

Inventflow: Grundfos A-partner

Grundfos NBE 80-200/171 AF2ABQQE

Find the pump here:

<https://inventflow.nl/en/pompenfilter/nbe/grundfos-nbe-80-200-171-af2abqqe>

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Datasheet

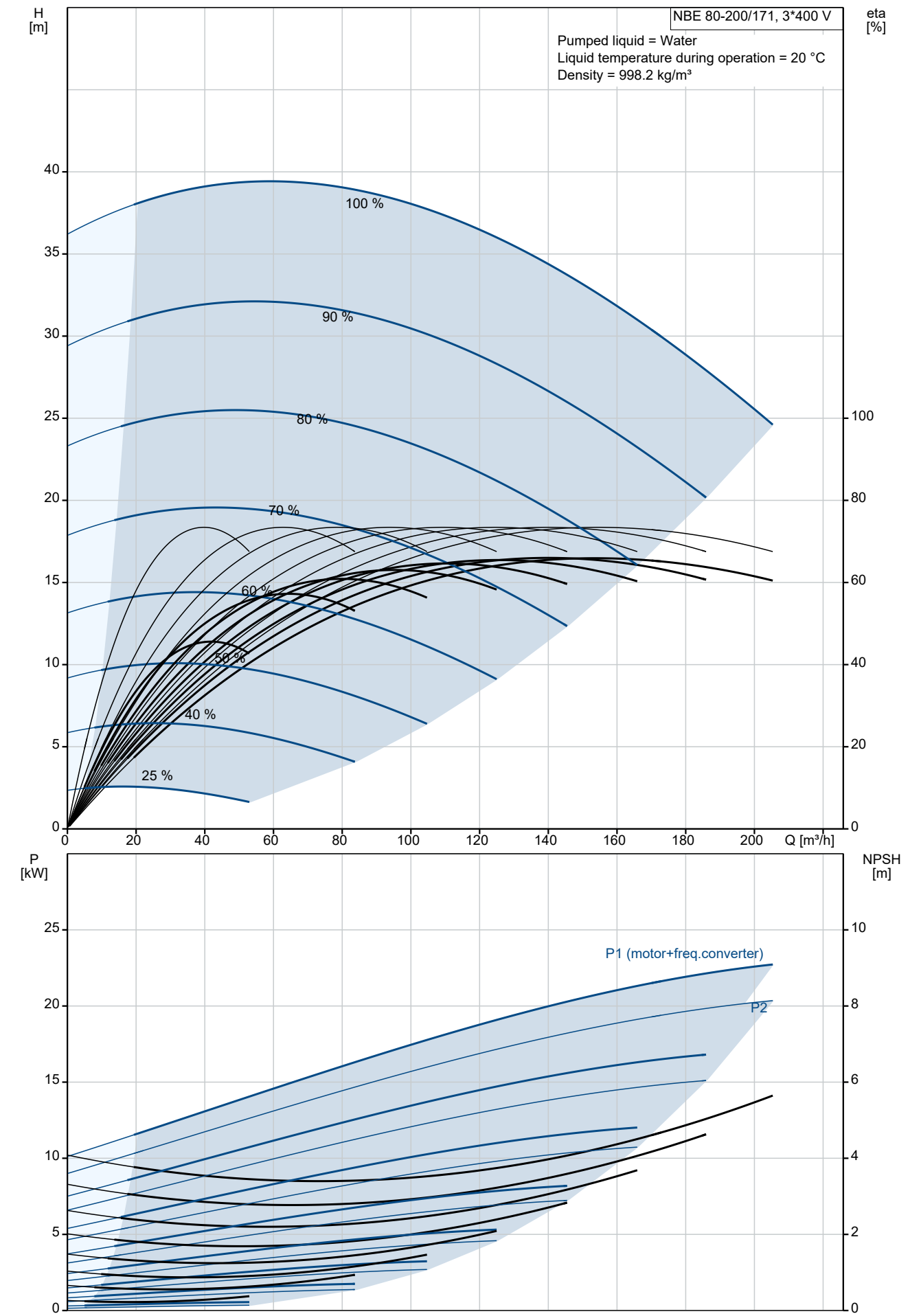


Qty.	Description
1	NBE 80-200/171 AF2ABQQE  Note! Product picture may differ from actual product Product No.: 98975790 Non-self priming, single-stage centrifugal Flange standard: pump according to EN 1092-2. The pump is for the pumping of thin, clean or slightly contaminated liquids without abrasive or long-fibred solids. The impeller is hydraulically as well as dynamically balanced. The pump has the following characteristics: - flange dimensions according to EN 1092-2, Pump housing: - Cast iron volute pump housing, - stainless steel shaft Impeller: and Cast iron impeller and bronze wear rings, - unbalanced mechanical shaft seal according to EN 12756. 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. An 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,

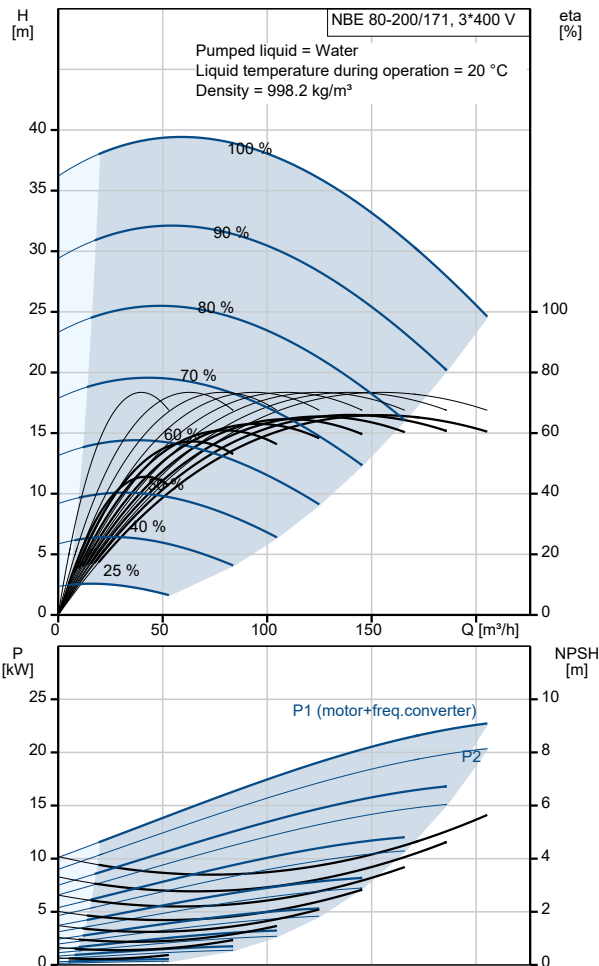
Qty.	Description
