

CRN64-5-2 A-F-G-V-HQQV 3x400/690 50 HZ

Grundfos pump 96123807




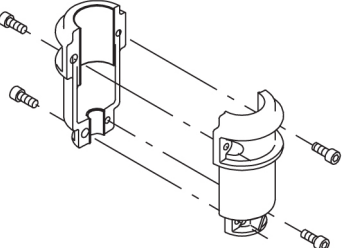
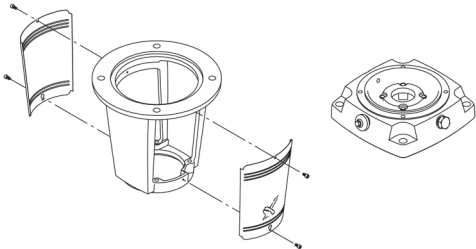
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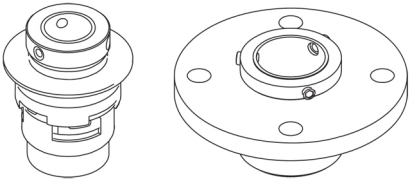
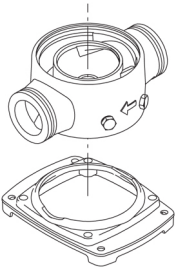
<https://www.lenntech.com/grundfos/CRN64/96123807/CRN-64-5-2-A-F-G-V-HQQV.html>

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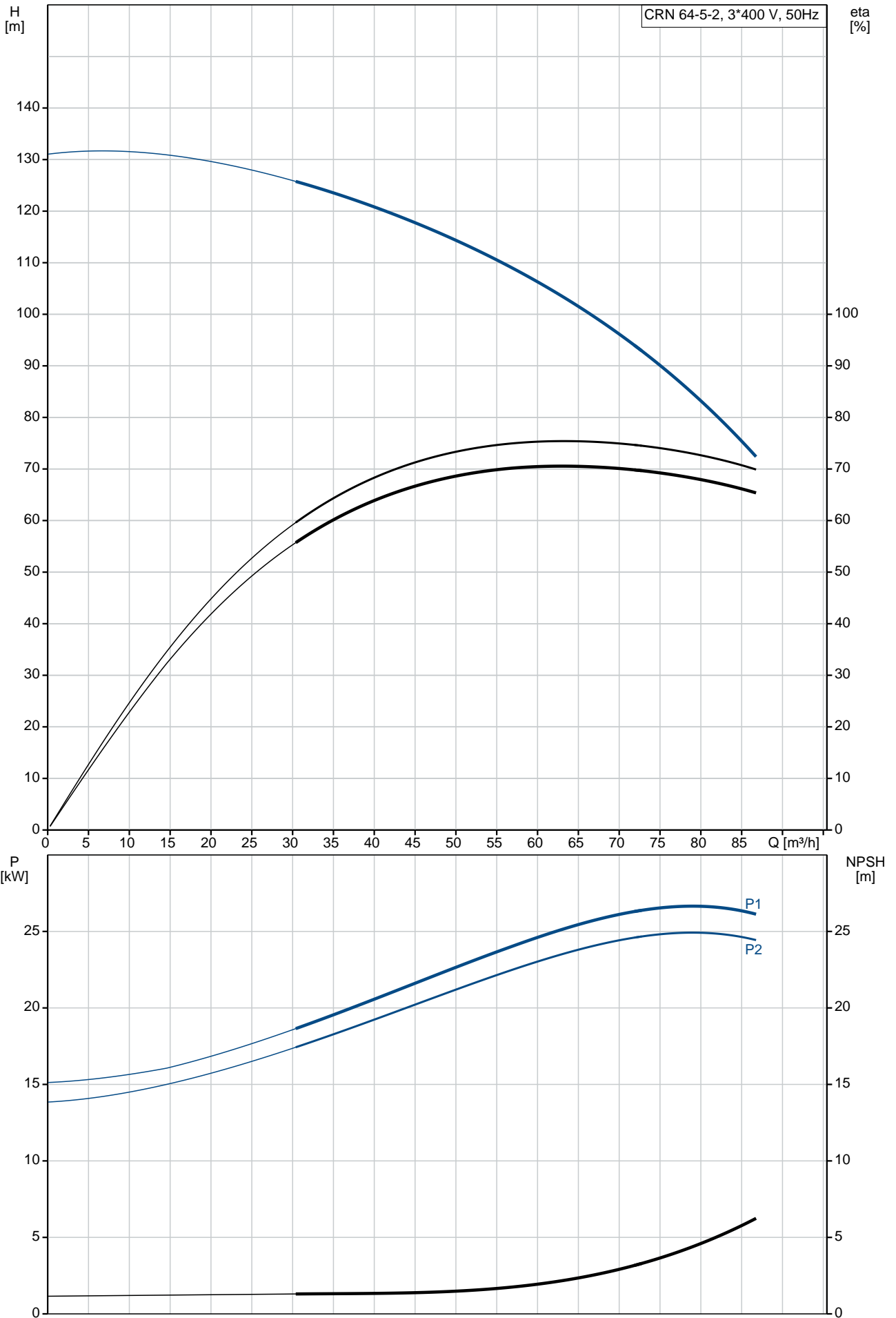
fax. +31 152 616 289

