

Product description



Pos.no	Description	Item no.	Qty.
	Mixer selection: Blending and suspension		
1.1	<p>RW 6525 Submersible mixer type ABS RW 6525</p> <p>Compact, versatile submersible mixers The RW is Sulzer's standard range of submersible mixers, economical without compromising on reliable design. These compact, versatile submersible mixers are ideal for agitating, blending, mixing, dissolving, and suspension of solids in municipal treatment plants, industry, and agriculture. The RW mixers can easily be fitted to existing guiderails and lifting devices without modification, using our wide range of brackets and adapters.</p> <p>MIXER DATA Type: RW 6525 Propeller diameter: 650 mm Propeller speed: 470 1/min</p> <p>MOTOR DATA Motor: A50/12 Series: 3~ motor Nominal power: 5 kW Nominal efficiency: 70,4 % Frequency: 50 Hz</p>		2
	Mixer selection: Blending and suspension		
2.1	<p>RW 4031 Submersible mixer type ABS RW 4031</p> <p>Compact, versatile submersible mixers The RW is Sulzer's standard range of submersible mixers, economical without compromising on reliable design. These compact, versatile submersible mixers are ideal for agitating, blending, mixing, dissolving, and suspension of solids in municipal treatment plants, industry, and agriculture. The RW mixers can easily be fitted to existing guiderails and lifting devices without modification, using our wide range of brackets and adapters.</p> <p>MIXER DATA Type: RW 4031 Propeller diameter: 400 mm Propeller speed: 680 1/min</p> <p>MOTOR DATA Motor: A40/8 Series: 3~ motor Nominal power: 4 kW Nominal efficiency: 71,2 % Frequency: 50 Hz</p>		1



Mixer Selection System

Printout for Mixer

RW 6525



Calculation for

Customer name AMV Chemie Technologie GmbH
Project name Missan Oil Company, Amarah, Iraq
Project no 2-MX-9301
Project note Wastewater Storage & Equalization Basin

Tank data

Tank shape	rectangular
Length	24 m
Width	21,9m
Liquid depth	6 m
Volume	3.154 m ³
Type and No of guide vanes	
Manning Strickler factor	
Additional loss factor	

Fluid data

Type of Fluid	Wastewater
MLSS / DMC	TDS - 3853 ppm / TSS 1184,4 ppm
SVI	0,125 m ³ /kg
Density	1.000 kg/m ³
Viscosity	10 mPa s
Temperature	35 °C

Aeration data

Bottom aerator	
No of Rotor surface aerator	
Maximum Airflow	
Regular Airflow	
Max. Airflow per m ²	0 Nm ³ /h
Regular Airflow per m ²	0 Nm ³ /h

Mixer data

Mixer	RW 6525
No of Mixer	2
Rated Motor Power (P2)	5 kW
Propeller diameter	650 mm
Propeller speed	470 1/min
Mixing capacity	657 l/s
Application factor	
Note	

