

Inventflow: Grundfos A-partner

Grundfos CRE 5-9 A-A-A-E-HQQE

Find the pump here:

<https://inventflow.nl/en/pompenfilter/cre/grundfos-cre-5-9-a-a-a-e-hqqe>

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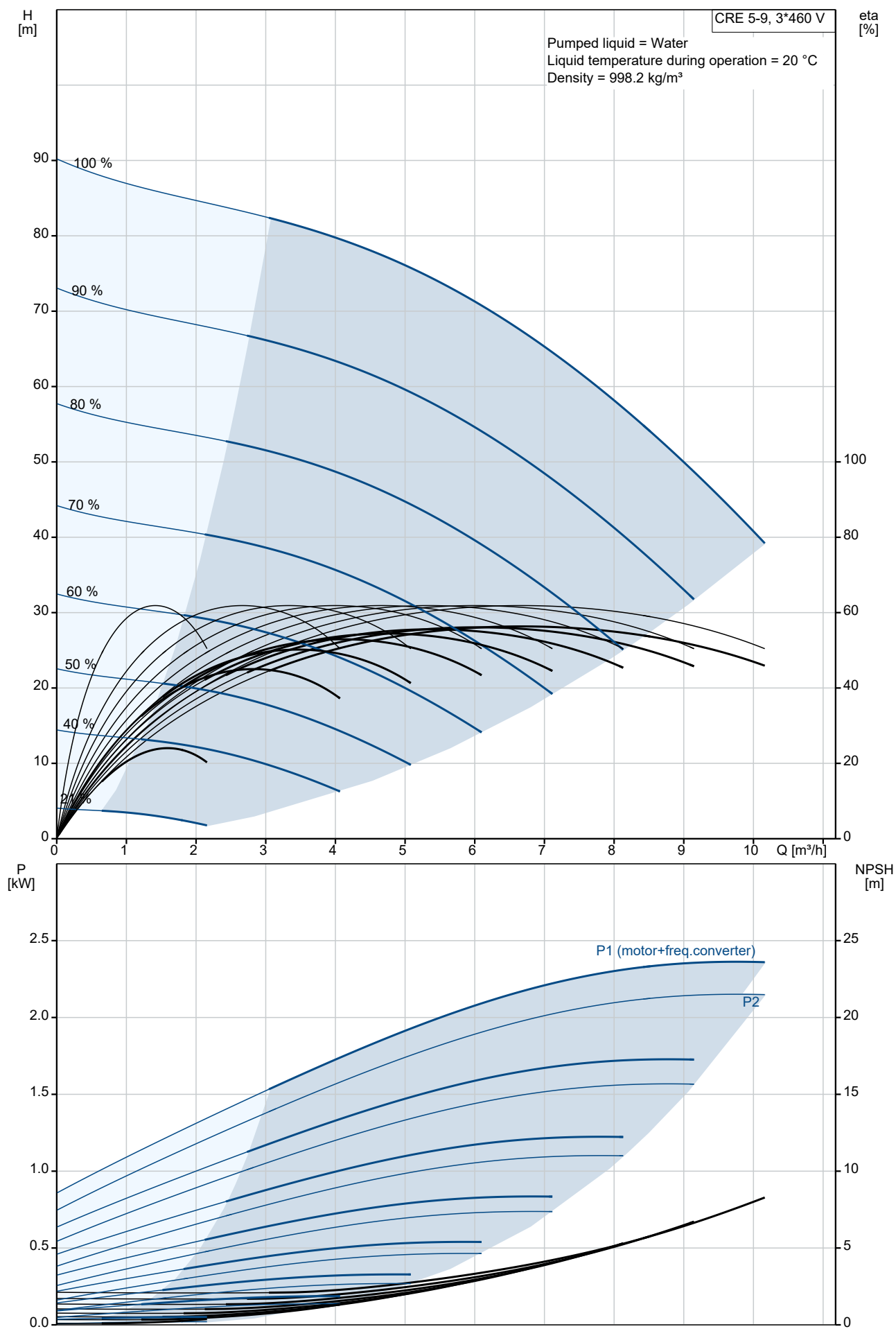
Datasheet