Position	Qty.	Description
	1	<p data-bbox="323 163 635 197">CRN 64-5-2 A-F-A-V-HQQV</p>  <p data-bbox="323 481 598 515">Product No.: On request</p> <p data-bbox="323 548 1444 649">Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). Pump materials in contact with the liquid are in high-grade 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 DIN flanges.</p> <p data-bbox="323 683 1053 716">The pump is fitted with a 3-phase, fan-cooled asynchronous motor.</p> <p data-bbox="323 750 638 784">Further product details</p> <p data-bbox="323 784 1444 884">Steel, cast iron and aluminium components have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface. An integral part of the process is a pretreatment. The entire process consists of these elements:</p> <ol data-bbox="323 896 813 1019" style="list-style-type: none"> 1) Alkaline-based cleaning. 2) Zinc phosphating. 3) Cathodic electro-deposition. 4) Curing to a dry film thickness 18-22 my m. <p data-bbox="323 1019 1029 1052">The colour code for the finished product is NCS 9000/RAL 9005.</p> <p data-bbox="323 1075 406 1108">Pump</p> <p data-bbox="323 1108 1452 1187">A long split coupling connects the pump and motor shaft. It is enclosed in the motor stool by means of two coupling guards. The long coupling makes it possible to replace the shaft seal without removing the motor from the pump.</p>  <p data-bbox="323 1478 1452 1534">The motor stool connects the pump head and motor. The pump head has a combined 1/2" priming plug and vent screw.</p>  <p data-bbox="323 1803 1420 1904">The pump is fitted with a balanced O-ring seal unit with a rigid torque-transmission system. This seal type is assembled in a cartridge unit which makes replacement safe and easy. Due to the balancing, this seal type is suitable for high-pressure applications. The cartridge construction also protects the pump shaft from possible wear from a dynamic O-ring between pump shaft and shaft seal.</p> <p data-bbox="323 1915 470 1948">Primary seal:</p> <ul data-bbox="359 1948 917 2004" style="list-style-type: none"> • Rotating seal ring material: silicon carbide (SiC) • Stationary seat material: silicon carbide (SiC) <p data-bbox="323 2004 1428 2060">This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.</p> <p data-bbox="323 2060 893 2094">Secondary seal material: FKM (fluorocarbon rubber)</p>