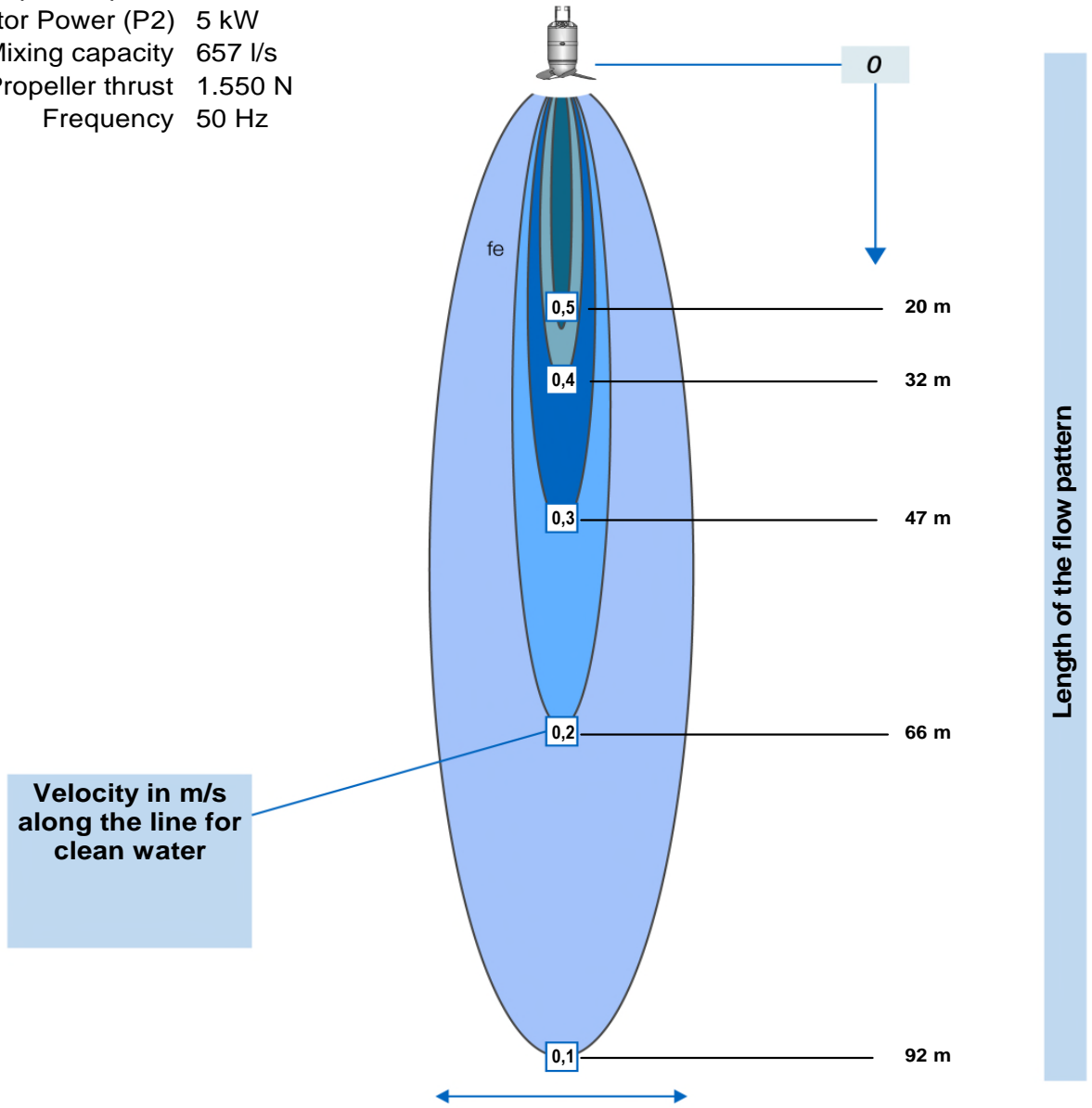
Calculation data

Speed correction	No
Motor duty point (P1)	6,047 kW
Motor duty point (P2)	4,2 kW
Power Consumption	
Specific power density (P1)	0,003835 kW/m ³
Specific power density (P2)	0,002664 kW/m ³
Average horizontal velocity	

Velocity diagram

RW 6525

- Propeller diameter 650 mm
- Propeller speed 470 1/min
- Rated Motor Power (P2) 5 kW
- Mixing capacity 657 l/s
- Propeller thrust 1.550 N
- Frequency 50 Hz



