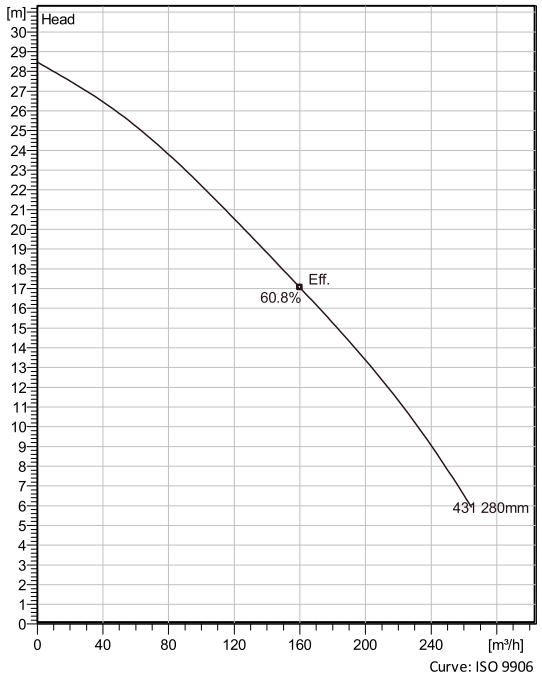
HS 5100 MT 3~ 431

Heavy duty slurry pumps. Highly wear resistant channel impeller with possibility to ad agitator. Submerged or dry installation

Technical specification

Curves according to: Water, pure Water, pure [100%],4 °C,1 kg/dm³,1.569 mm²/s



Curve: ISO 9906

Configuration

Motor number
H5100.261 25-19-4AA-W 22KW

Installation type
S - Portable Semi permanent, Wet

Impeller diameter
280 mm

Discharge diameter
100 mm

Pump information

Impeller diameter
280 mm

Discharge diameter
100 mm

Inlet diameter
150 mm

Maximum operating speed
1460 1/min

Number of blades
3

Throughlet diameter
40 mm

Max. fluid temperature
40 °C

Materials

Impeller
Hard-Iron

Project	**Created by**	Евгений Лемешонок	
Block	**Created on**	2/2/2022	**Last update** 2/2/2022

HS 5100 MT 3~ 431

Technical specification

Motor - General

Motor number H5100.261 25-19-4AA-W 22KW	**Phases** 3~	**Rated speed** 1460 1/min	**Rated power** 22 kW
Approval EN	**Number of poles** 4	**Rated current** 41 A	**Stator variant** 1
Frequency 50 Hz	**Rated voltage** 400 V	**Insulation class** H	**Type of Duty** S1
Version code 261			

Motor - Technical

Power factor - 1/1 Load 0.88	**Motor efficiency - 1/1 Load** 88.5 %	**Total moment of inertia** 0.295 kg m²	**Starts per hour max.** 30
Power factor - 3/4 Load 0.85	**Motor efficiency - 3/4 Load** 90.0 %	**Starting current, direct starting** 251 A	
Power factor - 1/2 Load 0.76	**Motor efficiency - 1/2 Load** 90.5 %	**Starting current, star-delta** 83.6 A	

Project		**Created by**	Евгений Лемешонок		
Block		**Created on**	2/2/2022	**Last update**	2/2/2022

