

Qty.

1

	<b>CONDFO</b>						
		D	ate:	23/06/2022			
	ription						
TPE3	D 100-40 S-A-F-A-BQQE-CDA						
		lote! Product picture may	differ from actual p	roduct			
Produ	uct No.: 99272530						
Single twin-ł	e-stage, close-coupled, volute tw nead pump is designed with two	rin-head pump with ir parallel power-heads	i-line suction and	l discharge ports of identical diameter. The			
maint	The pump is of the top-pull-out design, i.e. the power head (motor, pump head and impeller) can be removed for maintenance or service while the pump housing remains in the pipework.						
	power head is fitted with an unb			DIN flanges (EN 1092.2 and ISO 7005.2)			
The shaft seal is according to EN 12756. Pipework connection is via PN 10 DIN flanges (EN 1092-2 and ISO 7005-2).							
efficie	Each power head is fitted with a fan-cooled, permanent-magnet synchronous motor of identical size. The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2.						
The motor includes a frequency converter and PI controller in the motor terminal box. This enables continuously variable control of the motor speed, which again enables adaptation of the performance to a given requirement.							
	bump is fitted with a combined ter bump is suitable for applications i			ensor. trol and offers following control modes:			
-	AUTOADAPT. This function co more efficient curve without co			essure curve and automatically sets a			
-	FLOWADAPT. This control mo monitors the flow rate to ensur separate pump-throttling valve	e the desired maxim	ADAPT with a flow um flow is not ex	w-limiting function. The pump continuously ceeded. This will save the cost of a			
-		ad of the pump will in	crease proportio	ependent of the flow in the system. nally to the flow in the system to			
-	Constant temperature. The returned pipe, an external temperature statement	urn-pipe temperature sensor must be insta	is kept constant led in the return	. Note: If the pump is installed in the flow pipe of the system.			
-	Constant differential temperatu sensor or two separate temper		mperature can b	e measured by a differential-temperature			
-	Constant curve. The pump car speed.	h be set to run at a co	nstant speed in t	the range of 25 to 100 % of the maximum			
Wirel casca	ess communication between the ade mode, alternating mode or d	two power heads is uty/standby.	quickly and easily	y obtained. The pump heads can be set to			
The p consi 2013.	dered as an indicative benchmar	ex (MEI) is greater or k for best-performing	equal to 0.70. T water pump ava	his is by the Commission Regulation (EU) ailable on the market as from 1 January			
The clindica	perating panel on the motor tern ator.	ninal box features a f	our-inch TFT dis	play, push-buttons and the Grundfos Eye			
	lisplay gives an intuitive and use						
i he p enabl	bush-buttons are used to navigative setting of required setpoint as	e through the menu s well as setting of pur	np to "Min." or "N	ss pump and performance data on site and lax." operation or to "Stop".			
The C	Grundfos Eye indicator on the op Power on": Motor is running (r			n of pump status: unning (permanently green indicator lights)			
•			<b>C</b> ,	as stopped (permanently vellow indicator			

- "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights)
- "Alarm": Motor has stopped (flashing red indicator lights).



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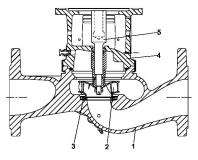
#### Qty. | Description

Communication with the pump is also possible by means of Grundfos GO Remote (accessory). The remote control enables further settings as well as reading out of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power consumption".

Date:

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



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

The twin-head pump is designed with two parallel power-heads. A flap valve in the common discharge port is opened by the flow of the pumped liquid and prevents backflow of liquid into the idle pump head.

The pump housing is provided with a replaceable stainless steel/PTFE neck ring to reduce the amount of liquid running from the discharge side of the impeller to the suction 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.

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: EPDM (ethylene-propylene rubber)

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

Twin-head pumps installed in horizontal pipes must be fitted with an automatic air vent in the upper part of the pump housing. The automatic air vent is not supplied with the pump.



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 IE5 in accordance with IEC 60034-30-2.