Width of the flow pattern

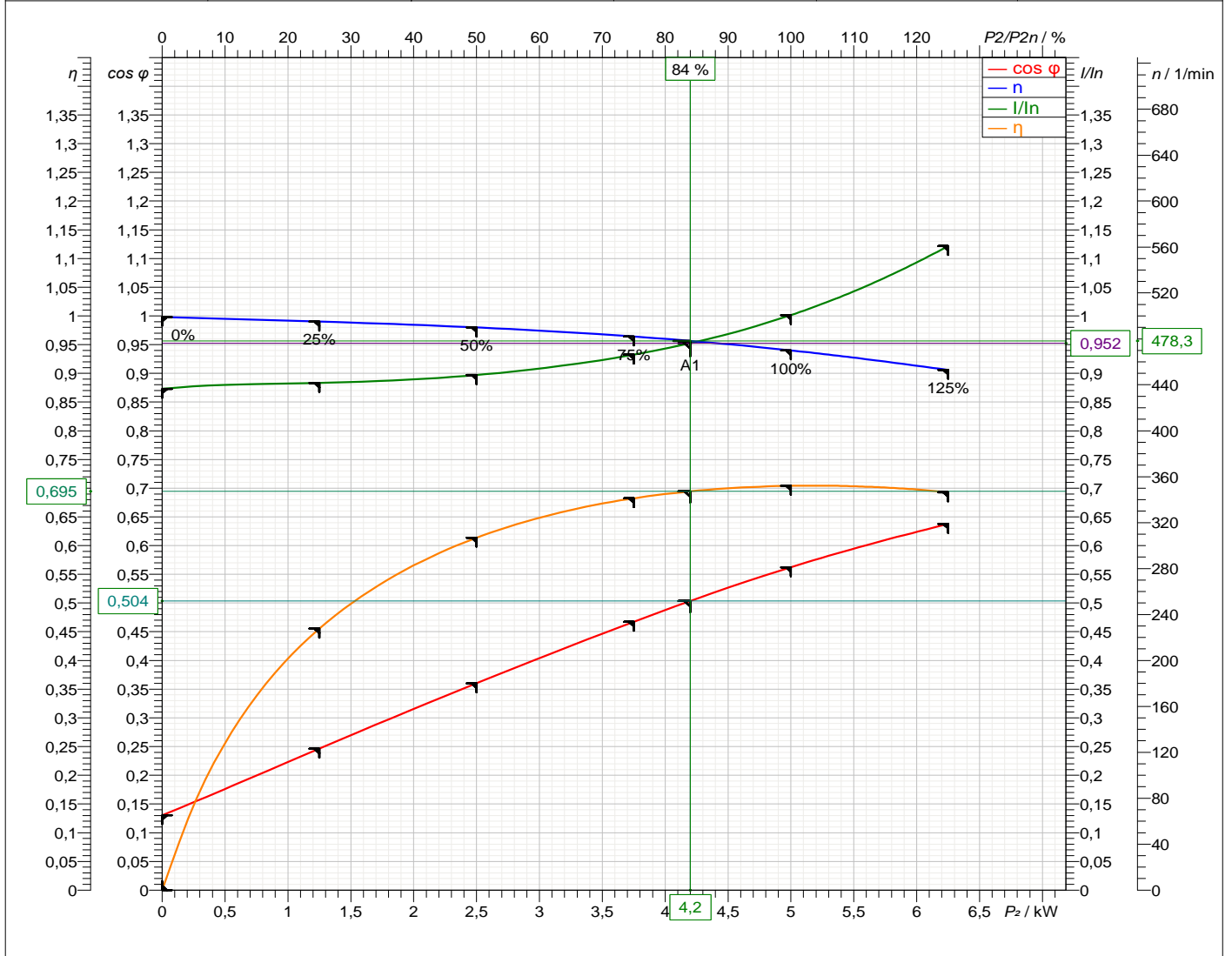
0,5 m/s	3,1 m
0,4 m/s	3,9 m
0,3 m/s	5,2 m
0,2 m/s	7,8 m
0,1 m/s	16 m