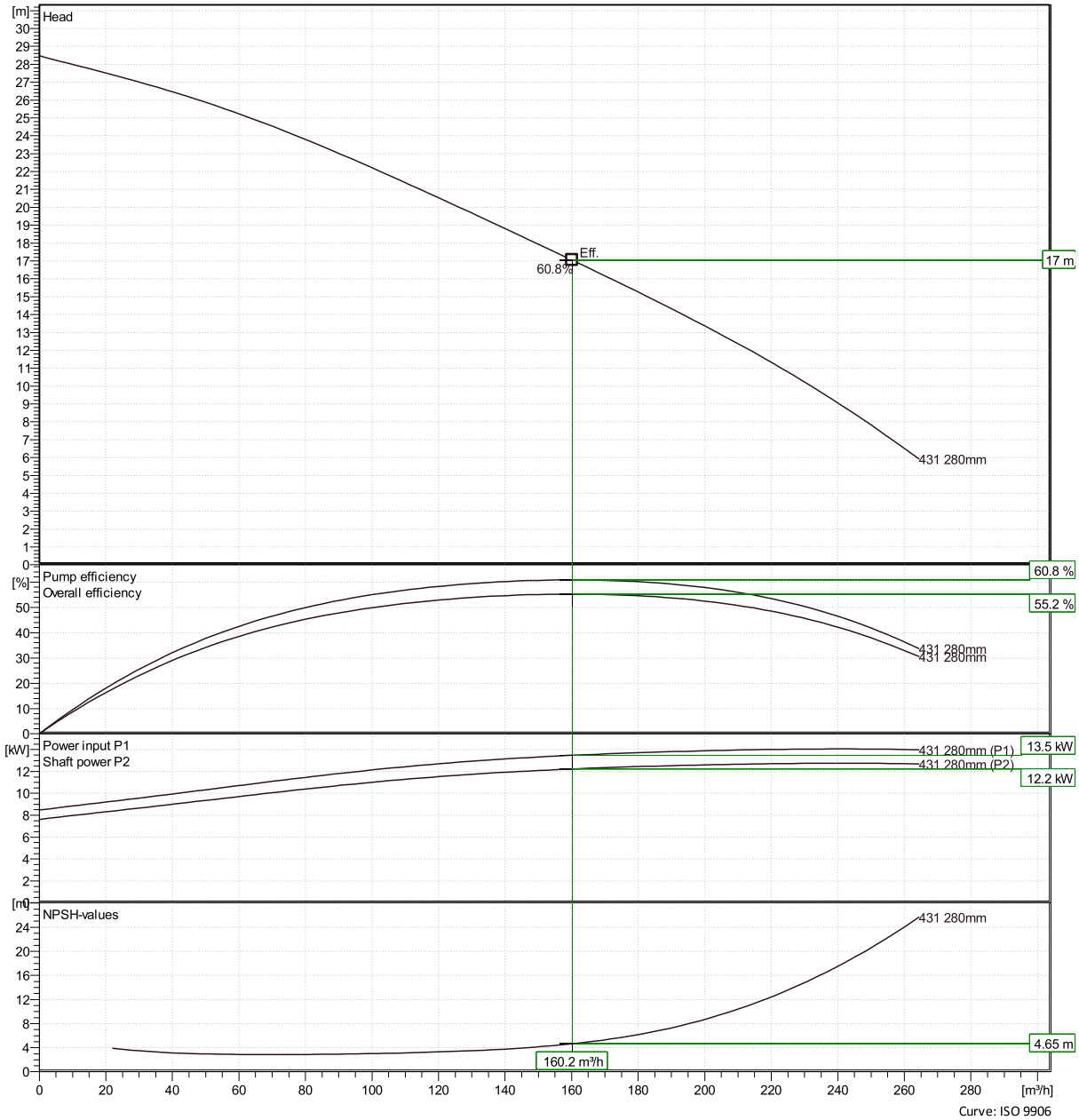
HS 5100 MT 3~ 431

Performance curve

Duty point

Flow	Head
160 m³/h	17 m

Curves according to: Water, pure Water, pure [100%],4 °C,1 kg/dm³,1.569 mm²/s



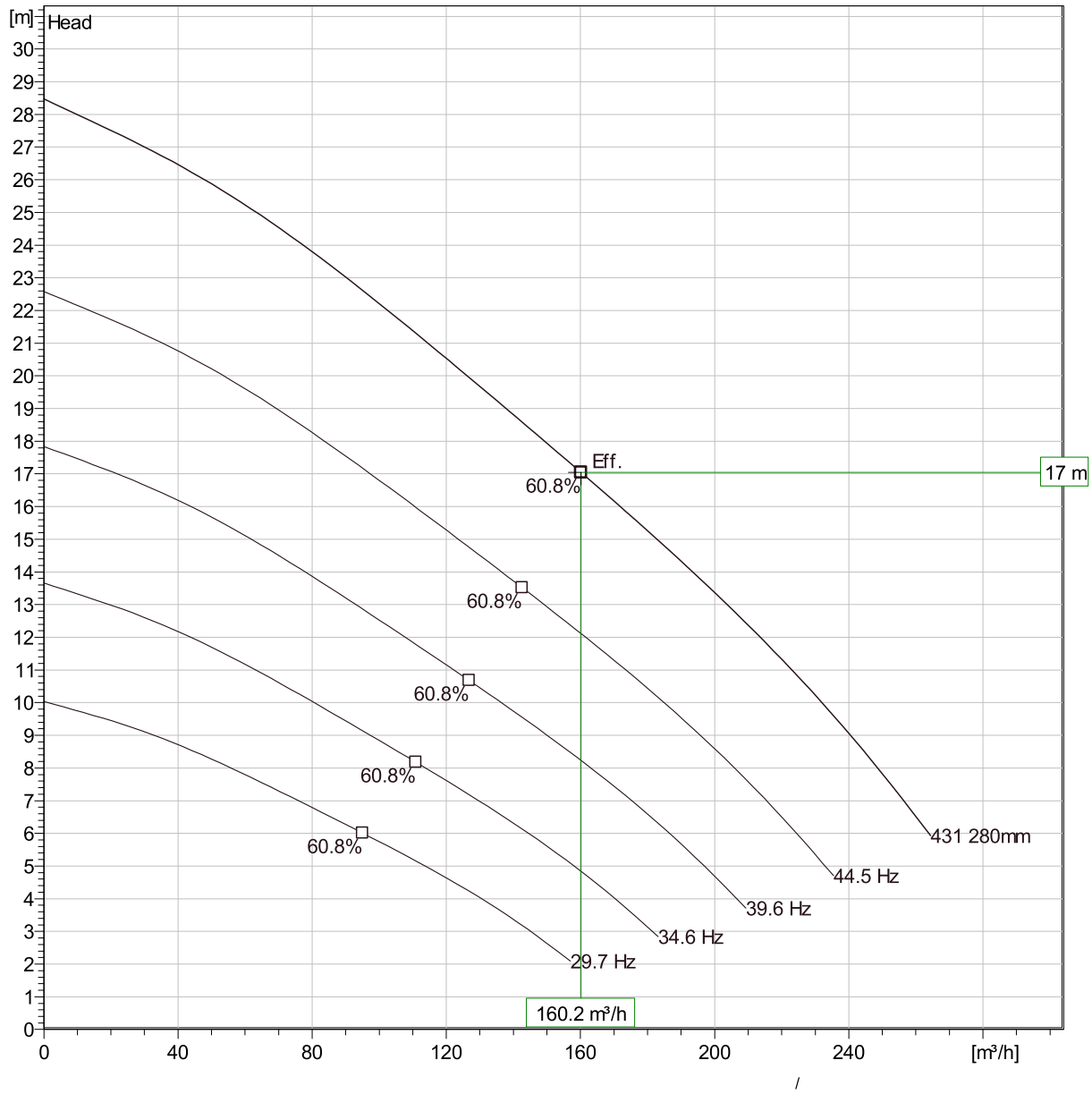
Curve: ISO 9906

Project		**Created by**	Евгений Лемешонок		
Block		**Created on**	2/2/2022	**Last update**	2/2/2022

HS 5100 MT 3~ 431

Duty Analysis

Curves according to: Water, pure [100%] ; 4°C; 1kg/dm³; 1.569mm²/s



Operating characteristics

Pumps / Systems	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr.eff.	Spec. Energy	NPSHre
	m³/h	m	kW	m³/h	m	kW		kWh/l	m
1	160	17	12.2	160	17	12.2	60.8 %	8.41E-5	4.65

