

TPE2 D 100-150-N-A-F-A-GQQE

Grundfos pump 98437689



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<https://www.lenntech.com/grundfos/TPED0/98437689/TPE2-D-100-150-N-A-F-A-GQQE.html>

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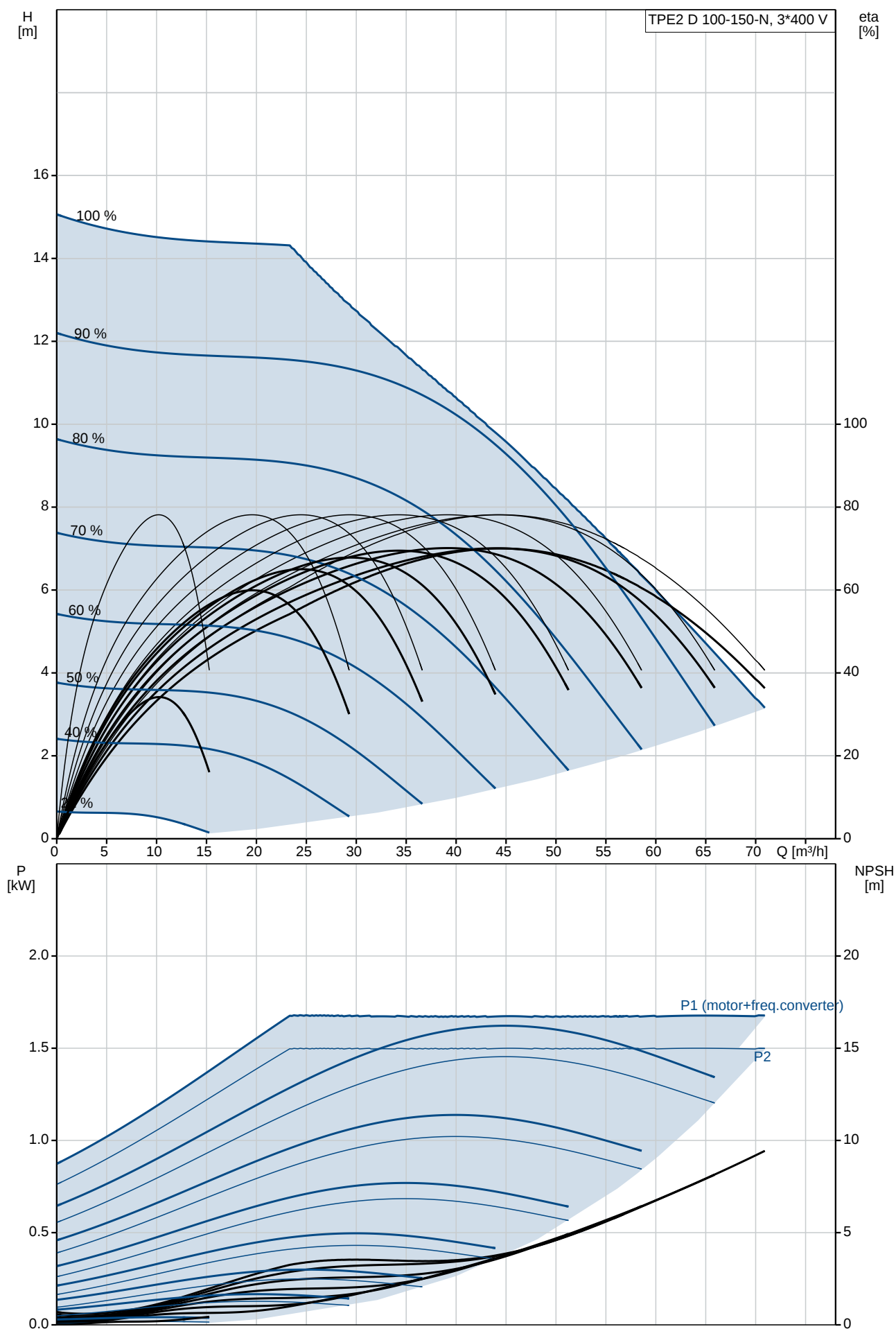
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Position	Qty.	Description
	1	TPE2 D 100-150-N A-F-A-GQQE  Product No.: On request Single-stage, close-coupled, volute twin-head pump with in-line suction and discharge ports of identical diameter. The twin-head pump is designed with two parallel power-heads. 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. Each power head is fitted with an unbalanced rubber bellows seal. The shaft seal is according to EN 12756. Pipework connection is via PN 10 DIN flanges (EN 1092-2 and ISO 7005-2). Each power head is fitted with a fan-cooled, permanent-magnet synchronous motor of identical size. 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. Further product details Wireless communication between the two power heads is quickly and easily obtained. The pump heads can be set to cascade mode, alternating mode or duty/standby. An operating panel on the motor terminal box enables setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop". The Grundfos Eye indicator on the operating panel provides visual indication of pump status: • "Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights) • "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights) • "Alarm": Motor has stopped (flashing red indicator lights). Communication with the pump is 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". 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. Pump Pump housing and pump head are electrocoated to improve the corrosion resistance. Electrocoating includes: 1) Alkaline-based cleaning. 2) Pretreatment with zinc phosphate coating. 3) Cathodic electrocoating (epoxy). 4) Curing of paint film at 200-250 °C.  1: Pump housing 2: Impeller 3: Neck ring