Frequency
50 Hz

Motor performance curve

A50/12

Rated power 5 kW	Service factor 1	Nominal Speed 470 1/min	Number of poles 12	Rated voltage 400 V	Date 3.27.23
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Symbol	No load	25 %	50 %	75 %	100 %	125 %
P ₂ / kW	0	1,25	2,5	3,75	5	6,25
P ₁ / kW	1,434	2,745	4,074	5,495	7,101	9,019
n / 1/min	499	495,1	489,9	482,1	469,9	453
cos φ	0,1303	0,2464	0,3601	0,4674	0,5624	0,6377
I / A	15,89	16,08	16,33	16,97	18,22	20,41
s / %	0,1935	0,9898	2,012	3,587	6,012	9,406
M / Nm	0	24,11	48,73	74,28	101,6	131,8
η / %	0	45,54	61,37	68,24	70,41	69,3

Tolerance according to VDE 0530 T1 12.84 or rated power

Starting current 51,9 A	Starting torque 135 Nm	Moment of inertia 0,07 kg m ²	No. starts per hour 10
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Sulzer reserves the right to change any data and dimensions without prior notice and can not be held responsible for the use of information contained in this software.

Data version



Mixer Selection System

Printout for Mixer

RW 4031



Calculation for

Customer name AMV Chemie Technologie GmbH
Project name Missan Oil Company, Amarah, Iraq
Project no 2-MX-9306
Project note Equalization Tank

Tank data

Tank shape	rectangular
Length	8 m
Width	5,3 m
Liquid depth	6 m
Volume	254,4 m ³
Type and No of guide vanes	
Manning Strickler factor	
Additional loss factor	

Fluid data

Type of Fluid	Wastewater
MLSS / DMC	TDS - 1100-13500 ppm / TSS <10-60 ppm
SVI	0,09 m ³ /kg
Density	1.000 kg/m ³
Viscosity	100 mPa s
Temperature	35 °C

Aeration data

Bottom aerator	
No of Rotor surface aerator	
Maximum Airflow	
Regular Airflow	
Max. Airflow per m ²	0 Nm ³ /h
Regular Airflow per m ²	0 Nm ³ /h

Mixer data

Mixer	RW 4031
No of Mixer	1
Rated Motor Power (P2)	4 kW
Propeller diameter	400 mm
Propeller speed	680 1/min
Mixing capacity	265 l/s
Application factor	
Note	

