

Inventflow: Grundfos A-partner

Grundfos TPE 50-540/2 A-F-A-BQQE-NDB

Find the pump here:

<https://inventflow.nl/en/pompenfilter/tpe/grundfos-tpe-50-540-2-a-f-a-bqqe-ndb>

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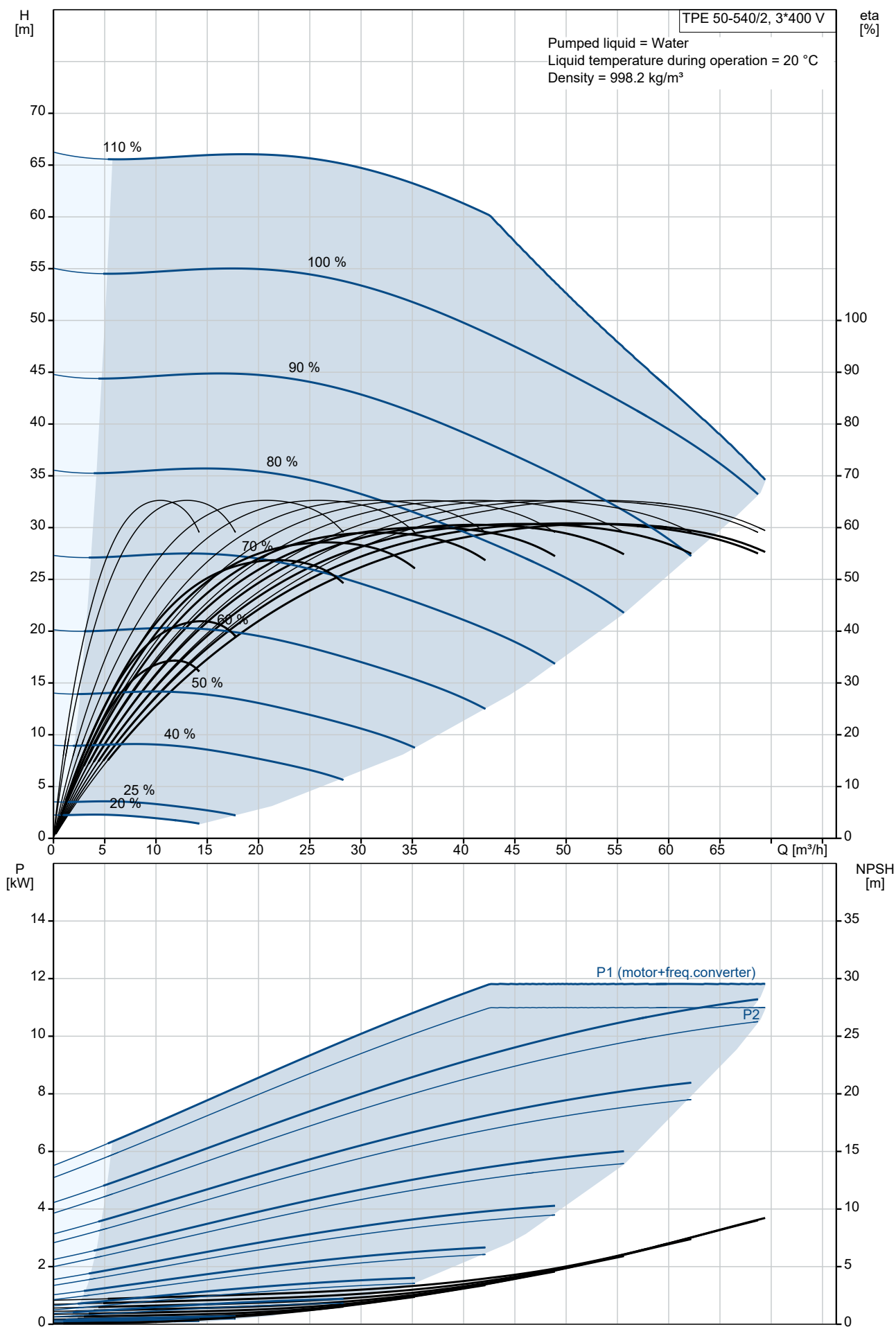
Datasheet