Position	Qty.	Description
		4: Pump head/motor stool 5: Stub shaft TWINPUMP=DJ 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 shaft seal is an unbalanced rubber bellows seal with reduced seal face. Due to the bellows, the seal does not wear the shaft, and the axial movement is not prevented by deposits on the shaft. The narrow seal face makes the seal perform well in high-viscosity and anti-freezing liquids. Primary seal: - 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 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 terminal box holds terminals for these connections: - one dedicated digital input - two analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 - 3.5 V 5 V voltage supply to potentiometer and sensor - one configurable digital input or open-collector output - Grundfos Digital Sensor input and output 24 V voltage supply for sensors - two signal relay outputs (potential-free contacts) - the two power heads communicate via wireless GENIair or wired GENI connection - interface for Grundfos CIM fieldbus module. Technical data Liquid: Pumped liquid: Water Liquid temperature range: -25 .. 60 °C Liquid temperature during operation: 20 °C Density: 998.2 kg/m³ Technical: Rated flow: 44.1 m³/h

Position	Qty.	Description
		Rated head: 9.8 m Actual impeller diameter: 90 mm Primary shaft seal: GQQE Curve tolerance: ISO9906:2012 3B Materials: Pump housing: Cast iron Impeller: Composite PES/PP 30% GF Installation: Range of ambient temperature: -20 .. 50 °C Maximum operating pressure: 10 bar Flange standard: DIN Pipe connection: DN 100 Pressure rating: PN 10 (@): 450 mm Flange size for motor: 56C Electrical data: Motor type: 90SC Rated power - P2: 2 x 1.5 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-500 V Rated current: 2.90-2.40 A Cos phi - power factor: 0.92-0.85 Rated speed: 360-4000 rpm Efficiency: 88.9% Motor efficiency at full load: 88.9 % Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Others: Minimum efficiency index, MEI ≥: 0.7 ErP status: EuP Standalone/Prod. Net weight: 75.4 kg Gross weight: 91 kg Shipping volume: 0.31 m³

