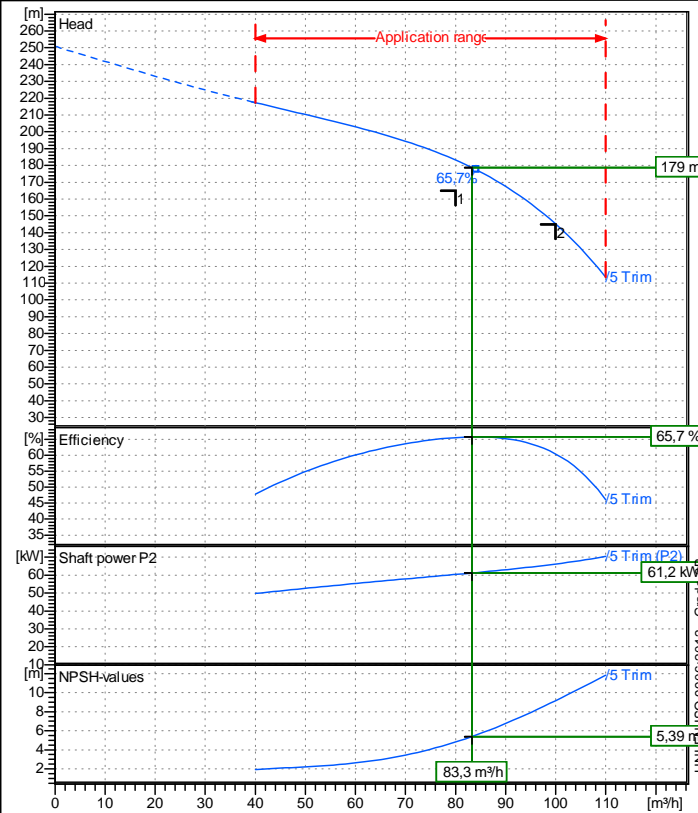
		<b>Product description</b> <b>TMVZ 2P 50-80/5 Trim</b>		Revision no	Page: 1
		Receiver		From	
Company name Respons. Department Person in charge Phone number Fax no E-mail address					
Item	Quant.	Description			
1	1	<b>SERIES TMVZ</b> <b>VERTICAL MULTISTAGE CENTRIFUGAL ELECTRIC PUMPS - 3000 1/min</b> TMVZ 2P 50-80/5 Trim USES The centrifugal multistage vertical electric pumps of series TMVZ are used in irrigation systems, systems of high pressure lifting, refrigeration, heating, snowing, cleaning, in boiler systems, in condensed extraction. <b>CONSTRUCTION CHARACTERISTICS</b> TMVZ: complete set with multistage centrifugal pump coupled with electric motor. Suction and delivery body with upward outlet, with the possibility of turning it at 90°, both directions. Intermediate stage composed of stage body and the corresponding diffuser with wearing rings. Drive side bearing supports with high rigidity. Shaft in stainless steel completely protected. External tie rods for tightening of the intermediate stages. Shaft seal: Soft packing Fibra PTFE  <b>IMPELLER</b> Impeller material: Cast iron EN-GJL-250  <b>FLANGES</b> TYPE : UNI EN 1092-2 - Outlet : DN 50 - PN40 - Inlet : DN 80 - PN16 Flanges (UNI EN 1092-2)  <b>INPUT DATA</b> Q=80 m³/h H=165 m  <b>OUTPUT DATA AT 3000 1/min</b> Q=83,256 m³/h - Qmax=110 m³/h H=178,7 m Absorbed power - duty point P2=61,2 kW Max absorbed power P2max=70,399 kW Temperature of the pumped liquid: from -15°C up to +90°C (120°C with mech. seal) Ambient Temperature (group of electric pump) : max. 40°C. (please, request verification for higher temperatures). The pumped liquid has to be chemically and mechanically suitable for the utilized materials. Max environment temperature: 40°C (for higher temperature, please, verify). Maximum working pressure : 40 bars  <b>PERFORMANCE TOLERANCES</b> Pumps: UNI EN ISO 9906: 2012- Grade 3B, other levels on request  <b>MOTOR</b> 75 kW -400V-50 Hz-3~ Poles n.: 2 Speed: 2950 1/min Rated current: 130 A Degree of protection: IP 55 - Insulation class: F Efficiency class - IEC 60034-30 IE3 Motor full load efficiency: 94,7 %			
1		<b>Bearing bracket: Grease bearing</b>			
1		<b>Shaft seal: Fibra PTFE</b>			
1		<b>Material design: Fibra PTFE</b>			
1		Packing: PTFE Fiber			
1		<b>Motor: 280S-100</b>			
		<b>Subtotal:</b>			
Total price excl. VAT		VAT in %		Total price incl. VAT	
0,00 Euro		16		0,00 Euro	
Project	Project ID	Created by	Created on	Last update	
			26/07/2023		

