

Inventflow: Grundfos A-partner

Grundfos CR 1S-23 A-A-A-E-HQQE

Find the pump here:

<https://inventflow.nl/en/pompenfilter/cr/grundfos-cr-1s-23-a-a-a-e-hqqe>

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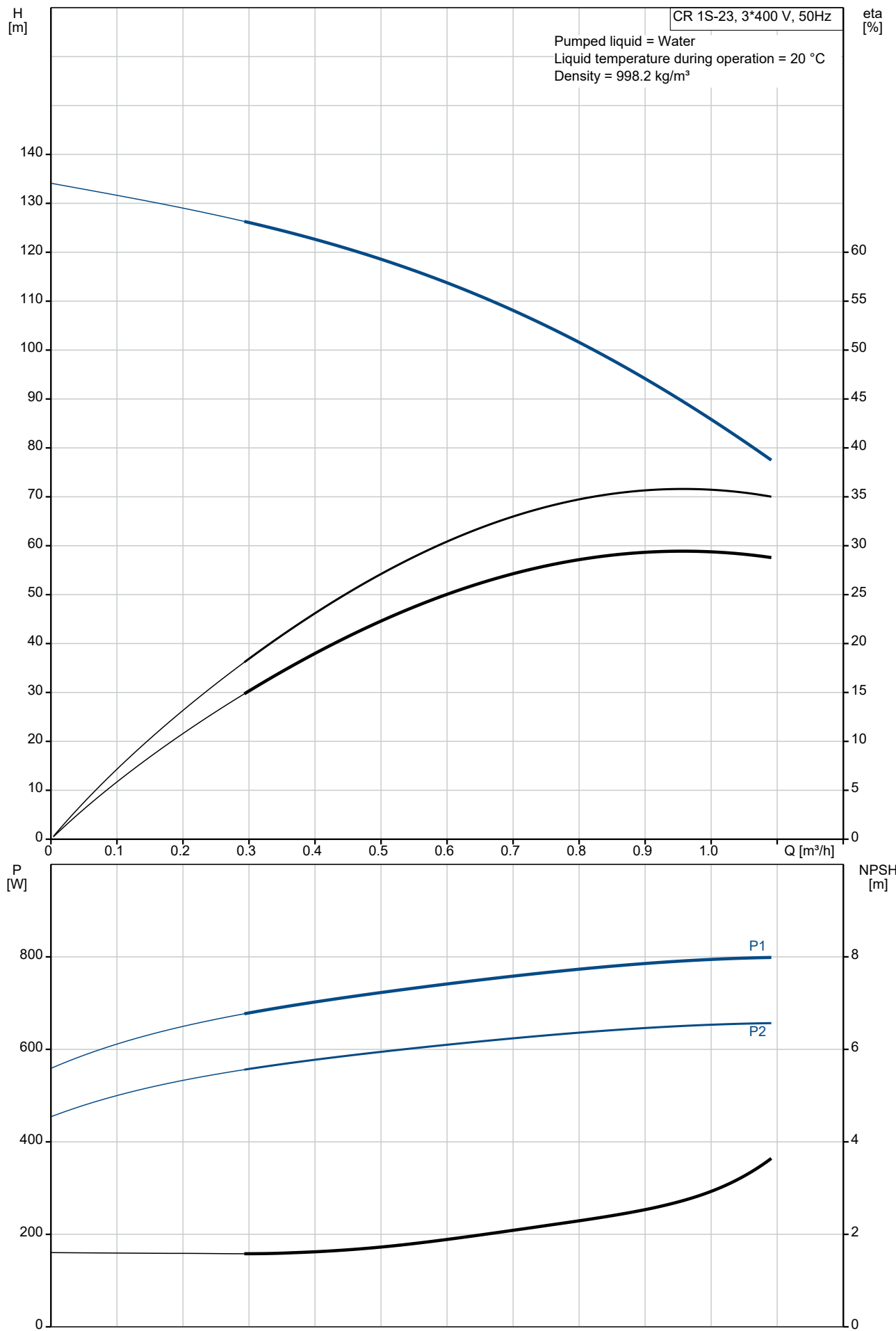
Datasheet