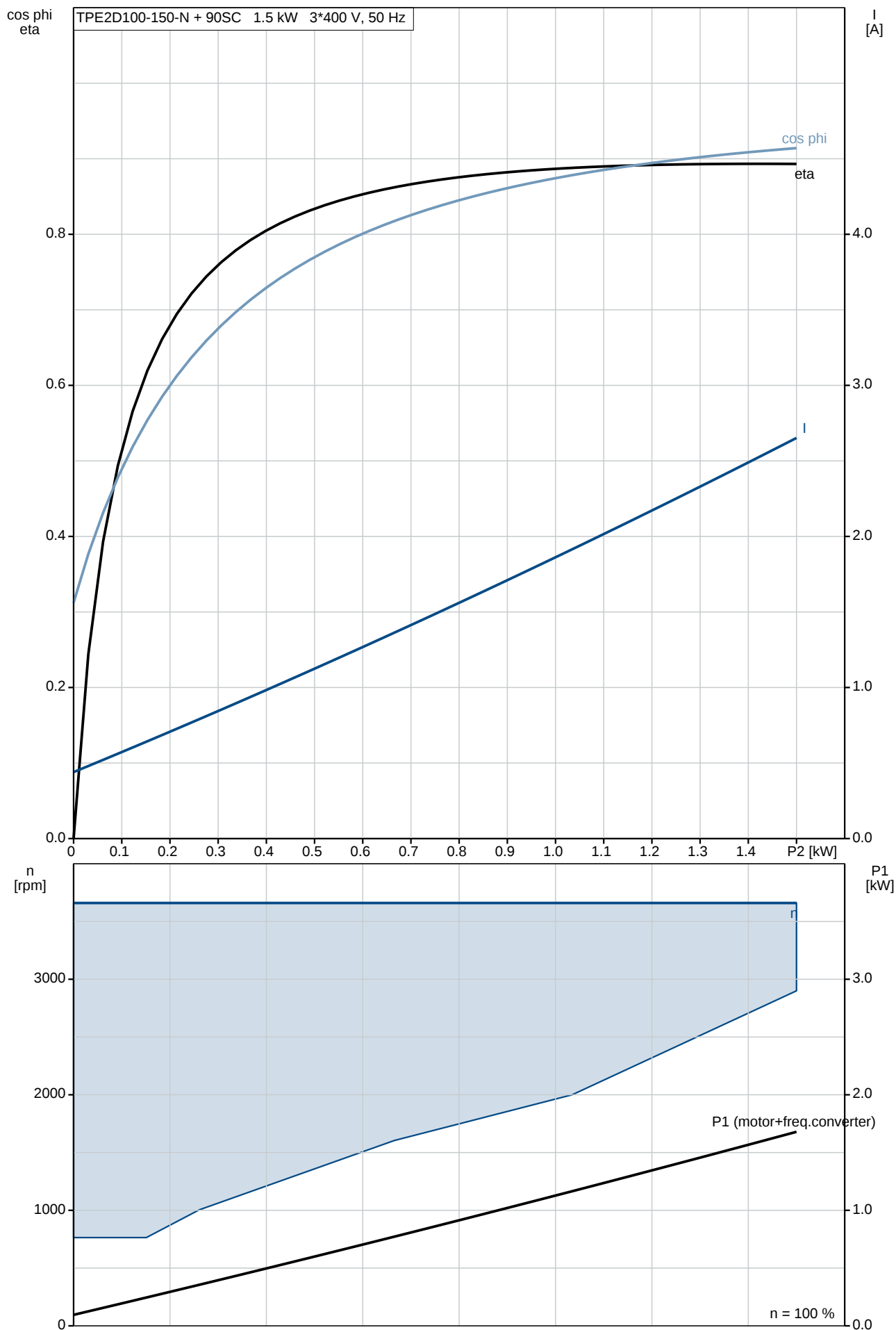
On request TPE2 D 100-150-N A-F-A-GQQE 50 Hz



The technical drawing for the TPE2 D 100-150-N pump assembly includes the following components:

- Performance Graphs:**
 - Top Graph:** Shows head (H) in meters versus flow rate (Q) in m³/h for various efficiency levels (eta [%]) from 40% to 100%. The pump is rated for 3*400 V.
 - Bottom Graph:** Shows power (P) in kW versus flow rate (Q) in m³/h for two configurations: P1 (motor+freq. converter) and P2.
- Mechanical Dimensions:**
 - Top View:** Shows a footprint with overall dimensions of 342 mm by 342 mm. Key features include a central 100 mm diameter, 252 mm side offsets, and a 270 mm central spacing.
 - Side View:** Shows a total height of 568 mm, a base width of 450 mm, and a mounting flange with a 165 mm diameter and 10.4 mm thickness.
 - Front View:** Shows a total width of 270 mm with 134 mm side offsets and a 122 mm central gap. The mounting flange has a 158 mm diameter.
 - Detail View:** Shows a mounting bracket with dimensions 243 mm, 147 mm, 135 mm, and 270 mm. Mounting holes are labeled M12.
- Electrical Schematic:**
 - Input:** Three-phase supply (L1, L2, L3) and PE ground.
 - Control:** Includes a stop button (NC, C1, NO) and a start button (NC, C2, NO).
 - Protection:** Thermal relay (T) with 0.35 OC and 1.5 V settings.
 - Wiring:** Shows connections for GENBus A, GENBus Y, GENBus B, and various voltage taps (+24 V, +24 V/5 V, +24 V).
 - Grounding:** Multiple GND connections are shown throughout the circuit.

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

Exploded view



Sectional drawing (TM058200 for TPE2,TPE3)



TM058200

Exploded view (TM057026 for MGE model H/I)



Disclaimer: The information about the Grundfos pump in this document may be outdated.

Data may be subject to alterations without further notice.

Please contact us to verify the data above is still accurate/up-to-date.

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