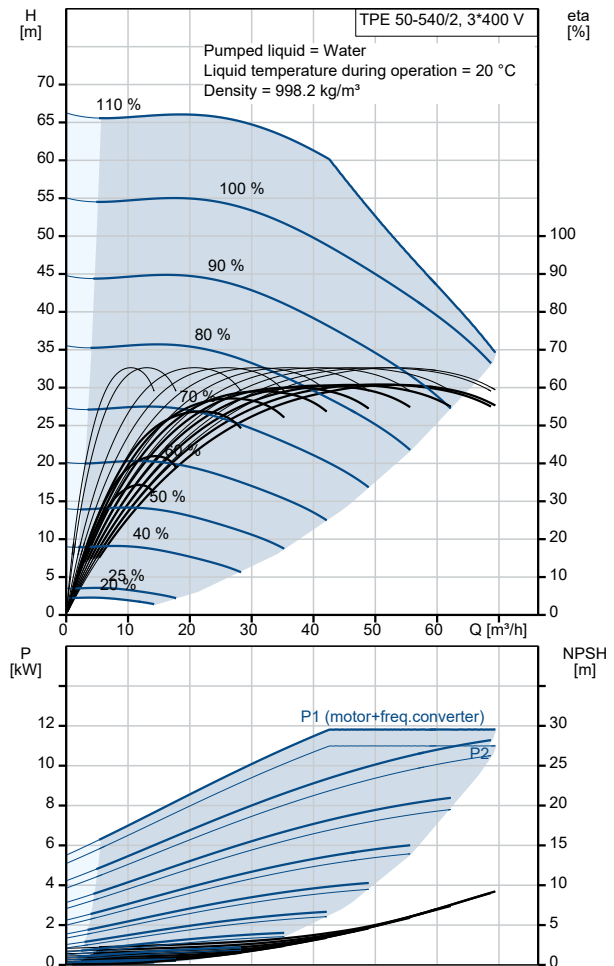
Qty.	Description
1	TPE 50-540/2 A-F-A-BQQE-NDB  Note! Product picture may differ from actual product Product No.: 99113940 Single-stage, centrifugal volute in-line, single-head pump. The in-line design with opposite suction and discharge ports enables mounting in pipework or on a concrete foundation. 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. External sensor can be connected if controlled pump operation based on for example flow, differential pressure or temperature is required. 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, - sensor, 0 - 5 V, 0 - 10 V, 0(4) - 20 mA, - 24 V voltage supply for sensor, I_{max} = 40 mA, - input for forced control to MIN or MAX (potential-free contact), - potential-free fault signal relay with

Qty.	Description
	changeover contact, - RS485 GENIbus. 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: 2940 rpm Rated flow: 53.5 m³/h Rated head: 44.2 m Actual impeller diameter: 207 mm Code for shaft seal: BQQE Curve tolerance: ISO9906:2012 3B 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 50 Pressure rating for connection: PN 16 Port-to-port length: 440 mm Flange size for motor: FF300 Electrical data: Motor type: 160MH IE Efficiency class: IE5 Rated power - P2: 11 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-500 V Rated current: 20.3-16.0 A Cos phi - power factor: 0.93-0.90 Rated speed: 360-4000 rpm Efficiency: 93.1% Motor efficiency at full load: 93.1 % Number of poles: 2 Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Motor No: 98971081 Others: Minimum efficiency index, MEI ≥: 0.70 Net weight: 128 kg Gross weight: 165 kg Shipping volume: 0.56 m³ Danish VVS No.: 382063540 Finnish LVI No.: 4616463 Country of origin: HU Custom tariff no.: 84137051