	- 24 V voltage supply for sensor, I_{max} = 40 mA, - input for forced control to MIN or MAX (potential-free contact), - potential-free fault signal relay with changeover contact, - RS485 GENIbus. Controls: Frequency converter: Built-in Pressure sensor: N Liquid: Pumped liquid: Water 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: 160 m³/h Rated head: 31.76 m Actual impeller diameter: 171 mm Nominal impeller diameter: 200 Shaft seal arrangement: Single Code for shaft seal: BQQE Curve tolerance: ISO9906:2012 3B Bearing design: Standard Materials: Pump housing: Cast iron EN-GJL-250 ASTM class 35 Wear ring: Brass Impeller: Cast iron EN-GJL-200 ASTM class 30 Shaft: Stainless steel EN 1.4301 AISI 304 Internal pump house coating: CED Installation: Maximum ambient temperature: 40 °C Maximum operating pressure: 16 bar Pipe connection standard: EN 1092-2 Size of inlet connection: DN 100 Size of outlet connection: DN 80 Pressure rating for connection: PN 16 Bearing lubrication: Grease Pump housing with feet: Yes Support block: N Electrical data: IE Efficiency class: IE3 Rated power - P₂: 22 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-480 V Rated current: 43.5-35.0 A Cos phi - power factor: 0.91-0.90 Rated speed: 480-3540 rpm Efficiency: IE3 92,7% Motor efficiency at full load: 92.7 % Number of poles: 2 Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F

