

Inventflow: Grundfos A-partner

Grundfos TPE 100-70/4 S-A-F-A-BQQE-HDA

Find the pump here:

<https://inventflow.nl/en/pompenfilter/tpe/grundfos-tpe-100-70-4-s-a-f-a-bqqe-hda>

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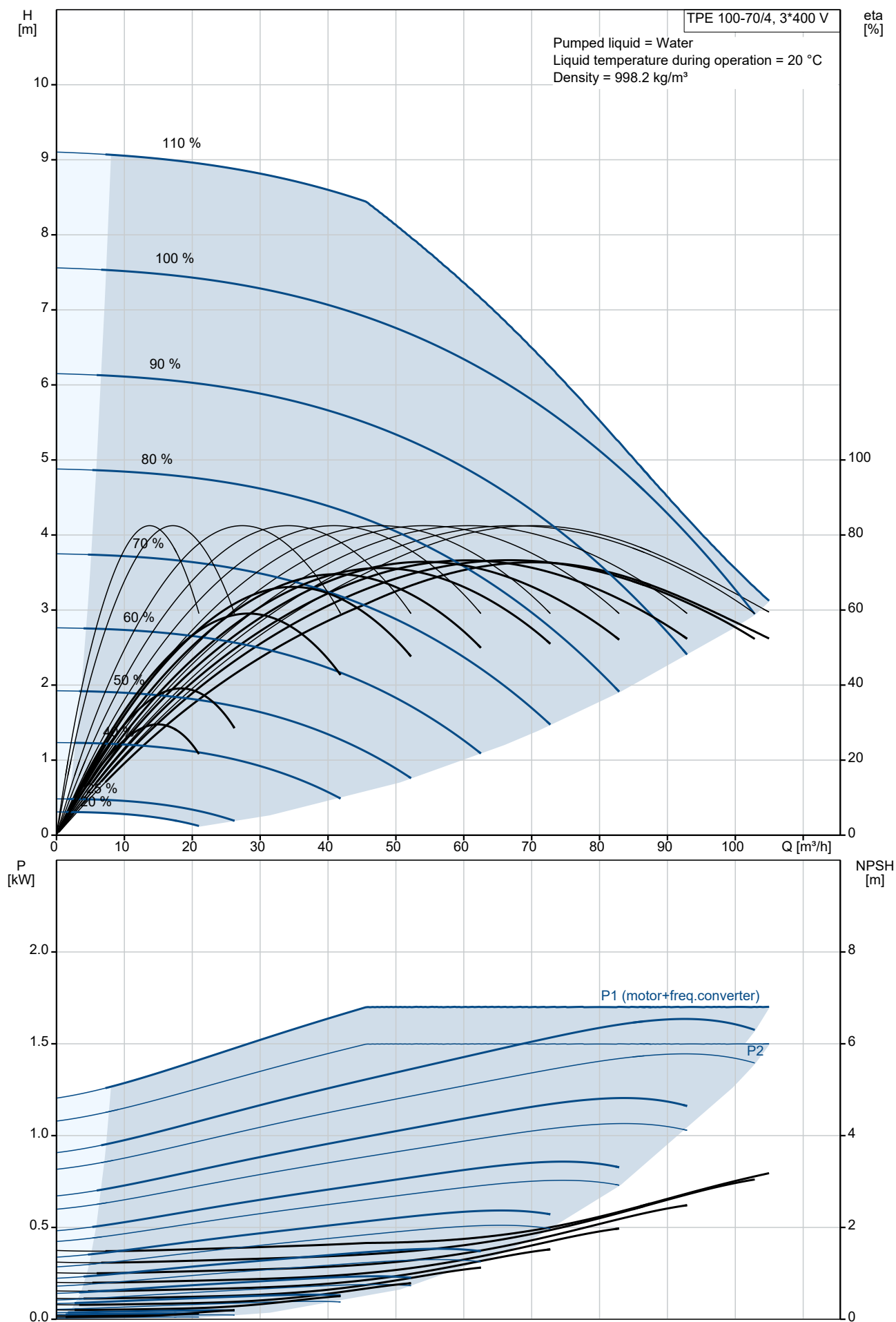
Datasheet