Receiver

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**Operating data specification**

Nominal flow	m <sup>3</sup> /h 80
Nominal head	m 165
Static head	m 0
NPSH - v value of plant	m 0
Inlet pressure	bar 0,09793
Fluid	Water, pure
Operating temperature t A	°C 20
Density at t A	kg/dm <sup>3</sup> 0,9983
Kin. viscosity at t A	mm <sup>2</sup> /s 1,005

**Pump**

Pump name	TMVZ 2P 50-80/5 Trim		
Size			
Design			
Speed 1/min	3000	No of stages	5
Impeller type			
Flow	Nominal	m <sup>3</sup> /h	83,3
	Max-	m <sup>3</sup> /h	110
	Min-	m <sup>3</sup> /h	40
Head	Nominal	m	179
	Max-	m	217
	Min-	m	114
Head H(Q=0)	m 251		
NPSH 3%	m 5,39		
Max. working pressure	bar 24,7		
Shaft power	kW 61,2		
Efficiency	% 65,7		
Max absorbed power	kW 70,399		

**Materials Pump**

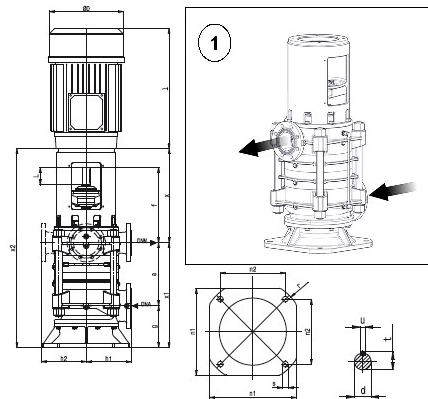
Shaft	Stainless steel AISI 431 (1.4057)		
Impeller	Cast iron EN-GJL-250		
Inlet	Cast iron EN-GJL-250		
Delivery body	Cast iron EN-GJL-250		
OR	EPDM Rubber		
Diffuser	Cast iron EN-GJL-250		
Soft packing			
Packing	PTFE Fiber		

<b>Motor</b>	Frame size	280S		
Manufacturer / Type	SAER	280S-100		
Rated power	kW 75	SF 1	Efficiency 4/4	94,7 %
Electric current	A 130	Speed	1/min 2950	
Electric voltage	V 400V	3~	Hz 50	
Starting mode	Unknown			
Degree of protection	IP 55	Insulation class	F	

Remarks:

**Dimensions in mm**

a	433	r	250		
d	38	s	26		
DNA	80	t	41,3		
DNM	50	u	10		
f	389	x	542		
g	189	x1	622		
h1	200	x2	1164		
h2	200				
L	80				
l	984				
n1	380				
n2	305				
ØD	559				
		C	99	C	132
		D	165	D	200
		DN	50	DN	80
		K	125	K	180
		N°	4	n°8	8
		Ø	19	ø	19