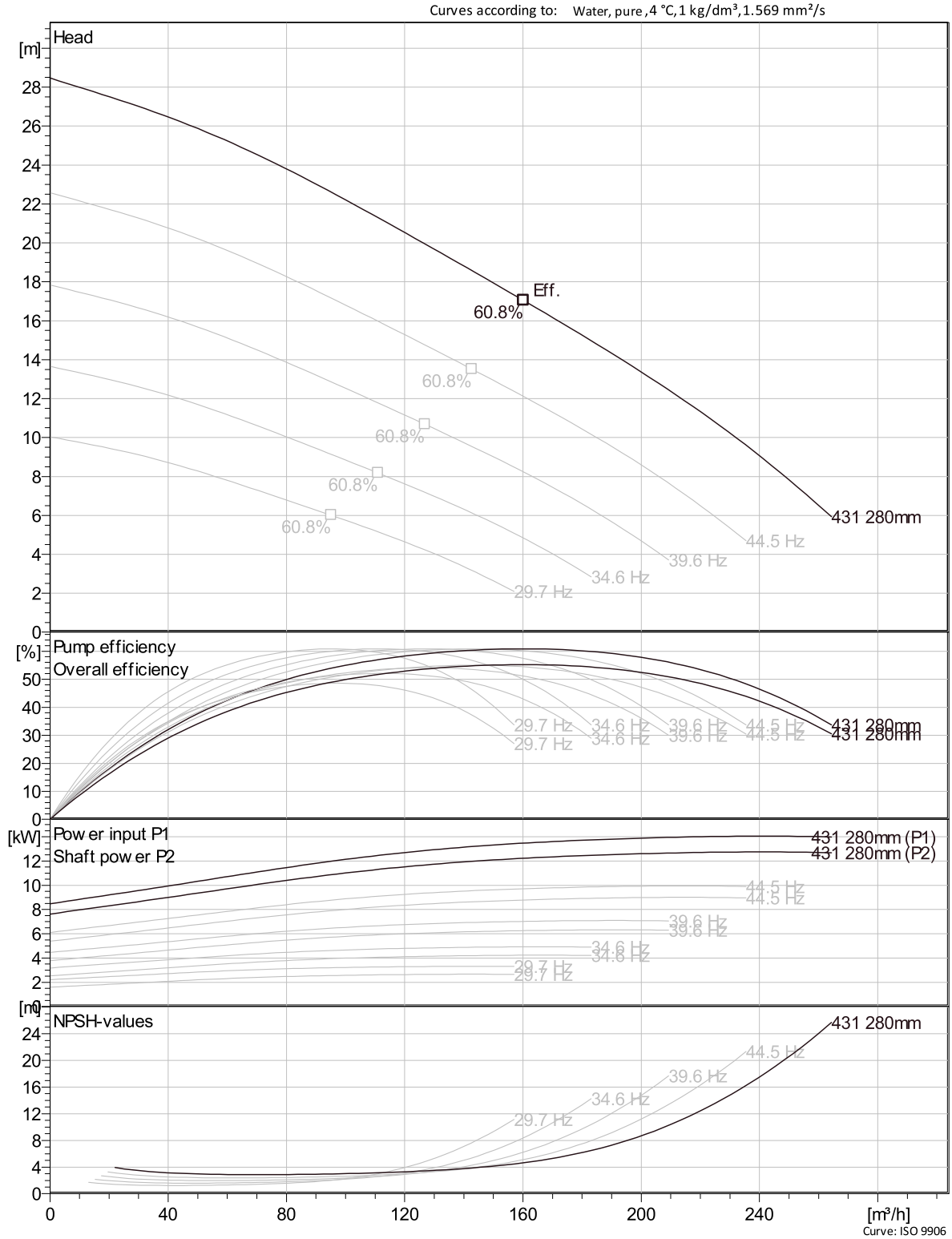
Project		**Created by**	Евгений Лемешонок		
Block		**Created on**	2/2/2022	**Last update**	2/2/2022