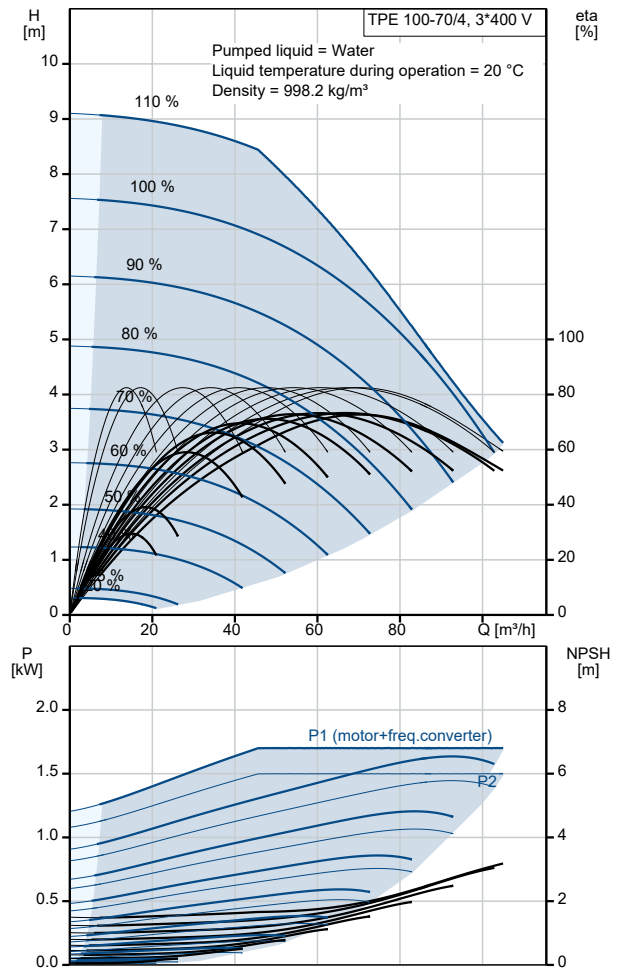
Qty.	Description
1	TPE 100-70/4 S-A-F-A-BQQE-HDA  Note! Product picture may differ from actual product Product No.: 99114813 Single-stage, centrifugal volute in-line, single-head pump. The in-line design with opposite suction and discharge ports enables mounting in pipework or on a concrete foundation. The shaft seal is a corrosion resistant maintenance-free mechanical seal. The pump is fitted with an IEC-flanged three-phase MGE motor with frequency converter and PI-controller integrated in the motor terminal box. No additional motor protection is required as both motor and electronics are protected by integrated overload and temperature protection. A differential pressure transmitter fitted on the pump registers the differential pressure across the pump and enables constant pressure or proportional pressure control of the pump. A control panel enables setting of required setpoint as well as setting of pump to MIN or MAX operation or to STOP. The control panel has indicator lights for "Operation" and "Fault". Communication with the pump is possible by means of Grundfos R100 Remote Control enabling further settings as well as reading out of a number of parameters such as "Actual value", "Speed", "Power input" and total "Power consumption". The terminal box holds terminals for the connection of : - Pump start/stop (potential-free contact), - external remote setpoint setting via analog signal, 0 - 5 V, 0 - 10 V, 0(4) - 20 mA, - 5 V voltage supply for setpoint potentiometer, I_{max} = 5 mA, - differential pressure sensor factory-fitted, - input for forced control to MIN or MAX (potential-free contact), - potential-free fault signal relay with changeover contact, - RS485 GENIbus.

Qty.	Description
	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: 1445 rpm Rated flow: 79.1 m³/h Rated head: 4.75 m Actual impeller diameter: 150 mm Code for shaft seal: BQQE Curve tolerance: ISO9906:2012 3B2 Materials: Pump housing: Cast iron EN-GJL-250 ASTM class 35 Impeller: Cast iron EN-GJL-200 ASTM class 30 Installation: Range of ambient temperature: -20 .. 50 °C Maximum operating pressure: 16 bar Max pressure at stated temp: 16 bar / 120 °C Type of connection: DIN Size of connection: DN 100 Pressure rating for connection: PN 16 Port-to-port length: 550 mm Flange size for motor: FF165 Electrical data: Motor type: 90LE IE Efficiency class: IE5 Rated power - P2: 1.5 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-500 V Rated current: 2.90-2.50 A Cos phi - power factor: 0.93 Rated speed: 180-2000 rpm Efficiency: 88.0% Motor efficiency at full load: 88.0 % Number of poles: 4 Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Motor No: 98971263 Others: Minimum efficiency index, MEI ≥: 0.70 Net weight: 90.7 kg Gross weight: 109 kg Shipping volume: 0.39 m³ Danish VVS No.: 381956070 Finnish LVI No.: 4616412 Norwegian NRF no.: 9043633 Country of origin: HU Custom tariff no.: 84137051

