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Inventflow: Grundfos A-partner

Grundfos CRN 20-7 A-P-A-E-HQQE

Find the pump here:

<https://inventflow.nl/en/pompenfilter/crn/grundfos-crn-20-7-a-p-a-e-hqqe>

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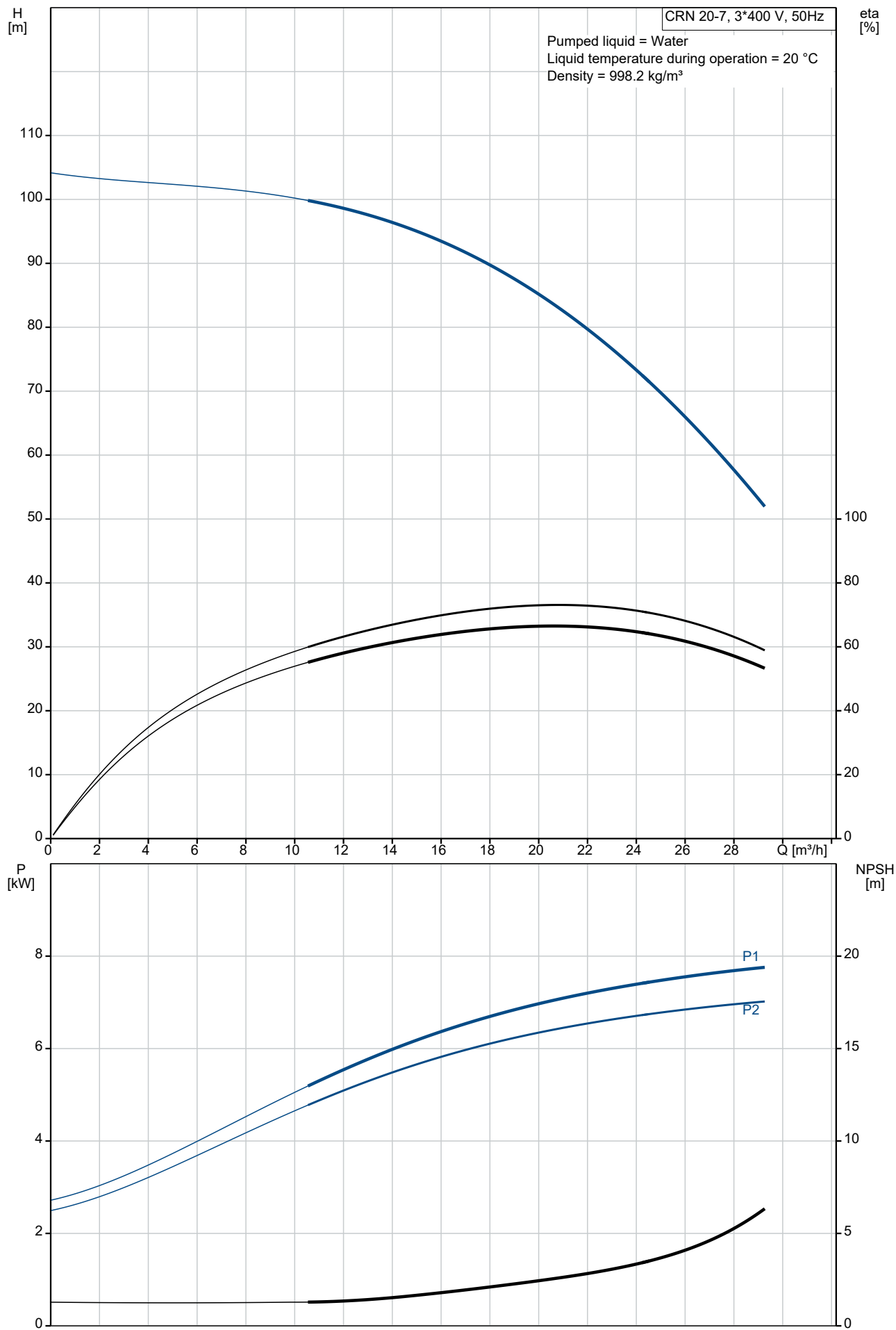
Datasheet



