

**Qty. Description**

1 CR 1-13 A-FGJ-A-E-HQQE



Note! Product picture may differ from actual product

Product No.: [96516249](#)

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 asynchronous motor.

### Further product details

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:

- 1) Alkaline-based cleaning.
  - 2) Zinc phosphating.
  - 3) Cathodic electro-deposition.
  - 4) Curing to a dry film thickness 18-22 my m.
- The colour code for the finished product is NCS 9000/RAL 9005.

### Pump

A standard split coupling connects the pump and motor shaft. It is enclosed in the pump head/motor stool by means of two coupling guards.



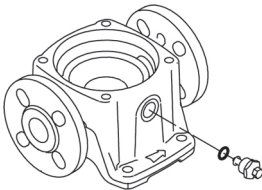
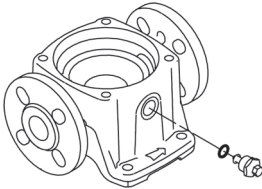
The pump head, pump head cover and flange for motor mounting is made in one piece. The pump head has a combined 1/2" priming plug and vent screw.



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.

Primary seal:

- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: silicon carbide (SiC)

| Qty. | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <p>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>Secondary seal material: EPDM (ethylene-propylene rubber)</p> <p>EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.</p>  <p>The shaft seal is screwed into the pump head.</p> <p>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>The base is made of cast iron. The flanges and base are cast in one piece. The outlet side of the base has a combined drain plug and bypass valve. The pump is secured to the foundation by four bolts through the base plate.</p>  <p>The base is made of cast iron. The flanges and base are cast in one piece. The outlet side of the base has a combined drain plug and bypass valve. The pump is secured to the foundation by four bolts through the base plate.</p>  <p><b>Motor</b></p> <p>The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. The motor is flange-mounted with tapped-hole flange (FT).</p> <p>Motor-mounting designation in accordance with IEC 60034-7: IM B 14 (Code I) / IM 3601 (Code II).</p> <p>Electrical tolerances comply with IEC 60034.</p> <p>The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.</p> <p>The motor does not incorporate motor protection and must be connected to a motor-protective circuit breaker which can be manually reset. The motor-protective circuit breaker must be set according to the rated current of the motor (I1/1).</p> <p><b>Technical data</b></p> <p><b>Controls:</b></p> <p>Frequency converter: NONE</p> <p><b>Liquid:</b></p> <p>Pumped liquid: Water</p> <p>Liquid temperature range: -20 .. 120 °C</p> <p>Liquid temperature during operation: 20 °C</p> |

| Qty. | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | <p>Density: 998.2 kg/m<sup>3</sup></p> <p><b>Technical:</b><br/> Pump speed on which pump data are based: 2864 rpm<br/> Rated flow: 1.8 m<sup>3</sup>/h<br/> Rated head: 61.3 m<br/> Pump orientation: Vertical<br/> Shaft seal arrangement: Single<br/> Code for shaft seal: HQQE<br/> Approvals on nameplate: CE, EAC, ACS<br/> Curve tolerance: ISO9906:2012 3B</p> <p><b>Materials:</b><br/> Base: Cast iron<br/> EN 1561 EN-GJL-200<br/> ASTM A48-25B<br/> Impeller: Stainless steel<br/> EN 1.4301<br/> AISI 304<br/> Bearing: SIC</p> <p><b>Installation:</b><br/> Maximum ambient temperature: 60 °C<br/> Maximum operating pressure: 25 bar<br/> Max pressure at stated temp: 25 bar / 120 °C<br/> 25 bar / -20 °C<br/> Type of connection: DIN / ANSI / JIS<br/> Size of inlet connection: DN 25/32<br/> 1 1/4 inch<br/> Size of outlet connection: DN 25/32<br/> 1 1/4 inch<br/> Pressure rating for pipe connection: PN 25<br/> Flange rating inlet: 250 lb<br/> Flange size for motor: FT100</p> <p><b>Electrical data:</b><br/> Motor standard: IEC<br/> Motor type: 80A<br/> IE Efficiency class: IE3<br/> Rated power - P2: 0.75 kW<br/> Power (P2) required by pump: 0.75 kW<br/> Mains frequency: 50 Hz<br/> Rated voltage: 3 x 220-240D/380-415Y V<br/> Rated current: 3.30/1.90 A<br/> Starting current: 580-620 %<br/> Cos phi - power factor: 0.81-0.71<br/> Rated speed: 2840-2870 rpm<br/> Efficiency: IE3 80,7%<br/> Motor efficiency at full load: 80.7 %<br/> Motor efficiency at 3/4 load: 82.7 %<br/> Motor efficiency at 1/2 load: 81.7 %<br/> Number of poles: 2<br/> Enclosure class (IEC 34-5): 55 Dust/Jetting<br/> Insulation class (IEC 85): F</p> <p><b>Others:</b><br/> Minimum efficiency index, MEI <math>\hat{=}</math> 0.70<br/> Net weight: 29.6 kg<br/> Gross weight: 32.4 kg</p> |