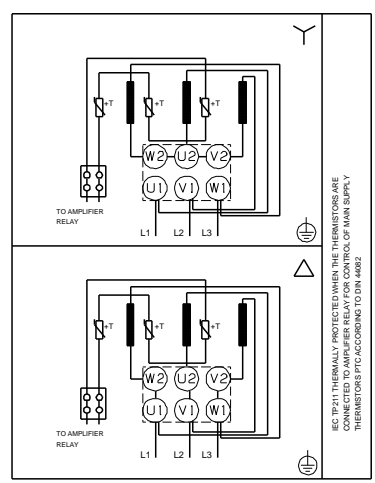
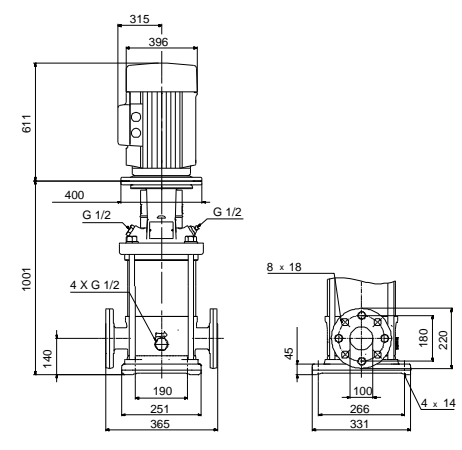
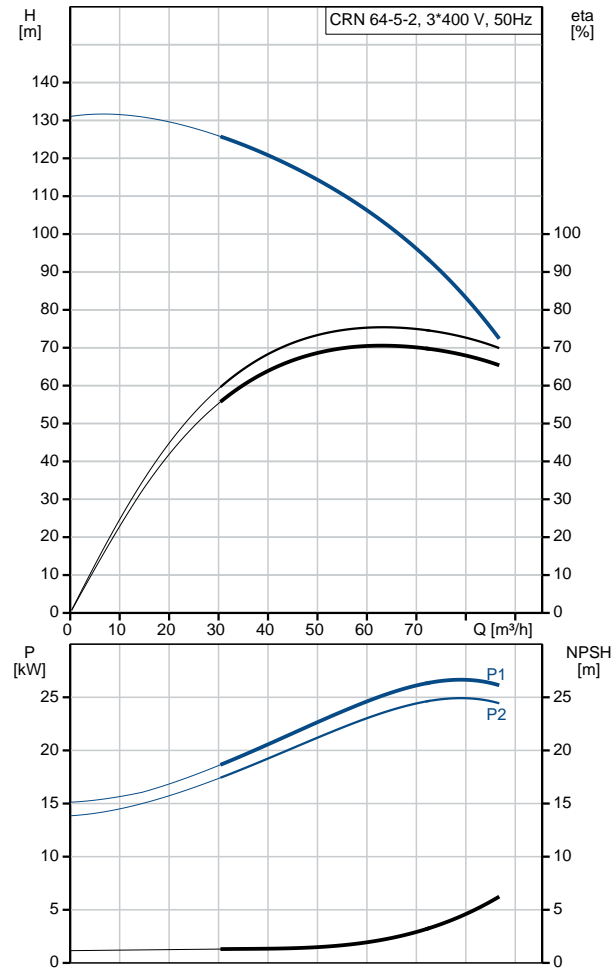
Position	Qty.	Description
		<p data-bbox="322 165 1468 219">FKM has excellent resistance to oils and chemicals. Above 90 °C, FKM should only be used in media without water.</p> <div data-bbox="322 255 734 434" style="text-align: center;">  </div> <p data-bbox="322 470 1468 524">The shaft seal is retained in the pump head by a cover and screws. It can be replaced without removing the motor.</p> <p data-bbox="322 560 1468 636">The chambers and impellers are made of stainless-steel sheet. The chambers are provided with a PTFE neck ring offering improved sealing and high efficiency. The impellers have smooth surfaces, and the shape of the blades ensure a high efficiency.</p> <p data-bbox="322 703 1468 801">The pump has a stainless-steel base mounted on a separate base plate. The base and base plate are kept in position by the tension of the staybolts which hold the pump together. Both the inlet and the outlet side of the base have two pressure gauge tappings. The pump is secured to the foundation by four bolts through the base plate. The flanges are fastened to the base by means of locking rings.</p> <div data-bbox="322 815 497 1084" style="text-align: center;">  </div> <p data-bbox="322 1137 402 1169">Motor</p> <p data-bbox="322 1173 1468 1227">The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. The motor is flange-mounted with free-hole flange (FF).</p> <p data-bbox="322 1232 1468 1285">Motor-mounting designation in accordance with IEC 60034-7: IM B 5 (Code I) / IM 3001 (Code II). Electrical tolerances comply with IEC 60034.</p> <p data-bbox="322 1290 1468 1321">The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.</p> <p data-bbox="322 1326 1468 1402">The motor has thermistors (PTC sensors) in the windings in accordance with DIN 44081/DIN 44082. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.</p> <p data-bbox="322 1406 1468 1482">Thermal switches must be connected to an external control circuit in a way which ensures that the automatic reset cannot cause accidents. The motors must be connected to a motor-protective circuit breaker according to local regulations.</p> <p data-bbox="322 1487 1468 1572">The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.</p> <p data-bbox="322 1608 523 1639">Technical data</p> <p data-bbox="322 1675 434 1706">Controls:</p> <p data-bbox="322 1711 756 1742">Frequency converter: NONE</p> <p data-bbox="322 1765 402 1796">Liquid:</p> <p data-bbox="322 1800 756 1832">Pumped liquid: Water</p> <p data-bbox="322 1836 810 1868">Liquid temperature range: -20 .. 90 °C</p> <p data-bbox="322 1872 810 1904">Liquid temperature during operation: 20 °C</p> <p data-bbox="322 1908 817 1939">Density: 998.2 kg/m³</p> <p data-bbox="322 1962 443 1993">Technical:</p> <p data-bbox="322 1998 772 2029">Rated flow: 64 m³/h</p> <p data-bbox="322 2033 772 2065">Rated head: 101.2 m</p> <p data-bbox="322 2069 772 2101">Pump orientation: Vertical</p> <p data-bbox="322 2105 772 2136">Shaft seal arrangement: Single</p>