99114813 TPE 100-70/4 S-A-F-A-BQQE-HDA 50 Hz

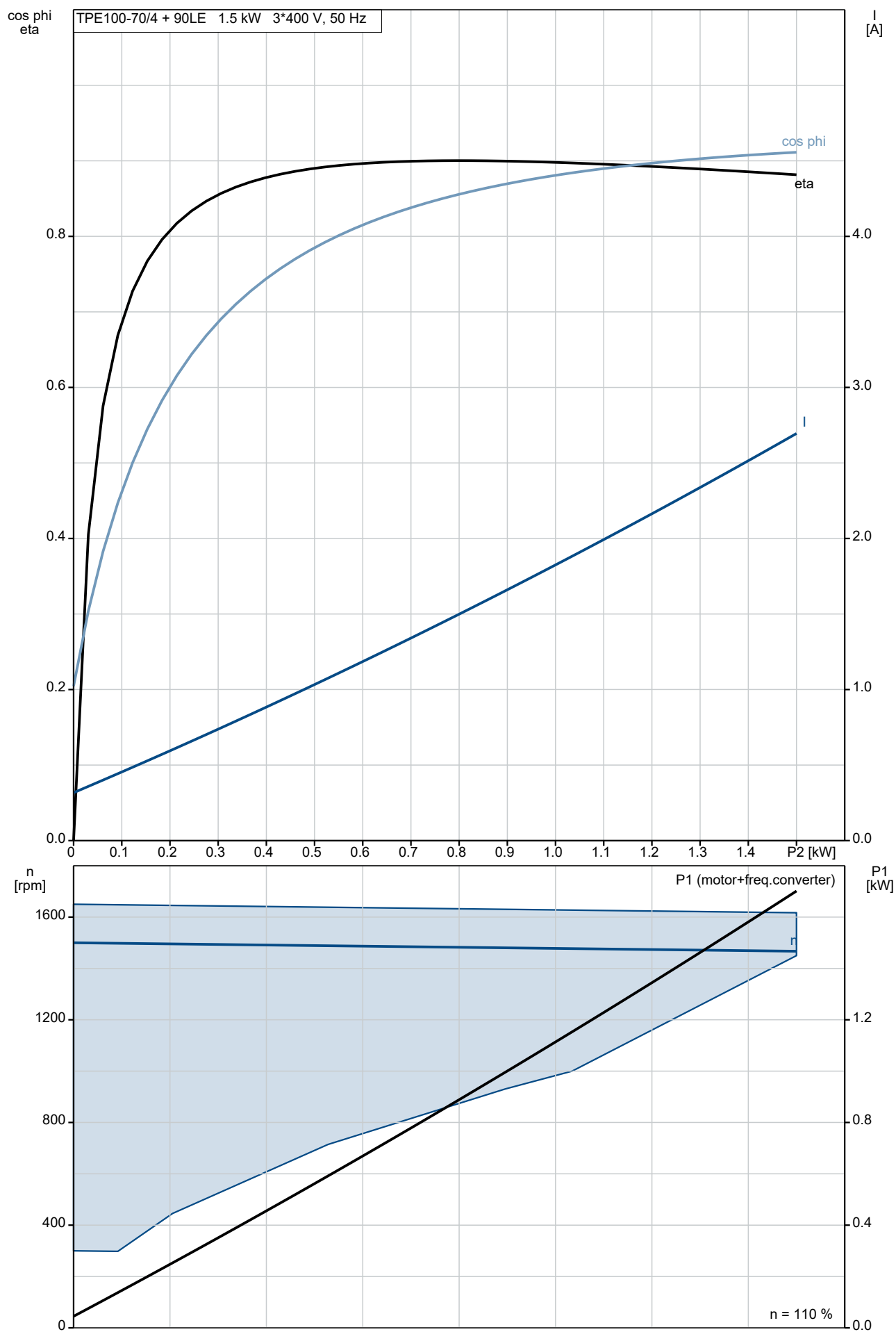


Description	Value
General information:	
Product name:	TPE 100-70/4 S-A-F-A-BQQE-HDA
Product No:	99114813
EAN number:	5712607036416
Technical:	
Pump speed on which pump data are based:	1445 rpm
Rated flow:	79.1 m³/h
Rated head:	4.75 m
Maximum head:	70 dm
Actual impeller diameter:	150 mm
Code for shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B2
Pump version:	A
Materials:	
Pump housing:	Cast iron
Pump housing:	EN-GJL-250
Pump housing:	ASTM class 35
Impeller:	Cast iron
Impeller:	EN-GJL-200
Impeller:	ASTM class 30
Material code:	A
Installation:	
Range of ambient temperature:	-20 .. 50 °C
Maximum operating pressure:	16 bar
Max pressure at stated temp:	16 bar / 120 °C
Type of connection:	DIN
Size of connection:	DN 100
Pressure rating for connection:	PN 16
Port-to-port length:	550 mm
Flange size for motor:	FF165
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:	90LE
IE Efficiency class:	IE5
Rated power - P2:	1.5 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-500 V
Rated current:	2.90-2.50 A
Cos phi - power factor:	0.93
Rated speed:	180-2000 rpm
Efficiency:	88.0%
Motor efficiency at full load:	88.0 %
Number of poles:	4
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor protec:	ELEC
Motor No:	98971263
Controls:	
Control panel:	HMI300 - Graphical
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	90.7 kg
Gross weight:	109 kg
Shipping volume:	0.39 m³
Config. file no:	99139278