Company name:

Created by:

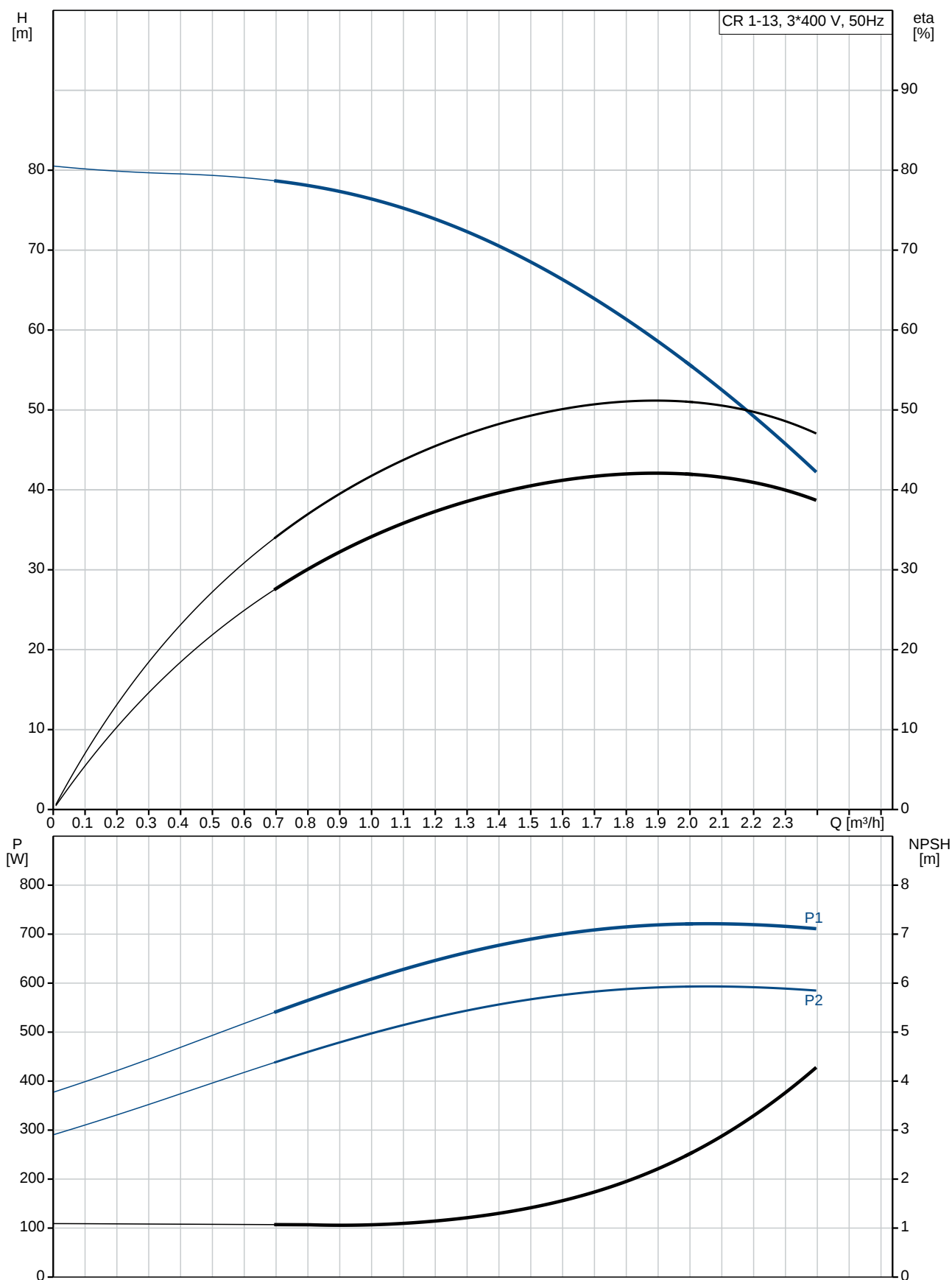
Phone:

Date:

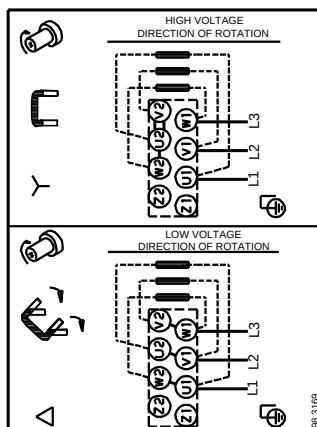
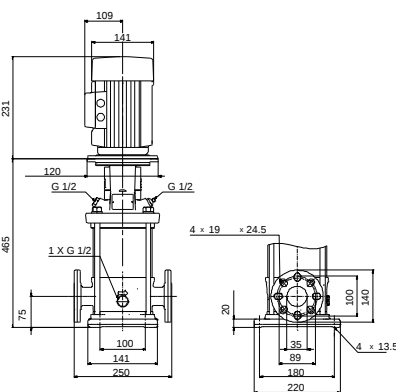
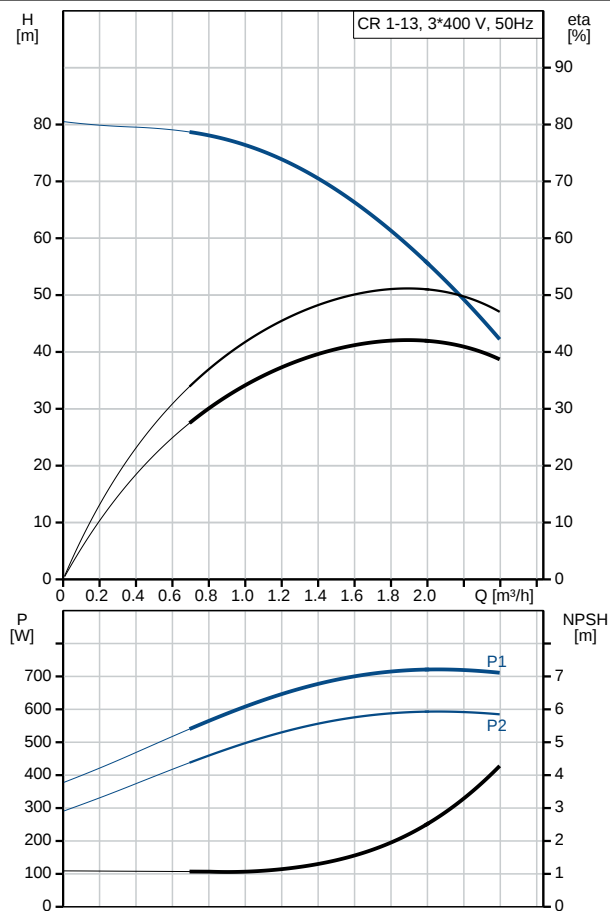
14/02/2019

| Qty. | Description                                                                  |
|------|------------------------------------------------------------------------------|
|      | <div data-bbox="193 331 1474 369">Shipping volume: 0.074 m<sup>3</sup></div> |

## 96516249 CR 1-13 A-FGJ-A-E-HQQE 50 Hz



| Description                              | Value                                           |
|------------------------------------------|-------------------------------------------------|
| <b>General information:</b>              |                                                 |
| Product name:                            | CR 1-13<br>A-FGJ-A-E-HQQE                       |
| Product No:                              | 96516249                                        |
| EAN number:                              | 5700396739434                                   |
| <b>Technical:</b>                        |                                                 |
| Pump speed on which pump data are based: | 2864 rpm                                        |
| Rated flow:                              | 1.8 m³/h                                        |
| Rated head:                              | 61.3 m                                          |
| Head max:                                | 80.7 m                                          |
| Stages:                                  | 13                                              |
| Impellers:                               | 13                                              |
| 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                                               |
| <b>Materials:</b>                        |                                                 |
| Base:                                    | Cast iron<br>EN 1561 EN-GJL-200<br>ASTM A48-25B |
| Impeller:                                | Stainless steel<br>EN 1.4301<br>AISI 304        |
| Material code:                           | A                                               |
| Code for rubber:                         | E                                               |
| Bearing:                                 | SIC                                             |
| <b>Installation:</b>                     |                                                 |
| Maximum ambient temperature:             | 60 °C                                           |
| Maximum operating pressure:              | 25 bar                                          |
| Max pressure at stated temp:             | 25 bar / -20 °C                                 |
| Type of connection:                      | DIN / ANSI / JIS                                |
| Size of inlet connection:                | DN 25/32<br>1 1/4 inch                          |
| Size of outlet connection:               | DN 25/32<br>1 1/4 inch                          |
| Pressure rating for pipe connection:     | PN 25                                           |
| Flange rating inlet:                     | 250 lb                                          |
| Flange size for motor:                   | FT100                                           |
| Connect code:                            | FGJ                                             |
| <b>Liquid:</b>                           |                                                 |
| Pumped liquid:                           | Water                                           |
| Liquid temperature range:                | -20 .. 120 °C                                   |
| Liquid temperature during operation:     | 20 °C                                           |
| Density:                                 | 998.2 kg/m³                                     |
| <b>Electrical data:</b>                  |                                                 |
| 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                                           |