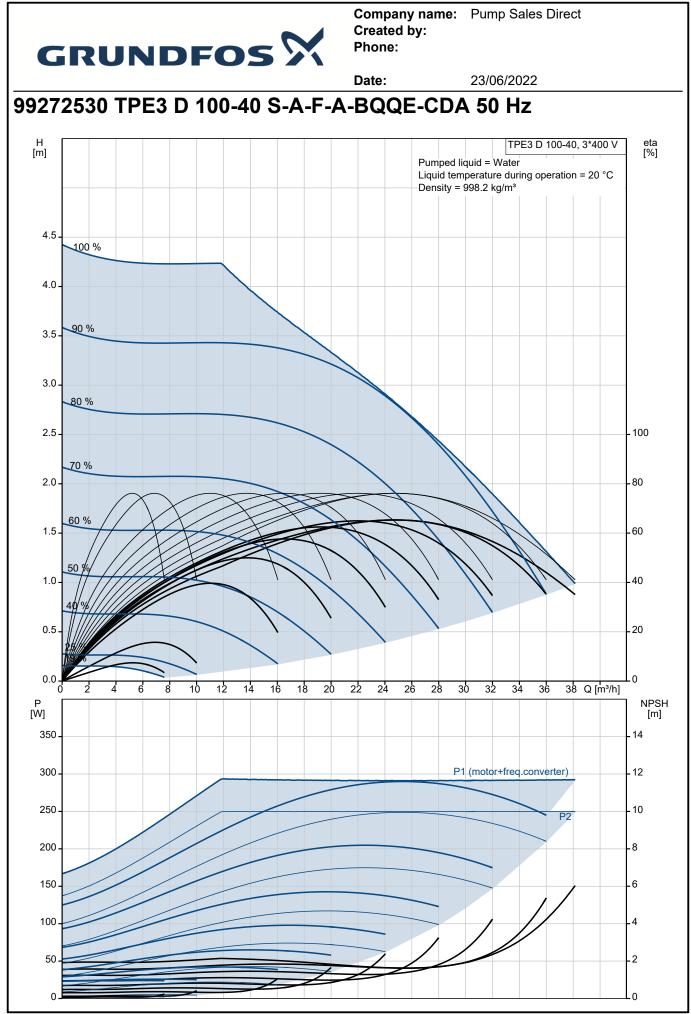
GRU	INDF	U5 7	Phone:		
			Date:	23/06/2	2022
Description					
The motor r quick-rising	equires no external i temperatures, e.g. c	motor protection constant overloa	n. The motor contro nd and stalled cond	ol unit incorporates pi itions.	rotection against slow- an
	l box holds terminal				
	dedicated digital inp				
	analog inputs, 0(4)-2				
	configurable digital i		llector output		
	• •	•	•	ensor (senarate con	nected)
<ul> <li>Grundfos combined temperature and differential pressure sensor (separate connected)</li> <li>24 V voltage supply for sensors</li> </ul>				neoled)	
	- two signal relay outputs (potential-free contacts)				
					ion
<ul> <li>interface for Grundfos CIM fieldbus module.</li> </ul>					
	l box holds terminal				
	dedicated digital inp				
	analog inputs, 0(4)-2				
	configurable digital i		llector output		
				ensor (separate con	nected)
	voltage supply for s				neoled)
	signal relay outputs (		ontacte)		
	Ibus connection		ontaotoj		
-	ace for Grundfos CI	M fieldbus mod	ule		
			uio.		
Technical data					
Controls:	onvortor:	Built-in			
Frequency of	onverter.	Duit-in			
Liquid:					
Pumped liqu		Water			
	erature range:	-25 120 °C			
	uid temperature:	20 °C			
Density:		998.2 kg/m³			
Technical:					
	d on which pump da	ta are hased:	1860 rpm		
Rated flow:	r on which pump du	23.9 m <sup>3</sup> /h			
Rated head		3 m			
	ller diameter:	90 mm			
Code for sh		BQQE			
Curve tolera		ISO9906:201	2 3B2		
Materials:		0.1			
Pump housi	ng:	Cast iron			
		EN-GJL-250	<b>.</b>		
		ASTM class 3	35		
Impeller:		Composite PES+30% GI	=		
		. 20:00/00			
Installation:					
	nbient temperature:	-20 50 °C			
	perating pressure:	10 bar			
	re at stated temp:	10 bar / 120 °	~r`		
			C		
Max pressu Type of con Size of conr	nection:	DIN DN 100	C		

