

Created by:

Phone: 01539 729395

**Email:** info@nationlapumpsandboilers.co.uk

**Date:** 04/01/2024

Project: Client:

Reference Number: Client Number: Contact:

#### Qty. | Description

#### TPE3 40-180 S-A-F-A-BQQE-FYC



Note! Product picture may differ from actual product

Product No.: 99272210

Single-stage, close-coupled, volute pump with in-line suction and discharge ports of identical diameter. 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.

The shaft seal is according to EN 12756. Pipework connection is via PN 6/10 DIN flanges (EN 1092-2 and ISO 7005-2).

The pump is fitted with a fan-cooled, permanent-magnet synchronous motor. 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. The pump is fitted with a combined temperature- and differential pressure sensor.

Controls:

Frequency converter: Built-in

Liquid:

Pumped liquid: Water
Liquid temperature range: -25 .. 120 °C
Selected liquid temperature: 20 °C
Density: 998.2 kg/m³

Technical:

Pump speed on which pump data are based: 4350 rpm

Rated flow: 18 m³/h
Rated head: 11.5 m
Actual impeller diameter: 74 mm
Code for shaft seal: BQQE

Curve tolerance: ISO9906:2012 3B2

Materials:

Pump housing: Cast iron

EN-GJL-250 ASTM class 35

Impeller: Composite PES+30% GF

Installation:

Range of ambient temperature: -20 .. 50 °C

Maximum operating pressure: 10 bar

Max pressure at stated temp: 10 bar / 120 °C

Type of connection: DIN
Size of connection: DN 40
Pressure rating for connection: PN 6/10



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Port-to-port length: 250 mm Flange size for motor: 56C

Electrical data:

Motor type: 80A
Rated power - P2: 0.75 kW
Mains frequency: 50 / 60 Hz
Rated voltage: 3 x 380-500 V
Rated current: 1.70-1.60 A
Cos phi - power factor: 0.82-0.66
Rated speed: 480-5900 rpm

IE Efficiency class:IE5Motor efficiency at full load:88.1 %Enclosure class (IEC 34-5):IP55Insulation class (IEC 85):F

Motor No: 99138035

Others:

 Minimum efficiency index, MEI ≥:
 0.70

 Net weight:
 24.4 kg

 Gross weight:
 31.9 kg

 Shipping volume:
 0.104 m³

 Danish VVS No.:
 381621180

 Swedish RSK No.:
 5745836

 Finnish LVI No.:
 4616252

 Norwegian NRF no.:
 9043431



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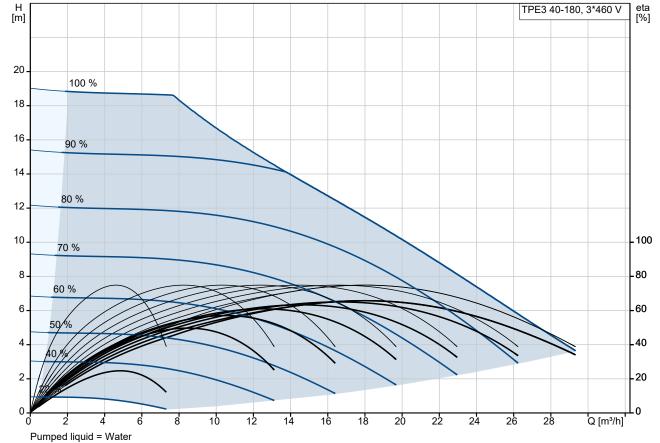
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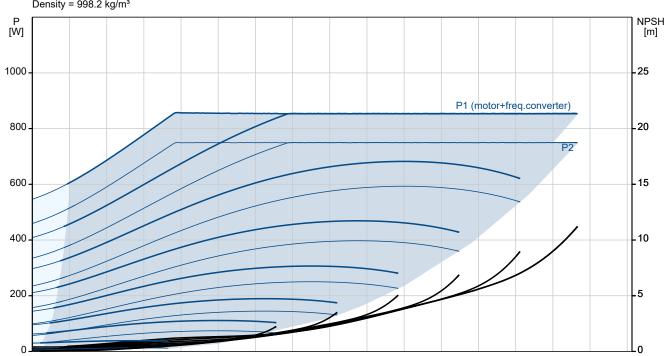
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### 99272210 TPE3 40-180 S-A-F-A-BQQE-FYC



Liquid temperature during operation = 20 °C

Density = 998.2 kg/m³





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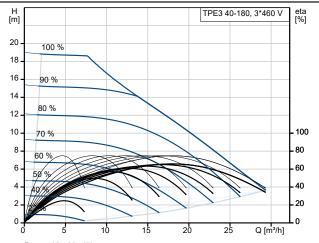
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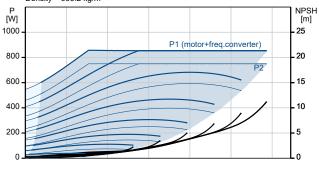
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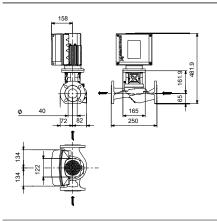
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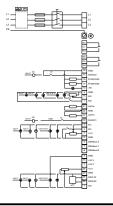
Description	Value
General information:	
Product name:	TPE3 40-180 S-A-F-A-BQQE-FYC
Product No:	99272210
EAN number:	5713826360115
Technical:	
Pump speed on which pump data are based:	4350 rpm
Rated flow:	18 m³/h
Rated head:	11.5 m
Maximum head:	180 dm
Actual impeller diameter:	74 mm
Code for shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B2
Pump version:	Α
Materials:	
Pump housing:	Cast iron
Pump housing:	EN-GJL-250
Pump housing:	ASTM class 35
Impeller:	Composite
Impeller:	PES+30% GF
Material code:	A
Installation:	
Range of ambient temperature:	-20 50 °C
Maximum operating pressure:	10 bar
Max pressure at stated temp:	10 bar / 120 °C
Type of connection:	DIN
Size of connection:	DN 40
Pressure rating for connection:	PN 6/10
Port-to-port length:	250 mm
Flange size for motor:	56C
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-25 120 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m³
Electrical data:	
Motor type:	80A
Rated power - P2:	0.75 kW
Mains frequency:	50 / 60 Hz
Rated voltage:	3 x 380-500 V
Rated current:	1.70-1.60 A
Cos phi - power factor:	0.82-0.66
Rated speed:	480-5900 rpm
IE Efficiency class:	IE5
Motor efficiency at full load:	88.1 %
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	ELEC
Motor No:	99138035
Controls:	
Control panel:	HMI300 - Graphical
Function Module:	FM300 - Advanced
F	D. 114 1