Position	Qty.	Description
		Code for shaft seal: HQQV Approvals on nameplate: CE, EAC Curve tolerance: ISO9906:2012 3B Materials: Base: Stainless steel EN 1.4408 AISI 316 Impeller: Stainless steel EN 1.4401 AISI 316 Bearing: SIC Support bearing: Graflon Installation: Maximum ambient temperature: 55 °C Maximum operating pressure: 16 bar Max pressure at stated temp: 16 bar / 90 °C 16 bar / -20 °C Type of connection: DIN Size of inlet connection: DN 100 Size of outlet connection: DN 100 Pressure rating for pipe connection: PN 16 Flange size for motor: FF350 Electrical data: Motor standard: IEC Motor type: SIEMENS IE Efficiency class: IE3 Rated power - P2: 30 kW Power (P2) required by pump: 30 kW Mains frequency: 50 Hz Rated voltage: 3 x 380-420D/660-725Y V Rated current: 56,0-51,0/32,0-29,5 A Starting current: 660-660 % Cos phi - power factor: 0.86 Rated speed: 2955 rpm Efficiency: IE3 93,3% Motor efficiency at full load: 93.3-93.3 % Motor efficiency at 3/4 load: 93.6-93.6 % Motor efficiency at 1/2 load: 93.4-93.4 % Number of poles: 2 Enclosure class (IEC 34-5): 55 Dust/Jetting Insulation class (IEC 85): F Others: Minimum efficiency index, MEI : 0.7 Net weight: 333 kg Gross weight: 371 kg Shipping volume: 0.805 m ³