Qty.	Description
1	CRN 20-7 A-P-A-E-HQQE  Product No.: 96500563 Vertical, non-self-priming, multistage, in-line, centrifugal pump for installation in pipe systems and mounting on a foundation. The pump has the following characteristics: - Impellers, intermediate chambers and outer sleeve are made of Impeller: Stainless steel, EN 1.4401. - Pump head cover and base are made of Pump housing: Stainless steel, EN 1.4408. - The shaft seal has assembly length according to EN 12756. - Power transmission is via cast iron split coupling. Flange standard: - Pipework connection is via PJE flanges/couplings. Phase: The motor is a 3-phase AC motor. Controls: Frequency converter: NONE Liquid: Pumped liquid: Water Liquid temperature range: -20 .. 120 °C Selected liquid temperature: 20 °C Density: 998.2 kg/m³ Technical: Pump speed on which pump data are based: 2919 rpm Rated flow: 21 m³/h Rated head: 81.7 m Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQE Approvals on nameplate: CE,EAC,UKCA,WRAS,ACS Curve tolerance: ISO9906:2012 3B Materials: Base: Stainless steel EN 1.4408 AISI 316 Impeller: Stainless steel EN 1.4401 AISI 316 Bearing: SIC Installation: Maximum ambient temperature: 60 °C Maximum operating pressure: 25 bar Max pressure at stated temp: 25 bar / 120 °C 25 bar / -20 °C Type of connection: PJE

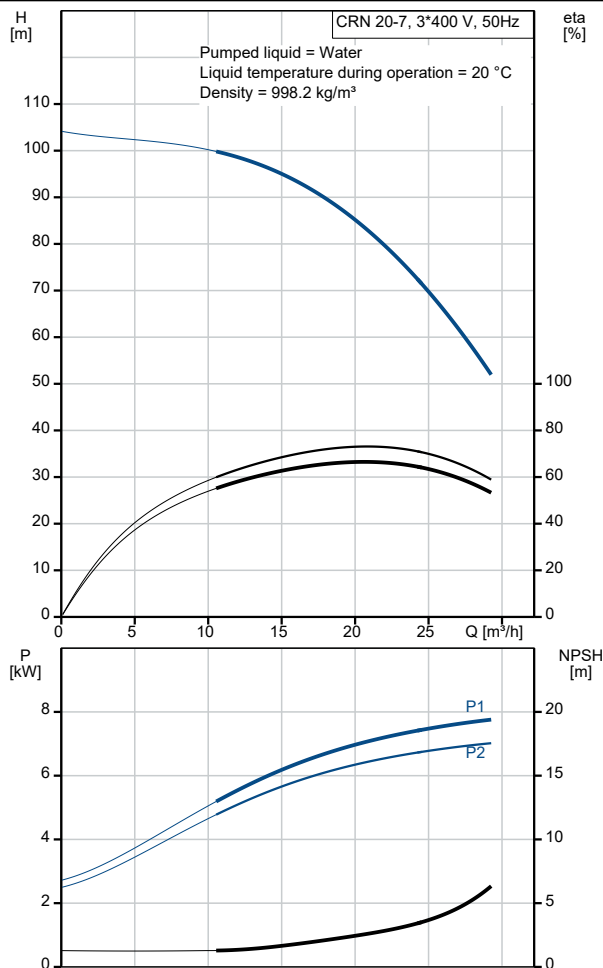
Qty.	Description
	Size of inlet connection: DN 50 Size of outlet connection: DN 50 Pressure rating for connection: PN 50 Flange size for motor: FF265 Electrical data: Motor standard: IEC Motor type: 132SB IE Efficiency class: IE3 Rated power - P2: 7.5 kW Power (P2) required by pump: 7.5 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-415D/660-690Y V Rated current: 14,4-14,0/8,30-8,10 A Starting current: 780-910 % Cos phi - power factor: 0.88-0.82 Rated speed: 2910-2920 rpm Efficiency: IE3 90,1% Motor efficiency at full load: 90.1-90.4 % Motor efficiency at 3/4 load: 90.8 % Motor efficiency at 1/2 load: 90.8 % Number of poles: 2 Enclosure class (IEC 34-5): 55 Dust/Jetting Insulation class (IEC 85): F Motor No: 85U17522 Others: Minimum efficiency index, MEI ≥: 0.70 Net weight: 96 kg Gross weight: 118 kg Shipping volume: 0.285 m³ Danish VVS No.: 385915070 Country of origin: HU Custom tariff no.: 84137075