Pumped liquid = Water Liquid temperature during operation = 20  $^{\circ}$ C Density = 998.2 kg/m³







Built-in

Frequency converter:



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Description	Value
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	24.4 kg
Gross weight:	31.9 kg
Shipping volume:	0.104 m³
Config. file no:	98484776
Danish VVS No.:	381621180
Swedish RSK No.:	5745836
Finnish LVI No.:	4616252
Norwegian NRF no.:	9043431



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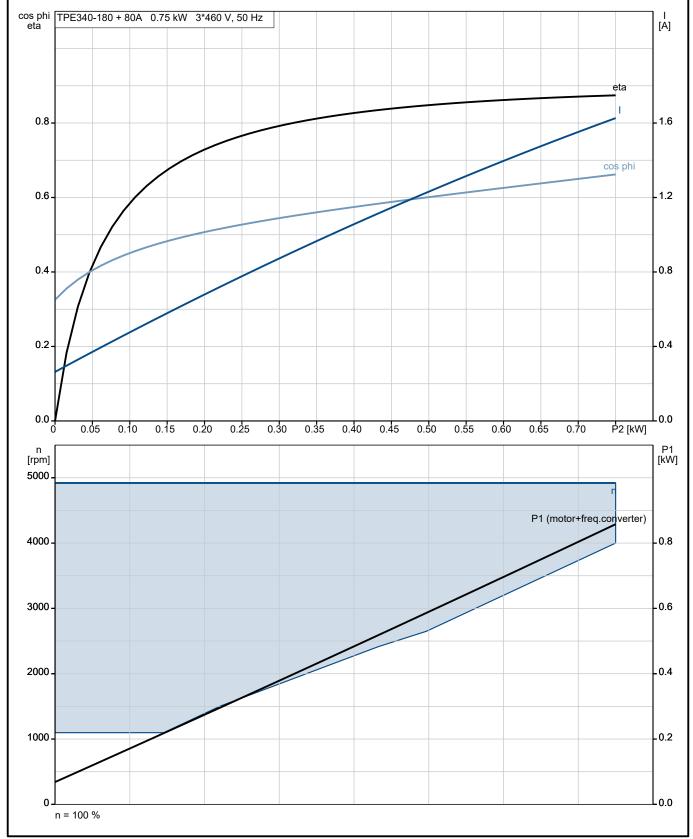
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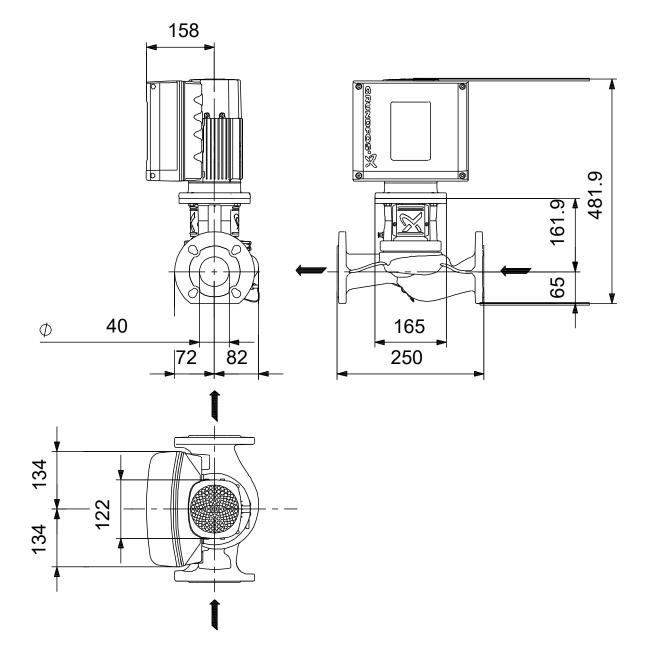
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Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.



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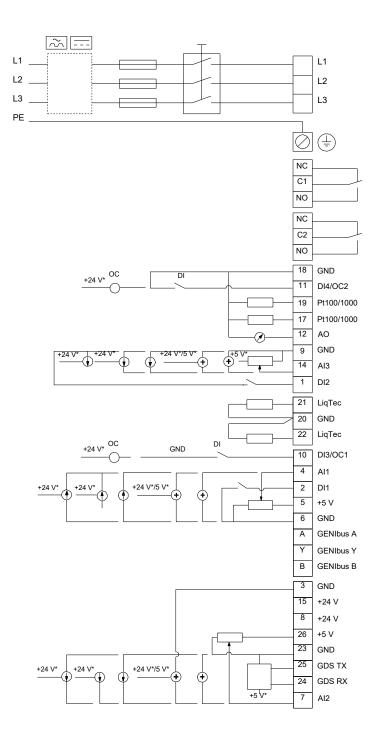
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Note! All units are in [mm] unless others are stated.