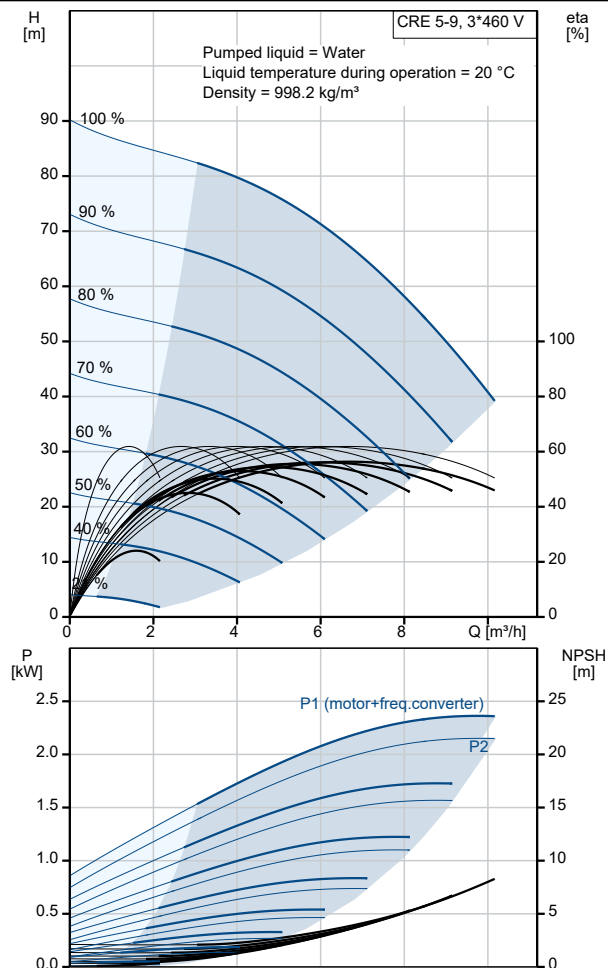
Qty.	Description
1	CRE 5-9 A-A-A-E-HQQE  Note! Product picture may differ from actual product Product No.: 98390027 Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron – all other wetted parts are in stainless steel. A cartridge shaft seal ensures high reliability, safe handling, and easy access and service. Power transmission is via a rigid split coupling. 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: 3501 rpm Rated flow: 6.9 m³/h Rated head: 68 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

Qty.	Description
	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: 50 °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 1/4 inch Size of outlet connection: 1 1/4 inch Pressure rating for connection: PN 16 Flange size for motor: FT115 Electrical data: Motor standard: IEC Motor type: 90LD IE Efficiency class: IE5 Rated power - P2: 2.2 kW Power (P2) required by pump: 2.2 kW Mains frequency: 50 / 60 Hz Rated voltage: 3 x 380-500 V Rated current: 4.15-3.40 A Cos phi - power factor: 0.93-0.87 Rated speed: 360-4000 rpm Efficiency: 90.1% Motor efficiency at full load: 90.1 % Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F Motor No: 98190193 Controls: Frequency converter: Built-in Pressure sensor: N Others: Minimum efficiency index, MEI $\geq$: 0.57 DOE Pump Energy Index CL: 0.00 DOE Pump Energy Index VL: 0.00 Net weight: 32.8 kg Gross weight: 35.7 kg Shipping volume: 0.143 m³ Finnish LVI No.: 4925685 Country of origin: HU Custom tariff no.: 84137075