Size of connection:

DN 100



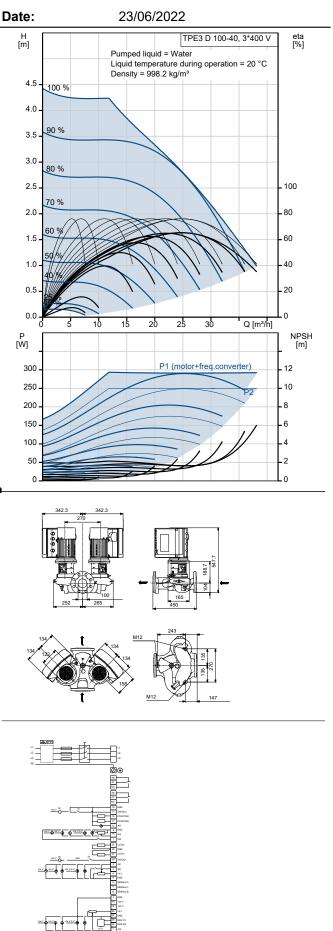
		Date:	23/06/2022	
Description				
Pressure rating for connection:	PN 10			
Port-to-port length:	450 mm			
Flange size for motor:	56C			
Electrical data:				
Motor type:	71A			
IE Efficiency class:	IE5			
Rated power - P2:	0.25 kW			
Mains frequency:	50 Hz			
Rated voltage:	3 x 380-500 V			
Rated current:	0.85-0.70 A			
Cos phi - power factor:	0.58-0.52			
Rated speed:	180-2000 rpm			
Efficiency:				
Motor efficiency at full load:	84.5 %			
Enclosure class (IEC 34-5):	IP55			
Insulation class (IEC 85):	F			
Motor No:	99137980			
Others:				
Minimum efficiency index, MEI ≥	· 0.70			
Net weight:	70.5 kg			
Gross weight:	86.1 kg			
Shipping volume:	0.315 m <sup>3</sup>			
Country of origin:	HU			
Custom tariff no.:	84137065			
	04137003			



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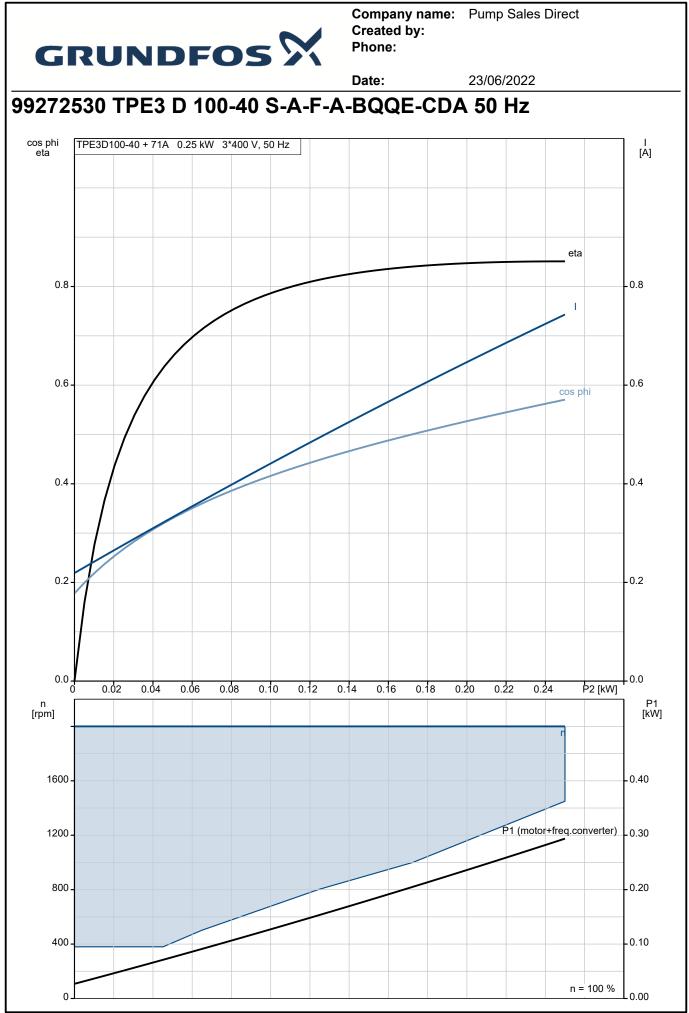