Qty.	Description
	Motor No: 85901267 Others: Minimum efficiency index, MEI ≥: 0.70 Net weight: 236 kg Gross weight: 261 kg Shipping volume: 0.707 m³ Country of origin: HU Custom tariff no.: 84137051

98975790 NBE 80-200/171 AF2ABQQE 50 Hz

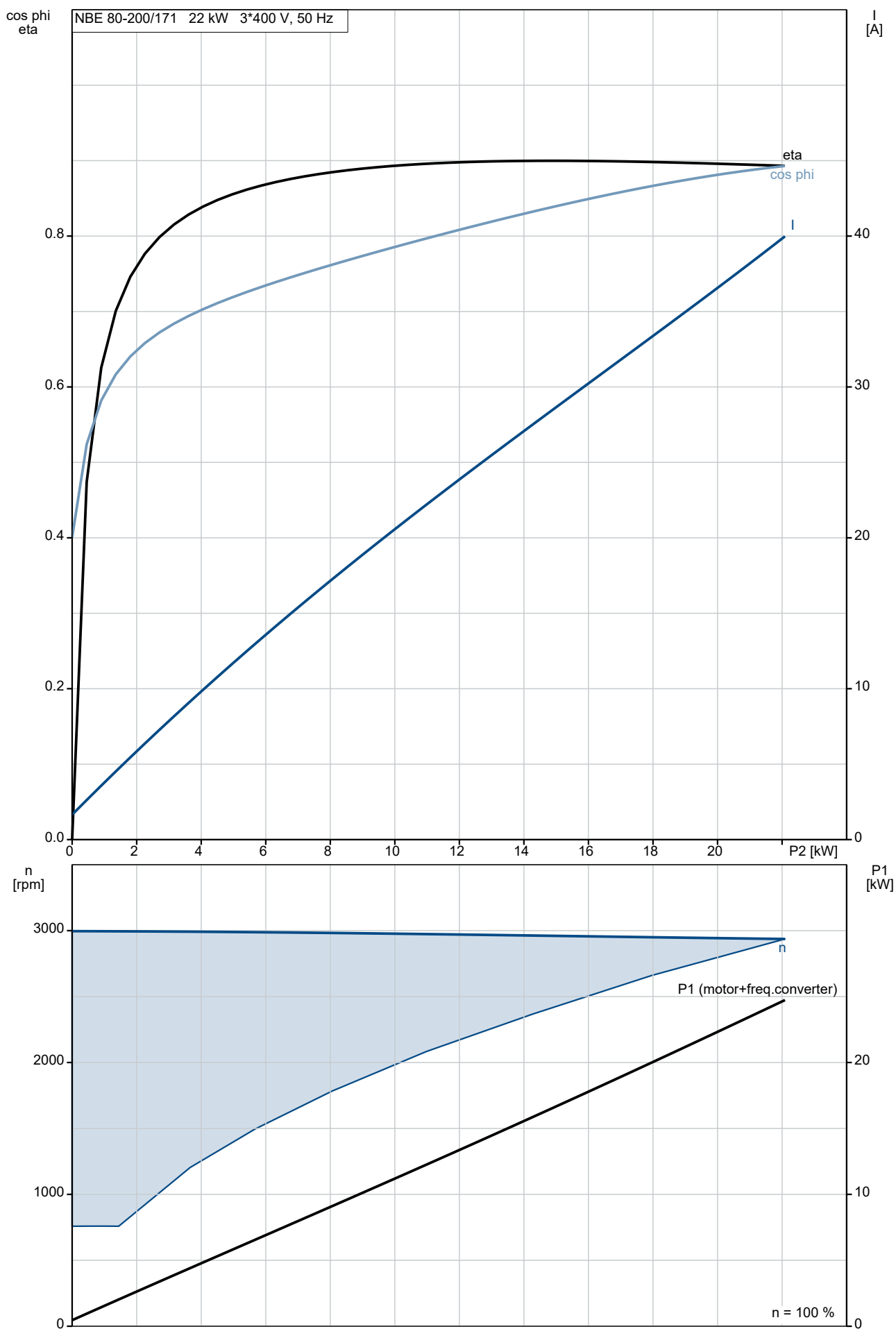


Description	Value		
General information:			
Product name:	NBE 80-200/171 AF2ABQQE		
Product No:	98975790		
EAN number:	5712604549445		
Technical:			
Pump speed on which pump data are based:	2940 rpm		
Rated flow:	160 m³/h		
Rated head:	31.76 m		
Actual impeller diameter:	171 mm		
Nominal impeller diameter:	200		
Shaft seal arrangement:	Single		
Shaft diameter:	32 mm		
Code for shaft seal:	BQQE		
Curve tolerance:	ISO9906:2012 3B		
Pump version:	A		
Bearing design:	Standard		
Materials:			
Pump housing:	Cast iron		
Pump housing:	EN-GJL-250		
Pump housing:	ASTM class 35		
Wear ring:	Brass		
Impeller:	Cast iron		
Impeller:	EN-GJL-200		
Impeller:	ASTM class 30		
Shaft:	Stainless steel		
Shaft:	EN 1.4301		
Shaft:	AISI 304		
Internal pump house coating:	CED		
Material code:	A		
Code for rubber:	E		
Installation:			
Maximum ambient temperature:	40 °C		
Maximum operating pressure:	16 bar		
Pipe connection standard:	EN 1092-2		
Size of inlet connection:	DN 100		
Size of outlet connection:	DN 80		
Pressure rating for connection:	PN 16		
Bearing lubrication:	Grease		
Pump housing with feet:	Yes		
Support block:	N		
Connect code:	F2		
Liquid:			
Pumped liquid:	Water		
Liquid temperature range:	-25 .. 120 °C		
Selected liquid temperature:	20 °C		
Density:	998.2 kg/m³		
Electrical data:			
IE Efficiency class:	IE3		
Rated power - P2:	22 kW		
Mains frequency:	50 Hz		
Rated voltage:	3 x 380-480 V		
Rated current:	43.5-35.0 A		
Cos phi - power factor:	0.91-0.90		
Rated speed:	480-3540 rpm		
Efficiency:	IE3 92,7%		
Motor efficiency at full load:	92.7 %		
Number of poles:	2		
Enclosure class (IEC 34-5):	IP55		
Insulation class (IEC 85):	F		
Motor protec:	YES		
Motor No:	85901267		
Mount. design. acc. IEC 34-7:	IM B35		