On request CRN 64-5-2 A-F-A-V-HQQV 50 Hz

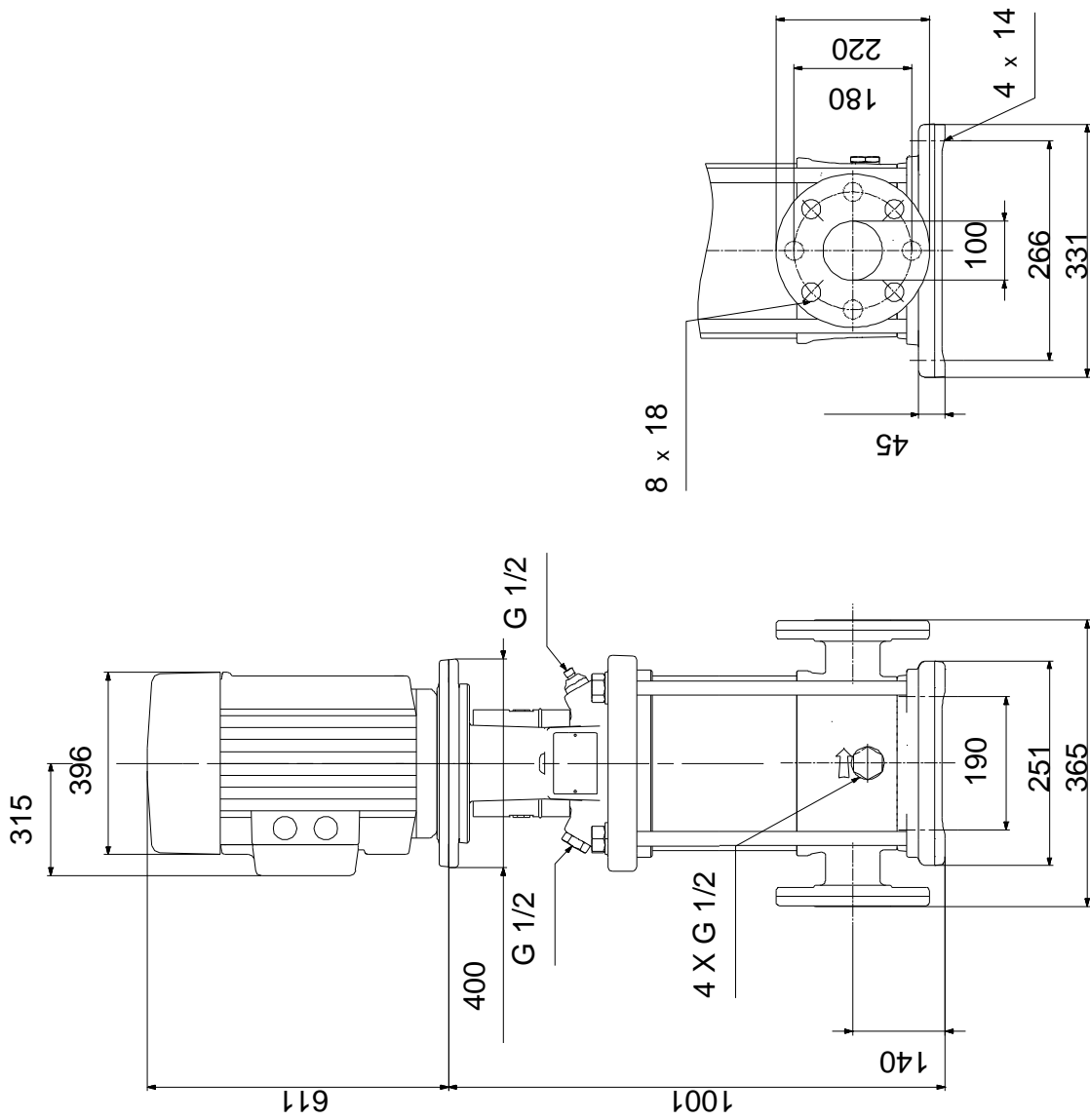


Description	Value
General information:	
Product name:	CRN 64-5-2 A-F-A-V-HQQV
Product No:	On request
EAN number:	On request
Technical:	
Rated flow:	64 m ³ /h
Rated head:	101.2 m
Stages:	5
Impellers:	5
Number of reduced-diameter impellers:	2
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Approvals on nameplate:	CE, EAC
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	B
Materials:	
Base:	Stainless steel EN 1.4408 AISI 316
Impeller:	Stainless steel EN 1.4401 AISI 316
Material code:	A
Code for rubber:	V
Bearing:	SIC
Support bearing:	Graflon
Installation:	
Maximum ambient temperature:	55 °C
Maximum operating pressure:	16 bar
Max pressure at stated temp:	16 bar / 90 °C 16 bar / -20 °C
Type of connection:	DIN
Size of inlet connection:	DN 100
Size of outlet connection:	DN 100
Pressure rating for pipe connection:	PN 16
Flange size for motor:	FF350
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-20 .. 90 °C
Liquid temperature during operation:	20 °C
Density:	998.2 kg/m ³
Electrical data:	
Motor standard:	IEC
Motor type:	SIEMENS
IE Efficiency class:	IE3
Rated power - P2:	30 kW
Power (P2) required by pump:	30 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 380-420D/660-725 V
Rated current:	56,0-51,0/32,0-29,5 A
Starting current:	660-660 %
Cos phi - power factor:	0.86
Rated speed:	2955 rpm
Efficiency:	IE3 93,3%
Motor efficiency at full load:	93.3-93.3 %
Motor efficiency at 3/4 load:	93.6-93.6 %
Motor efficiency at 1/2 load:	93.4-93.4 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting



