

- 1: Pump housing
- 2: Impeller
- 3: Stub shaft
- 4: Pump head/motor stool
- 5: Wear rings

The pump housing is provided with a replaceable brass neck ring to reduce the amount of liquid running from the outlet side of the impeller to the inlet side.

The impeller is secured to the shaft with a nut.

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.

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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.



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## Qty. Description

Secondary seal material: EPDM (ethylene-propylene rubber)

EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.

A circulation of liquid through the duct of the air vent screw ensures lubrication and cooling of the shaft seal.

The flanges have tappings for mounting of pressure gauges.

The motor stool forms connection between the pump housing and the motor, and is equipped with a manual air vent screw for venting of the pump housing and the shaft seal chamber. The sealing between motor stool and pump housing is an O-ring.

The central part of the motor stool is provided with guards for protection against the shaft and coupling. The pump shaft is fastened directly on the motor shaft with key and set screws.

#### 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 IE3 in accordance with IEC 60034-30-1.

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.

### Further product details

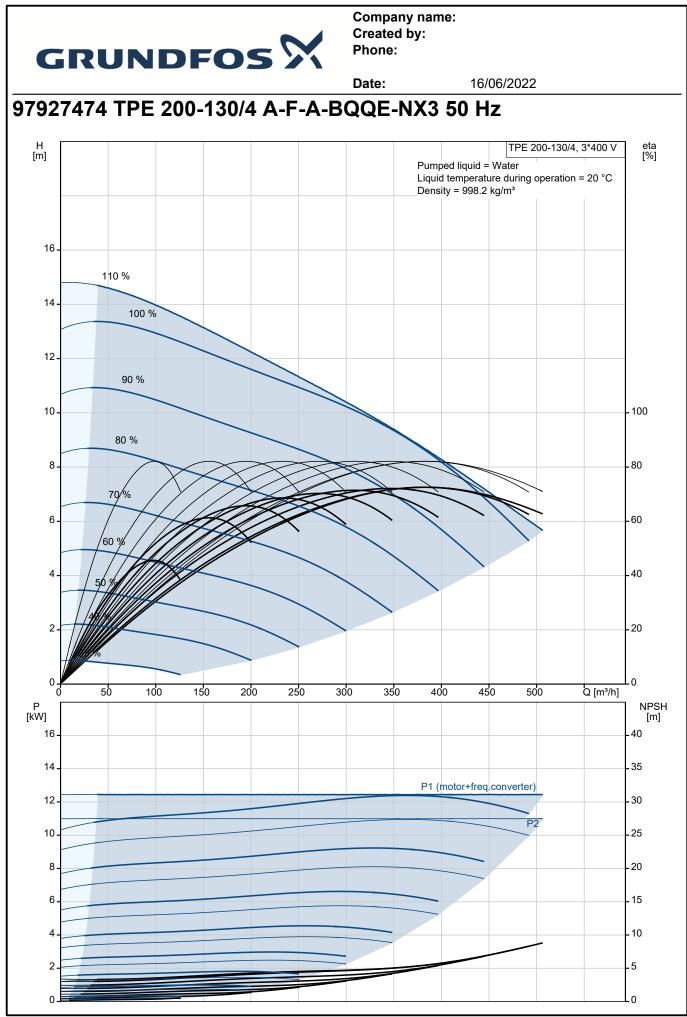
Cast-iron parts have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface.

