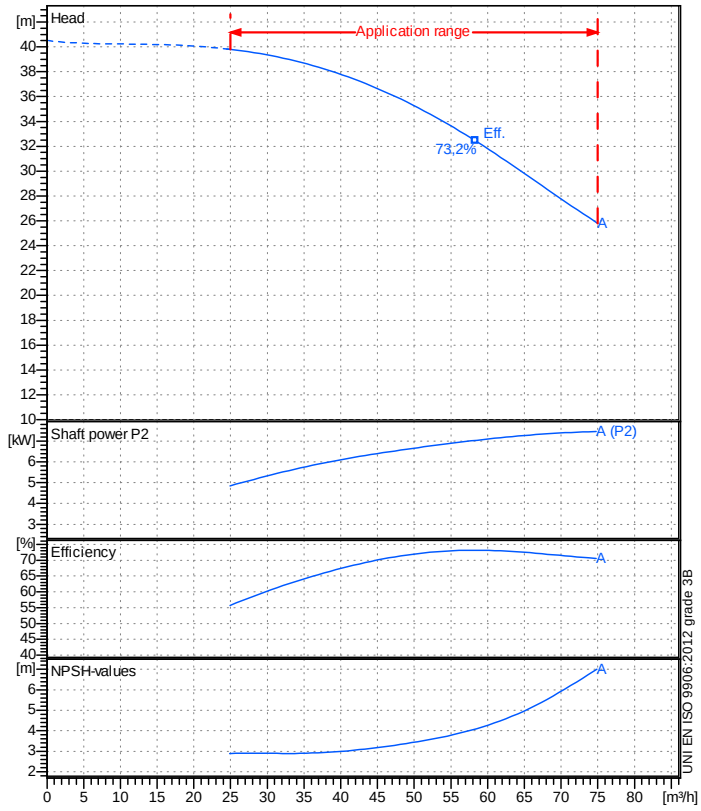


Operating data specification

Nominal flow	m³/h	0
Nominal head	m	0
Static head	m	0
NPSH - value of plant	m	0
Inlet pressure	bar	0,09793
Fluid		Water, pure
Operating temperature t A	°C	20
Density at t A	kg/dm³	0,9983
Kin. viscosity at t A	mm²/s	1,005

Pump

Pump name		IR50-160A		
Size		65/50/160		
Design				
Speed 1/min	2900	No of stages	1	
Impeller type				
Flow	Nominal	m³/h		
	Max-	m³/h	75	
	Min-	m³/h	25	
Head	Nominal	m		
	Max-	m	39,8	
	Min-	m	25,8	
Head H(Q=0)		m	40,5	
NPSH 3%		m		
Max. working pressure		bar	3,97	
Shaft power		kW		
Efficiency		%		
Max absorbed power		kW	7,4598	

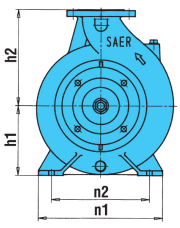
Materials Pump

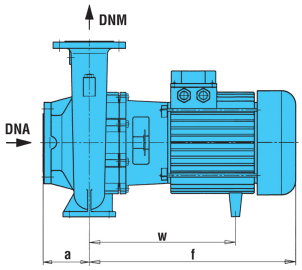
Shaft	Stainless steel AISI 431 (1.4057)
Impeller	Cast iron EN-GJL-250
Pump body	Cast iron EN-GJL-250
Seal disc	Cast iron EN-GJL-250
Gasket	Natural fiber
Mechanical seal	BVEG (Grafite/Ossido Allumina/EPDM)

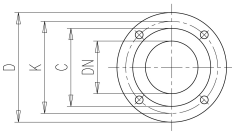
Motor	Frame size	112 M		
Manufacturer / Type	SAER 112 M 2 - 7,5			
Rated power kW	7,5	Efficiency 4/4		0 %
Electric current A		Speed 1/min		2950
Electric voltage V	400 V	3~	Hz	50
Starting mode	Unknown			
Degree of protection	IP 55	Insulation class		F

Dimensions in mm

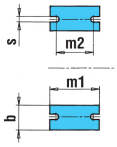
a	100
b	50
DNA	65
DNM	50
f	423,5
h1	160
h2	180
m1	100
m2	70
n1	265
n2	212
s	14
w	305







