

Inventflow: Grundfos A-partner

Grundfos CRE 1-27 A-FGJ-A-E-HQQE

Find the pump here:

<https://inventflow.nl/en/pompenfilter/cre/grundfos-cre-1-27-a-fgj-a-e-hqqe>

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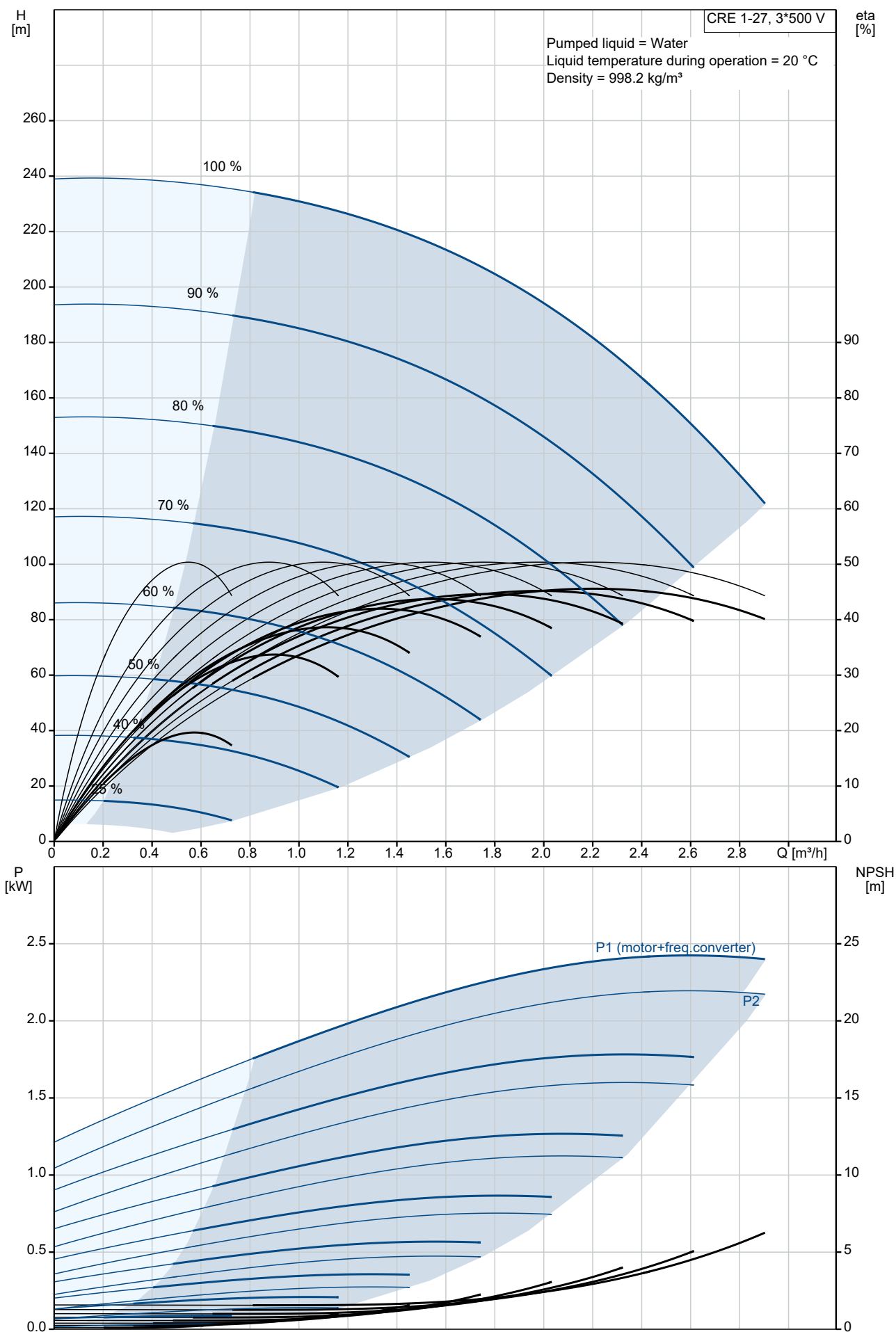
Datasheet



