

Submittal Data

PROJECT:	UNIT TAG:	QUANTITY:
REPRESENTATIVE: _____	TYPE OF SERVICE:	DATE: _____
ENGINEER:	SUBMITTED BY:	DATE:
CONTRACTOR:	APPROVED BY:	DATE:
	ORDER NO.:	DATE:

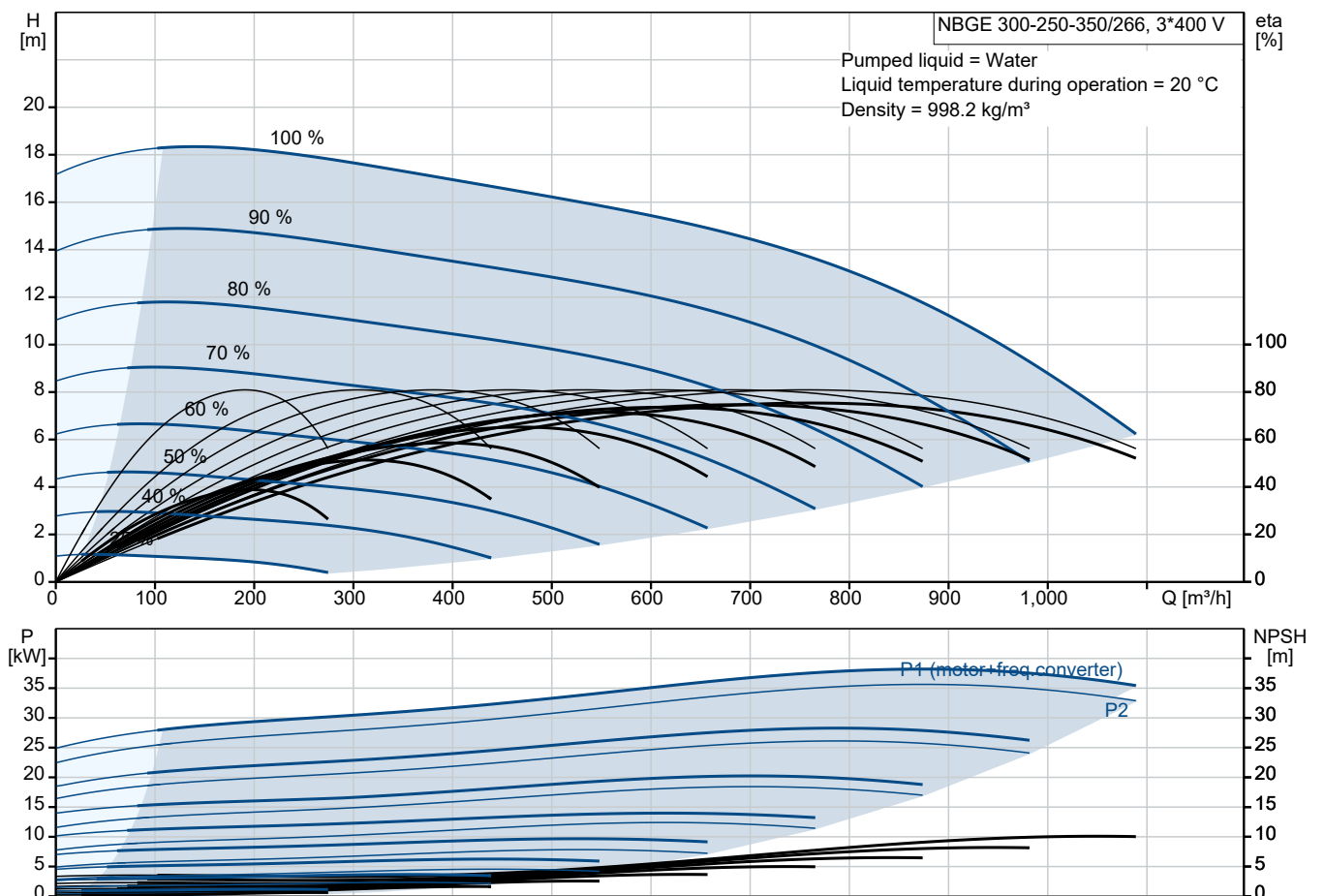


NBGE 300-250-350/266 AIASF2AVSBQQVSW3

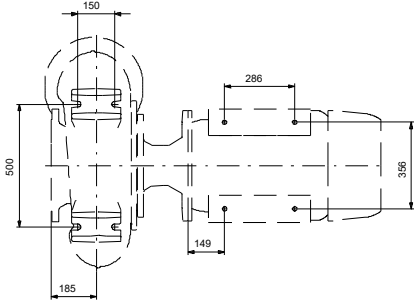
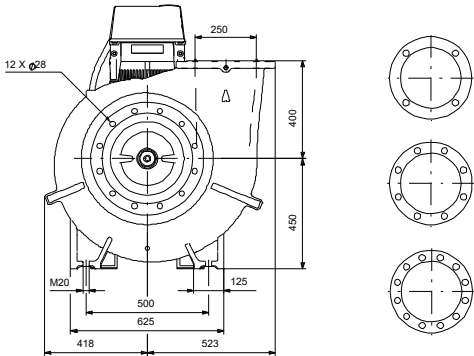
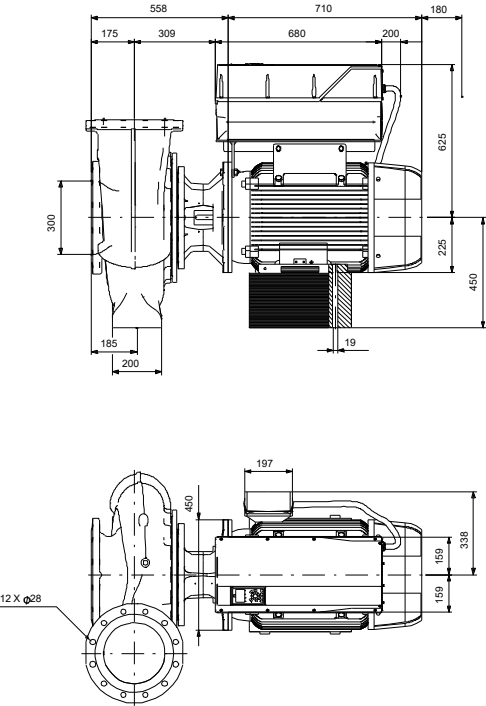
End-suction close-coupled pumps according to ISO 2858 with frequency-controlled motors.

Note! Product picture may differ from actual product

Conditions of Service	Pump Data	Motor Data
Liquid: Water	Liquid temperature range: -10 .. 90 °C	Rated voltage: 380-420D/660-725Y V
Temperature: 20 °C	Maximum ambient temperature: 50 °C	Mains frequency: 50 Hz
Specific Gravity: 1.000	Shaft seal: BQQV	Enclosure class: IP55
	Product number: On request	Insulation class: F
		Motor protection: PTC
		Eta 1/1: 95.4 %



Submittal Data



- Materials:**
- Pump housing: Cast iron
 - Pump housing: ASTM class 35
 - Impeller: Cast iron
 - Impeller: ASTM class 30
 - Impeller: EN-GJL-200
 - Material code: A
 - Code for rubber: V

Qty. Description

1 NBGE 300-250-350/266 AIASF2AVSBQQVSW3



Note! Product picture may differ from actual product

Product No.: On request

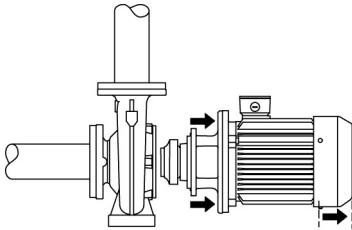
Non-self-priming, single-stage, centrifugal volute pump designed according to ISO 5199 with dimensions and rated performance according to ISO 2858 (16 bar). Flanges are PN 16 with dimensions according to EN 1092-2. The pump has an axial suction port, radial discharge port, horizontal shaft and a back pull-out design enabling removal of the motor, motor stool, cover and impeller without disturbing the pump housing or pipework.

The unbalanced rubber bellows seal is according to DIN EN 12756.

The pump is close-coupled to a fan-cooled asynchronous motor.

The product's minimum efficiency index (MEI) is greater or equal to 0.70. This is by the Commission Regulation (EU) considered as an indicative benchmark for best-performing water pump available on the market as from 1 January 2013.