96500563 CRN 20-7 A-P-A-E-HQQE 50 Hz



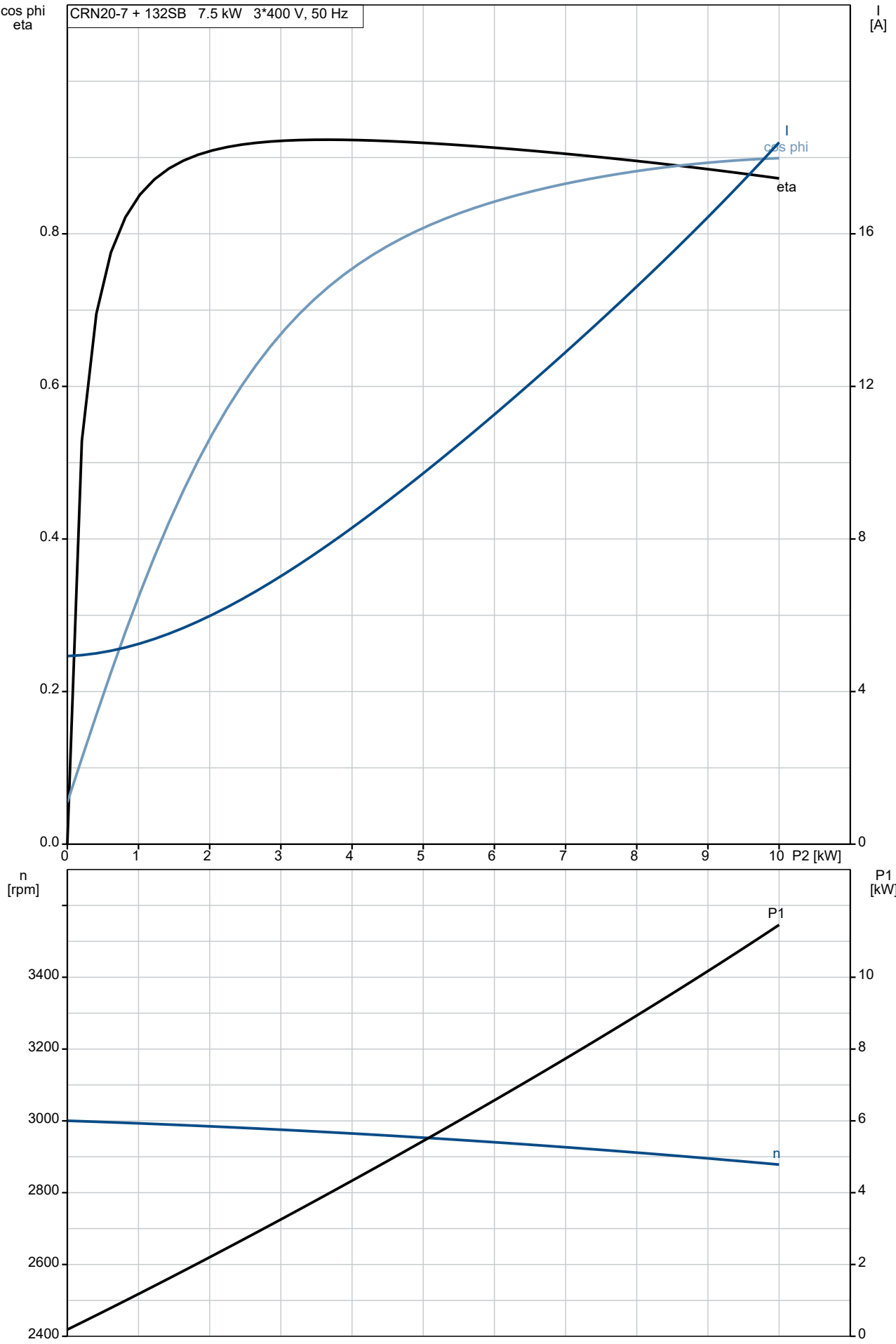
Description	Value		
General information:			
Product name:	CRN 20-7 A-P-A-E-HQQE		
Product No:	96500563		
EAN number:	5700396204321		
Technical:			
Pump speed on which pump data are based:	2919 rpm		
Rated flow:	21 m³/h		
Rated head:	81.7 m		
Maximum head:	103 m		
Stages:	7		
Impellers:	7		
Number of reduced-diameter impellers:	0		
Low NPSH:	N		
Pump orientation:	Vertical		
Shaft seal arrangement:	Single		
Code for shaft seal:	HQQE		
Approvals on nameplate:	CE,EAC,UKCA,WRAS,A CS		
Curve tolerance:	ISO9906:2012 3B		
Pump version:	A		
Model:	A		
Materials:			
Base:	Stainless steel		
Base:	EN 1.4408		
Base:	AISI 316		
Impeller:	Stainless steel		
Impeller:	EN 1.4401		
Impeller:	AISI 316		
Material code:	A		
Code for rubber:	E		
Bearing:	SIC		
Installation:			
Maximum ambient temperature:	60 °C		
Maximum operating pressure:	25 bar		
Max pressure at stated temp:	25 bar / 120 °C		
Max pressure at stated temp:	25 bar / -20 °C		
Type of connection:	PJE		
Size of inlet connection:	DN 50		
Size of outlet connection:	DN 50		
Pressure rating for connection:	PN 50		
Flange size for motor:	FF265		
Connect code:	P		
Liquid:			
Pumped liquid:	Water		
Liquid temperature range:	-20 .. 120 °C		
Selected liquid temperature:	20 °C		
Density:	998.2 kg/m³		
Electrical data:			
Motor standard:	IEC		
Motor type:	132SB		
IE Efficiency class:	IE3		
Rated power - P2:	7.5 kW		
Power (P2) required by pump:	7.5 kW		
Mains frequency:	50 Hz		
Rated voltage:	3 x 380-415D/660-690Y V		
Rated current:	14,4-14,0/8,30-8,10 A		
Starting current:	780-910 %		
Cos phi - power factor:	0.88-0.82		
Rated speed:	2910-2920 rpm		
Efficiency:	IE3 90,1%		
Motor efficiency at full load:	90.1-90.4 %		
Motor efficiency at 3/4 load:	90.8 %		