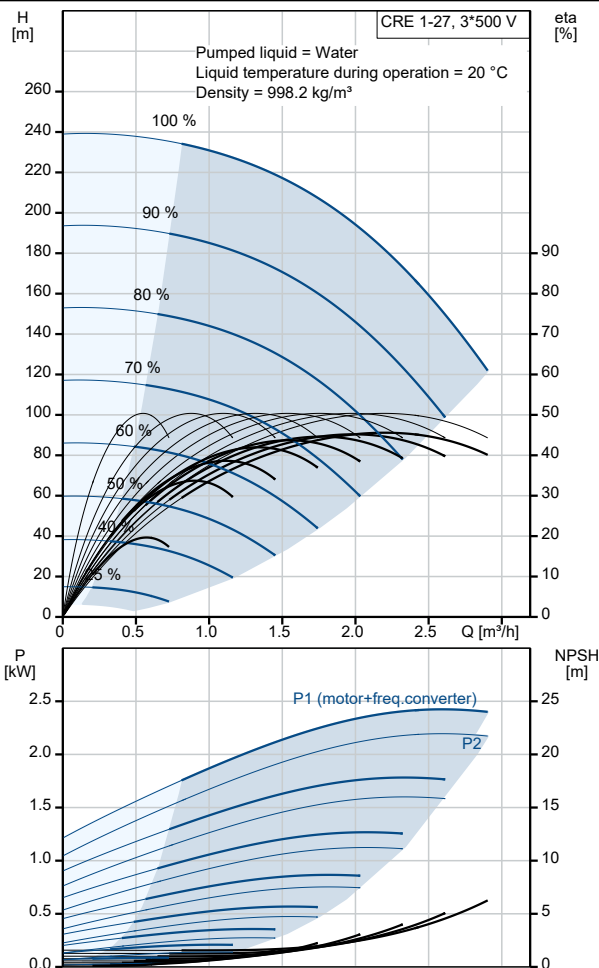
Qty.	Description
1	CRE 1-27 A-FGJ-A-E-HQQE  Product No.: 99072116 Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron – all other wetted parts are in stainless steel. A cartridge shaft seal ensures high reliability, safe handling, and easy access and service. Power transmission is via a rigid split coupling. Pipe connection is via combined DIN-ANSI-JIS flanges. The pump is fitted with a 3-phase, fan-cooled, permanent-magnet, synchronous motor. The motor efficiency is classified as IE5 in accordance with IEC 60034-30-2. The motor includes a frequency converter and PI controller in the motor terminal box. This enables continuously variable control of the motor speed, which again enables adaptation of the performance to a given requirement. An operating panel on the motor terminal box enables setting of required setpoint as well as setting of pump to "Min." or "Max." operation or to "Stop". The Grundfos Eye indicator on the operating panel provides visual indication of pump status: • "Power on": Motor is running (rotating green indicator lights) or not running (permanently green indicator lights) • "Warning": Motor is still running (rotating yellow indicator lights) or has stopped (permanently yellow indicator lights) • "Alarm": Motor has stopped (flashing red indicator lights). Communication with the pump is possible by means of Grundfos GO Remote (accessory). The remote control enables 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 has a number of inputs and outputs enabling the motor to be used in advanced applications where many inputs and outputs are required: • two dedicated digital inputs • three analog inputs, 0(4)-20 mA, 0-5 V, 0-10 V, 0.5 - 3.5 V • 5 V voltage supply to potentiometer and sensor • one analog output, 0-10 V, 0(4)-20 mA • two configurable digital inputs or open-collector outputs • two Pt100/Pt1000 inputs • LiqTec, dry-running protection sensor input • Grundfos Digital Sensor input and output • 24 V voltage supply for sensors • two signal-relay outputs (potential-free contacts) • GENIbus connection • interface for Grundfos CIM fieldbus module. 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: 3514 rpm Rated flow: 2.2 m³/h Rated head: 187.8 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: Cast iron EN 1561 EN-GJL-200