The back pull-out design means that the pump can be serviced by a single person without disturbing the pump housing or pipes.



Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

Pump

The pump housing has both a priming and a drain hole closed by plugs. The impeller is a closed impeller with double-curved blades with smooth surfaces. The impeller is statically balanced according to ISO 1940-1 class G6.3 and hydraulically balanced to compensate for axial thrust.

Motor stool and pump cover are made of cast iron (EN-GJL-250). Coupling guards are fitted to the motor stool.

The pump is fitted with an unbalanced rubber bellows seal with torque transmission across the spring and around the bellows. Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft.

Seal faces:

- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: silicon carbide (SiC)

This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

Secondary seal material: FKM (fluorocarbon rubber)

FKM has excellent resistance to oils and chemicals. Above 90 °C, FKM should only be used in media without water.

The pump housing has feet.

The pump is to be secured to the foundation with bolts through the pump housing feet and motor feet. The pump is delivered with steel support blocks. The support blocks provide horizontal alignment of the pump and ensure clearance between the motor stool/motor flange and the foundation.

The language on the pump nameplate is English.

Qty. Description

1

Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.

The motor efficiency is classified as IE4 in accordance with IEC 60034-30-1.

The motor has thermistors (PTC sensors) in the windings in accordance with DIN 44081/DIN 44082. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

Thermal switches must be connected to an external control circuit in a way which ensures that the automatic reset cannot cause accidents. The motors must be connected to a motor-protective circuit breaker according to local regulations.

The motor requires no external motor protection. The motor control unit incorporates protection against slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

The motor is equipped with bearing current protection. This protects the bearings from failure due to bearing currents, which can be caused e.g. by the high-frequency switching of a variable frequency drive.

Further product details

Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

Technical data

Controls:

VFD product number: 99616824
 Frequency converter: Built-in
 Type of frequency converter: CUE 3X380-500V IP55 RUG 37KW
 Appr. for VFD: CE, CULUS, C-TICK
 Pressure sensor: N

Liquid:

Pumped liquid: Water
 Liquid temperature range: -10 .. 90 °C
 Selected liquid temperature: 20 °C
 Density: 998.2 kg/m³

Technical:

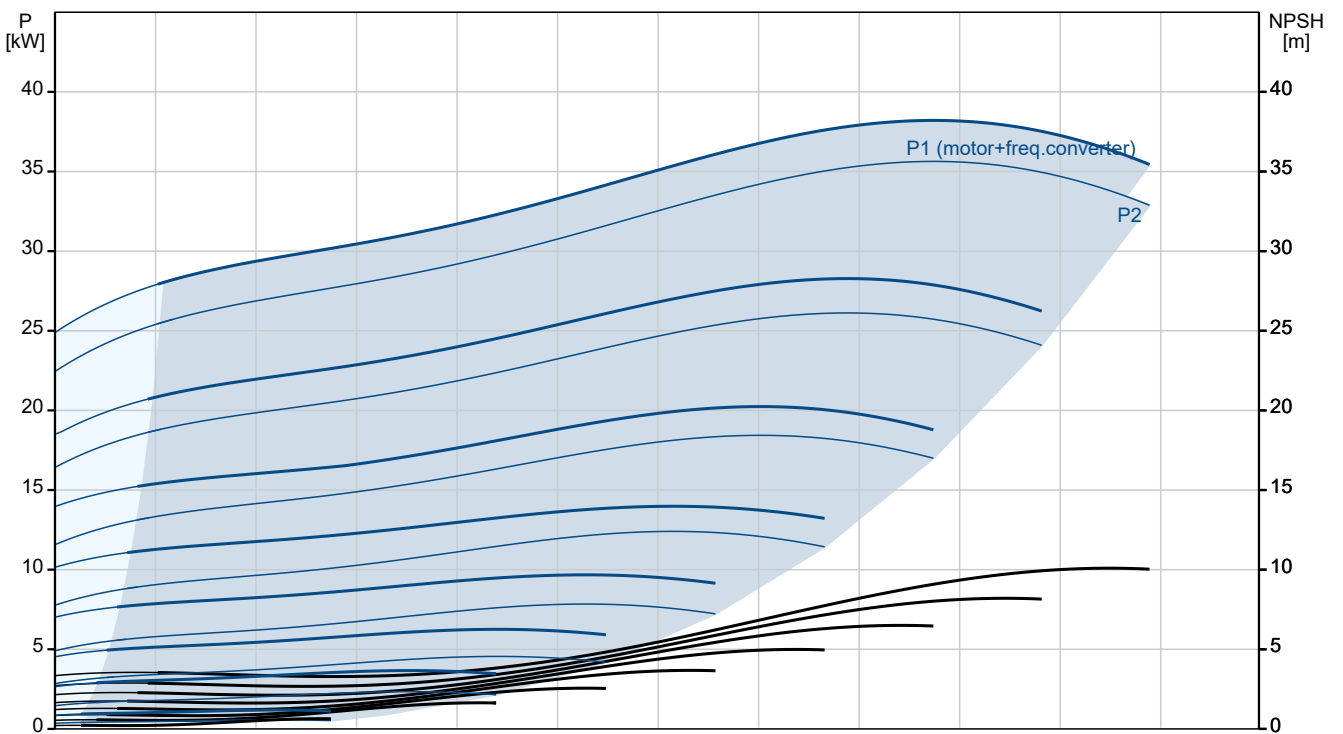
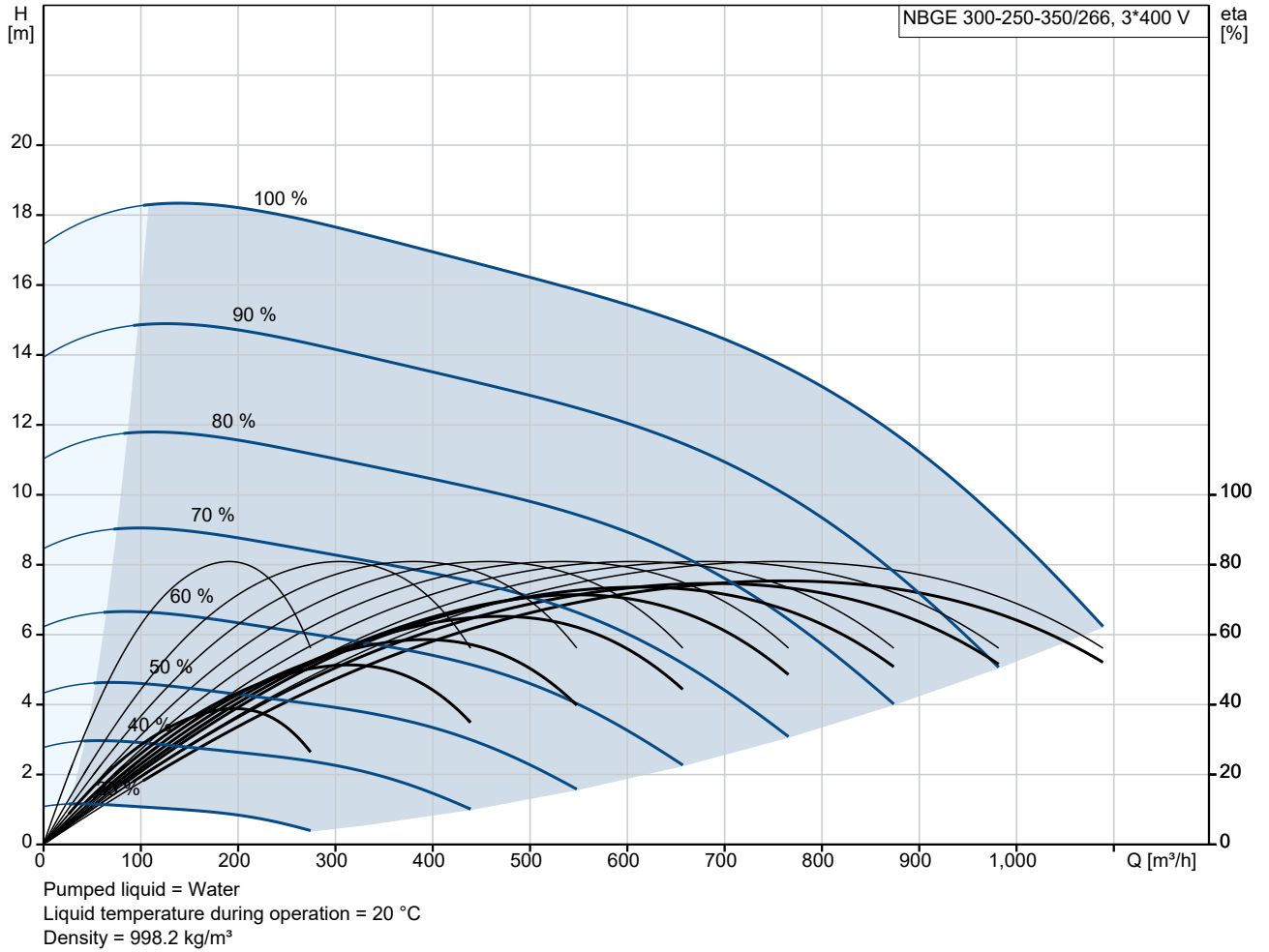
Pump speed on which pump data are based: 1485 rpm
 Rated flow: 751.4 m³/h
 Rated head: 13.74 m
 Actual impeller diameter: 266 mm
 Nominal impeller diameter: 350
 Type of impeller: Standard
 Shaft seal arrangement: Single
 Code for shaft seal: BQQV
 Curve tolerance: ISO9906:2012 3B
 Bearing design: Standard