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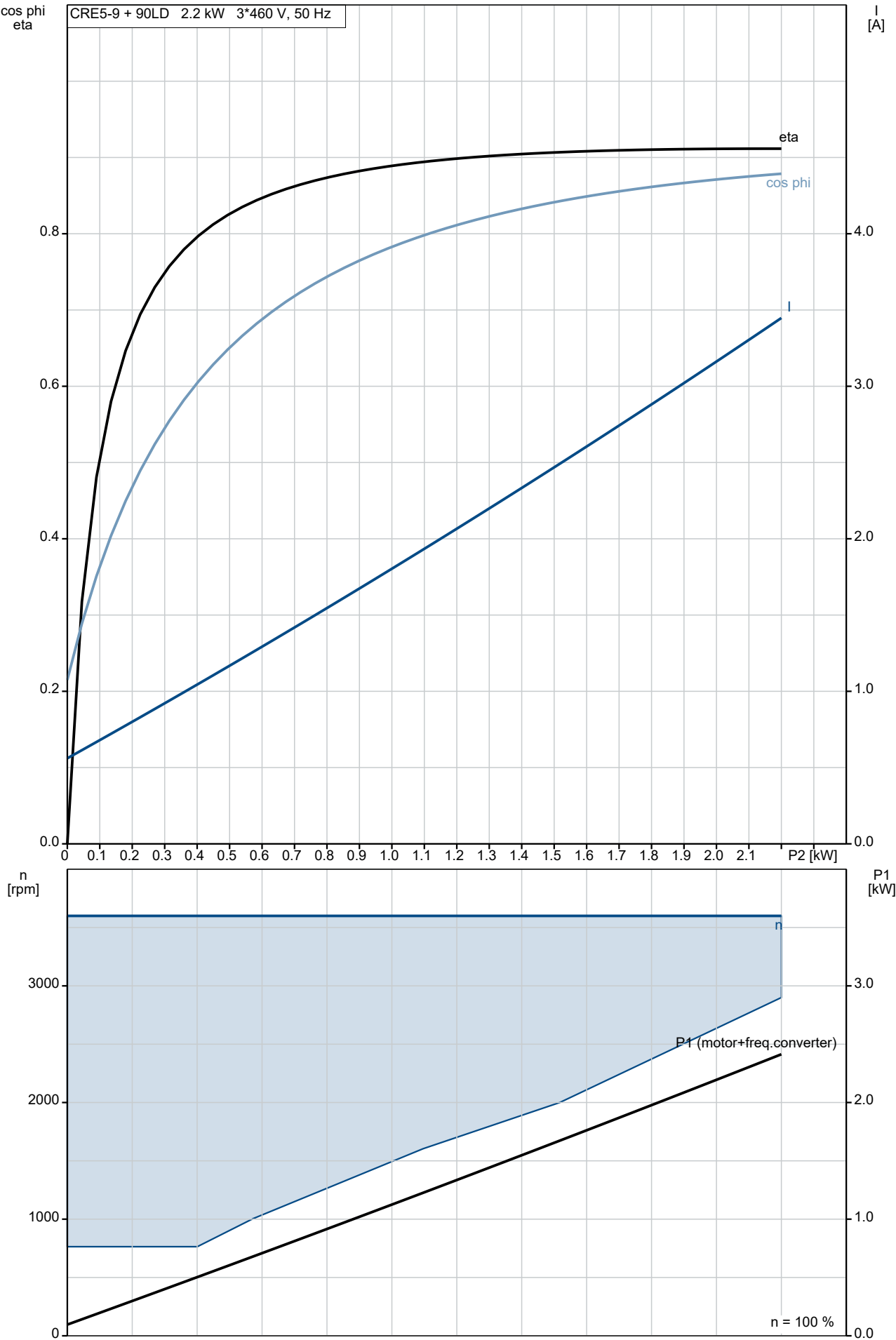


Description	Value
General information:	
Product name:	CRE 5-9 A-A-A-E-HQQE
Product No:	98390027
EAN number:	5711494189090
Technical:	
Pump speed on which pump data are based:	3501 rpm
Rated flow:	6.9 m³/h
Rated head:	68 m
Maximum head:	93.3 m
Stages:	9
Impellers:	9
Number of reduced-diameter impellers:	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:	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 1/4 inch
Size of outlet connection:	1 1/4 inch
Pressure rating for connection:	PN 16
Flange size for motor:	FT115
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:	90LD
IE Efficiency class:	IE5
Rated power - P2:	2.2 kW
Power (P2) required by pump:	2.2 kW
Mains frequency:	50 / 60 Hz
Rated voltage:	3 x 380-500 V
Rated current:	4.15-3.40 A
Cos phi - power factor:	0.93-0.87
Rated speed:	360-4000 rpm
Efficiency:	90.1%
Motor efficiency at full load:	90.1 %
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Motor protec:	ELEC