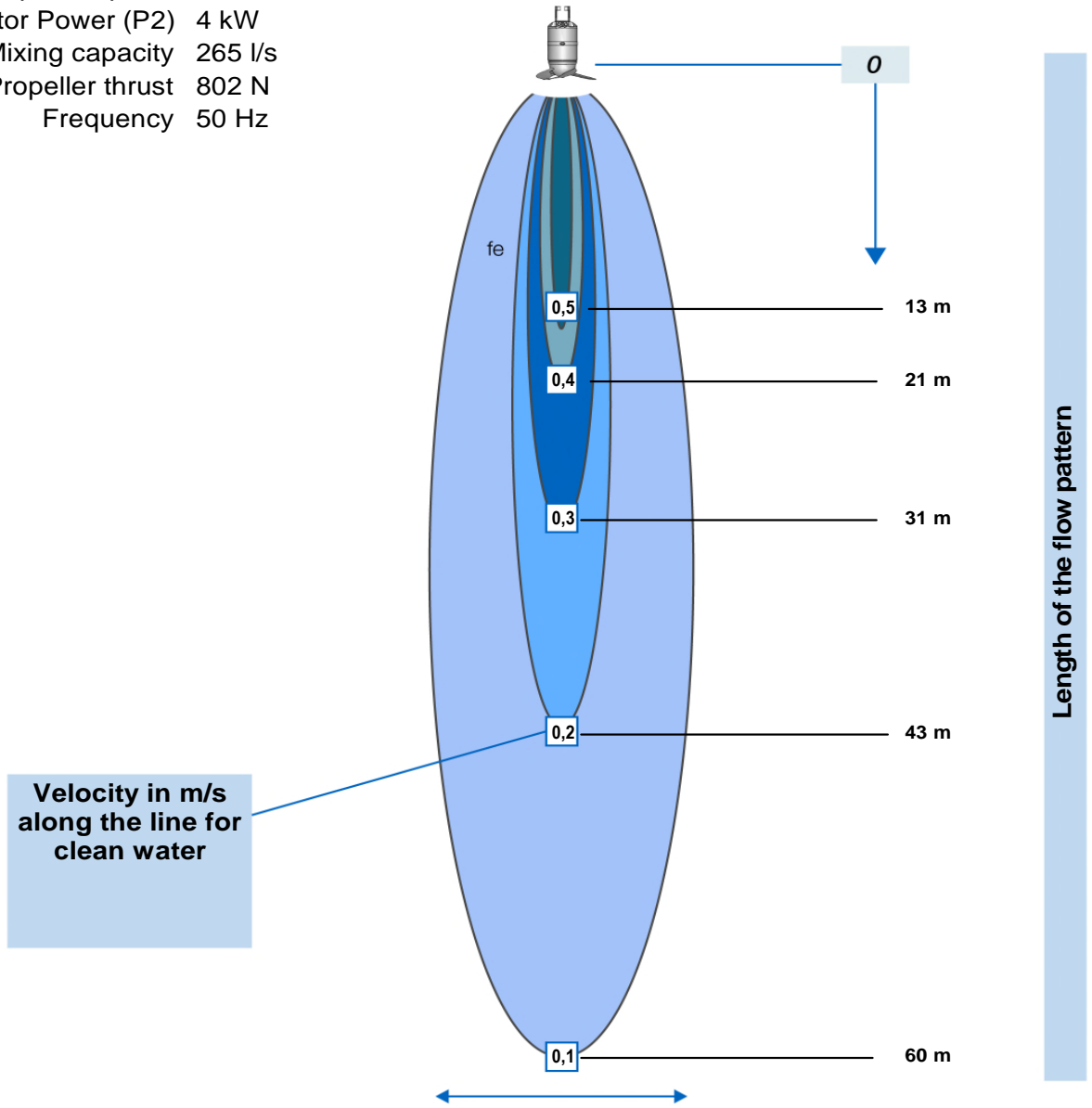
Calculation data

Speed correction	No
Motor duty point (P1)	3,701 kW
Motor duty point (P2)	2,626 kW
Power Consumption	
Specific power density (P1)	0,01441 kW/m ³
Specific power density (P2)	0,01023 kW/m ³
Average horizontal velocity	

Velocity diagram

RW 4031

- Propeller diameter 400 mm
- Propeller speed 680 1/min
- Rated Motor Power (P2) 4 kW
- Mixing capacity 265 l/s
- Propeller thrust 802 N
- Frequency 50 Hz