Qty.	Description
	Impeller: ASTM A48-25B Stainless steel EN 1.4301 AISI 304 Bearing: SIC Installation: Maximum ambient temperature: 50 °C Maximum operating pressure: 25 bar Max pressure at stated temp: 25 bar / 120 °C 25 bar / -20 °C Type of connection: DIN / ANSI / JIS Size of inlet connection: DN 25/32 Size of outlet connection: DN 25/32 Pressure rating for connection: PN 25 Flange rating inlet: 250 lb Flange size for motor: FT130 Electrical data: Motor standard: IEC Motor type: 100LA IE Efficiency class: IE5 Rated power - P2: 3 kW Power (P2) required by pump: 3 kW Mains frequency: 50 / 60 Hz Rated voltage: 3 x 380-500 V Rated current: 5.80-4.80 A Cos phi - power factor: 0.91-0.86 Rated speed: 360-4000 rpm Efficiency: 90.7% Motor efficiency at full load: 90.7 % Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Motor No: 98971049 Controls: Frequency converter: Built-in Pressure sensor: N Others: Minimum efficiency index, MEI ≥: 0.70 Net weight: 52.7 kg Gross weight: 73.7 kg Shipping volume: 0.285 m³ Danish VVS No.: 386000027 Finnish LVI No.: 4925672 Country of origin: HU Custom tariff no.: 84137075