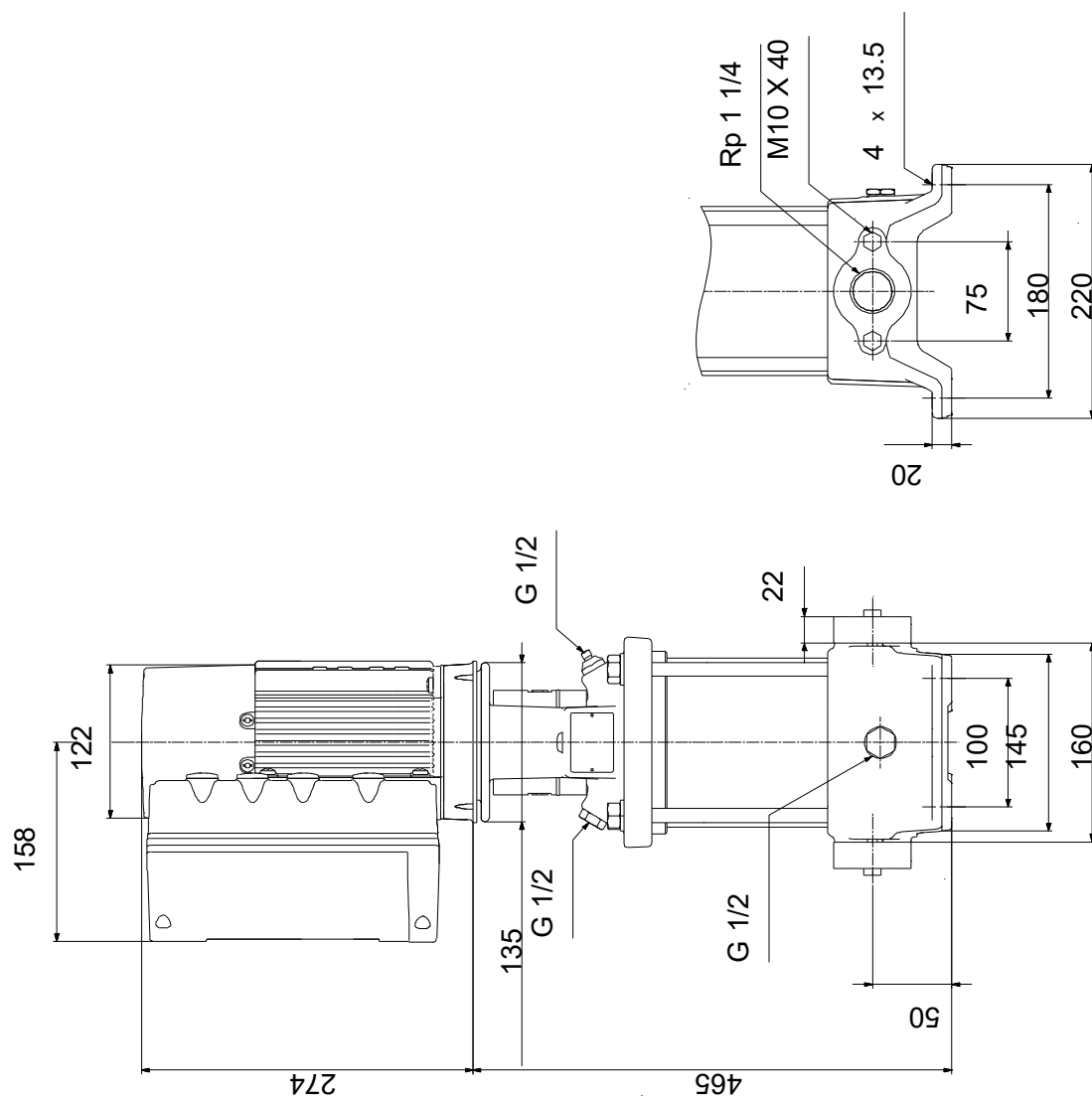


Description	Value
Motor No:	98190193
Controls:	
Control panel:	Standard
Function Module:	FM300 - Advanced
Frequency converter:	Built-in
Pressure sensor:	N
Others:	
Minimum efficiency index, MEI ≥:	0.57
DOE Pump Energy Index CL:	0.00
DOE Pump Energy Index VL:	0.00
Net weight:	32.8 kg
Gross weight:	35.7 kg
Shipping volume:	0.143 m ³
Config. file no:	98499054
Finnish LVI No.:	4925685
Country of origin:	HU
Custom tariff no.:	84137075

98390027 CRE 5-9 A-A-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 5-9, Product No. 98390027
Produced After 1252 (production year and week number)