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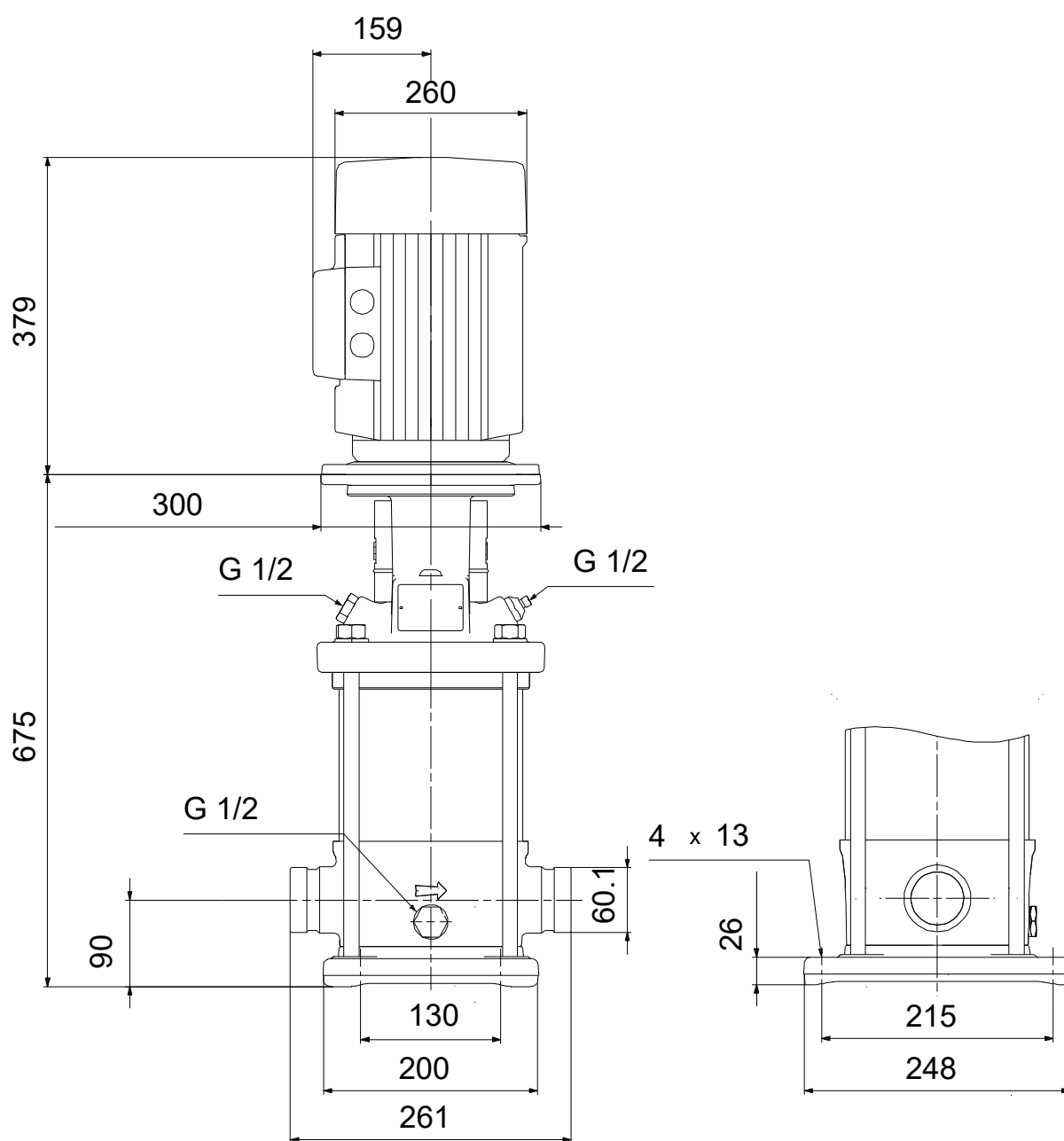