99072116 CRE 1-27 A-FGJ-A-E-HQQE

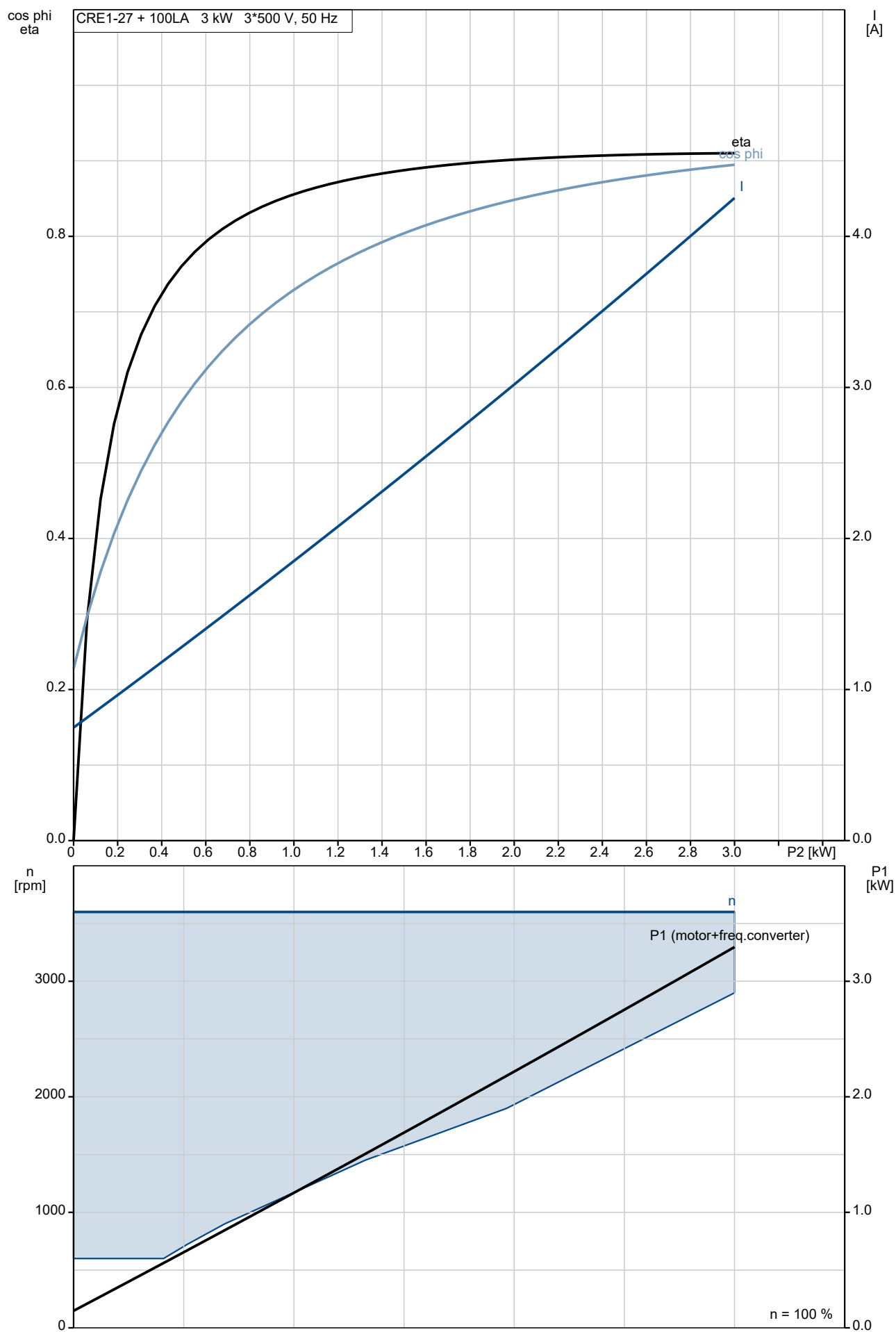


Description	Value		
General information:			
Product name:	CRE 1-27 A-FGJ-A-E-HQQE		
Product No:	99072116		
EAN number:	5712606204878		
Technical:			
Pump speed on which pump data are based:	3514 rpm		
Rated flow:	2.2 m³/h		
Rated head:	187.8 m		
Maximum head:	244.4 m		
Stages:	27		
Impellers:	27		
Number 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:	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:	50 °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:	DIN / ANSI / JIS		
Size of inlet connection:	DN 25/32		
Size of outlet connection:	DN 25/32		
Pressure rating for connection:	PN 25		
Flange rating inlet:	250 lb		
Flange size for motor:	FT130		
Connect code:	FGJ		
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:	100LA		
IE Efficiency class:	IE5		
Rated power - P2:	3 kW		
Power (P2) required by pump:	3 kW		
Mains frequency:	50 / 60 Hz		
Rated voltage:	3 x 380-500 V		
Rated current:	5.80-4.80 A		
Cos phi - power factor:	0.91-0.86		
Rated speed:	360-4000 rpm		
Efficiency:	90.7%		
Motor efficiency at full load:	90.7 %		
Enclosure class (IEC 34-5):	IP55		
Insulation class (IEC 85):	F		