Materials:

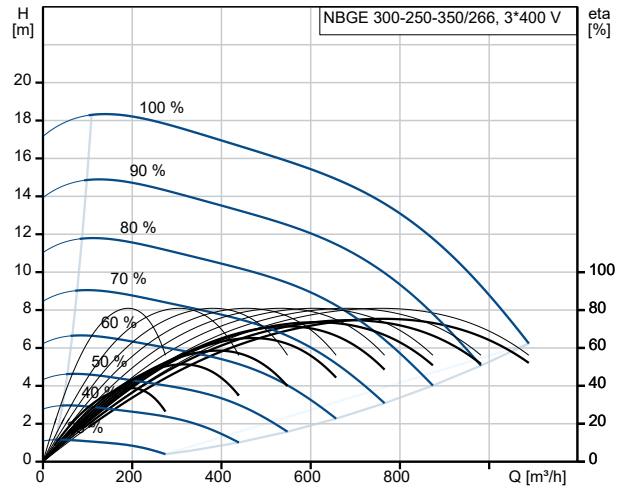
Pump housing: Cast iron
 EN-GJL-250
 ASTM class 35
 Wear ring: Brass
 Impeller: Cast iron
 EN-GJL-200
 ASTM class 30
 Internal pump house coating: CED
 Shaft: Stainless steel

Qty.	Description
1	<p>EN 1.4301 AISI 304</p> <p>Installation:</p> <p>Range of ambient temperature: -10 .. 50 °C Maximum operating pressure: 16 bar Pipe connection standard: EN 1092-2 Size of inlet connection: DN 300 Size of outlet connection: DN 250 Pressure rating for connection: PN 16 Bearing lubrication: Grease Pump housing with feet: Yes Support block (Yes/No): Y</p> <p>Electrical data:</p> <p>Rated power - P2: 37 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-420D/660-725Y V Rated current: 67.0/38.5 A Starting current: 840 % Cos phi - power factor: 0.84 Rated speed: 1485 rpm IE efficiency: IE4 95,4% IE Efficiency class: IE4 Motor efficiency at full load: 95.4 % Motor efficiency at 3/4 load: 95.4 % Motor efficiency at 1/2 load: 94.8 % Number of poles: 4 Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Motor No: 92691591 Bearing insulation type N-end: CERAMIC SHAFT COATING</p> <p>Others:</p> <p>Minimum efficiency index, MEI ≥: 0.70 Net weight: 1020 kg Gross weight: 1120 kg Shipping volume: 2.59 m³ Country of origin: HU Custom tariff no.: 84137051 Language on pump nameplate: GB</p>