Description	Value
Motor efficiency at 1/2 load:	90.8 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protec:	PTC
Motor No:	85U17522
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	96 kg
Gross weight:	118 kg
Shipping volume:	0.285 m³
Danish VVS No.:	385915070
Country of origin:	HU
Custom tariff no.:	84137075

96500563 CRN 20-7 A-P-A-E-HQQE 50 Hz



96500563 CRN 20-7 A-P-A-E-HQQE 50 Hz



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

Spare parts CRN 20-7, Product No. 96500563
Produced After 1101 (production year and week number)

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
-	Kit, chamber stack			96491790	1	pcs
- 80	Chamber stack				1	
- 3	Top intermediate chamber				1	
	Guide vane					
	Cover plate					
3	Intermediate chamber					
- 4a	Intermediate chamber cpl.				2	
	Sand Lifter					
	Guide cup					
	Bearing plate					
	Guide vane					
3	Intermediate chamber					
45	Neck ring cpl.					
47	Bearing bush					
65	Retainer					
- 4	Intermediate chamber cpl.				4	
3	Intermediate chamber					
45	Neck ring cpl.					
65	Retainer					
26a	Strap cpl.		Length (mm): 314MM		2	
26.c	Washer		Designation: DIN 125A		2	
			Thickness: 1,6			
26.b	Hex head screw				2	
44b	Inlet part				1	
- 44a	Inlet part cpl.				1	
45	Neck ring cpl.					
65	Retainer					
47a	Bearing ring				2	
- 49	Impeller cpl.				7	
49c	Wear ring					
49	Impeller					
- 51	Shaft, spline, cpl.				1	
	Bar					
62	Stop ring					
64d	Spacing bush				2	
64c	Spacer				1	
64a	Spacing pipe		Internal diameter: 17,5		2	
			Length (mm): 17			
64	Spacing pipe		Length (mm): 43.6		4	
66	Wedge lock washer				1	
67	Lock nut		Thread: M8		1	
69	Spacing bush				1	
-	Kit, coupling			96511351	1	pcs
	Adjusting fork				1	
- 8	Coupling				1	
9	Hex socket head cap screw		Designation: DIN 912		4	
			Length (mm): 25			
			Thread: M10			
10a	Coupling half				1	
10	Shaft pin		Diameter: 5		1	
			Length (mm): 26			
-	Kit, coupling guard			96509613	1	pcs
7.a	Combi Slot Torx screw				4	
7	Coupling guard				2	
-	Kit, gaskets			96509609	1	pcs
	Gasket				2	
24	O-ring				2	
37	O-ring				2	
38	O-ring				1	