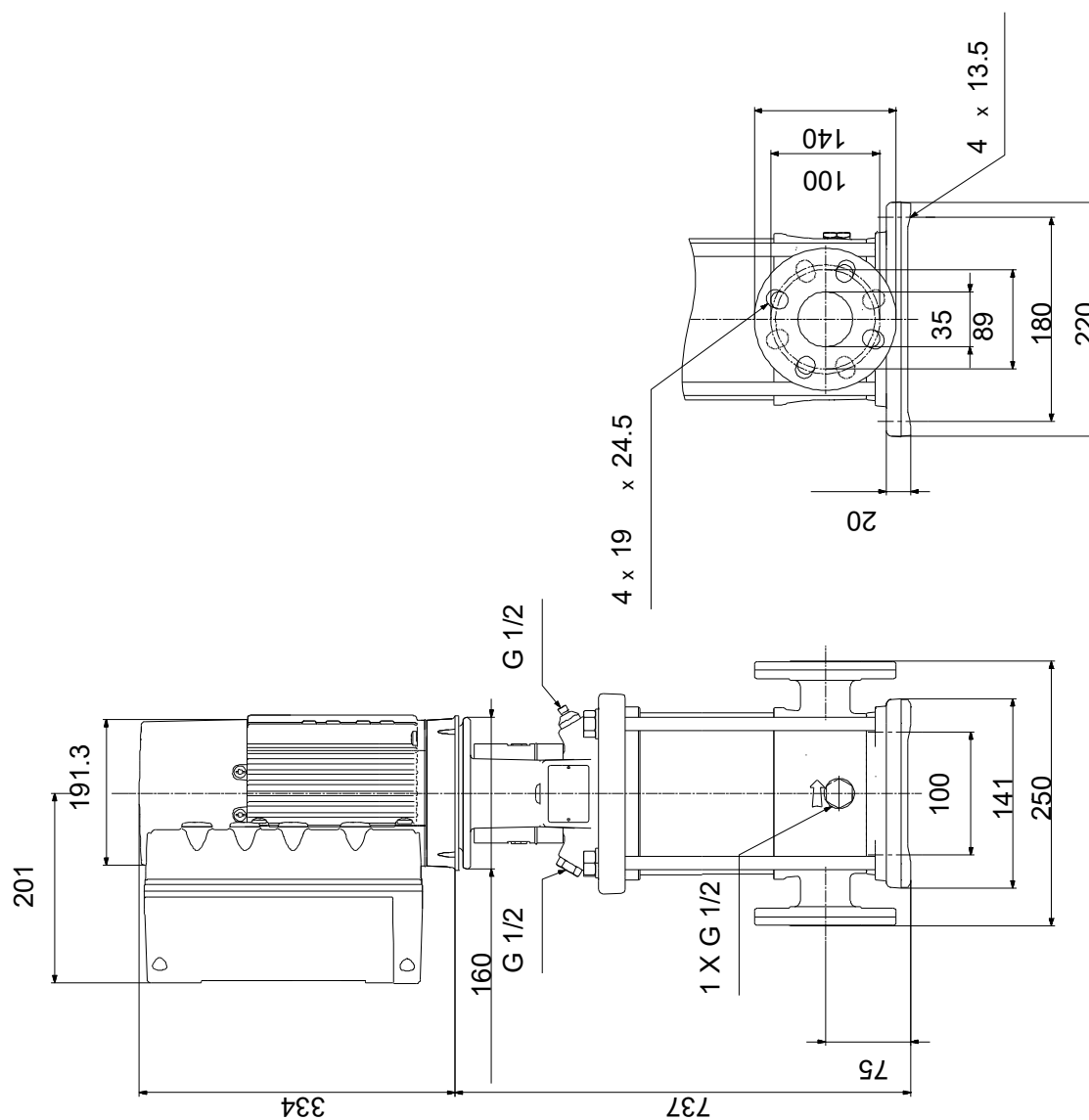


Description	Value
Motor protec:	ELEC
Motor No:	98971049
Controls:	
Control panel:	Standard
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	52.7 kg
Gross weight:	73.7 kg
Shipping volume:	0.285 m ³
Config. file no:	99057231
Danish VVS No.:	386000027
Finnish LVI No.:	4925672
Country of origin:	HU
Custom tariff no.:	84137075

99072116 CRE 1-27 A-FGJ-A-E-HQQE



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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 CRE 1-27, Product No. 99072116
Produced After 1633 (production year and week number)

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aanta	Eenheid
- 80	Kit, chamber stack		Bearing type: SILICON CARBIDE	96453503	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.				23	
	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.				27	
- 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				23	
66	Wedge lock washer				1	
67	Lock nut		Thread: M8		1	
-	Kit, coupling			00415063	1	pcs
9	Hex socket head cap screw		Designation: DIN 912		4	
			Length (mm): 25			
			Thread: M8			
10a	Coupling half				2	
10	Shaft pin		Diameter: 5		1	
			Length (mm): 26			
-	Kit, coupling guard			96505131	1	pcs
7a	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			
			Thickness: 2,75			

Pos	Omschrijving	Opmerking tekst	Classificatie	Gegevens	Onderdeelnr.	Aanta	Eenheid
-	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				99879896	1	pcs
-	Kit, Ball bearing				98881508	1	
99	Retaining ring					1	
153	Ball bearing					1	
154	Ball bearing					1	
156 d	Seal ring					1	
156c	Seal ring					1	
157	O-ring			Diameter: 52		1	
				Material type: NBR			
				Thickness: 3			
158	Waved washer					1	
188	Retaining ring					1	
-	Kit, Blanking plug				99052475	1	
252 b	Plug cpl.					4	
252 b	Blanking plug					1	
-	Kit, cable gland				98736096	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	

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aanta	Eenheid
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			98878612	1	
251 d	Pan head thread forming screw					4
251 b	Control box					1
251 a	Control box cpl.					1
252 b	Plug cpl.					4
252 b	Blanking plug					1
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
268 a	Base					1
268	Pan head screw					1
273 b	Battery					1
273 a	Cross recess Pan head screw					3
273	Funct. Module cpl.					1
275 a	Pin					1
277 b	Spring					4
277 a	Cross recess Pan head screw					1
277	Cover					1
286	Spacer					1
287	Cover					1
288 b	Retaining ring					8
288 a	Pan head thread forming screw					8
288	Wire clamp					4
289 a	Pan head thread forming screw					1
289	Wire clamp					1
290	Control panel, cpl.					1
301	Jumper					1
-	Kit, Control box upper			98869865	1	
251 d	Pan head thread forming screw					4
251 b	Control box					1
-	Kit, Control panel			98939973	1	
290	Control panel, cpl.					1
-	Kit, cover			98330622	1	
287	Cover					1
-	Kit, end shield (NDE)			98869882	1	
156c	Seal ring					1
156 a	End shield NDE					1
157	O-ring		Diameter: 52			1
			Material type: NBR			
			Thickness: 3			