		Date:
Description	Value	H [m]
General information:		
Product name:	TPE3 D 100-40 S-A-F-A-BQQE-CDA	4.5
Product No:	99272530	4.0
EAN number:	5713826366117	4.0
Technical:		3.5
Pump speed on which pump data are based:	1860 rpm	3.0
Rated flow:	23.9 m³/h	
Rated head:	3 m	2.5
Maximum head:	40 dm	2.0
Actual impeller diameter:	90 mm	
Code for shaft seal:	BQQE	1.5
Curve tolerance:	ISO9906:2012 3B2	
Pump version:	A	1.0
Materials:		0.5
Pump housing:	Cast iron	
Pump housing:	EN-GJL-250	0.0
Pump housing:	ASTM class 35	P
Impeller:	Composite	[Ŵ]
Impeller:	PES+30% GF	300
Material code:	A	
Installation:		250
Range of ambient temperature:	-20 50 °C	200 -
Maximum operating pressure:	10 bar	150
Max pressure at stated temp:	10 bar / 120 °C	100
Type of connection:	DIN	50.
Size of connection:	DN 100	
Pressure rating for connection:	PN 10	0.
Port-to-port length:	450 mm 56C	
Flange size for motor: Connect code:	F	
Liquid:	F	
Pumped liquid:	Water	
Liquid temperature range:	-25 120 °C	
Selected liquid temperature:	20 °C	
Density:	998.2 kg/m <sup>3</sup>	
Electrical data:		
Motor type:	71A	
IE Efficiency class:	IE5	
Rated power - P2:	0.25 kW	134
Mains frequency:	50 Hz	
Rated voltage:	3 x 380-500 V	
Rated current:	0.85-0.70 A	
Cos phi - power factor:	0.58-0.52	
Rated speed:	180-2000 rpm	
Efficiency:	84.5%	L1
Motor efficiency at full load:	84.5 %	P6
Enclosure class (IEC 34-5):	IP55	
Insulation class (IEC 85):	F	
Built-in motor protection:	ELEC	
Motor No:	99137980	
Controls:		
Control panel:	HMI300 - Graphical	
Function Module:	FM300 - Advanced	2
Frequency converter:	Built-in	
Others:		
Minimum efficiency index, MEI ≥:	0.70	-
Net weight:	70.5 kg	