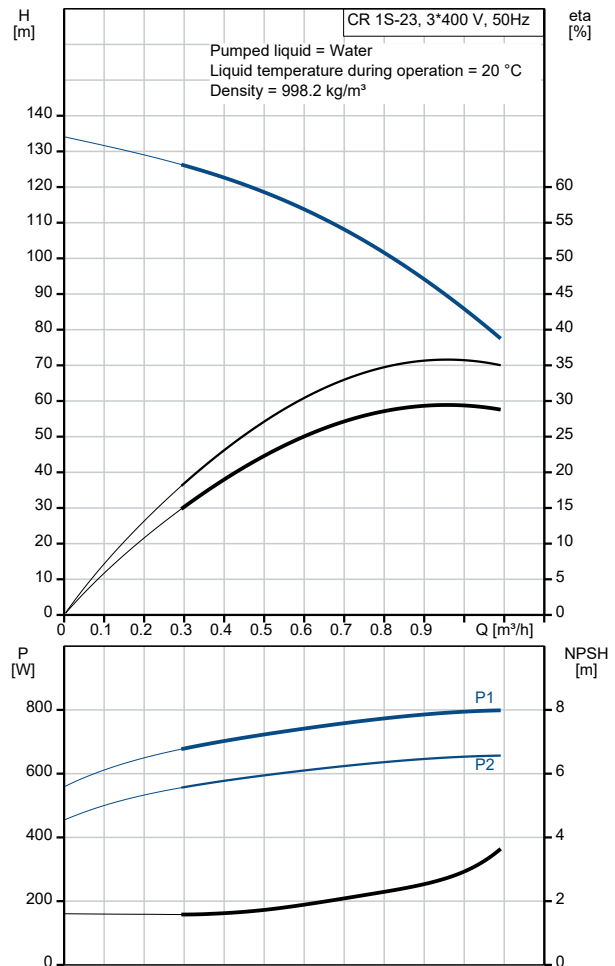
Qty.	Description
1	CR 1S-23 A-A-A-E-HQQE  Note! Product picture may differ from actual product Product No.: 96515568 Vertical, non-self-priming, multistage, in-line, centrifugal pump for installation in pipe systems and mounting on a foundation. The pump has the following characteristics: - Impellers and intermediate chambers are made of Impeller: Stainless steel, EN 1.4301. Pump housing: - Pump head and base are made of Cast iron. - The shaft seal has assembly length according to EN 12756. - Power transmission is via cast iron split coupling. Flange standard: - Pipework connection is via Oval / Rp flanges. 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: 2864 rpm Rated flow: 0.9 m³/h Rated head: 90.4 m Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQE Approvals on nameplate: CE, EAC, ACS Curve tolerance: ISO9906:2012 3B Materials: Base: Cast iron EN 1561 EN-GJL-200 ASTM A48-25B Impeller: Stainless steel EN 1.4301 AISI 304 Bearing: SIC Installation: Maximum ambient temperature: 60 °C Maximum operating pressure: 16 bar Max pressure at stated temp: 16 bar / 120 °C 16 bar / -20 °C Type of connection: Oval / Rp Size of inlet connection: 1 inch Size of outlet connection: 1 inch Pressure rating for connection: PN 16