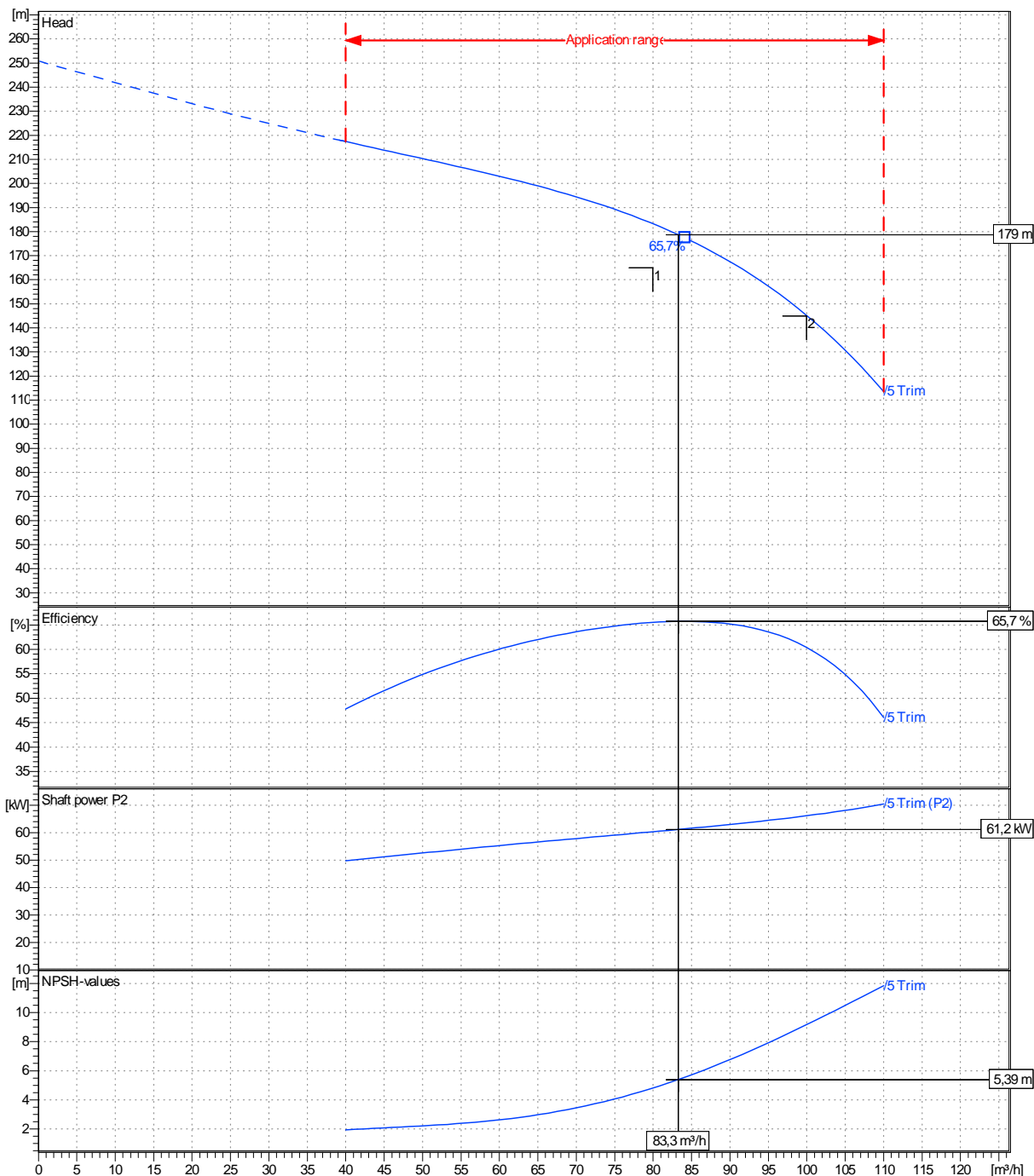
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Receiver		From	
Company name			
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Operating area	Flow	Head	Impeller type
Operating data specification	80 m <sup>3</sup> /h	165 m	Impeller construction
Pump data	83,3 m <sup>3</sup> /h	179 m	Sense of rotation
			Clockwise from the drive end
			Outlet width
			DN 50
	Flow	Head	Shaft power P2
	Min. Max. $\eta$ Max.	H(Q=0) $\eta$ Max.	P2(Q=0) Max. $\eta$ Max.
	m <sup>3</sup> /h m <sup>3</sup> /h m <sup>3</sup> /h	m m	kW kW kW
	40 110 84,2	251 177	70,4 61,4
			Speed
			1/min 3000
			Frequency
			Hz 50 Hz