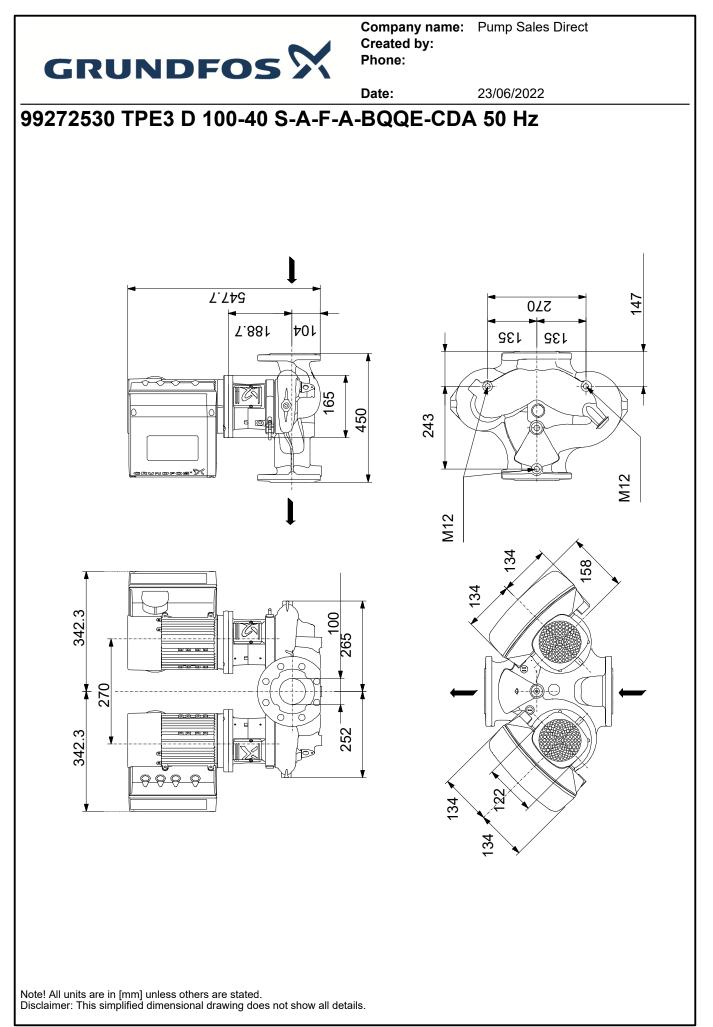


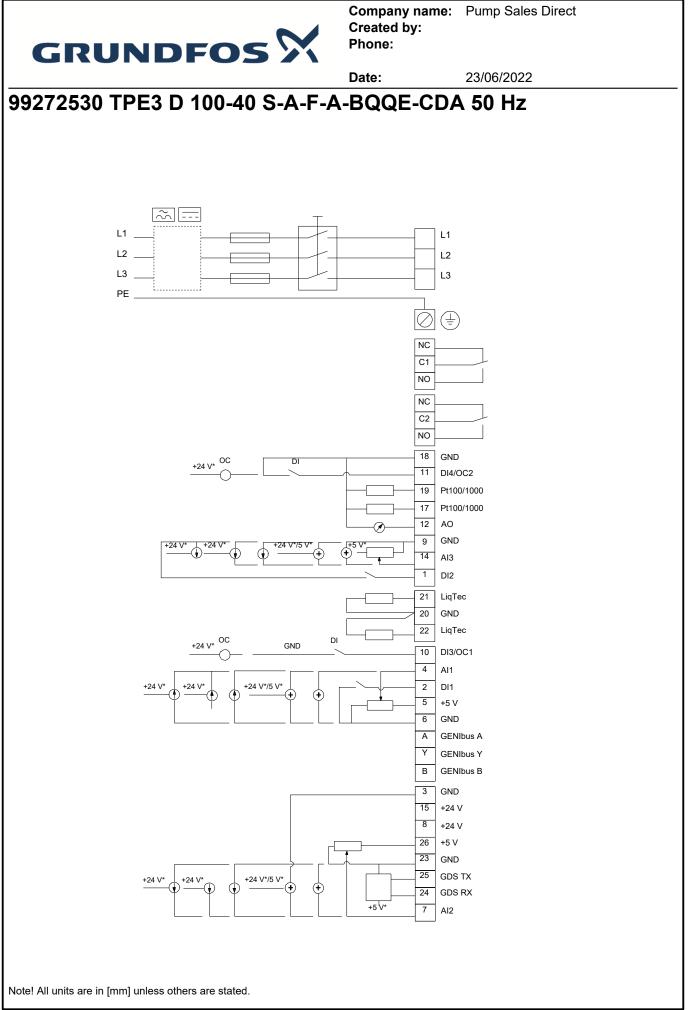


		Date:	23/06/2022
Description	Value		
Gross weight:	86.1 kg	-	
Shipping volume:	0.315 m³		
Config. file no:	98484688		
Country of origin:	HU		
Custom tariff no.:	84137065		



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23/06/2022

# Order Data:

Product name:TPE3 D 100-40Amount:1Product No:99272530

Total: Price on request