Qty.	Description
	Flange size for motor: FT100 Electrical data: Motor standard: IEC Motor type: 80A IE Efficiency class: IE3 Rated power - P2: 0.75 kW Power (P2) required by pump: 0.75 kW Mains frequency: 50 Hz Rated voltage: 3 x 220-240D/380-415Y V Rated current: 3.30/1.90 A Starting current: 580-620 % Cos phi - power factor: 0.81-0.71 Rated speed: 2840-2870 rpm Efficiency: IE3 80,7% Motor efficiency at full load: 80.7 % Motor efficiency at 3/4 load: 82.7 % Motor efficiency at 1/2 load: 81.7 % Number of poles: 2 Enclosure class (IEC 34-5): 55 Dust/Jetting Insulation class (IEC 85): F Motor No: 85905175 Others: Minimum efficiency index, MEI $\geq$: 0.54 Net weight: 28.8 kg Gross weight: 32.9 kg Shipping volume: 0.092 m³ Danish VVS No.: 385900523 Country of origin: HU Custom tariff no.: 84137075

96515568 CR 1S-23 A-A-A-E-HQQE 50 Hz

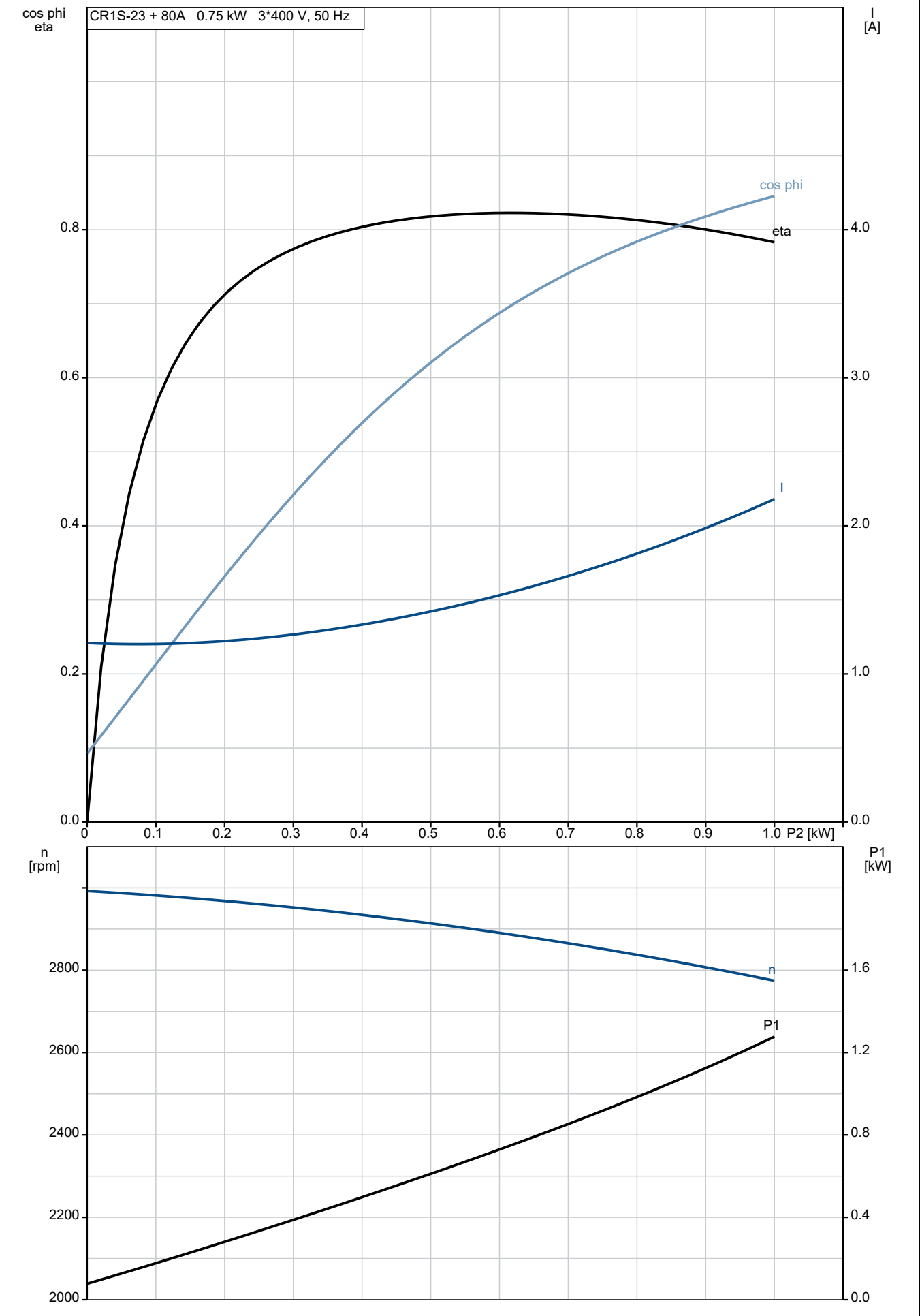


Description	Value
General information:	
Product name:	CR 1S-23 A-A-A-E-HQQE
Product No:	96515568
EAN number:	5700396727721
Technical:	
Pump speed on which pump data are based:	2864 rpm
Rated flow:	0.9 m³/h
Rated head:	90.4 m
Maximum head:	134.4 m
Stages:	23
Impellers:	23