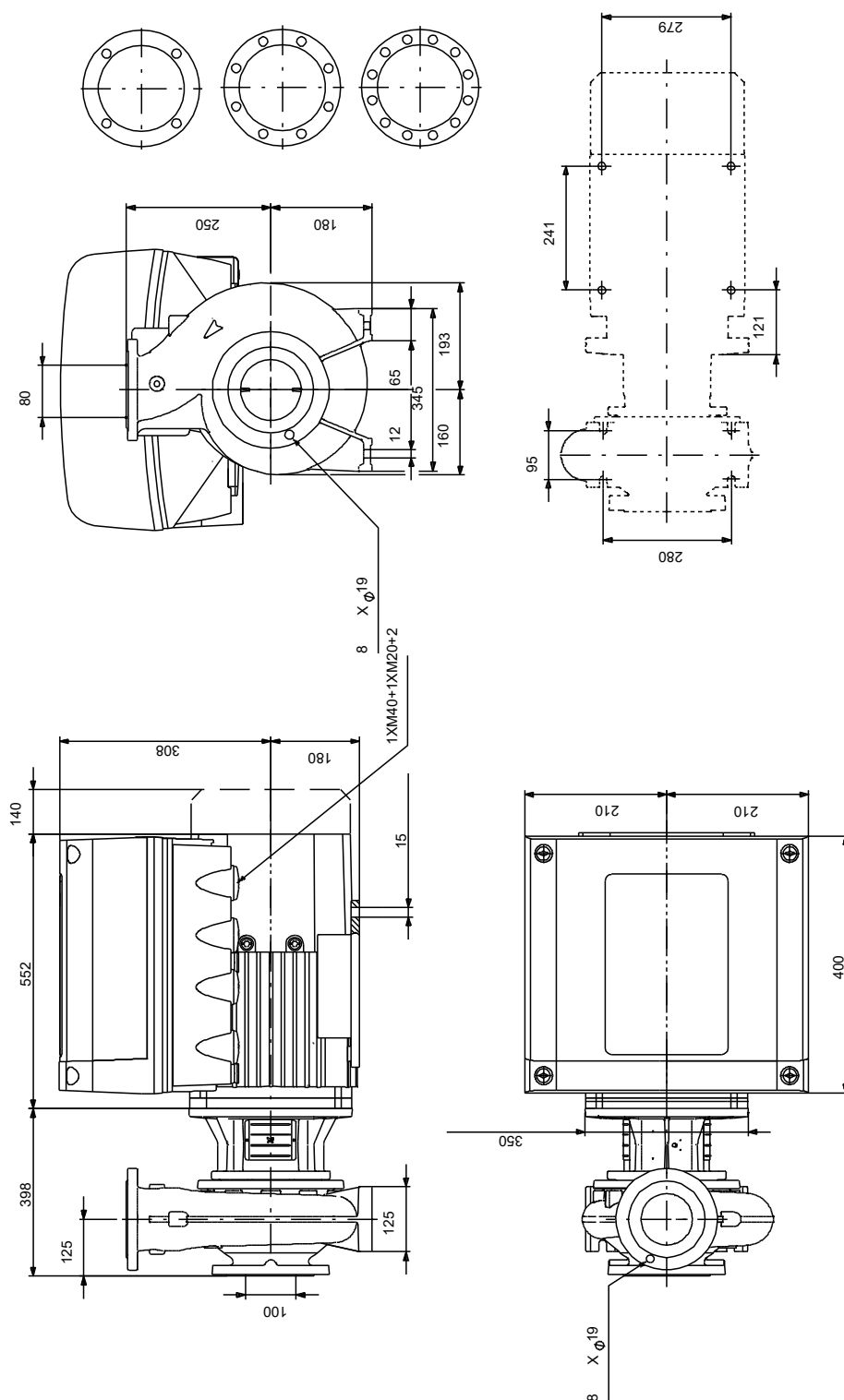


Description	Value
Controls:	
Control panel:	Standard
Function Module:	PUMP I/O
Frequency converter:	Built-in
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	236 kg
Gross weight:	261 kg
Shipping volume:	0.707 m³
Country of origin:	HU
Custom tariff no.:	84137051

98975790 NBE 80-200/171 AF2ABQQE 50 Hz



98975790 NBE 80-200/171 AF2ABQQE 50 Hz



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

Spare parts NBE 80-200/171, Product No. 98975790
Produced After 2101 (production year and week number)

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr	Aanta	Eenhei
-	Bulk, Nut			92514631	1	pcs
67	Nut		Thread: M18		5	
-	Bulk, o-ring			92547617	1	pcs
72.a	O-ring		Diameter: 221,84 Material type: EPDM Thickness: 3,53		5	
-	Bulk, Plug vent			96620482	1	pcs
18	Plug				5	
-	Bulk, Shaft seal			92514302	1	pcs
105	Shaft seal				5	
-	Kit, coupling guard			96809945	1	pcs
7a	Pan head screw				4	
7	Coupling guard				2	
-	Kit, cover			98990962	1	pcs
18	Plug				1	
36	Nut		Thread: M10		8	
77	Cover				1	