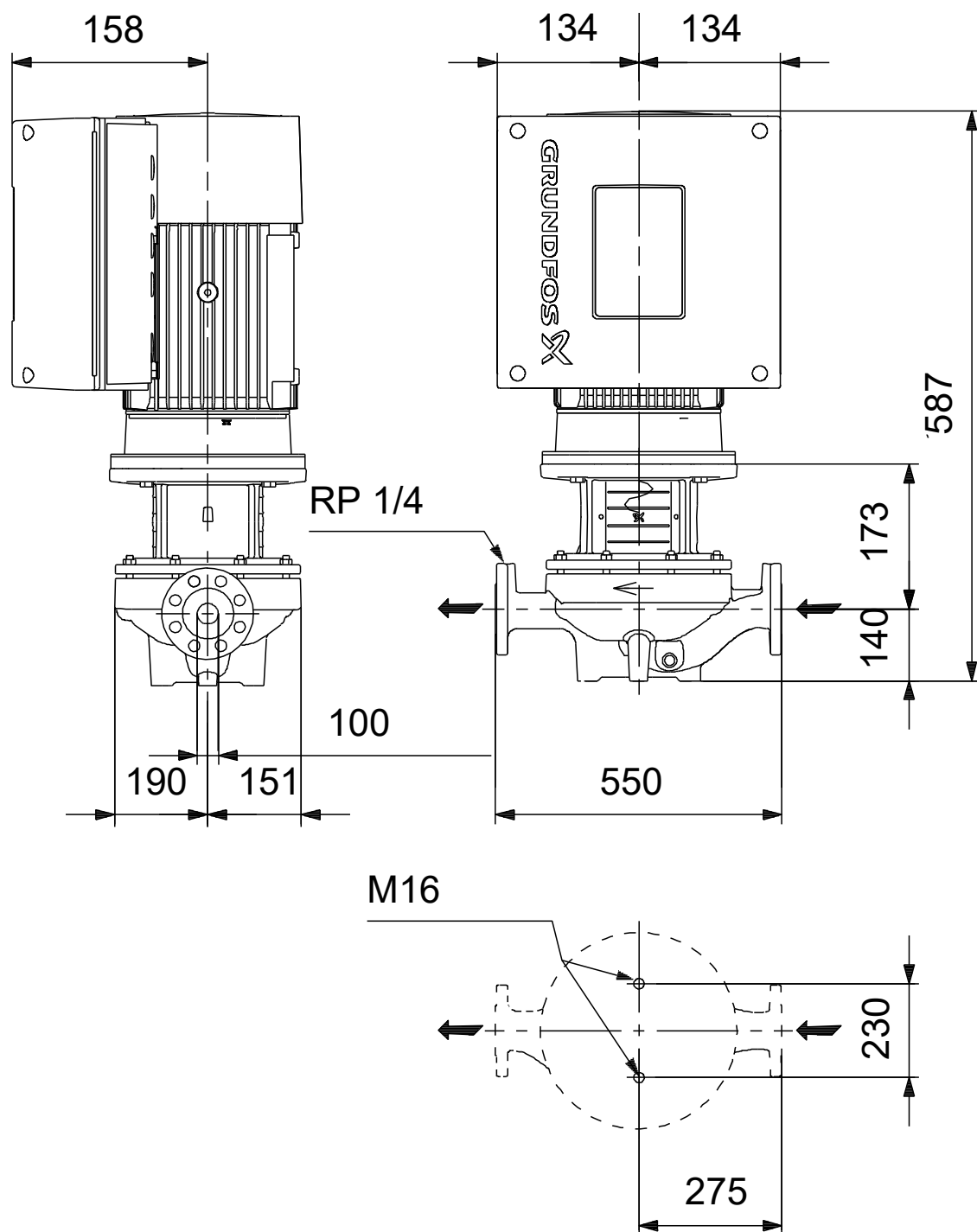


Description	Value
Danish VVS No.:	381956070
Finnish LVI No.:	4616412
Norwegian NRF no.:	9043633
Country of origin:	HU
Custom tariff no.:	84137051

99114813 TPE 100-70/4 S-A-F-A-BQQE-HDA 50 Hz



99114813 TPE 100-70/4 S-A-F-A-BQQE-HDA 50 Hz



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

Spare parts TPE 100-70/4, Product No. 99114813
Produced After 1811 (production year and week number)

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
-	Kit, bracket			99184283	1	pcs
	Pan head thread forming screw				1	
	Bracket				1	
152	Cross recess countersunk screw				1	
-	Kit, capillary tubes			99184237	1	pcs
508	Tube				1	
509	Capillary tube.				1	
-	Kit, sensor			99184269	1	pcs
	Housing				1	
	Clip				1	
	Fitting				2	
7a	Pan washer head screw				2	
501	Sensor				1	
510	Mounting bush.				2	
530	Cable				1	
+	Stub shaft			99113730	1	pcs
-	Motor				1	pcs
-	Kit, adapter			98345796	1	
- 252a	Adapter set					1
	Adapter					
	Adapter					
167	Cable gland					
-	Kit, bearing cpl.			98330605	1	
111	Ball bearing		Designation: 6204.2Z.C3.SYN			1
154	Ball bearing					1
156d	Gasket		Internal diameter: 114,80			1
			Outer diameter: 121,20			
			Thickness: 0,25			
156c	Seal ring					1
156c	Seal ring					1
157	O-ring		Diameter: 47			1
			Material type: NBR			
			Thickness: 3			
158	Waved washer					1
-	Kit, Blanking plug			98334761	1	
252b	Plug cpl.					4
-	Kit, cable gland			98337336	1	
- 293	Cable glands set			98271484	1	
167	Cable gland					
167	Cable gland					
-	Kit, connector plugs			98403113	1	
266	Connector plug 10-pole					1
266	Connector plug 2-pole					1
266	Connector plug 8-pole					1
266	Connector plug 8-pole					1
266	Connector plug 8-pole					1
266	Connector plug 3-pole					1
266	Connector plug 3-pole					1
266	Connector plug 3-pole					1
-	Kit, control box			99132424	1	
152	Pan head thread forming screw					1
178	Pan head thread forming screw					4
251d	Pan head thread forming screw					4