99113940 TPE 50-540/2 A-F-A-BQQE-NDB 50 Hz

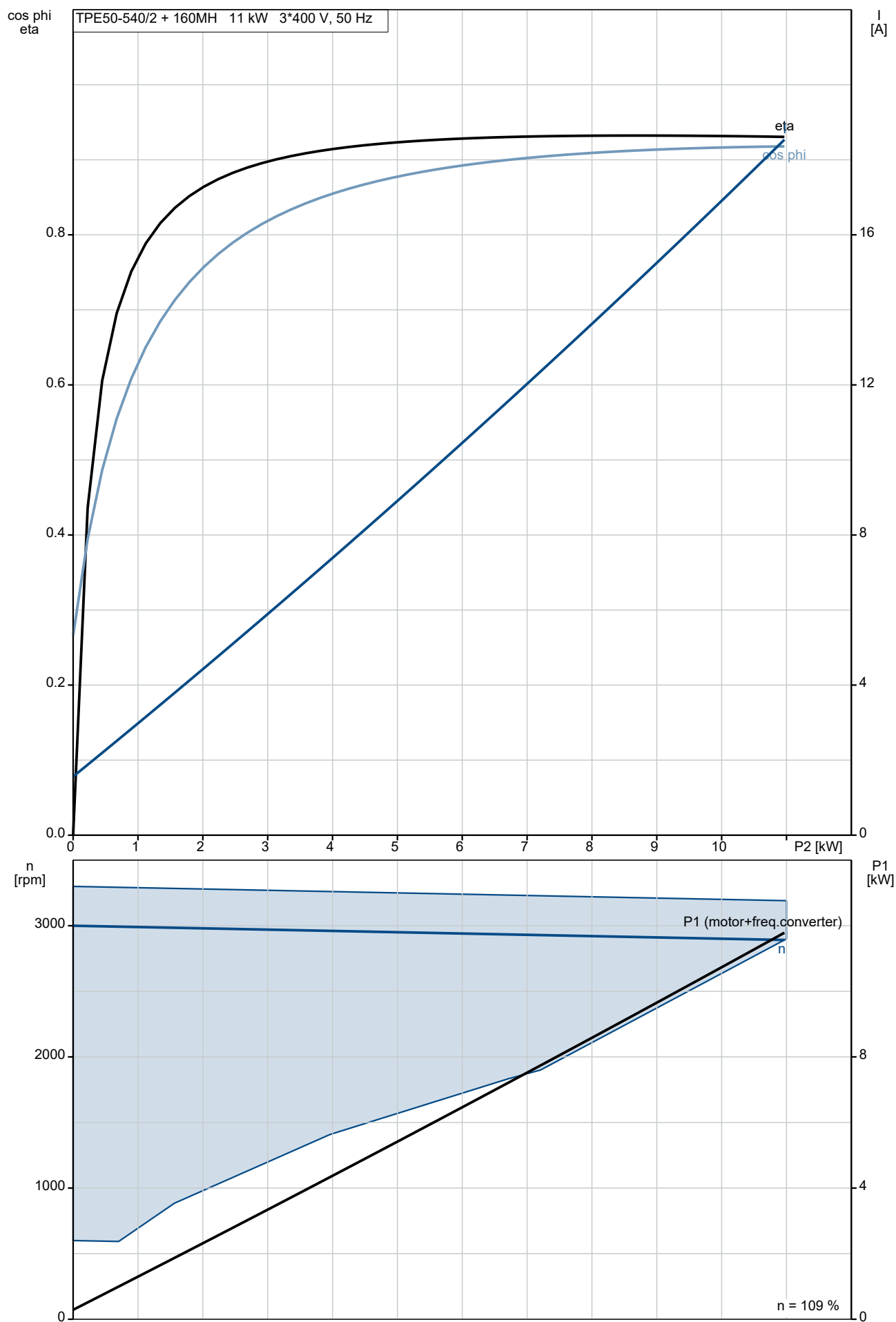


Description	Value
General information:	
Product name:	TPE 50-540/2 A-F-A-BQQE-NDB
Product No:	99113940
EAN number:	5712607020019
Technical:	
Pump speed on which pump data are based:	2940 rpm
Rated flow:	53.5 m³/h
Rated head:	44.2 m
Maximum head:	540 dm
Actual impeller diameter:	207 mm
Code for shaft seal:	BQQE
Curve tolerance:	ISO9906:2012 3B
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 50
Pressure rating for connection:	PN 16
Port-to-port length:	440 mm
Flange size for motor:	FF300
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:	160MH
IE Efficiency class:	IE5
Rated power - P2:	11 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-500 V
Rated current:	20.3-16.0 A
Cos phi - power factor:	0.93-0.90
Rated speed:	360-4000 rpm
Efficiency:	93.1%
Motor efficiency at full load:	93.1 %
Number of poles:	2
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor protec:	ELEC
Motor No:	98971081
Controls:	
Control panel:	HMI200 - Standard
Function Module:	300
Frequency converter:	Built-in
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	128 kg
Gross weight:	165 kg
Shipping volume:	0.56 m³
Config. file no:	99100723