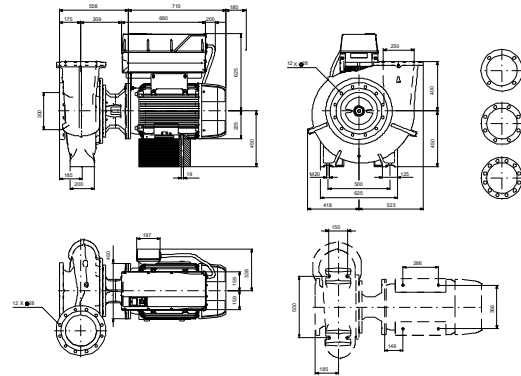
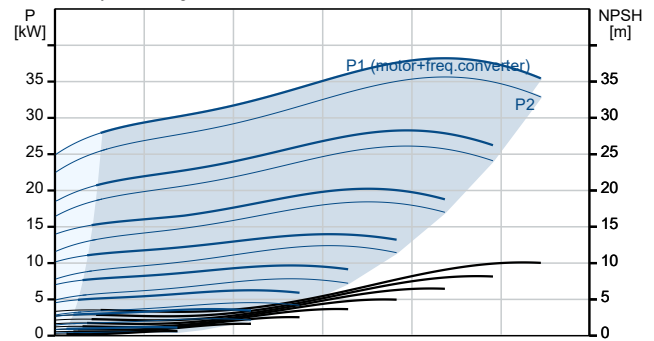
On request NBGE 300-250-350/266 AIASF2AVSBQQVSW3 50 Hz



Description	Value
General information:	
Product name:	NBGE 300-250-350/266 AIASF2AVSBQQVSW3
Product No:	On request
EAN number:	On request
Technical:	
Pump speed on which pump data are based:	1485 rpm
Rated flow:	751.4 m ³ /h
Rated head:	13.74 m
Actual impeller diameter:	266 mm
Nominal impeller diameter:	350
Type of impeller:	Standard
Shaft seal arrangement:	Single
Shaft diameter:	48 mm
Code for shaft seal:	BQQV
Curve tolerance:	ISO9906:2012 3B
Pump version:	AS
Bearing design:	Standard
Materials:	
Pump housing:	Cast iron
Pump housing:	EN-GJL-250
Pump housing:	ASTM class 35
Wear ring:	Brass
Impeller:	Cast iron
Impeller:	EN-GJL-200
Impeller:	ASTM class 30
Internal pump house coating:	CED
Material code:	A
Code for rubber:	V
Shaft:	Stainless steel
Shaft:	EN 1.4301
Shaft:	AISI 304
Installation:	
Range of ambient temperature:	-10 .. 50 °C
Maximum operating pressure:	16 bar
Pipe connection standard:	EN 1092-2
Size of inlet connection:	DN 300
Size of outlet connection:	DN 250
Pressure rating for connection:	PN 16
Bearing lubrication:	Grease
Pump housing with feet:	Yes
Support block (Yes/No):	Y
Connect code:	F2
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-10 .. 90 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m ³
Electrical data:	
Rated power - P2:	37 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725Y V
Rated current:	67.0/38.5 A
Starting current:	840 %
Cos phi - power factor:	0.84
Rated speed:	1485 rpm
IE efficiency:	IE4 95,4%



Pumped liquid = Water
Liquid temperature during operation = 20 °C
Density = 998.2 kg/m³



IEC 60745 THERMAL PROTECTED MOTOR THE THERMISTORS ARE CONNECTED TO AMPLIFIER RELAY FOR CONTROL OF MAXIMUM TEMPERATURE (PTC ACCORDING TO DIN 44082)



Company name:

Created by:

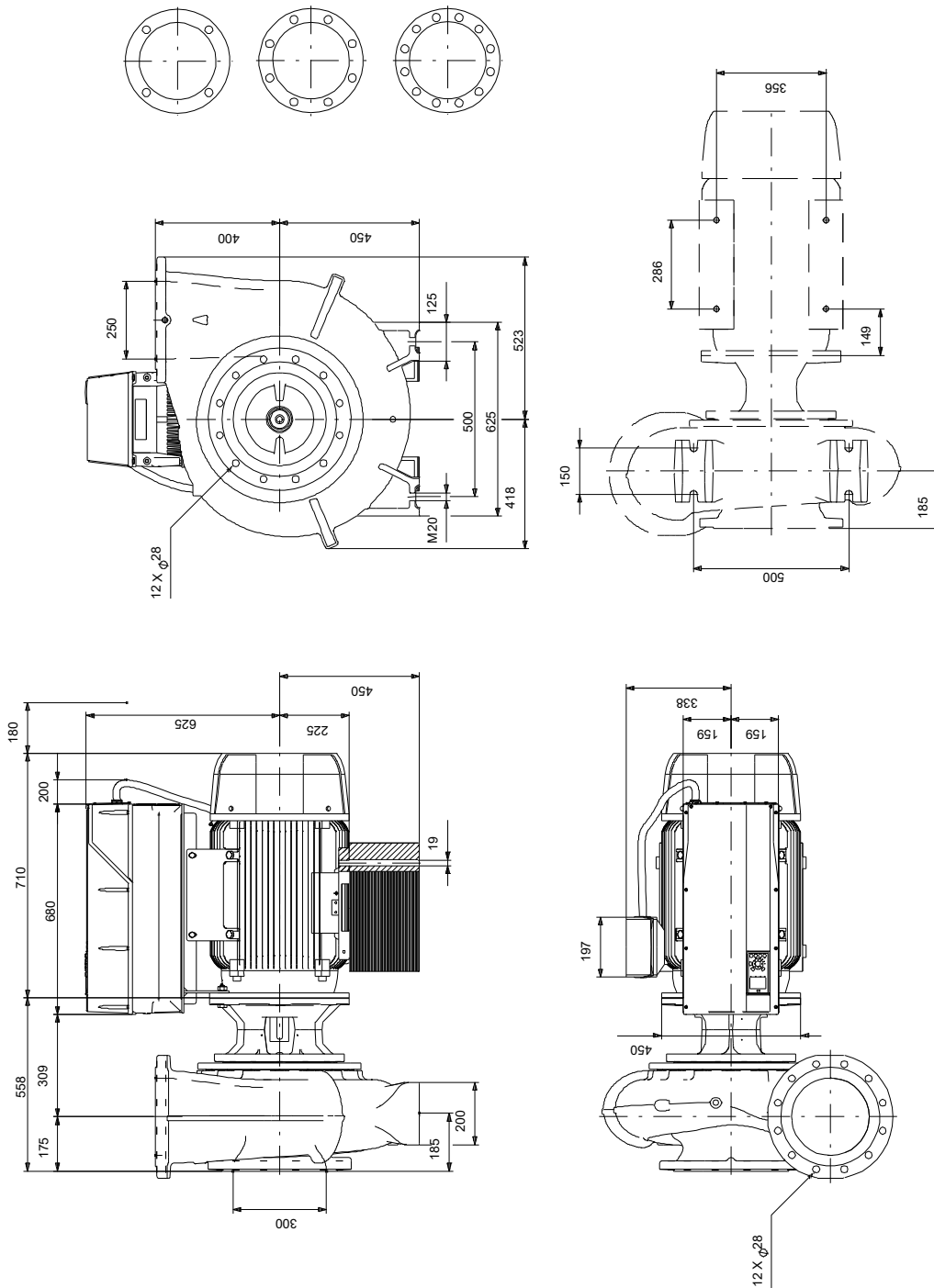
Phone:

Date:

25/10/2024

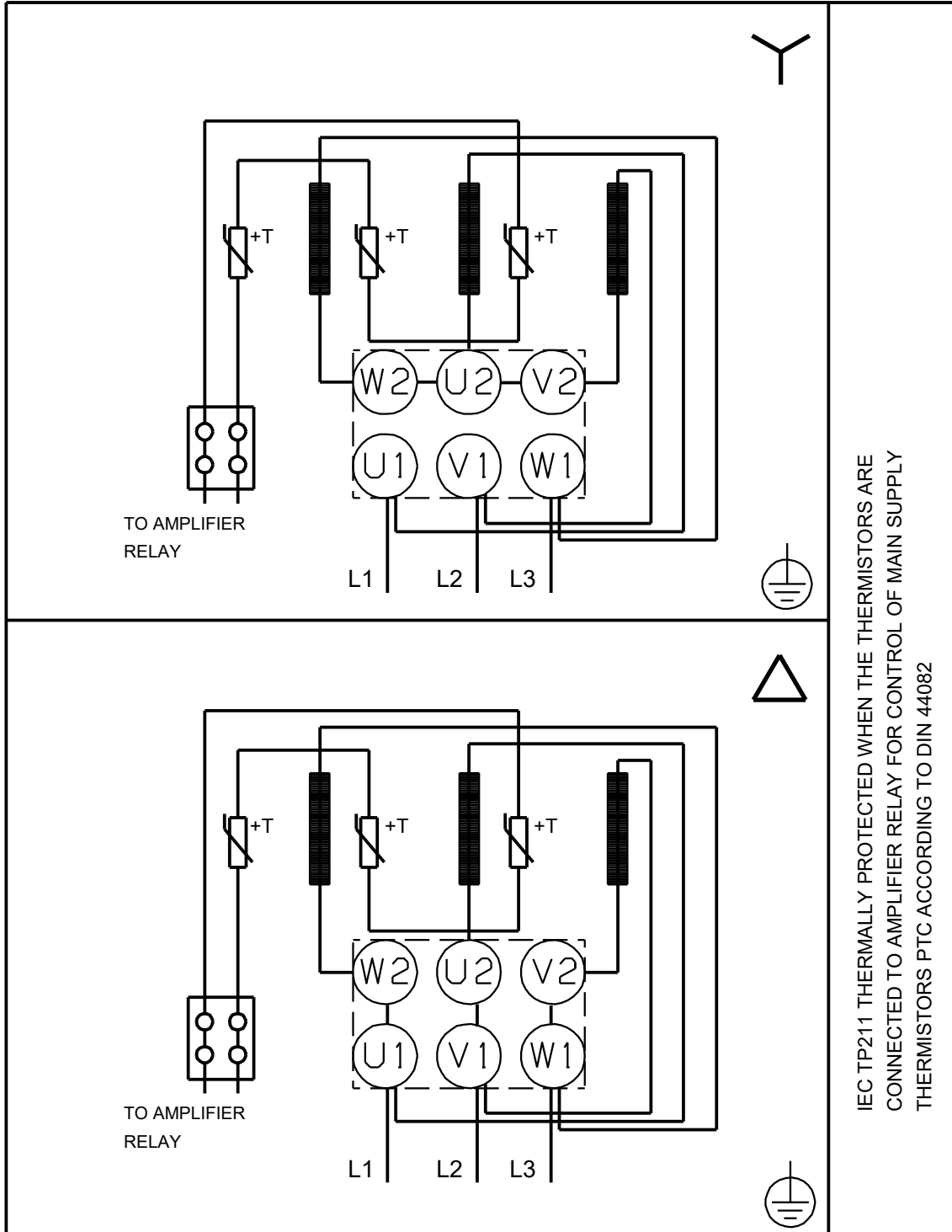
Description	Value
IE Efficiency class:	IE4
Motor efficiency at full load:	95.4 %
Motor efficiency at 3/4 load:	95.4 %
Motor efficiency at 1/2 load:	94.8 %
Number of poles:	4
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	92691591
Mount. design. acc. IEC 34-7:	IM B35
Bearing insulation type N-end:	CERAMIC SHAFT COATING
Controls:	
VFD product number:	99616824
Frequency converter:	Built-in
Type of frequency converter:	CUE 3X380-500V IP55 RUG 37KW
Appr. for VFD:	CE, CULUS, C-TICK
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	1020 kg
Gross weight:	1120 kg
Shipping volume:	2.59 m ³
Country of origin:	HU
Custom tariff no.:	84137051
Language on pump nameplate:	GB

On request NBGE 300-250-350/266 AIASF2AVSBQQVSW3 50 Hz



Note! All units are in [mm] unless others are stated.
Disclaimer: This simplified dimensional drawing does not show all details.

On request NBGE 300-250-350/266 AIASF2AVSBQQVSW3 50 Hz



IEC TP211 THERMALLY PROTECTED WHEN THE THERMISTORS ARE
CONNECTED TO AMPLIFIER RELAY FOR CONTROL OF MAIN SUPPLY
THERMISTORS PTC ACCORDING TO DIN 44082

Note! All units are in [mm] unless others are stated.