Number of reduced-diameter impellers:	0
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQE
Approvals on nameplate:	CE, EAC, ACS
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Materials:	
Base:	Cast iron
Base:	EN 1561 EN-GJL-200
Base:	ASTM A48-25B
Impeller:	Stainless steel
Impeller:	EN 1.4301
Impeller:	AISI 304
Material code:	A
Code for rubber:	E
Bearing:	SIC
Installation:	
Maximum ambient temperature:	60 °C
Maximum operating pressure:	16 bar
Max pressure at stated temp:	16 bar / 120 °C
Max pressure at stated temp:	16 bar / -20 °C
Type of connection:	Oval / Rp
Size of inlet connection:	1 inch
Size of outlet connection:	1 inch
Pressure rating for connection:	PN 16
Flange size for motor:	FT100
Connect code:	A
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:	80A
IE Efficiency class:	IE3
Rated power - P2:	0.75 kW
Power (P2) required by pump:	0.75 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 220-240D/380-415Y V
Rated current:	3.30/1.90 A
Starting current:	580-620 %
Cos phi - power factor:	0.81-0.71
Rated speed:	2840-2870 rpm
Efficiency:	IE3 80,7%
Motor efficiency at full load:	80.7 %
Motor efficiency at 3/4 load:	82.7 %
Motor efficiency at 1/2 load:	81.7 %