### **Technical data**

Controls: Frequency converter:	Built-in
Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water -25 120 °C 20 °C 998.2 kg/m³
Technical: Pump speed on which pump data Rated flow: Rated head: Actual impeller diameter: Code for shaft seal: Curve tolerance:	are based: 1470 rpm 378 m³/h 9 m 218-210 mm BQQE ISO9906:2012 3B
Materials: Pump housing: Impeller:	Cast iron EN-GJL-250 ASTM class 35 Cast iron EN-GJL-200 ASTM class 30
Installation: Range of ambient temperature: Maximum operating pressure: Max pressure at stated temp: Type of connection: Size of connection: Pressure rating for connection: Port-to-port length: Flange size for motor:	-20 40 °C 16 bar 16 bar / 120 °C DIN DN 200 PN 16 900 mm FF300



		Date:	16/06/2022	
Description				
Electrical data:				
Motor type:	160MB			
IE Efficiency class:	IE3			
Rated power - P2:	11 kW			
Mains frequency:	50 Hz			
Rated voltage:	3 x 380-480 V			
Rated current:	22.0-17.8 A			
Cos phi - power factor:	0.86-0.81			
Rated speed:	240-1750 rpm			
Efficiency:	IE3 91,4%			
Motor efficiency at full load:	91.4 %			
Number of poles:	4			
Enclosure class (IEC 34-5):	IP55			
Insulation class (IEC 85):	F			
Motor No:	86906100			
Othere				
Others: Minimum efficiency index, ME	> 0.70			
Net weight:	353 kg			
Gross weight:	449 kg			
	1.68 m <sup>3</sup>			
Shipping volume: Danish VVS No.:	382039130			
Finnish LVI No.:	4616522			
	4010322 HU			
Country of origin:				
Custom tariff no .:	84137051			