HS 5100 MT 3~ 431

VFD Curve

FLYGT
a xylem brand

Curves according to: Water, pure ,4 °C,1 kg/dm³,1.569 mm²/s



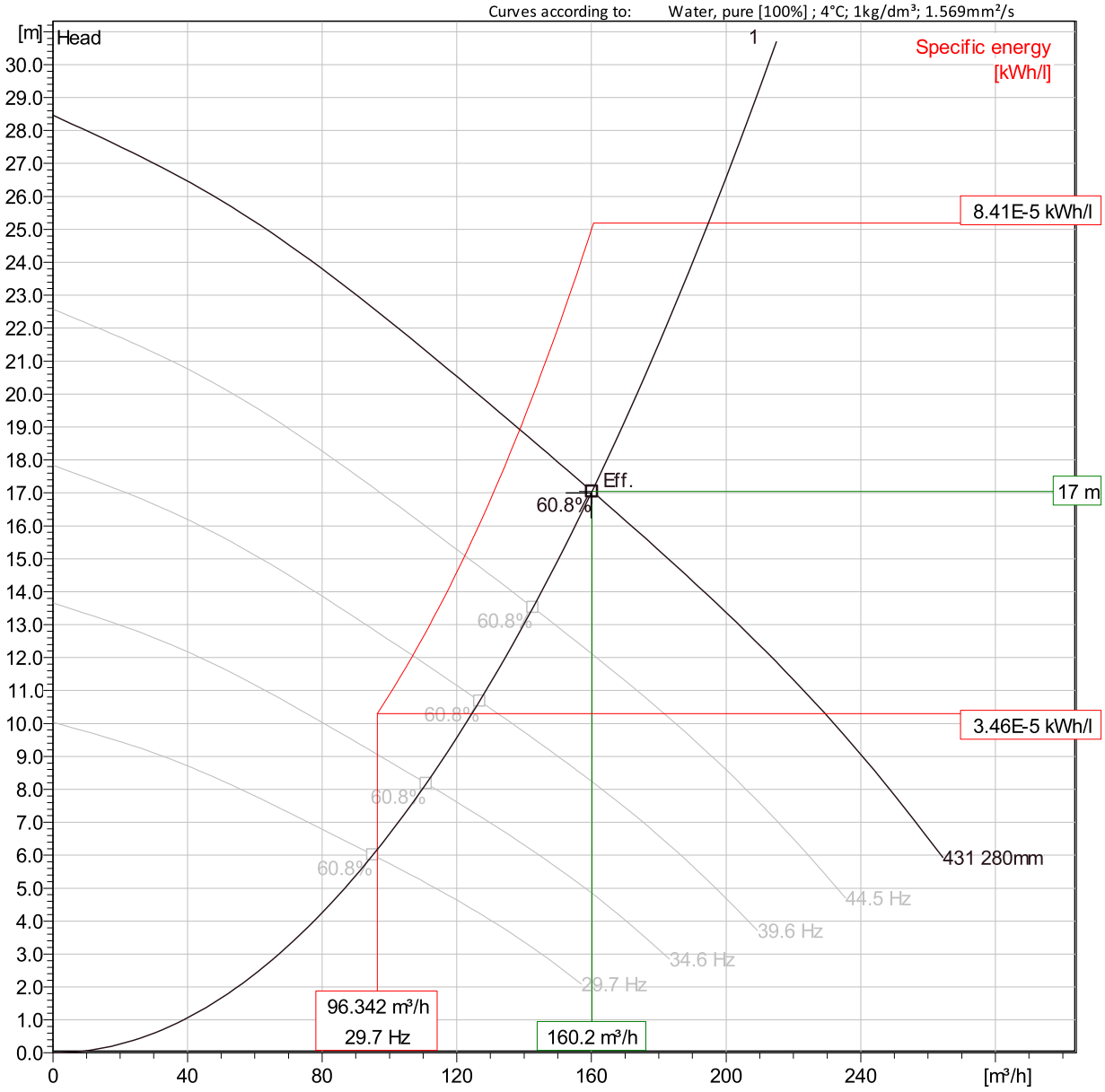
Curve: ISO 9906

Project		**Created by**	Евгений Лемешонок		
Block		**Created on**	2/2/2022	**Last update**	2/2/2022

