

Qty. Description

1 TP 65-180/2 A-F-A-BQBE-HW1



Note! Product picture may differ from actual product

Product No.: [99222098](#)

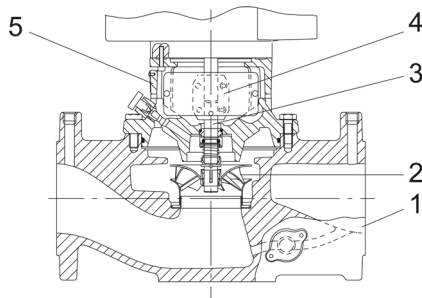
Single-stage, close-coupled, volute pump with in-line suction and discharge ports of identical diameter. The pump is of the top-pull-out design, i.e. the power head (motor, pump head and impeller) can be removed for maintenance or service while the pump housing remains in the pipework.

The pump is fitted with an unbalanced rubber bellows seal. 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 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.

Pump



1: Pump housing

2: Impeller

3: Shaft

4: Coupling

5: 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 with a split cone with 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: carbon graphite, resin-impregnated

This material pairing has a very good corrosion resistance and is especially suitable for water up to 90 °C.

The seal life will be reduced significantly at temperatures above 90 °C.

The material pairing is not recommended for liquids containing particles as this will result in heavy wear on the SiC face.

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.

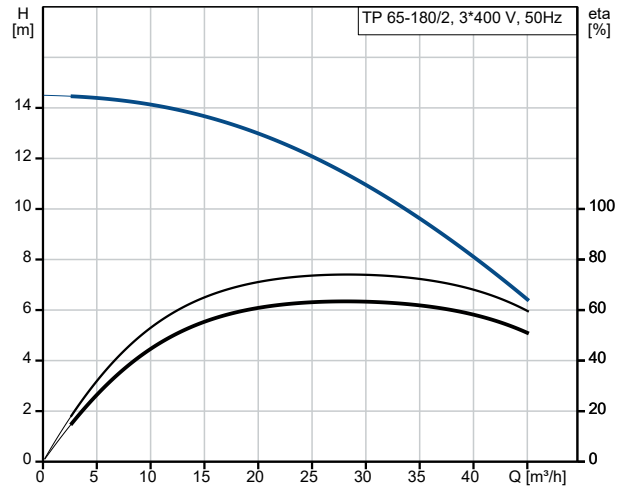
The flanges have tapings for mounting of pressure gauges.

Qty.	Description
1	<p>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.</p> <p>The central part of the motor stool is provided with guards for protection against the shaft and coupling. Motor and pump shaft are connected via a shell coupling.</p> <p>Motor</p> <p>The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. Electrical tolerances comply with IEC 60034.</p> <p>The motor is flange-mounted with tapped-hole flange (FT). Motor-mounting designation in accordance with IEC 60034-7: IM B 14, IM V 18 (Code I) / IM 3601, IM 3611 (Code II).</p> <p>The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.</p> <p>The motor does not incorporate motor protection and must be connected to a motor-protective circuit breaker which can be manually reset. The motor-protective circuit breaker must be set according to the rated current of the motor (I1/1).</p> <p>The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.</p> <p>Further product details</p> <p>Technical data</p> <p>Controls:</p> <p>Frequency converter: None</p> <p>Liquid:</p> <p>Pumped liquid: Water</p> <p>Liquid temperature range: 0 .. 140 °C</p> <p>Selected liquid temperature: 20 °C</p> <p>Density: 998.2 kg/m³</p> <p>Technical:</p> <p>Pump speed on which pump data are based: 2830 rpm</p> <p>Rated flow: 28 m³/h</p> <p>Rated head: 11.4 m</p> <p>Actual impeller diameter: 102 mm</p> <p>Code for shaft seal: BQBE</p> <p>Curve tolerance: ISO9906:2012 3B2</p> <p>Materials:</p> <p>Pump housing: Cast iron EN-GJL-250 ASTM class 35</p> <p>Impeller: Stainless steel EN 1.4301 AISI 304</p> <p>Installation:</p> <p>Range of ambient temperature: -30 .. 60 °C</p> <p>Maximum operating pressure: 10 bar</p> <p>Max pressure at stated temp: 10 bar / 140 °C</p> <p>Type of connection: DIN</p> <p>Size of connection: DN 65</p> <p>Pressure rating for connection: PN 6/10</p> <p>Port-to-port length: 340 mm</p> <p>Flange size for motor: FT115</p>