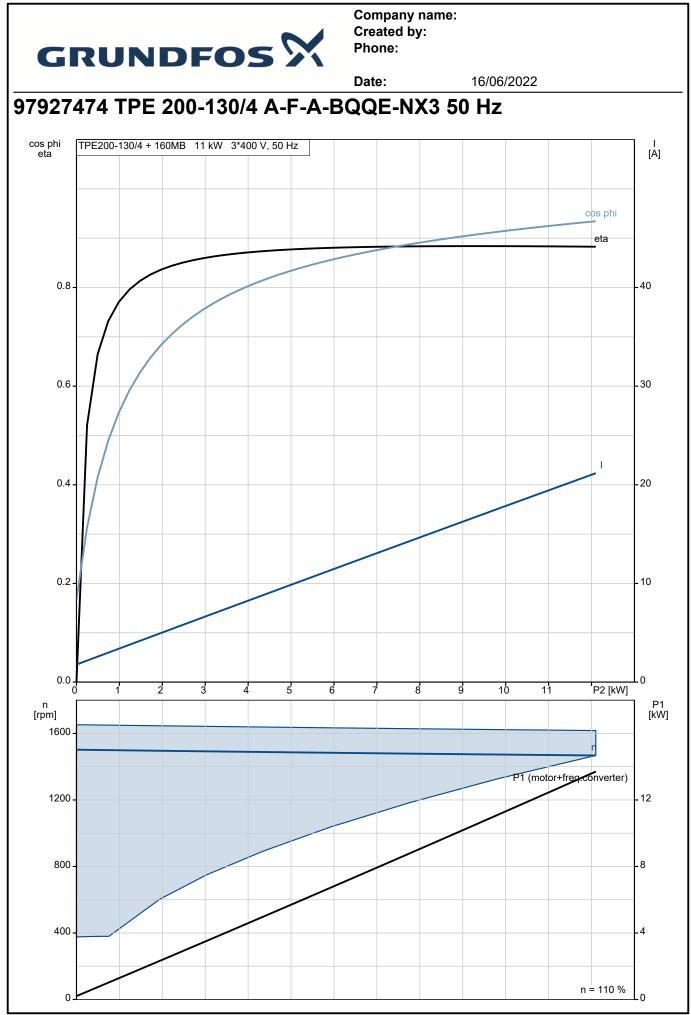


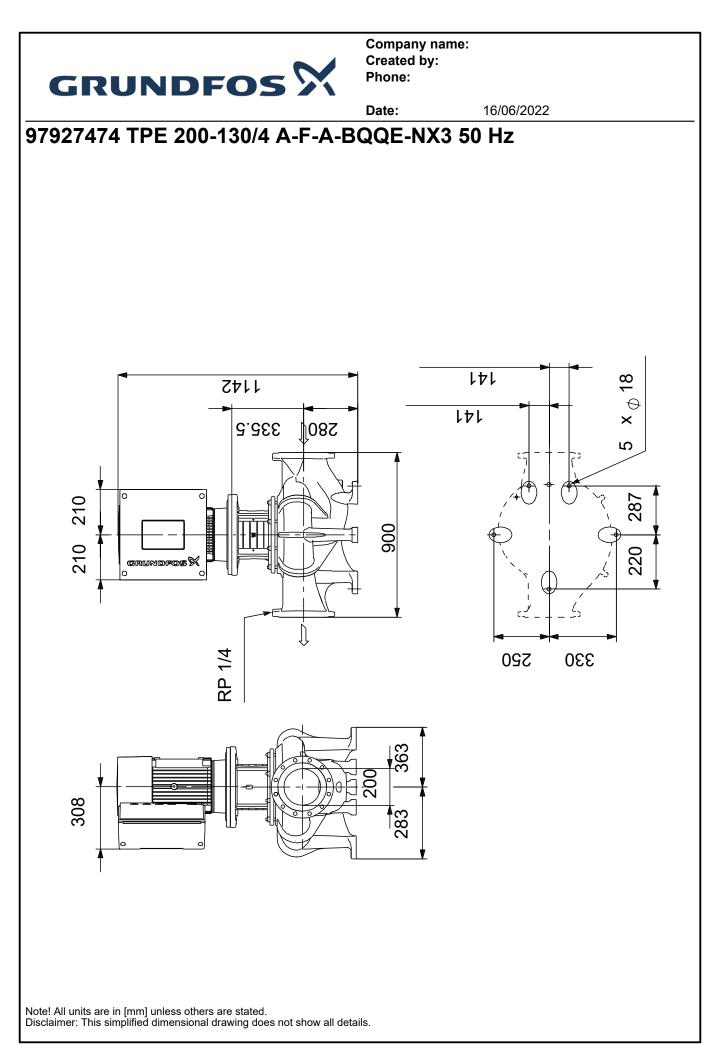
GRONDI		Date: 16/06/2022
Description	Value	H [m] TPE 200-130/4, 3*400 V [%]
General information:	Vuluo	Pumped liquid = Water
Product name:	TPE 200-130/4 A-F-A-BQQE-NX3	Liquid temperature during operation = 20 °C Density = 998.2 kg/m <sup>3</sup>
Product No:	97927474	110 %
EAN number:	5710626550128	14 100%
Technical:		100 40
Pump speed on which pump data are based:	1470 rpm	12-90 %
Rated flow:	378 m³/h	10 100
Rated head:	9 m	80 %
Maximum head:	130 dm	8- 80
Actual impeller diameter:	218-210 mm	70 %
Code for shaft seal:	BQQE	6- 60
Curve tolerance:	ISO9906:2012 3B	
Pump version:	Α	4 40
Materials:		2 20
Pump housing:	Cast iron	20 · · · · · · · · · · · · · · · · · · ·
Pump housing:	EN-GJL-250	
Pump housing:	ASTM class 35	0 100 200 300 400 Q [m³/h]
Impeller:	Cast iron	P [kW] [m]
Impeller:	EN-GJL-200	
Impeller:	ASTM class 30	14 35
Material code:	A	12 30
Installation:		10-P2-25
Range of ambient temperature:	-20 40 °C	8
Maximum operating pressure:	16 bar	615
Max pressure at stated temp:	16 bar / 120 °C	4 10
Type of connection:	DIN	2.5
Size of connection:	DN 200	
Pressure rating for connection:	PN 16	
Port-to-port length:	900 mm	308 210 210
Flange size for motor:	FF300	
Connect code:	F	
Liquid:		
Pumped liquid:	Water	
Liquid temperature range:	-25 120 °C	
Selected liquid temperature:	20 °C	
Density:	998.2 kg/m³	200 900
Electrical data:	0	
Motor type:	160MB	
IE Efficiency class:	IE3	
Rated power - P2:	11 kW	
Mains frequency:	50 Hz	
Rated voltage:	3 x 380-480 V	220 287 5 × Ø 18
Rated current:	22.0-17.8 A	
Cos phi - power factor:	0.86-0.81	
Rated speed:	240-1750 rpm	
Efficiency:	IE3 91,4%	
Motor efficiency at full load:	91.4 %	
Number of poles:	4	
Enclosure class (IEC 34-5):	IP55	
Insulation class (IEC 85):	F	
Built-in motor protection:	YES	
Motor No:	86906100	Lange Lang
Controls:		Sama La Sa Sama La Sama La Sam
Control panel:	Standard	
Function Module:	PUMP I/O	
Frequency converter:	Built-in	C CNO (frame) C CNO (frame) S c N10 S ceptor in part S ceptor in part
Others:	_ ~	