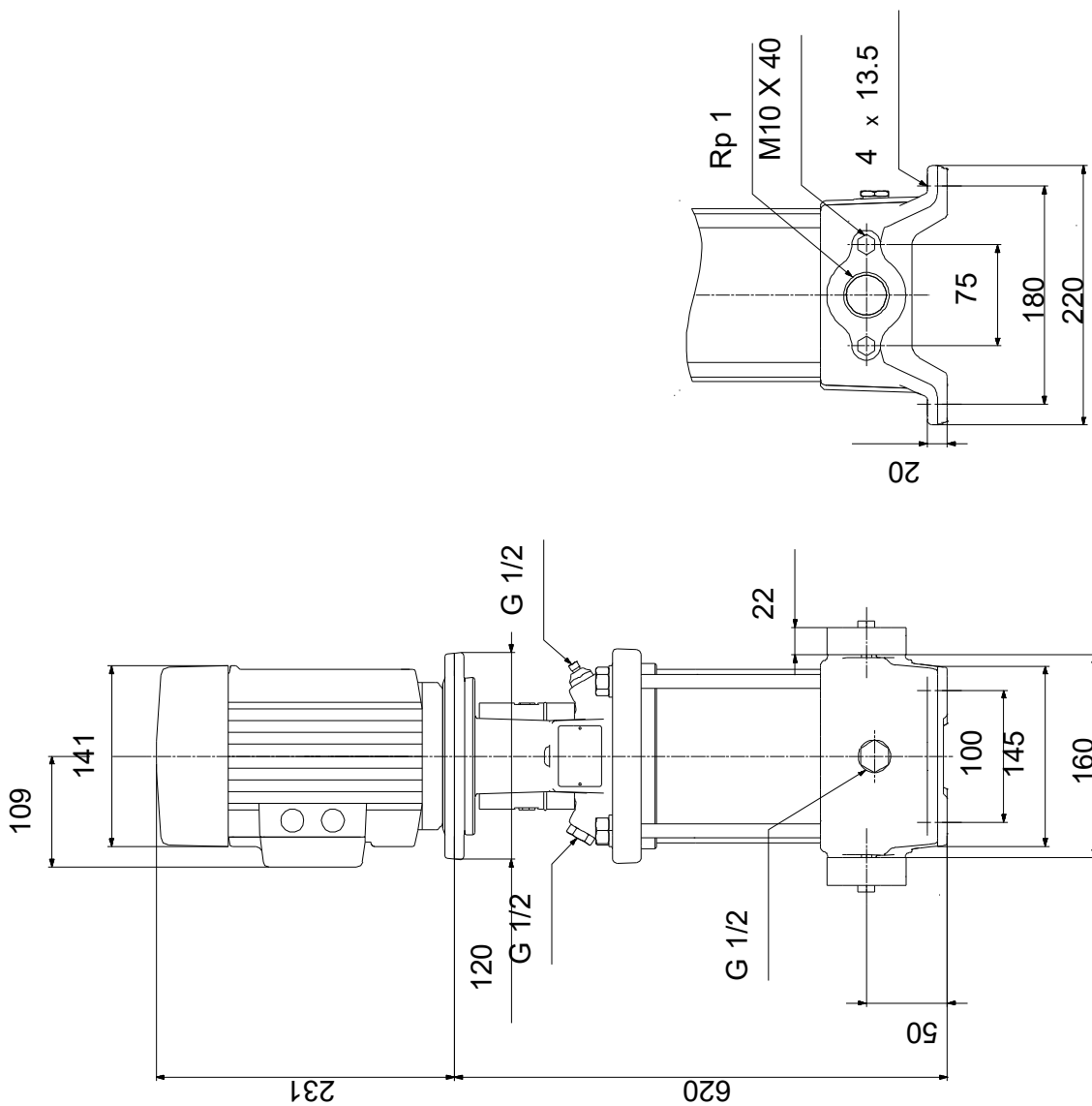


Description	Value
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protec:	NONE
Motor No:	85905175
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI ≥:	0.54
Net weight:	28.8 kg
Gross weight:	32.9 kg
Shipping volume:	0.092 m³
Danish VVS No.:	385900523
Country of origin:	HU
Custom tariff no.:	84137075

96515568 CR 1S-23 A-A-A-E-HQQE 50 Hz



96515568 CR 1S-23 A-A-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 CR 1S-23, Product No. 96515568
Produced After 1101 (production year and week number)

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aanta	Eenheid
- 80	Chamber stack		Bearing type: SILICON CARBIDE	96479072	1	pcs
- 4a	Chamber w. bearing cpl.				3	
	Vane				1	
	Intermediate chamber				1	
	Retainer for bearing				1	
	Guide vane				6	
45	Neck ring				1	
47	Bearing bush				1	
65	Retainer				1	
65	Retainer				1	
- 4	Chamber cpl.				19	
	Vane				1	
	Intermediate chamber				1	
	Plate				1	
	Guide vane				6	
45	Neck ring				1	
65	Retainer				1	
65	Retainer				1	
- 5a	Chamber cpl.				1	
	Vane				1	
	Intermediate chamber				1	
45	Neck ring				1	
65	Retainer				1	
65	Retainer				1	
- 44a	Guide vane cpl.				1	
	Plate				1	
	Guide vane				6	
50	Top plate				1	
47a	Bearing ring				3	
- 49	Impeller cpl.				23	
49	Impeller				1	
- 51	Shaft, spline, cpl.				1	
	Shaft				1	
69	Stop ring				1	
64d	Spacing pipe		Internal diameter: 12,85		3	
			Outer diameter: 15,85			
			Length (mm): 4,50			
64c	Clamp, splined		Internal diameter: 8,5		1	
			Outer diameter: 15			
64a	Spacing pipe				19	
66	Wedge lock washer				1	
67	Lock nut		Thread: M8		1	
-	Kit, coupling			00415061	1	pcs
9	Hex socket head cap screw		Designation: DIN 912		4	
			Length (mm): 20			
			Thread: M6			
10a	Coupling half				2	
10	Shaft pin		Diameter: 5		1	
			Length (mm): 26			
-	Kit, coupling guard			96505130	1	pcs
7.a	Combi Slot Torx screw				4	
7	Coupling guard				2	
-	Kit, gaskets			96455090	1	pcs
37	O-ring				2	
38	O-ring				1	
38	O-ring				2	
109	O-ring		Diameter: 22,00		1	
			Material type: EPDM			