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
-	Kit, chamber stack		Bearing type: SILICON CARBIDE	96453582	1	pcs
- 4a	Chamber w. bearing cpl.				2	
	Vane				1	
	Retainer for bearing				1	
	Guide vane				6	
	Chamber				1	
45	Neck ring				1	
47	Bearing bush				1	
65	Retainer				1	
65	Retainer for seal ring				1	
- 4	Chamber cpl.				6	
	Vane				1	
	Plate				1	
	Guide vane				6	
5a	Chamber				1	
45	Neck ring				1	
65	Retainer				1	
65	Retainer for seal ring				1	
- 5a	Chamber cpl.				1	
	Vane				1	
	Guide cup				1	
5a	Chamber				1	
45	Neck ring				1	
65	Retainer				1	
65	Retainer for seal ring				1	
- 44a	Guide vane cpl.				1	
	Plate				1	
	Guide vane				6	
50	Top plate				1	
47a	Bearing ring				2	
49	Impeller cpl.				9	
51	Shaft, spline, cpl.				1	
64c	Clamp, splined		Internal diameter: 8,5		1	
			Outer diameter: 15			
64a	Spacing pipe		Length (mm): 13.00		2	
64	Spacing pipe		Length (mm): 26.0		6	
66	Wedge lock washer				1	
67	Lock nut		Thread: M8		1	
69	Spacing pipe		Length (mm): 2.00		1	
-	Kit, coupling			00415062	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			
-	Kit, plug			96505133	1	pcs
- 18	Air vent screw				1	

Pos	Omschrijving	Opmerking tekst	Classificatie	Gegevens	Onderdeelnr.	Aantal	Eenheid
	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: SIC	96455097	1	pcs
- 4a	Chamber w. bearing cpl.					2	
	Vane					1	
	Retainer					1	
	Guide vane					6	
	Chamber					1	
45	Neck ring					1	
47	Bearing bush					1	
65	Retainer					1	
65	Neck ring retainer					1	
45	Neck ring					10	
47a	Bearing ring					2	
64c	Clamp, splined			Internal diameter: 8,5		1	
				Outer diameter: 15			
64a	Spacing pipe			Length (mm): 13.00		2	
65	Neck ring retainer					10	
66	Wedge lock washer					1	
67	Lock nut			Thread: M8		1	
441 b	Gasket					2	
-	Motor				99131993	1	pcs
-	Kit, adapter				98345796	1	
- 252 a	Adapter set					1	
	Adapter						
	Adapter						
167	Cable gland						
-	Kit, bearing cpl.				98330605	1	
111	Ball bearing			Designation: 6204.2Z.C3.SYN		1	
154	Ball bearing					1	
156 d	Gasket			Internal diameter: 114,80		1	
				Outer diameter: 121,20			
				Thickness: 0,25			
156c	Seal ring					1	
156c	Seal ring					1	
157	O-ring			Diameter: 47		1	
				Material type: NBR			
				Thickness: 3			
158	Waved washer					1	
-	Kit, Blanking plug				98334761	1	
252 b	Plug cpl.					4	
-	Kit, cable gland				98337336	1	
- 293	Cable glands set				98271484	1	
167	Cable gland						
167	Cable gland						
-	Kit, connector plugs				98403113	1	

Pos	Omschrijving	Opmerking tekst	Classificatie	Gegevens	Onderdeelnr.	Aantal	Eenheid
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				98406659	1	
152	Pan head thread forming screw					1	
166	Torx Screw					2	
178	Pan head thread forming screw					4	
251 d	Pan head thread forming screw					4	
251 b	Control box					1	
251 a	Control box					1	
252 b	Plug cpl.					4	
266	Connector plug 8-pole					1	
266	Connector plug 3-pole					1	
268 a	Base					1	
268	Pan head screw					1	
273 b	Battery					1	
273	Funct. Module cpl.					1	
275 a	Pin					1	
277 a	Cross recess Pan head screw					1	
277 a	Cross recess Pan head screw					1	
277 a	Cross recess Pan head screw					5	
277	Isolation cover					1	
286	Spacer					1	
286	Spacer					1	
287	Cover					1	
288 b	Retaining ring					6	
288 a	Pan head thread forming screw					6	
288	Wire clamp					3	
289	Wire clamp					1	
290	Control panel, cpl.					1	
-	Kit, Control box upper				98334765	1	
251 d	Pan head thread forming screw					4	
251 b	Control box					1	
	Kit, Control panel				98939973	1	
-	Kit, cover				98330622	1	
287	Cover					1	
-	Kit, fan				98290124	1	
152	Pan head thread forming screw					4	
156c	Seal ring					1	
156	Fan					1	
-	Kit, flange (DE)				98290128	1	
156 d	Gasket			Internal diameter: 114,80		1	
				Outer diameter: 121,20			
				Thickness: 0,25			
156 b	Flange					1	