Width of the flow pattern

0,5 m/s	2,1 m
0,4 m/s	2,6 m
0,3 m/s	3,4 m
0,2 m/s	5,1 m
0,1 m/s	10 m

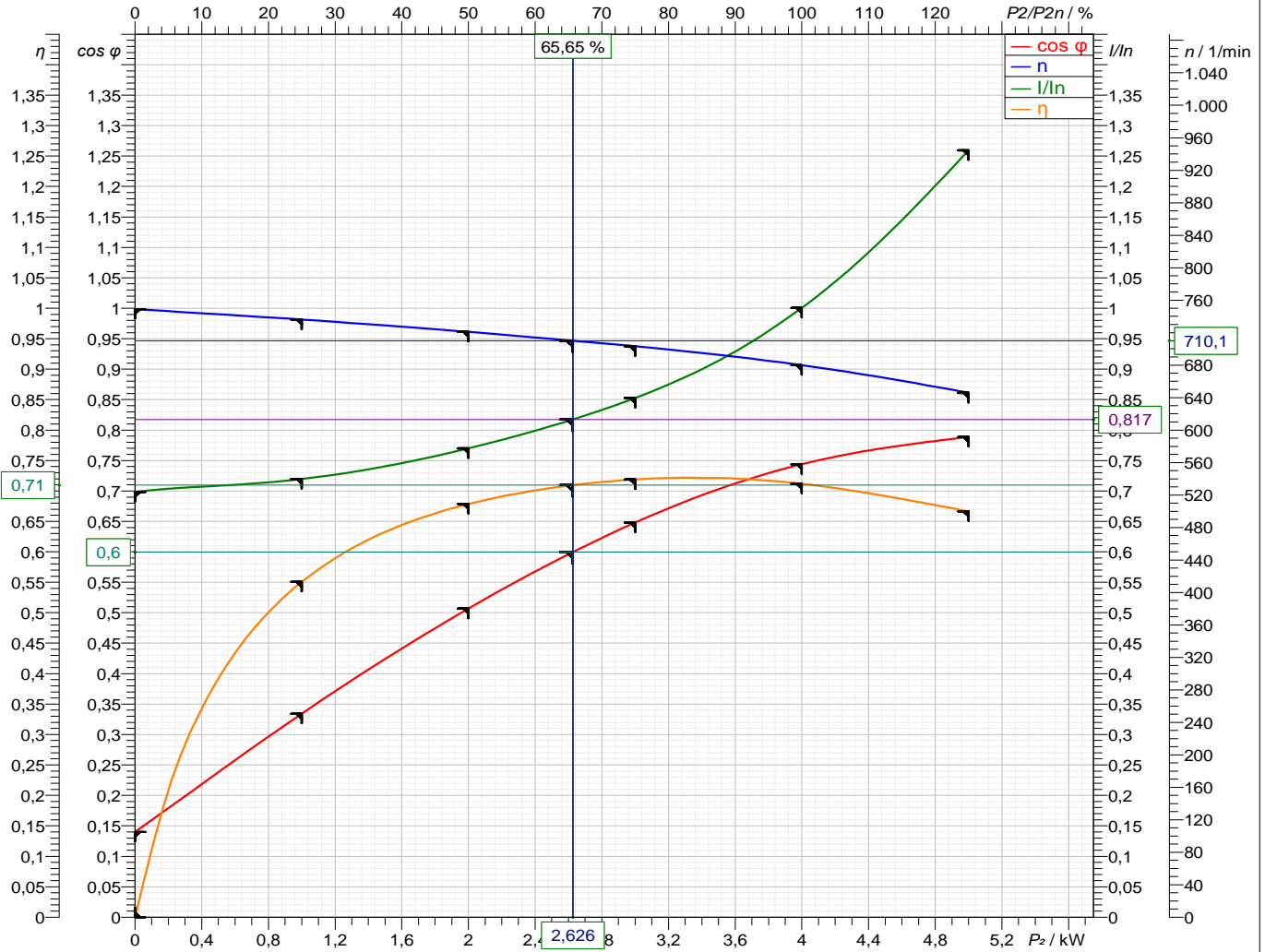
Frequency
50 Hz

Motor performance curve



A40/8

Rated power 4 kW	Service factor 1	Nominal Speed 680 1/min	Number of poles 8	Rated voltage 400 V	Date 3.27.23
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Symbol	No load	25 %	50 %	75 %	100 %	125 %
P ₂ / kW	0	1	2	3	4	5
P ₁ / kW	0,7385	1,816	2,947	4,173	5,62	7,502
I / A	7,612	7,845	8,393	9,294	10,91	13,73
cos φ	0,14	0,3341	0,5069	0,6481	0,7438	0,7889
n / 1/min	749,1	736,1	720,9	703,2	679,8	645,9
s / %	0,122	1,851	3,885	6,244	9,354	13,88
M / Nm	0	12,97	26,49	40,74	56,18	73,92
η / %	0	55,06	67,86	71,89	71,17	66,65

Tolerance according to VDE 0530 T1 12.84 or rated power

Starting current 37 A	Starting torque 73 Nm	Moment of inertia 0,02 kg m ²	No. starts per hour 10
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Data version