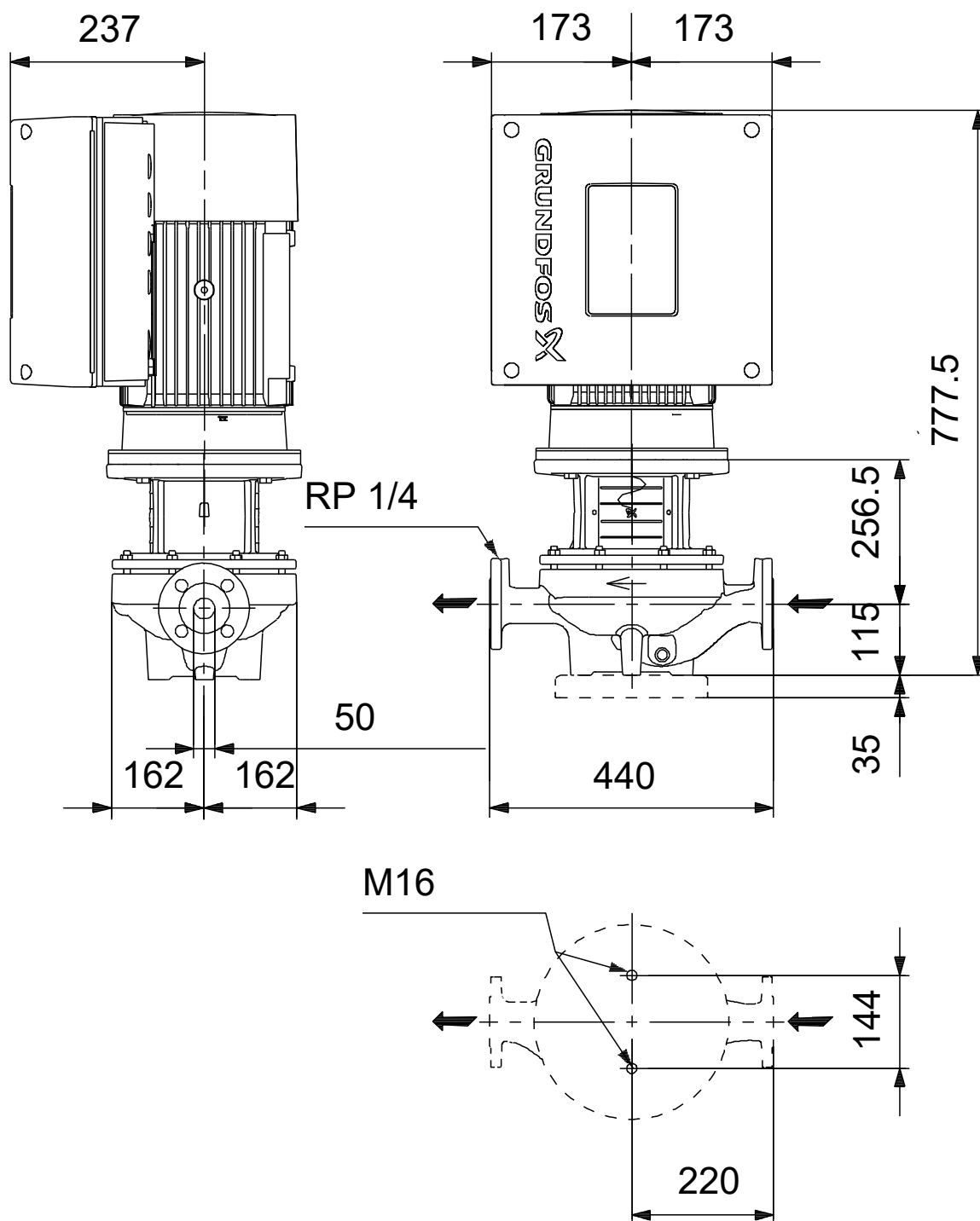


Description	Value
Danish VVS No.:	382063540
Finnish LVI No.:	4616463
Country of origin:	HU
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99113940 TPE 50-540/2 A-F-A-BQQE-NDB 50 Hz



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

Spare parts TPE 50-540/2, Product No. 99113940
Produced After 1811 (production year and week number)

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
-	Kit, Base plate			00485031	1	pcs
28g	Hex head screw				2	
56	Base plate				1	
-	Motor				1	pcs
-	Kit, Ball bearing			98881522	1	
111	Ball bearing				1	
154	Ball bearing				1	
156d	Seal ring				1	
156c	Seal ring				1	
158	Waved washer				1	
-	Kit, Blanking plug			99052476	1	
252b	Blind plug				1	
252b	Plug cpl.				5	
-	Kit, cable gland			98736115	1	
293	Cable glands set				1	
-	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			98878613	1	
251d	Pan head thread forming screw				4	
251b	Control box				1	
251a	Control box cpl.				1	
252b	Blind plug				1	
252b	Plug cpl.				5	
266	Connector plug 10-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	
268a	Base				2	
268	Pan head screw				2	
273b	Battery				1	
273a	Cross recess Pan head screw				4	
273	Funct. Module cpl.				1	
275a	Pin				1	
277b	Spring				4	
277a	Cross recess Pan head screw				1	
277	Cover				1	
286	Spacer				1	
287	Cover				1	
288b	Retaining ring				8	
288a	Pan head thread forming screw				8	
288	Wire clamp				4	
289a	Pan head thread forming screw				1	
289	Wire clamp				1	
290	Control panel, cpl.				1	
301	Jumper				1	
-	Kit, Control box upper			98869869	1	
251d	Pan head thread forming screw				4	
251b	Control box				1	
-	Kit, Control panel			98939973	1	