-	Kit, motor stool			95131785	1	pcs
1a	Motor stool				1	
7	Coupling guard				2	
28	Hex head screw				4	
36	Hex nut		Thread: M16		4	
36	Nut		Thread: M10		12	
77a	Pan head screw				4	
-	Kit, nut			96939130	1	pcs
11	Parallel key				1	
-	36 Nut				1	
66a	Spring lock washer				1	
66	Washer				1	
67	Nut		Thread: M18		1	
-	Kit, pump housing			95131730	1	pcs
-	6 Pump housing				1	
26	Staybolt		Length (mm): 45 Thread: M10		8	
45	Wear ring				1	
20	Pipe plug		Thread: R 3/8		2	
36	Nut		Thread: M10		8	
-	Kit, stub shaft			96039360	1	pcs
9	Socket set screw		Length (mm): 10 Thread: M8		2	
11	Parallel key				1	
51	Stub shaft				1	
66a	Spring lock washer				1	
66	Washer				1	
67	Nut		Thread: M18		1	
	Spare, O-ring			97757671	1	pcs
-	Spare, plug vent			98164277	1	pcs
18	Plug				1	
-	Spare, shaft seal			98434906	1	pcs
105	Shaft seal				1	
-	Spare, spacer for shaft seal			96591277	1	pcs
105b	Spacer				1	
-	Spare, wear ring			99208810	1	pcs
45	Wear ring				1	
-	Motor				1	pcs
-	Kit, bearing cpl.		Designation: 6310.Z.C4-6310.Z.C4	96796811	1	
111	Ball bearing				1	