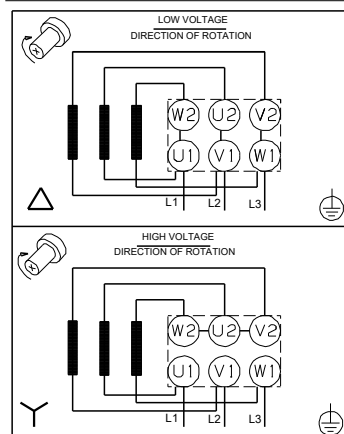
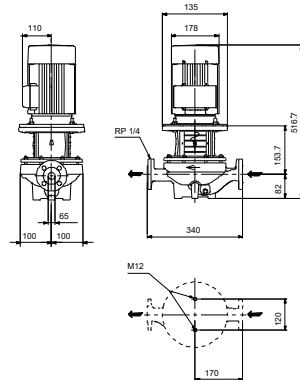
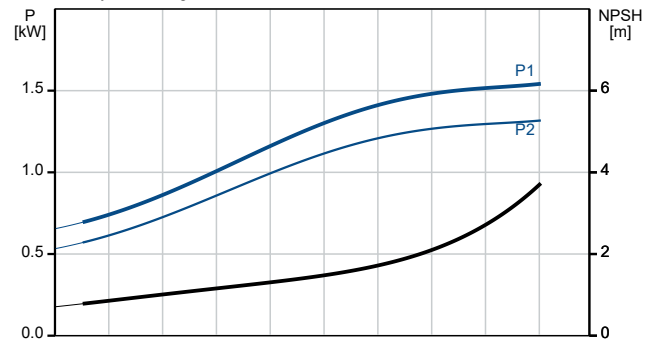
Qty.	Description
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1	Electrical data:
	Motor type: 90SD
	Rated power - P2: 1.5 kW
	Mains frequency: 50 Hz
	Rated voltage: 3 x 220-240D/380-415Y V
	Rated current: 5.70/3.30 A
	Starting current: 750-820 %
	Cos phi - power factor: 0.84-0.78
	Rated speed: 2890-2910 rpm
	IE Efficiency class: IE3
	Motor efficiency at full load: 84.2 %
	Motor efficiency at 3/4 load: 86.4-84.9 %
	Motor efficiency at 1/2 load: 86.0-83.0 %
	Number of poles: 2
	Enclosure class (IEC 34-5): 55 Dust/Jetting
	Insulation class (IEC 85): F
	Motor No: 85U01906
	Others:
	Minimum efficiency index, MEI \geq : 0.70
	Net weight: 41.8 kg
	Gross weight: 46.8 kg
	Shipping volume: 0.091 m ³

Description	Value
General information:	
Product name:	TP 65-180/2 A-F-A-BQBE-HW1
Product No:	99222098
EAN number:	5712608954979
Technical:	
Pump speed on which pump data are based:	2830 rpm
Rated flow:	28 m³/h
Rated head:	11.4 m
Maximum head:	180 dm
Actual impeller diameter:	102 mm
Code for shaft seal:	BQBE
Curve tolerance:	ISO9906:2012 3B2
Pump version:	A
Materials:	
Pump housing:	Cast iron
Pump housing:	EN-GJL-250
Pump housing:	ASTM class 35
Impeller:	Stainless steel
Impeller:	EN 1.4301
Impeller:	AISI 304
Material code:	A
Installation:	
Range of ambient temperature:	-30 .. 60 °C
Maximum operating pressure:	10 bar
Max pressure at stated temp:	10 bar / 140 °C
Type of connection:	DIN
Size of connection:	DN 65
Pressure rating for connection:	PN 6/10
Port-to-port length:	340 mm
Flange size for motor:	FT115
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	0 .. 140 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m³
Electrical data:	
Motor type:	90SD
Rated power - P2:	1.5 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 220-240D/380-415Y V
Rated current:	5.70/3.30 A
Starting current:	750-820 %
Cos phi - power factor:	0.84-0.78
Rated speed:	2890-2910 rpm
IE Efficiency class:	IE3
Motor efficiency at full load:	84.2 %
Motor efficiency at 3/4 load:	86.4-84.9 %
Motor efficiency at 1/2 load:	86.0-83.0 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Built-in motor protection:	NONE
Motor No:	85U01906
Controls:	
Frequency converter:	None