Description	Value
Insulation class (IEC 85):	F
Motor protec:	PTC
Motor No:	81U15332
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI :	0.7
Net weight:	333 kg
Gross weight:	371 kg
Shipping volume:	0.805 m ³

On request CRN 64-5-2 A-F-A-V-HQQV 50 Hz

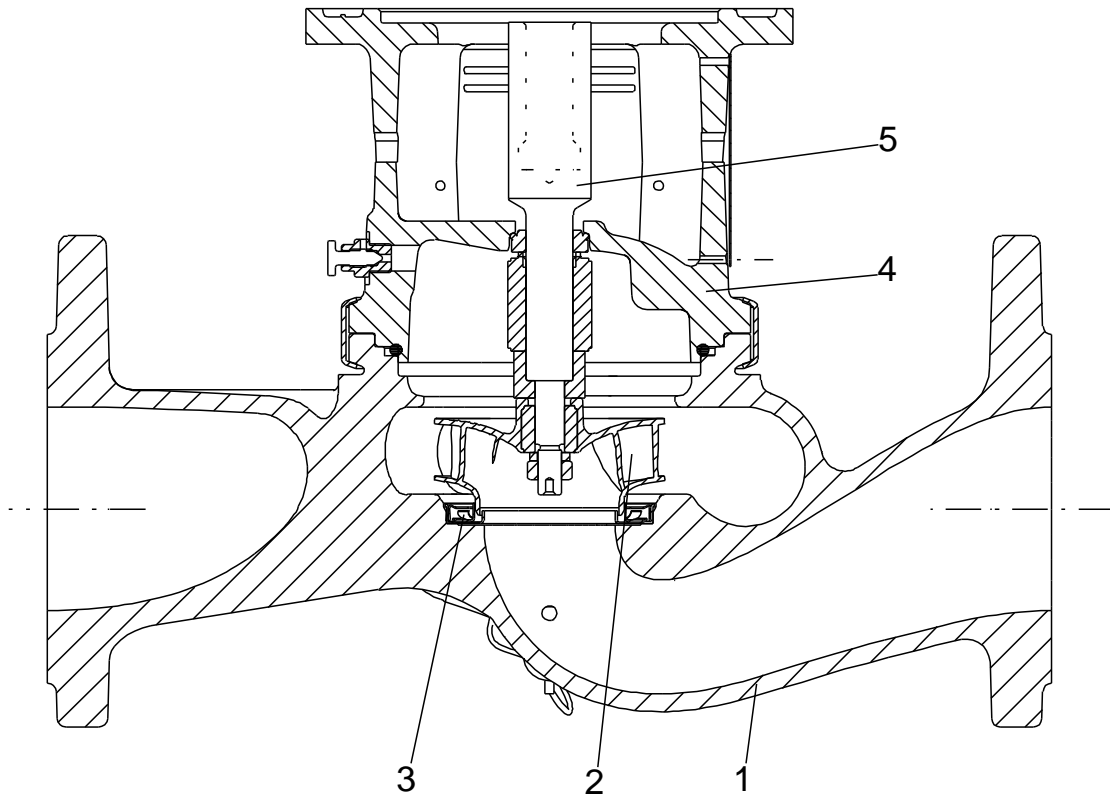


Note! All units are in [mm] unless others are stated.
Disclaimer: This simplified dimensional drawing does not show all details.