HS 5100 MT 3~ 431

VFD Analysis

Curves according to: Water, pure [100%] ; 4°C; 1kg/dm³; 1.569mm²/s



Operating Characteristics

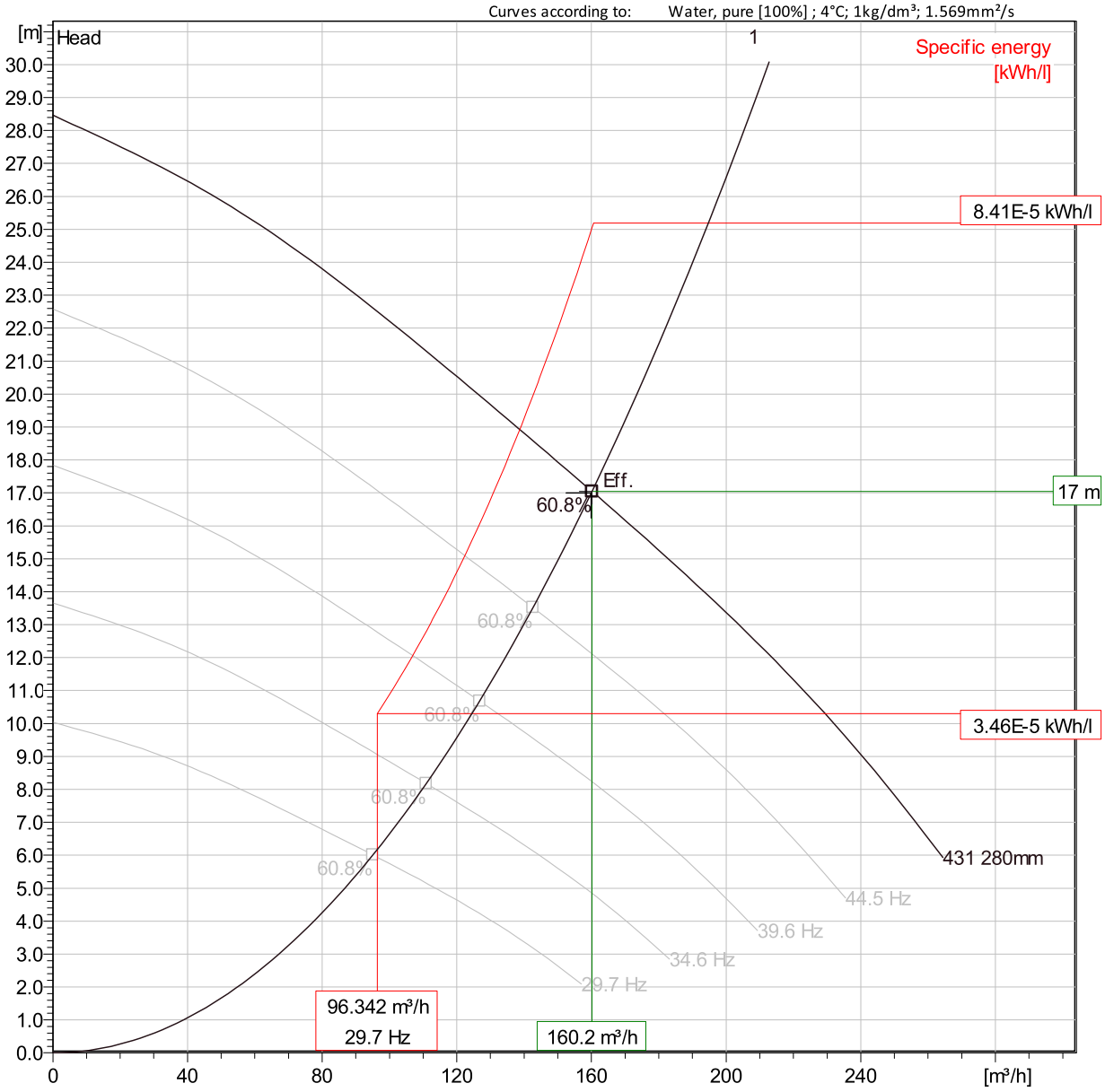
Pumps / Systems	Frequency	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr.eff.	Specific energy	NPSHre
		m³/h	m	kW	m³/h	m	kW		kWh/l	m
1	50 Hz	160	17	12.2	160	17	12.2	60.8 %	8.41E-5	4.65
1	44.5 Hz	145	13.9	8.98	145	13.9	8.98	60.8 %	6.87E-5	3.94
1	39.6 Hz	128	11	6.3	128	11	6.3	60.8 %	5.52E-5	3.27
1	34.6 Hz	112	8.39	4.22	112	8.39	4.22	60.8 %	4.39E-5	2.64

Project		**Created by**	Евгений Лемешонок		
Block		**Created on**	2/2/2022	**Last update**	2/2/2022