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





Company name:

Created by:

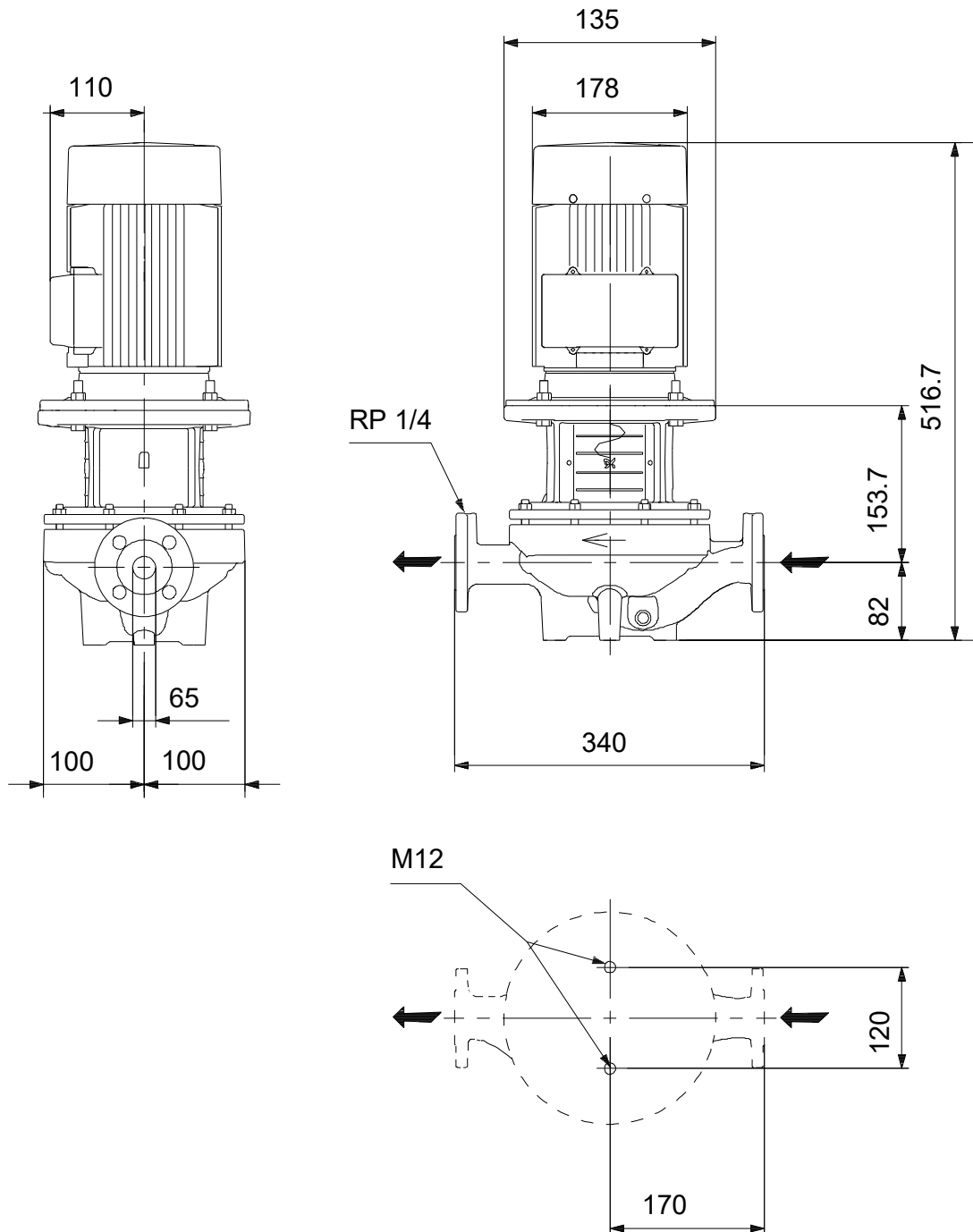
Phone:

Date:

25/10/2024

Description	Value
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	41.8 kg
Gross weight:	46.8 kg
Shipping volume:	0.091 m ³

99222098 TP 65-180/2 A-F-A-BQBE-HW1 50 Hz



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

Spare parts TP 65-180/2, Product No. 99222098

Produced After 1945 (production year and week number)

Pos	Description	Annotation	Classification Data	Part no.	Qty.	Unit
-	Kit, Coupling			00339124	1	pcs
9	Hex socket head cap screw				4	pcs
10a	Coupling half				2	pcs
10	Shaft pin				1	pcs
-	Kit, Shaft seal			99194299	1	pcs
72a	O-ring				1	pcs
72a	O-ring				1	pcs
109	O-ring				1	pcs
-	Shaft w/impeller cpl.			98313236	1	pcs
48	Bulk, Split cone nut (10 PC)			96547794	1	pcs
49b	Bulk, Split cone (10 PC)			96547795	1	pcs
49	Impeller cpl.			96547711	1	pcs
51	Pump shaft			96547792	1	pcs
-	Motor			99606486	1	pcs
-	Kit, Bearing cpl.			96279794	1	pcs
111	Ball bearing				1	pcs
154	Ball bearing				1	pcs
157	O-ring				1	pcs
158	Waved washer				1	pcs
187	Retaining ring				1	pcs
188	Retaining ring				1	pcs
-	Kit, End shield			96279789	1	pcs
156a	End shield				1	pcs
157a	Gasket				1	pcs
157	O-ring				1	pcs
158	Waved washer				1	pcs
159a	Seal ring				1	pcs
-	Kit, Fan			96279757	1	pcs
156	Fan				1	pcs
159a	Seal ring				1	pcs
-	Kit, fan cover, black			96279755	1	pcs
151b	Label				1	pcs
151a	Label				1	pcs
151	Fan cover				1	pcs
152	Pan head thread forming screw				4	pcs
-	Kit, fan cover, black/red			92890743	1	pcs
151b	Label				1	pcs
151a	Label				1	pcs
151	Fan cover				1	pcs
152	Pan head thread forming				4	pcs
-	Kit, Flange			96279777	1	pcs
156b	Flange				1	pcs
159.c	Seal ring				1	pcs
184	Gasket				1	pcs
186	Drain plug				3	pcs
-	Kit, Retaining ring			96279798	1	pcs
187	Retaining ring				1	pcs
188	Retaining ring				1	pcs
-	Kit, Shaft seal			96279761	1	pcs
159c	Seal ring				1	pcs
159a	Seal ring				1	pcs
-	Kit, Staybolts			96279791	1	pcs
181	Pan head staybolt				4	pcs



Company name:

Created by:

Phone:

Date: 25/10/2024

Pos	Description	Annotation	Classification Data	Part no.	Qty.	Unit
-	Kit, Terminal board			96279769	1	pcs
163	Hex socket head screw				1	pcs
173a	Base				1	pcs
173	Pan head thread forming				1	pcs
176	Slot cheese head screw				6	pcs
176	Terminal				1	pcs
176	Connecting piece				3	pcs
176	Wire clamp				3	pcs
176	Terminal board				1	pcs
177	Pan head screw				1	pcs
-	Kit, Terminal box cover			96279771	1	pcs
164	Terminal box cover w/gasket				1	pcs
166	Pan head thread forming				4	pcs
-	Pump housing cpl.			98313171	1	pcs
45	Neck ring			96591109	1	pcs
7	Coupling guard			96590459	2	pcs
10	Bulk, Shaft pin (10 PC)			96536473	1	pcs
10	Shaft pin			96587588	1	pcs
18	Bulk, Plug (5 PC)			96620482	1	pcs
18	Plug			98164277	1	pcs
19	Plug			96590492	2	pcs
28	Hex head screw			99932722	4	pcs
72a	O-ring			98163015	1	pcs
105	Shaft seal			99345191	1	pcs