Pos	Omschrijving	Opmerking tekst	Classificatie	Gegevens	Onderdeelnr	Aanta	Eenhei
154	Ball bearing						1
158	Waved washer						1
-	Kit, bearing plate				96796809	1	
155. a	Cover						1
208a	Gasket						3
208	Hex socket head cap screw			Designation: DIN912			3
				Length (mm): 40			
				Thread: M5			
-	Kit, connector plugs				96348923	1	
	Connector plug 5-pole						1
	Connector plug 4-pole						1
	Connector plug 4-pole						1
	Connector plug 3-pole						1
	Connector plug 3-pole						1
	Connector plug 3-pole						1
	Connector plug 3-pole						1
	Connector plug						1
- 273	Kit, control board				96348918	1	
	Service kit instruction						1
	Controlboard						1
-	Kit, eyebolt				96796712	1	
189	Eyebolt						2
-	Kit, fan cover				96830826	1	
151	Fan cover						1
152. a	Rubber bush						4
152	Hex head cap screw						4
196	Diaphragm						1
-	Kit, flange				96796807	1	
156. b	Flange						1
159. b	Seal ring						1
185	Hex socket head cap screw						4
186	Drain plug						4
195. a	Grease nipple						1
-	Kit, foot				96796804	1	
191. a	Foot						1
191	Foot						1
192	Hex socket head cap screw						4
194	Lock washer						4
194	Nut						4
-	Kit, funct. module - E-pump				96348929	1	
263	MGE large I/O add-on						1
-	Kit, funct. module -Geni/RS485				96348932	1	
263	Add-on module, cpl. w/plugs						1
-	Kit, gaskets				96798508	1	
184	O-ring			Diameter: 235			2
275	Kit, inverter board				96348920	1	
-	Kit, key				96796817	1	
171	Parallel key						1
-	Kit, lubrication nipple				96796671	1	
195. b	Grease nipple						2
195. a	Grease nipple						1
-	Kit, motor				96844389	1	
	Flex insulation						3
	EMC filter						1
	Cover cpl.						1
	Motor						1
99a	Retaining ring						1

Pos	Omschrijving	Opmerking tekst	Classificatie	Gegevens	Onderdeelnr	Aanta	Eenhei
151	Fan cover						1
152. a	Rubber bush						4
152	Hex head cap screw						4
156	Fan						1
177	Torx Screw						1
185. b	Nut						4
185. b	Nut						4
191. a	Foot						1
191	Foot						1
192	Hex socket head cap screw						4
194	Lock washer						4
196	Diaphragm						1
273a	Pan head thread forming screw						4
-	Kit, ND-end shield cpl.				96796810	1	
156a	End shield NDE						1
158	Waved washer						1
159	V-ring						1
185. c	Nut						4
185. a	Hex socket head cap screw						4
195. b	Grease nipple						1
-	Kit, opr. panel				96348924	1	
259	Operation panel						1
274	Kit, rectifier board				96348921	1	
-	Kit, terminal box				96348914	1	
164	Cover cpl.						1
166	Pan head thread forming screw						5
251	Terminal box						1
277	Blind cover						1
283	Motor cover cpl.						1
284	Cover						1
-	Kit, varistor				96348917	1	
279. b	Pan head thread forming screw						2
279	Varistor						1
49	Impeller				98783779	1	pcs