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aanta	Eenheid
Thickness: 2,75						
-	Kit, plug			96505133	1	pcs
- 18	Air vent screw				1	
	Spindle				1	
	Plug				1	
23b	Spindle				1	
25	Plug				1	
25	Plug				1	
38	O-ring				1	
38	O-ring				2	
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			96455086	1	pcs
105	Shaft seal	Material type: HQQE			1	
-	Kit, wear parts	Material type: SILICON CARBIDE		96455093	1	pcs
- 4a	Chamber w. bearing cpl.				3	
	Vane				1	
	Retainer				1	
	Guide vane				6	
4a	Intermediate chamber				1	
45	Neck ring				1	
47	Bearing bush				1	
65	Retainer for seal ring				1	
65	Neck ring retainer				1	
45	Neck ring				24	
47a	Bearing ring				3	
64d	Spacing pipe	Internal diameter: 12,85			3	
		Outer diameter: 15,85				
		Length (mm): 4,50				
64c	Clamp, splined	Internal diameter: 8,5			1	
		Outer diameter: 15				
65	Neck ring retainer				24	
66	Wedge lock washer				1	
67	Lock nut	Thread: M8			1	
441 b	Gasket				2	
-	Motor			85904031	1	pcs
-	Kit, Ball bearing			96279741	1	
111	Ball bearing	Designation: 6304.2Z.C3.SYN			1	
111	Ball bearing				1	
157	O-ring	Diameter: 32			1	
		Material type: NBR				
		Thickness: 2				
158	Waved washer				1	
-	Kit, fan			96279721	1	
156	Fan				1	
159 a	Seal ring				1	
-	Kit, fan cover			96279720	1	
151	Fan cover				1	
152	Pan head thread forming screw				2	
-	Kit, flange			96279854	1	
156 b	Flange				1	
159c	Seal ring				1	
184	Gasket	Internal diameter: 114,80			1	
		Outer diameter: 121,20				
		Thickness: 0,25				
185	Pan head screw				4	