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
290	Control panel, cpl.				1	
-	Kit, cover			98330622	1	
287	Cover				1	
-	Kit, end shield (NDE)			98869886	1	
150b	O-ring				1	
156c	Gamma ring				1	
156c	Seal ring				1	
156a	End shield NDE				1	
158	Waved washer				1	
200a	Grease nipple				1	
206	Pan head thread forming screw				4	
206	Hex socket head cap screw				4	
207b	Nut				4	
-	Kit, fan			98869879	1	
152	Pan head thread forming screw				4	
156c	Seal ring				1	
156	Fan				1	
-	Kit, fan cover			98869873	1	
151	Fan cover				1	
152	Pan head thread forming screw				4	
-	Kit, flange (DE)			98869906	1	
	Glue				0	
150b	O-ring				1	
155a	Bearing cover				1	
156c	Seal ring				1	
156b	Flange				1	
185	Hex socket head cap screw				4	
201c	Drain plug				4	
201b	Blind plug				1	
201a	Grease nipple				1	
208b	Nut				4	
208a	Gasket				3	
208	Hex socket head cap screw		Designation: DIN912		3	
			Length (mm): 40			
			Thread: M5			
-	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			98859523	1	
277b	Spring				4	
277a	Cross recess Pan head screw				1	
277	Cover				1	
-	Kit, Lower part cpl.			98859573	1	
178	Pan head thread forming screw				4	
251a	Control box cpl.				1	
275a	Pin				1	
277a	Cross recess Pan head screw				1	
277	Cover				1	
-	Kit, motor			99010812	1	
	Hex socket head cap screw				2	
	Glue				0	
	Terminal				6	
40	Parallel key		Designation: DS96 DIN 6885		1	
			Dimension: 12X8X90			
66a	Washer				2	
99a	Circlip				1	
111	Ball bearing				1	
118a	Hex socket head cap screw				4	
150b	O-ring				2	
150	Stator w/housing				1	
151	Fan cover				1	

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
152	Pan head thread forming screw				4	
154	Ball bearing				1	
155a	Bearing cover				1	
156d	Gasket				1	
156c	Seal ring				1	
156c	Seal ring				1	
156b	Flange				1	
156a	End shield NDE				1	
156	Fan				1	
158	Waved washer				1	
172	Shaft w/rotor				1	
185	Hex socket head cap screw				4	
186	Drain plug				4	
187	Retaining ring				1	
195.a	Grease nipple				1	
195.a	Grease nipple				1	
196	Diaphragm				1	
203	Terminal plug				1	
208b	Nut				4	
208b	Nut				4	
208a	Gasket				3	
208	Hex socket head cap screw		Designation: DIN912		3	
			Length (mm): 40			
			Thread: M5			
289a	Pan head thread forming screw				2	
-	Kit, plug			99028677	1	
152	Pan head thread forming screw				2	
203	Terminal plug				1	
205	Gasket				1	
-	Kit, screws			99028725	1	
268a	Base				2	
268	Pan head screw				2	
288b	Retaining ring				8	
288a	Pan head thread forming screw				8	
288	Wire clamp				4	
289a	Pan head thread forming screw				1	
289	Wire clamp				1	
	Lifting device			99140040	2	
99a	Circlip			99946400	1	
152	Pan head thread forming screw			99834207	2	
152	Pan head thread forming screw			99814578	2	
186	Drain plug			99980519	4	
251d	Pan head thread forming screw			98995460	4	
266	Connector plug 3-pole			99421265	1	
7a	Pan head screw			99266550	4	pcs
18	Plug			96620482	1	pcs
18	Plug			98164277	1	pcs
19	Pipe plug		Thread: R 3/8	96620487	2	pcs
19	Plug			98163028	2	pcs
36	Nut		Thread: M10	96620484	10	pcs
49	Impeller			99211606	1	pcs
56	Base plate			96590430	1	pcs
67	Nut		Thread: M14	92526531	1	pcs
72a	O-ring		Diameter: 253,6	92547618	1	pcs
			Material type: EPDM			
			Thickness: 3,53			
72a	O-ring		Diameter: 253,6	92526509	1	pcs
			Material type: EPDM			
			Thickness: 3,53			
72a	O-ring		Diameter: 253,6	97511826	1	pcs
			Material type: EPDM			
			Thickness: 3,53			
72a	O-ring		Diameter: 253,6	97757672	1	pcs

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
			Material type: EPDM			
			Thickness: 3,53			
105	Shaft seal			99380916	1	pcs
105	Shaft seal			99884645	1	pcs