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
38	O-ring				1	
38	O-ring				2	
60	Spring				4	
415	Gasket		Internal diameter: 44		2	
			Outer diameter: 60			
			Thickness: 2			
441b	Gasket		Internal diameter: 49		2	
			Outer diameter: 92			
			Thickness: 2			
-	Kit, plug			96511312	1	pcs
- 18	Air vent screw				1	
	Spindle				1	
	Plug				1	
25a	Drain plug				1	
25	Plug				1	
38	O-ring				1	
38	O-ring				1	
38	O-ring				2	
38	O-ring		Diameter: 5,3		1	
			Material type: FKM			
			Thickness: 2,4			
38	O-ring		Diameter: 16,3		1	
			Material type: FKM			
			Thickness: 2,4			
38	O-ring		Diameter: 16,3		2	
			Material type: FKM			
			Thickness: 2,4			
-	Kit, shaft seal HQQE			96511844	1	pcs
105	Shaft seal		Material type: HQQE		1	
-	Kit, wear parts			96511827	1	pcs
- 4a	Intermediate chamber cpl.				2	
	Sand Lifter				1	
	Guide cup				1	
	Bearing plate				1	
	Guide vane				10	
3	Intermediate chamber				1	
45	Neck ring cpl.				1	
47	Bearing bush				1	
65	Retainer				1	
26.c	Washer		Designation: DIN 125A		2	
			Thickness: 1,6			
26.b	Hex head screw				2	
45	Neck ring cpl.				8	
47a	Bearing ring				2	
49c	Wear ring				10	
62	Retaining ring				1	
64d	Spacing bush				2	
64c	Spacer				1	
64b	Spacing bush		Length (mm): 5.00		1	
64a	Spacing pipe		Internal diameter: 17,5		2	
			Length (mm): 17			
65	Retainer				8	
66	Wedge lock washer				1	
67	Lock nut		Thread: M8		1	
-	Motor			91333038	1	pcs
-	Kit, bearing cpl.			96796642	1	
111	Ball bearing		Designation: 6206.2Z.C3.SYN		1	
153	Angular-contact bearing				1	
157	O-ring		Diameter: 62		1	
			Material type: NBR			
			Thickness: 3			
158	Waved washer				2	
159.b	V-ring				1	

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
159	V-ring				1	
-	Kit, eyebolt			96279874	1	
189	Lifting eye				1	
-	Kit, fan			96796189	1	
156	Fan				1	
-	Kit, fan cover			96796188	1	
151	Fan cover				1	
152	Pan head thread forming screw				4	
-	Kit, flange			96796224	1	
156.b	Flange				1	
159.b	V-ring				1	
185c	Nut				4	
185	Hex socket head cap screw				4	
186	Drain plug				4	
-	Kit, gaskets			96798510	1	
184	O-ring				2	
-	Kit, ND-end shield cpl.			96796598	1	
156.a	End shield NDE				1	
157	O-ring		Diameter: 62 Material type: NBR Thickness: 3		1	
158	Waved washer				1	
159	V-ring				1	
185.c	Nut				4	
185.a	Hex socket head cap screw				4	
-	Kit, shaft seal			96843458	1	
159.b	V-ring				1	
159	V-ring				1	
-	Kit, terminal board			96030209	1	
	Bracket cpl.				1	
163	Hex socket head screw				1	
176	Terminal				1	
176	Terminal board				1	
178	Connecting piece				3	
179	Cable shoe				6	
180a	Slot cheese head screw		Designation: COMBI TORX T25		6	
			Length (mm): 10 Thread: M5			
180	Wire clamp				6	
-	Kit, terminal box cover			96796215	1	
164	Terminal box cover w/gasket				1	
166	Pan head thread forming screw				4	
-	Motor				1	pcs
-	Kit, bearing cpl.			96796642	1	
111	Ball bearing		Designation: 6206.2Z.C3.SYN		1	
153	Angular-contact bearing				1	
157	O-ring		Diameter: 62 Material type: NBR Thickness: 3		1	
158	Waved washer				2	
159.b	V-ring				1	
159	V-ring				1	
-	Kit, eyebolt			96279874	1	
189	Lifting eye				1	
-	Kit, fan			96796189	1	
156	Fan				1	
-	Kit, fan cover			96796188	1	