Exploded view

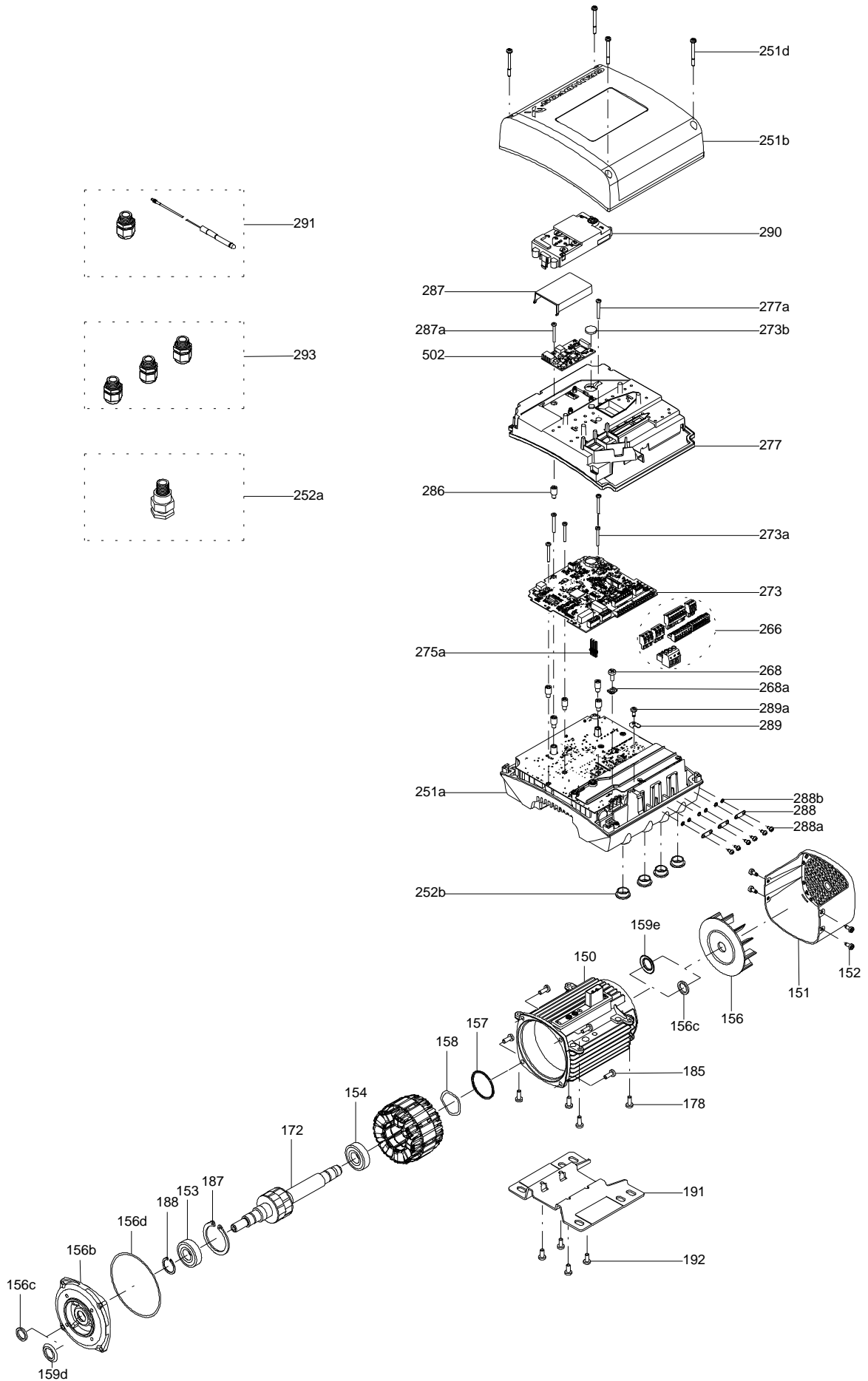


Sectional drawing (TM058200 for TPE2,TPE3)



TM058200

Exploded view (TM057026 for MGE model H/I)



Parts list CRN 64-5-2, Product No. On request
Valid from 1.4.2012 (1213)