HS 5100 MT 3~ 431

VFD Analysis

Curves according to: Water, pure [100%] ; 4°C; 1kg/dm³; 1.569mm²/s



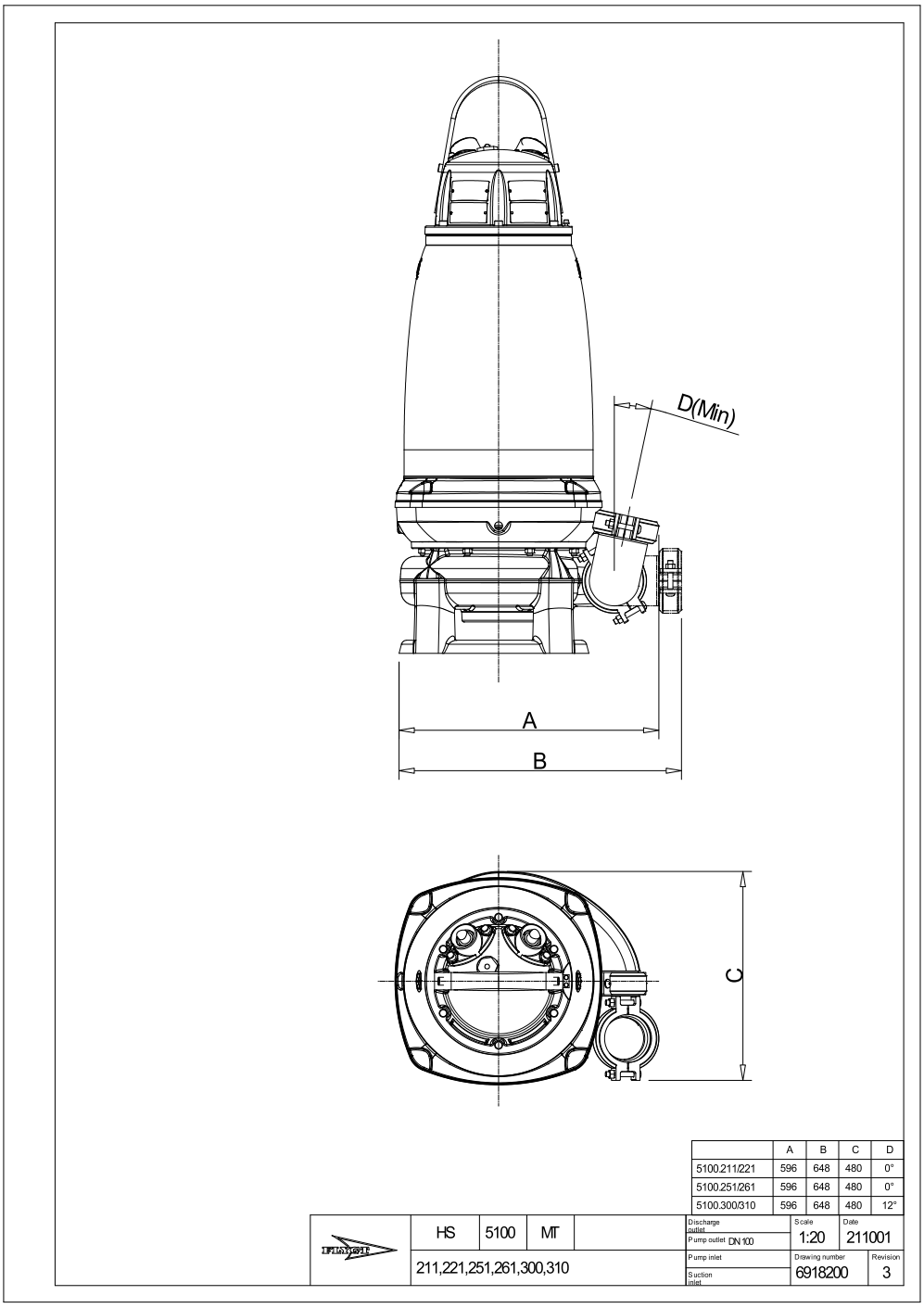
Operating Characteristics

Pumps / Systems	Frequency	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr.eff.	Specific energy	NPSHre
		m³/h	m	kW	m³/h	m	kW		kWh/l	m
1	29.7 Hz	96.3	6.16	2.66	96.3	6.16	2.66	60.8 %	3.46E-5	2.06

Project		**Created by**	Евгений Лемешонок		
Block		**Created on**	2/2/2022	**Last update**	2/2/2022

HS 5100 MT 3~ 431

Dimensional drawing



	A	B	C	D
5100.211/221	596	648	480	0°
5100.251/261	596	648	480	12°
5100.300/310	596	648	480	0°

FLYGT	HS	5100	MT	Discharge outlet Pump outlet DN 100	Scale 1:20	Date 211001
	211,221,251,261,300,310			Pump inlet Suction inlet	Drawing number 6918200	Revision 3

Project	**Created by**	Евгений Лемешонок	
Block	**Created on**	2/2/2022	**Last update** 2/2/2022