C	102	C	122
D	165	D	185
DN	50	DN	65
K	125	K	145
n°	4	n°	4
øn	19	øn	19



Remarks:

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Performance curves
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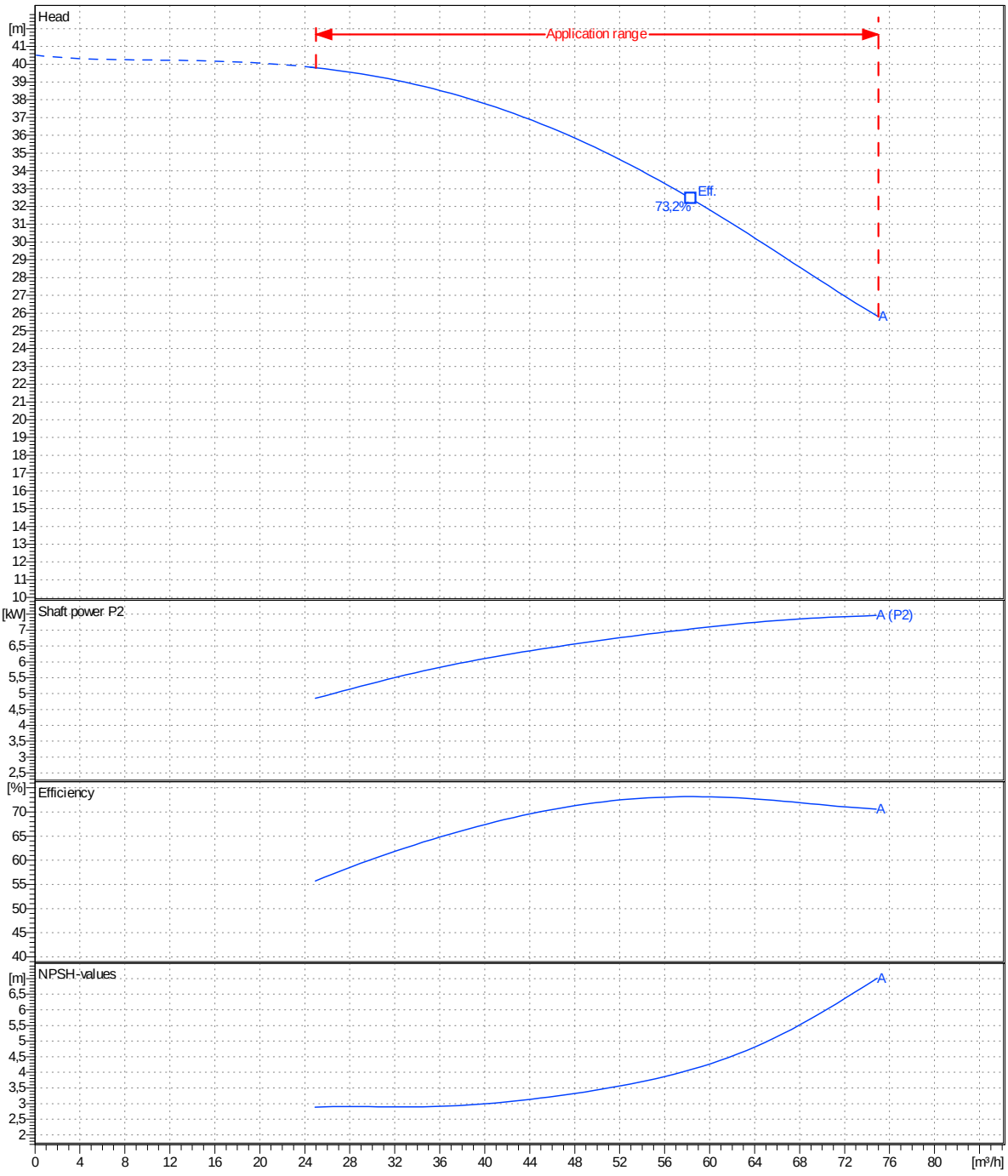
Operating area	Flow	Head
Operating data specification	0 m³/h	0 m
Pump data	m³/h	m

Impeller type	
Impeller construction	Closed
Sense of rotation	Clockwise from the drive end
Outlet width	DN 50
Speed 1/min	2900
Frequency Hz	50 Hz