Pos	Omschrijving	Opmerking tekst	Classificatie	Gegevens	Onderdeelnr.	Aanta	Eenheid
186	Drain plug						1
-	Kit, shaft seal				96279722	1	
159c	Seal ring						1
159 a	Seal ring						1
-	Kit, terminal box				96279724	1	
152	Pan head thread forming screw						4
164 a	Terminal box w/gasket						1
164	Terminal box cover w/gasket						1
173 a	Washer			Designation: SQUARE			1
				Internal diameter: 5,5			
				Outer diameter: 10X10			
				Thickness: 1,5			
173 a	Base						1
173	Pan head thread forming screw			Designation: COMBI TORX T25			1
173	Pan head screw			Designation: DIN 7985			1
175	Pan head screw			Designation: DIN 7985			2
176	Terminal cpl.						1
-	Motor				85900491	1	pcs
-	Kit, Ball bearing				96279741	1	
111	Ball bearing			Designation: 6304.2Z.C3.SYN			1
111	Ball bearing						1
157	O-ring			Diameter: 32			1
				Material type: NBR			
				Thickness: 2			
158	Waved washer						1
-	Kit, fan				96279721	1	
156	Fan						1
159 a	Seal ring						1
-	Kit, fan cover				96279720	1	
151	Fan cover						1
152	Pan head thread forming screw						2
-	Kit, flange				96279880	1	
156 b	Flange						1
157 a	Gasket			Internal diameter: 114,80			1
				Outer diameter: 121,20			
				Thickness: 0,25			
159c	Seal ring						1
185	Pan head screw						4
186	Drain plug						1
-	Kit, shaft seal				96279722	1	
159c	Seal ring						1
159 a	Seal ring						1
-	Kit, terminal box				96279724	1	
152	Pan head thread forming screw						4
164 a	Terminal box w/gasket						1
164	Terminal box cover w/gasket						1
173 a	Washer			Designation: SQUARE			1
				Internal diameter: 5,5			
				Outer diameter: 10X10			
				Thickness: 1,5			
173 a	Base						1
173	Pan head thread forming screw			Designation: COMBI TORX T25			1
173	Pan head screw			Designation: DIN 7985			1

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aanta	Eenheid
175	Pan head screw		Designation: DIN 7985			2
176	Terminal cpl.					1
4a	Chamber w. bearing cpl.			98371208	3	pcs
4a	Chamber w. bearing cpl.			97690601	3	pcs
4a	Chamber w. bearing cpl.			97690590	3	pcs
4a	Chamber w. bearing cpl.			96547660	3	pcs
4a	Chamber w. bearing cpl.			98371207	3	pcs
- 4	Chamber cpl.			97690020	19	pcs
45	Neck ring			96536194	1	
65	Retainer			92501765	1	
65	Retainer			98270018	1	
65	Retainer			92501764	1	
4	Chamber cpl.			96547662	19	pcs
4	Chamber cpl.			98371206	19	pcs
5a	Chamber cpl.			98371205	1	pcs
5a	Chamber cpl.			96588148	1	pcs
6	Base			96588138	1	pcs
10	Shaft pin	Diameter: 5		96536473	1	pcs
		Length (mm): 26				
10	Shaft pin	Diameter: 5		96587588	1	pcs
		Length (mm): 26				
- 25a	Priming valve cpl.			96588242	1	pcs
38	O-ring			99198815	1	
38	O-ring			99412727	1	
26	Staybolt	Length (mm): 439		96603308	4	pcs
		Thread: M12				
26	Staybolt	Length (mm): 439		98986259	4	pcs
		Thread: M12				
32	Washer	Designation: DIN 125 A		99883474	4	pcs
		Internal diameter: 13				
		Outer diameter: 24				
		Thickness: 2,5				
36	Nut	Thread: M12		96620479	4	pcs
37	O-ring			96547656	2	pcs
38	O-ring			99198815	2	pcs
38	O-ring			99412727	2	pcs
44a	Guide vane cpl.			96547669	1	pcs
44a	Guide vane cpl.			98371221	1	pcs
47a	Bearing ring			97905743	3	pcs
47a	Bearing ring			96547649	3	pcs
49	Impeller cpl.			98394398	23	pcs
51	Shaft, spline, cpl.			98368522	1	pcs
55	Outer sleeve			98811296	1	pcs
64c	Clamp, splined	Internal diameter: 8,5		98496968	1	pcs
		Outer diameter: 15				
64a	Spacing pipe			96536198	19	pcs
66	Wedge lock washer			96536157	1	pcs
66	Wedge lock washer			92575609	1	pcs
67	Lock nut	Thread: M8		98277008	1	pcs
105	Shaft seal	Material type: HQQE		96983415	1	pcs
441 b	Gasket			96536206	2	pcs
441 a	Flange	Thread: RP 1		96547453	2	pcs