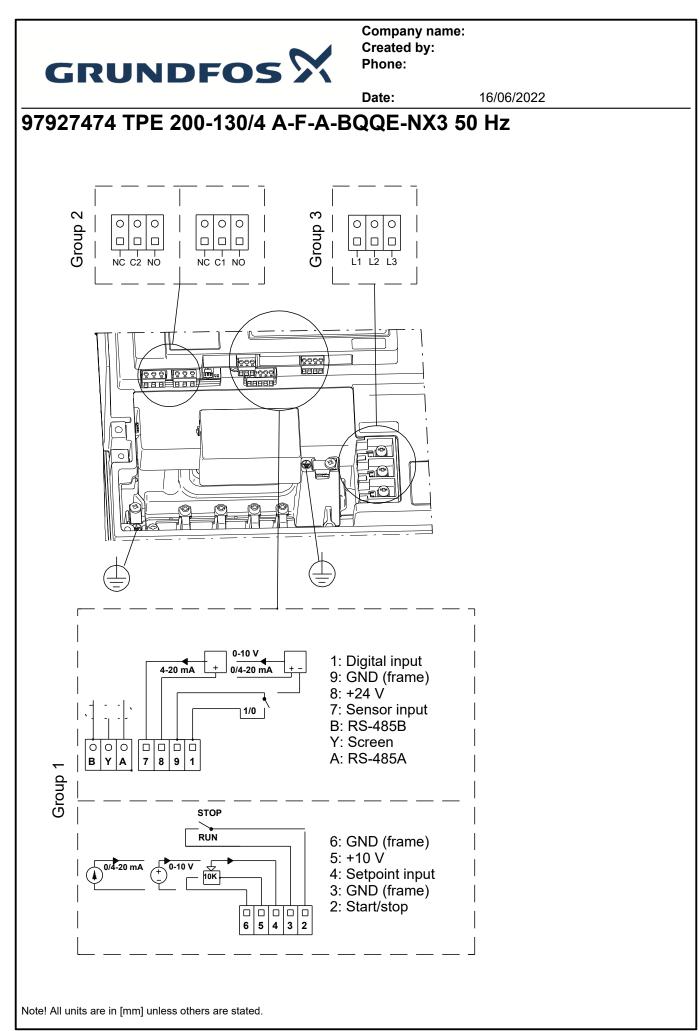
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		Date:	16/06/2022
Description	Value		
Minimum efficiency index, MEI ≥:	0.70		
Net weight:	353 kg		
Gross weight:	449 kg		
Shipping volume:	1.68 m³		
Config. file no:	95139409		
Danish VVS No.:	382039130		
Finnish LVI No.:	4616522		
Country of origin:	HU		
Custom tariff no.:	84137051		









16/06/2022

# Order Data:

Product name:TPE 200-130/4Amount:1Product No:97927474

Total: Price on request