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
185	Cross recess Pan head screw				4	
186	Drain plug				1	
188	Retaining ring				1	
-	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			98330625	1	
277 a	Cross recess Pan head screw				1	
277	Isolation cover				1	
-	Kit, Lower part cpl.			98330619	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	Isolation cover				1	
-	Kit, motor			98293865	1	
	Terminal				3	
99a	Retaining ring				1	
99	Retaining ring				1	
111	Ball bearing		Designation: 6204.2Z.C3.SYN		1	
150	Stator				1	
150	Stator housing				1	
151	Fan cover				1	
152	Pan head thread forming screw				4	
154	Ball bearing				1	
156 d	Gasket		Internal diameter: 114,80		1	
			Outer diameter: 121,20			
			Thickness: 0,25			
156c	Seal ring				1	
156c	Seal ring				1	
156 b	Flange				1	
156	Fan				1	
157	O-ring		Diameter: 47		1	
			Material type: NBR			
			Thickness: 3			
158	Waved washer				1	
172	Shaft w/rotor				1	
178	Pan head thread forming screw				4	
185	Cross recess Pan head screw				4	
186	Drain plug				1	
203	Terminal plug				1	
289 a	Pan head thread forming screw				1	
-	Kit, plug			99369622	1	
	Terminal				3	
203	Terminal plug				1	
205	Pan head thread forming screw				1	
-	Kit, screws			98330627	1	
268 a	Base				1	
268	Pan head screw				1	
288 b	Retaining ring				6	
288 a	Pan head thread forming screw				6	

Pos	Omschrijving	Opmerking tekst	Classificatie	Gegevens	Onderdeelnr.	Aantal	Eenheid
288	Wire clamp					3	
289 a	Pan head thread forming screw					1	
289	Wire clamp					1	
-	Kit, staybolts				98881544	1	
181	Pan head staybolt					4	
	Pan head thread forming screw				99598708	4	
111	Ball bearing	Designation: 6204.2Z.C3.SYN			97914979	1	
152	Pan head thread forming screw				99834207	1	
152	Pan head thread forming screw				99814578	1	
156 d	Gasket	Internal diameter: 114,80			99406425	1	
		Outer diameter: 121,20					
		Thickness: 0,25					
156	Fan				96591801	1	
159 a	Seal ring				97689816	1	
186	Drain plug				99980519	1	
251 d	Pan head thread forming screw				98995460	4	
266	Connector plug 3-pole				99421265	1	
2a	Pump head				96588194	1	pcs
4a	Chamber w. bearing cpl.				96547652	2	pcs
4a	Chamber w. bearing cpl.				98371274	2	pcs
- 4	Chamber cpl.				96547651	6	pcs
45	Neck ring				96547603	1	
65	Retainer				97911446	1	
4	Chamber cpl.				98371272	6	pcs
5a	Chamber cpl.				98371269	1	pcs
6	Base				96588138	1	pcs
7a	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): 265			98986327	4	pcs
		Thread: M12					
28	Hex head screw	Length (mm): 20			99932722	4	pcs
		Thread: M8					
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.				96547658	1	pcs
44a	Guide vane cpl.				98681144	1	pcs
47a	Bearing ring				97905743	2	pcs
47a	Bearing ring				96547649	2	pcs
49	Impeller cpl.				96547648	9	pcs
49	Impeller cpl.				98394422	9	pcs
51	Shaft, spline, cpl.				96588234	1	pcs
55	Outer sleeve				98811290	1	pcs
60	Formed wire spring				99935918	1	pcs
64c	Clamp, splined	Internal diameter: 8,5			98496968	1	pcs
		Outer diameter: 15					

Pos	Omschrijving	Opmerking tekst	Classificatie Gegevens	Onderdeelnr.	Aantal	Eenheid
64a	Spacing pipe		Length (mm): 13.00	96536452	2	pcs
64a	Spacing pipe		Length (mm): 13.00	98520104	2	pcs
64	Spacing pipe		Length (mm): 26.0	96536304	6	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 pipe		Length (mm): 2.00	96536451	1	pcs
105	Shaft seal		Material type: HQQE	96983415	1	pcs
441 b	Gasket			96536206	2	pcs
441 a	Flange		Thread: RP 1	96547454	2	pcs