 Performance data based to: Water, pure [100%]; 20°C; 0,998kg/dm<sup>3</sup>; 1mm<sup>2</sup>/s

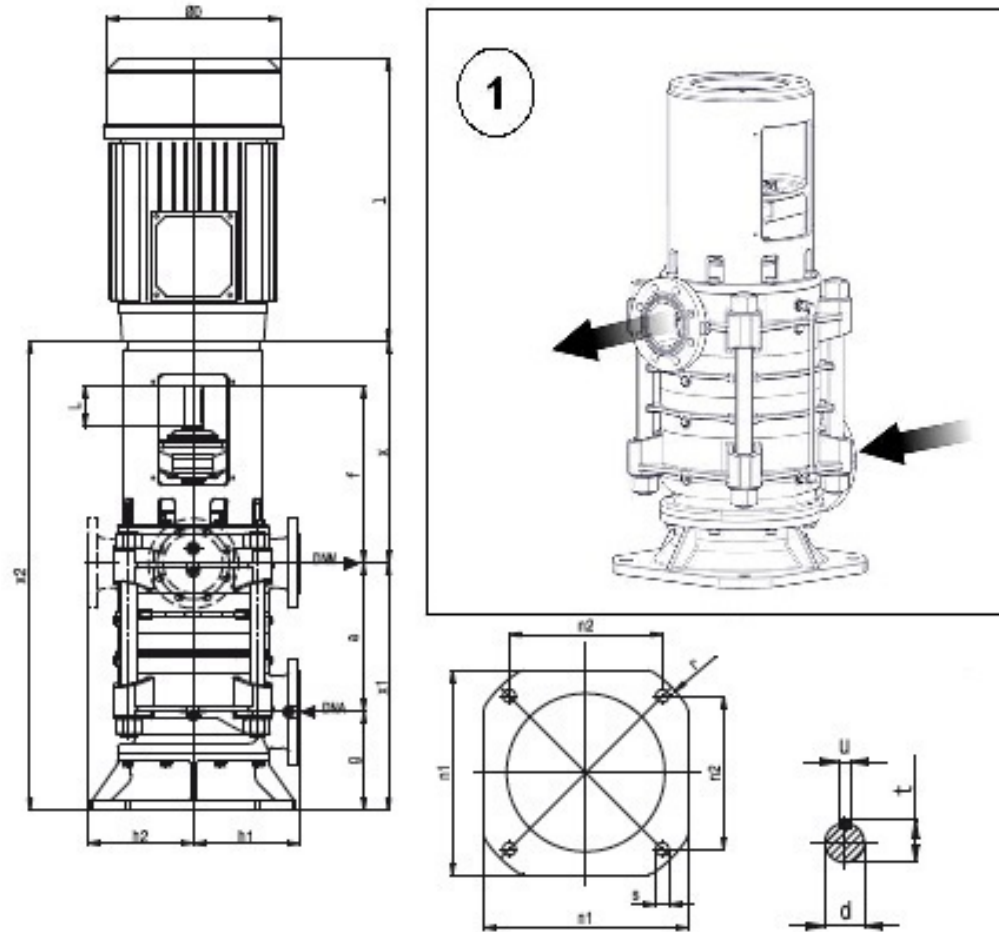
UNI EN ISO 9906:2012 - Grade 3B



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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.

**Connections**

Suction side	Discharge port
DN80	DN 50
PN16	PN40

**Dimensions in mm**

a	433
d	38
DNA	80
DNM	50
f	389
g	189
h1	200
h2	200
L	80
l	984
n1	380
n2	305
ØD	559
r	250
s	26
t	41,3
u	10
x	542
x1	622
x2	1164

Project

Project ID

Created by

Created on  
**26/07/2023**

Last update