	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	58,3	40,5	32,4		7,46	7,04

Performance data based to: Water, pure [100%] ; 20°C; 0,998kg/dm³; 1mm²/s

UNI EN ISO 9906:2012 - Grade 3B



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	Spare parts IR50-160A	Revision no	Page: 4

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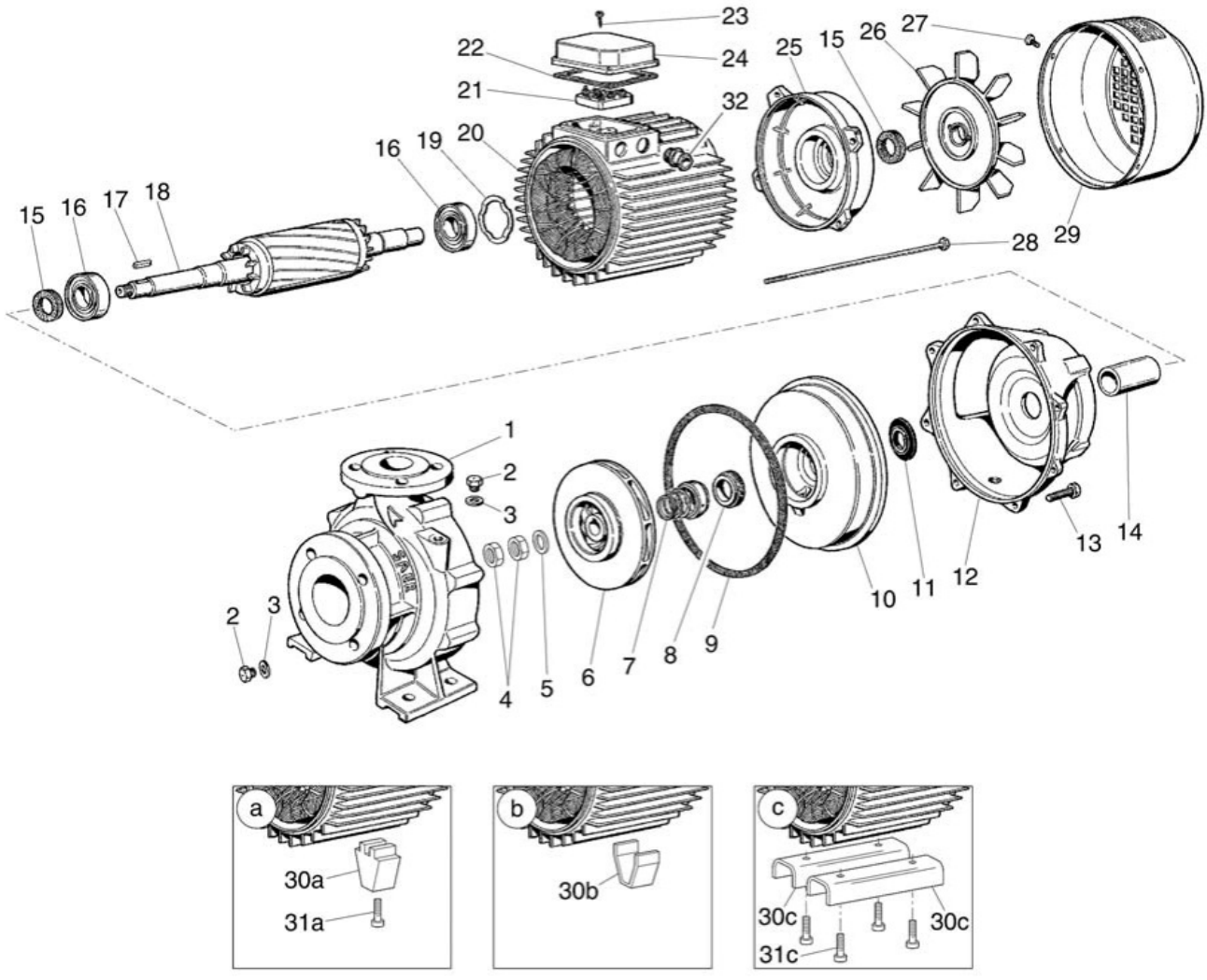

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