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aanta	Eenheid
158	Waved washer					1
206	Pan head thread forming screw					4
-	Kit, fan			98869876	1	
152	Pan head thread forming screw					4
156c	Seal ring					1
156	Fan					1
-	Kit, fan cover			99957566	1	
151	Fan cover					1
152	Pan head thread forming screw					4
-	Kit, flange (DE)			98869888	1	
	Glue					0
156c	Seal ring					1
156 b	Flange					1
201c	Drain plug					3
-	Kit, Funct. module			98334777	1	
273 a	Cross recess Pan head screw					5
273	Funct. Module cpl.					1
275 a	Pin					1
286	Spacer					1
-	Kit, Isolation cover			98859508	1	
277 b	Spring					4
277 a	Cross recess Pan head screw					1
277	Cover					1
-	Kit, Lower part cpl.			98859571	1	
178	Pan head thread forming screw					4
251 a	Control box cpl.					1
275 a	Pin					1
277 a	Cross recess Pan head screw					1
277	Cover					1
-	Kit, motor			99010735	1	
	Glue					0
	Terminal					3
99a	Retaining ring					1
99	Retaining ring					1
111	Ball bearing					1
111	Ball bearing					1
150	Stator w/housing					1
151	Fan cover					1
152	Pan head thread forming screw					4
156 d	Gasket					1
156c	Seal ring					1
156c	Seal ring					1
156 b	Flange					1
156 a	End shield NDE					1
156	Fan					1
157	O-ring		Diameter: 52			1
			Material type: NBR			
			Thickness: 3			
158	Waved washer					1
172	Shaft w/rotor					1
181	Pan head staybolt					4

Pos	Omschrijving	Opmerking tekst	Classificatie	Gegevens	Onderdeelnr.	Aanta	Eenheid
186	Drain plug					3	
190	Eyebolt					2	
203	Terminal plug					1	
289 a	Pan head thread forming screw					2	
-	Kit, plug				99028676	1	
152	Pan head thread forming screw					2	
203	Terminal plug					1	
205	Gasket					1	
-	Kit, screws				99028712	1	
268 a	Base					1	
268	Pan head screw					1	
288 b	Retaining ring					8	
288 a	Pan head thread forming screw					8	
288	Wire clamp					4	
289 a	Pan head thread forming screw					1	
289	Wire clamp					1	
-	Kit, staybolts				98881544	1	
181	Pan head staybolt					4	
111	Ball bearing				99083449	1	
111	Ball bearing				97501069	1	
152	Pan head thread forming screw				99834207	4	
152	Pan head thread forming screw				99814578	4	
158	Waved washer				99804989	1	
159 a	Seal ring				97689816	1	
186	Drain plug				99980519	3	
251 d	Pan head thread forming screw				98995460	4	
266	Connector plug 3-pole				99421265	1	
2a	Pump head				98681106	1	pcs
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	23	pcs
45	Neck ring				96536194	1	
65	Retainer				92501765	1	
65	Retainer				98270018	1	
65	Retainer				92501764	1	
4	Chamber cpl.				96547662	23	pcs
4	Chamber cpl.				98371206	23	pcs
5a	Chamber cpl.				98371205	1	pcs
5a	Chamber cpl.				96588148	1	pcs
6	Base				96588146	1	pcs
7.a	Combi Slot Torx screw				96886324	4	pcs
7	Coupling guard				96603690	2	pcs
10	Shaft pin			Diameter: 5	96536473	1	pcs
				Length (mm): 26			
10	Shaft pin			Diameter: 5	96587588	1	pcs
				Length (mm): 26			
18	Air vent screw				96547461	1	pcs
18	Air vent screw				95061351	1	pcs
- 25a	Priming valve cpl.				96588242	1	pcs
38	O-ring				99198815	1	
38	O-ring				99412727	1	
25	Plug				96536013	1	pcs
26	Staybolt			Length (mm): 511	96547457	4	pcs
				Thread: M12			
26	Staybolt			Length (mm): 511	98986260	4	pcs

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aanta	Eenheid
28	Hex head screw		Thread: M12 Length (mm): 25	99335941	4	pcs
32	Washer		Thread: M8 Designation: DIN 125 A Internal diameter: 13 Outer diameter: 24 Thickness: 2,5	99883474	4	pcs
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.			96547665	27	pcs
49	Impeller cpl.			98394397	27	pcs
51	Shaft, spline, cpl.			98368524	1	pcs
55	Outer sleeve			98811261	1	pcs
60	Formed wire spring			99935918	1	pcs
64c	Clamp, splined		Internal diameter: 8,5 Outer diameter: 15	98496968	1	pcs
64a	Spacing pipe			96536198	23	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