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
151	Fan cover				1	
152	Pan head thread forming screw				4	
-	Kit, flange			96796224	1	
156.b	Flange				1	
159.b	V-ring				1	
185c	Nut				4	
185	Hex socket head cap screw				4	
186	Drain plug				4	
-	Kit, gaskets			96798510	1	
184	O-ring				2	
-	Kit, ND-end shield cpl.			96796598	1	
156.a	End shield NDE				1	
157	O-ring		Diameter: 62 Material type: NBR Thickness: 3		1	
158	Waved washer				1	
159	V-ring				1	
185.c	Nut				4	
185.a	Hex socket head cap screw				4	
-	Kit, shaft seal			96843458	1	
159.b	V-ring				1	
159	V-ring				1	
-	Kit, terminal board			96030209	1	
	Bracket cpl.				1	
163	Hex socket head screw				1	
176	Terminal				1	
176	Terminal board				1	
178	Connecting piece				3	
179	Cable shoe				6	
180a	Slot cheese head screw		Designation: COMBI TORX T25		6	
			Length (mm): 10 Thread: M5			
180	Wire clamp				6	
-	Kit, terminal box cover			96796215	1	
164	Terminal box cover w/gasket				1	
166	Pan head thread forming screw				4	
1a	Pump head			98914854	1	pcs
1	Flange			99104283	1	pcs
2	Pump cover			98481138	1	pcs
3	Top intermediate chamber			98734577	1	pcs
4a	Intermediate chamber cpl.			96538853	2	pcs
4a	Intermediate chamber cpl.			98371117	2	pcs
- 4	Intermediate chamber cpl.			96538840	4	pcs
3	Intermediate chamber			98371143	1	
65	Retainer			96547341	1	
4	Intermediate chamber cpl.			98371115	4	pcs
6	Base			98654159	1	pcs
10	Shaft pin		Diameter: 5 Length (mm): 26	96536473	1	pcs
10	Shaft pin		Diameter: 5 Length (mm): 26	96587588	1	pcs
18	Air vent screw			96547461	1	pcs
18	Air vent screw			95061351	1	pcs
25	Plug			96536013	1	pcs
26a	Strap cpl.		Length (mm): 314MM	98925044	2	pcs
26.c	Washer		Designation: DIN 125A Thickness: 1,6	99262704	2	pcs

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
26.c	Washer		Designation: DIN 125A	99886930	2	pcs
			Thickness: 1,6			
26	Staybolt			98982882	4	pcs
32	Washer		Designation: DIN 125 A2	99944260	4	pcs
			Internal diameter: 17			
			Outer diameter: 30			
			Thickness: 3			
36	Nut		Thread: M16	99944257	4	pcs
37a	O-ring			96538857	1	pcs
38	O-ring			99198791	1	pcs
38	O-ring			99198815	2	pcs
38	O-ring			99412727	2	pcs
44b	Inlet part			98814593	1	pcs
44a	Inlet part cpl.			98818922	1	pcs
47a	Bearing ring			96538795	2	pcs
- 49	Impeller cpl.			98394459	7	pcs
49c	Wear ring			96547340	1	
51	Shaft, spline, cpl.			98368636	1	pcs
55	Outer sleeve			98812641	1	pcs
56	Base plate			98481136	1	pcs
60	Spring			96538963	4	pcs
64d	Spacing bush			96538947	2	pcs
64c	Spacer			97980241	1	pcs
64a	Spacing pipe		Internal diameter: 17,5	98417487	2	pcs
			Length (mm): 17			
64	Spacing pipe		Length (mm): 43.6	96535107	4	pcs
66	Wedge lock washer			96536157	1	pcs
66	Wedge lock washer			92575609	1	pcs
67	Lock nut		Thread: M8	98277008	1	pcs
69	Spacing bush			96538949	1	pcs
76a	Rivet			96620489	1	pcs
105	Shaft seal		Material type: HQQE	96538914	1	pcs