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
251b	Control box				1	
251a	Control box cpl.				1	
252b	Plug cpl.				4	
268a	Base				1	
268	Pan head screw				1	
273b	Battery				1	
273	Funct. Module cpl.				1	
275a	Pin				1	
277a	Cross recess Pan head screw				5	
277a	Cross recess Pan head screw				1	
277a	Cross recess Pan head screw				1	
277	Isolation cover				1	
286	Spacer				1	
286	Spacer				1	
287	Cover				1	
288b	Retaining ring				6	
288a	Pan head thread forming screw				6	
288	Wire clamp				3	
289	Wire clamp				1	
290	Control panel, cpl.				1	
-	Kit, Control box upper			98334769	1	
251d	Pan head thread forming screw				4	
251b	Control box				1	
-	Kit, Control panel			98939971	1	
290	Control panel, cpl.				1	
-	Kit, cover			98330622	1	
287	Cover				1	
-	Kit, fan			98290124	1	
152	Pan head thread forming screw				4	
156c	Seal ring				1	
156	Fan				1	
-	Kit, flange (DE)			98330548	1	
156d	Gasket		Internal diameter: 114,80		1	
			Outer diameter: 121,20			
			Thickness: 0,25			
156b	Flange				1	
185	Cross recess Pan head screw				4	
186	Drain plug				1	
188	Retaining ring				1	
-	Kit, Funct. module			98334777	1	
273a	Cross recess Pan head screw				5	
273	Funct. Module cpl.				1	
275a	Pin				1	
286	Spacer				1	
-	Kit, Isolation cover			98330625	1	
277a	Cross recess Pan head screw				1	
277	Isolation cover				1	
-	Kit, Lower part cpl.			99094250	1	
178	Pan head thread forming screw				4	

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
251a	Control box cpl.				1	
275a	Pin				1	
277a	Cross recess Pan head screw				1	
277	Isolation cover				1	
-	Kit, motor			99010828	1	
	Terminal				3	
111	Ball bearing		Designation: 6204.2Z.C3.SYN		1	
150	Stator				1	
150	Stator housing				1	
151	Fan cover				1	
152	Pan head thread forming screw				1	
152	Pan head thread forming screw				4	
152	Pan head thread forming screw				4	
154	Ball bearing				1	
156d	Gasket		Internal diameter: 114,80		1	
			Outer diameter: 121,20			
			Thickness: 0,25			
156c	Seal ring				1	
156c	Seal ring				1	
156b	Flange				1	
156	Fan				1	
157	O-ring		Diameter: 47		1	
			Material type: NBR			
			Thickness: 3			
158	Waved washer				1	
172a	Parallel key		Dimension: 8X7X40		1	
172	Shaft w/rotor				1	
178	Pan head thread forming screw				4	
185	Cross recess Pan head screw				4	
187	Retaining ring				1	
188	Retaining ring				1	
201c	Drain plug				1	
203	Terminal plug				1	
-	Kit, plug			99369622	1	
	Terminal				3	
203	Terminal plug				1	
205	Pan head thread forming screw				1	
-	Kit, screws			98330627	1	
268a	Base				1	
268	Pan head screw				1	
288b	Retaining ring				6	
288a	Pan head thread forming screw				6	
288	Wire clamp				3	
289a	Pan head thread forming screw				1	
289	Wire clamp				1	
-	Kit, staybolts			98881544	1	
181	Pan head staybolt				4	
	Pan head thread forming screw			99598708	4	
111	Ball bearing		Designation: 6204.2Z.C3.SYN	97914979	1	
152	Pan head thread forming screw			99834207	4	
152	Pan head thread forming screw			99814578	4	

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
156d	Gasket		Internal diameter: 114,80	99406425	1	
			Outer diameter: 121,20			
			Thickness: 0,25			
156	Fan			96591801	1	
159a	Seal ring			97689816	1	
186	Drain plug			99980519	1	
251d	Pan head thread forming screw			98995460	4	
266	Connector plug 3-pole			99421265	1	
- 6	Pump housing w/wear ring			98424537	1	pcs
36	Nut		Thread: M10	96620484	6	
18	Plug			96620482	1	pcs
18	Plug			98164277	1	pcs
49	Impeller			98518028	1	pcs
67	Nut		Thread: M14	92526531	1	pcs
72a	O-ring			92547662	1	pcs
72a	O-ring			92526508	1	pcs
72a	O-ring			97511824	1	pcs
72a	O-ring			99756265	1	pcs
77a	Pan head screw			99266550	4	pcs
105	Shaft seal			99380916	1	pcs
105	Shaft seal			99884645	1	pcs
510	Mounting bush.			99079267	2	pcs