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
+	Motor				1	pcs
- 1	Basic unit				1	pcs
-	Chamber stack				1	
-	Intermediate chamber cpl.				1	
4a	Chamber					
45	Seal ring					
65	Neck ring					
65	Top f/neck ring					
- 3	Upper chamber cpl.				1	
3	Chamber					
45	Seal ring					
65	Top f/neck ring					
- 4	Intermediate chamber cpl.				3	
4	Chamber					
45	Seal ring					
65	Neck ring					
65	Top f/neck ring					
26a	Strap cpl.		Length (mm): 422 Thread: M8		2	
26b	Hex socket head cap screw				2	
26c	Washer		Designation: DIN 125A Thickness: 1,6		2	
- 44	Inlet part cpl.				1	
44a	Inlet part					
45	Seal ring					
65	Neck ring					
65	Top f/neck ring					
47a	Bearing cpl.				1	
- 49a	Impeller cpl. reduced diameter				2	
48	Nut					
- 49a	Impeller					
	Impeller hub					
49c	Wear ring					
49b	Split cone					
- 49e	Impeller cpl.				3	
48	Nut					
- 49	Impeller					
	Impeller hub					
49c	Wear ring					
49b	Split cone					
- 51	Shaft cpl.		Diameter: 22 Length (mm): 660		1	
	Washer					
	Bearing ring, rotating					
51	Shaft					
66	Wedge lock washer					
67	Hex socket head cap screw		Designation: DIN 912 Length (mm): 16 Thread: M8			
- 2a	Pump head cpl.				1	
2	Pump head				1	
9	Hex socket head cap screw		Designation: DIN 912 Length (mm): 25 Thread: M10		4	
- 18	Air vent screw				1	
	Plug					
	Spindle					
23	Plug				1	
37	O-ring		Diameter: 216		1	

Pos	Description	Annotation	Données de classification	Référence	Quantité	Unité
			Material type: FKM			
			Thickness: 4			
58	Cover				1	
60	Spring				4	
100	O-ring		Diameter: 16,3		2	
			Material type: FKM			
			Thickness: 2,4			
- 6b	Base cpl.				1	
	Bearing ring, stationary				1	
6	Base				1	
25	Plug				4	
31	Hex socket head cap screw				1	
32	Washer		Designation: DIN 125A		1	
			Internal diameter: 6,4			
			Outer diameter: 12,0			
			Thickness: 1,6			
37	O-ring		Diameter: 216		1	
			Material type: FKM			
			Thickness: 4			
38	O-ring		Diameter: 16,3		4	
			Material type: FKM			
			Thickness: 2,4			
56	Base plate				1	
26	Staybolt		Length (mm): 643		4	
			Thread: M16			
36	Nut		Thread: M16		4	
55	Outer sleeve				1	
66a	Washer		Designation: DIN 125 A2		4	
			Internal diameter: 17			
			Outer diameter: 30			
			Thickness: 3			
- 1a	Motor stool cpl.				1	pcs
1a	Motor stool				1	
7	Coupling guard				2	
7a	Socket button head screw				4	
- 8	Coupling cpl.		Dimension: 22/55		1	
9	Hex socket head cap screw		Designation: DIN 912		4	
			Length (mm): 25			
			Thread: M10			
10a	Coupling half				2	
28	Hex head screw		Length (mm): 60		4	
			Thread: M16			
28	Hex socket head cap screw		Designation: DIN 912		4	
			Length (mm): 50			
			Thread: M10			
32a	Washer		Designation: DIN 125 A		8	
			Internal diameter: 17			
			Outer diameter: 30			
			Thickness: 3			
36	Hex nut		Thread: M16		4	
- 76	Nameplate set				1	pcs
76	Plate				1	
76a	Rivet				2	
- 105	Shaft seal		Material type: HQQV		1	pcs
	Adjusting fork				1	
109	O-ring		Diameter: 44,45		1	
			Material type: FKM			
			Thickness: 3,53			
110	O-ring		Diameter: 21,5		1	
			Thickness: 4,25			
- 200	Flange cpl.				2	pcs
201	Flange		Diameter: DN 100		1	
			Pressure: PN 16			
203	Lock ring				1	

Disclaimer: The information about the Grundfos pump in this document may be outdated.

Data may be subject to alterations without further notice.

Please contact us to verify the data above is still accurate/up-to-date.

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