Company name:

Created by:

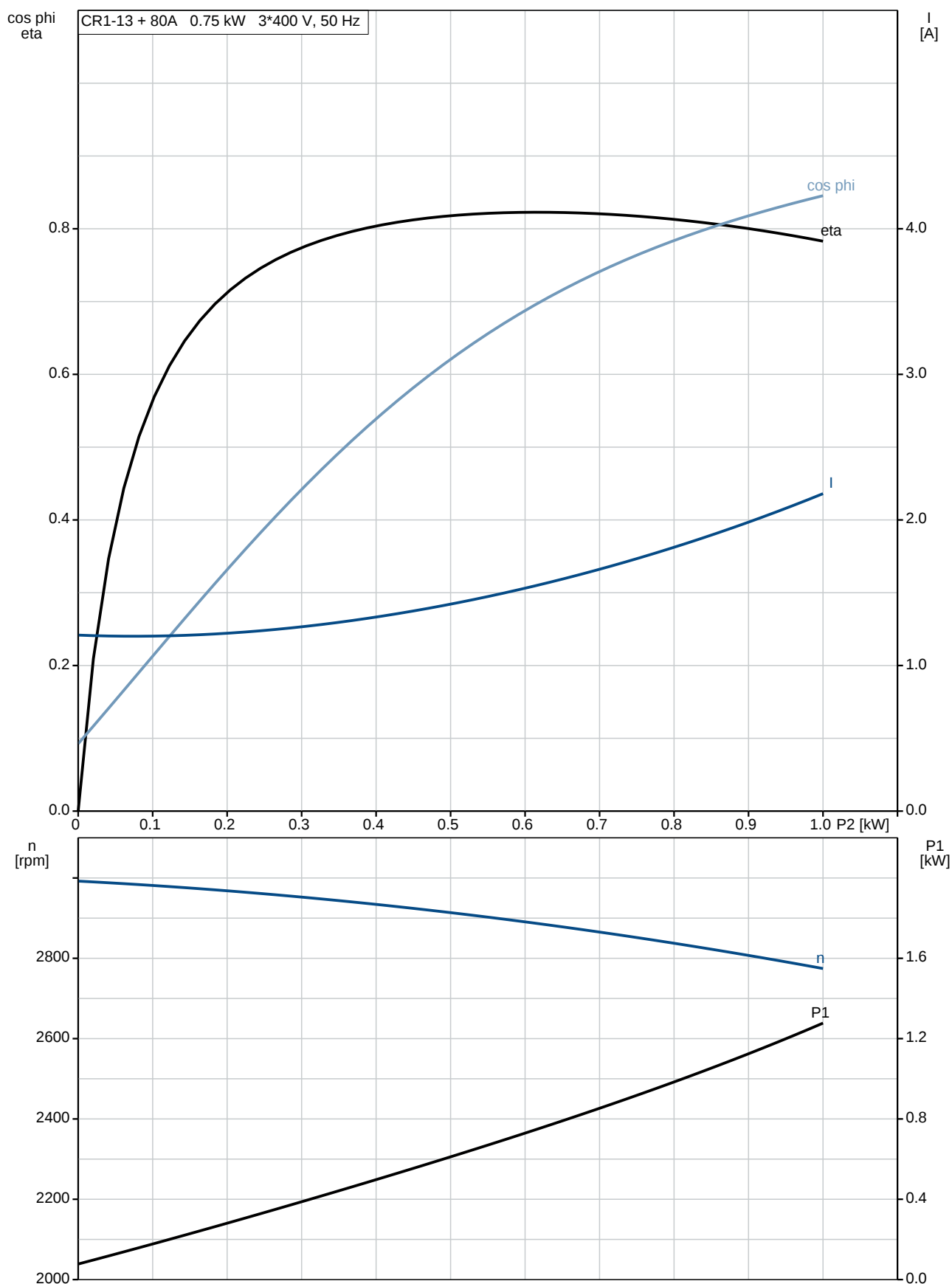
Phone:

Date:

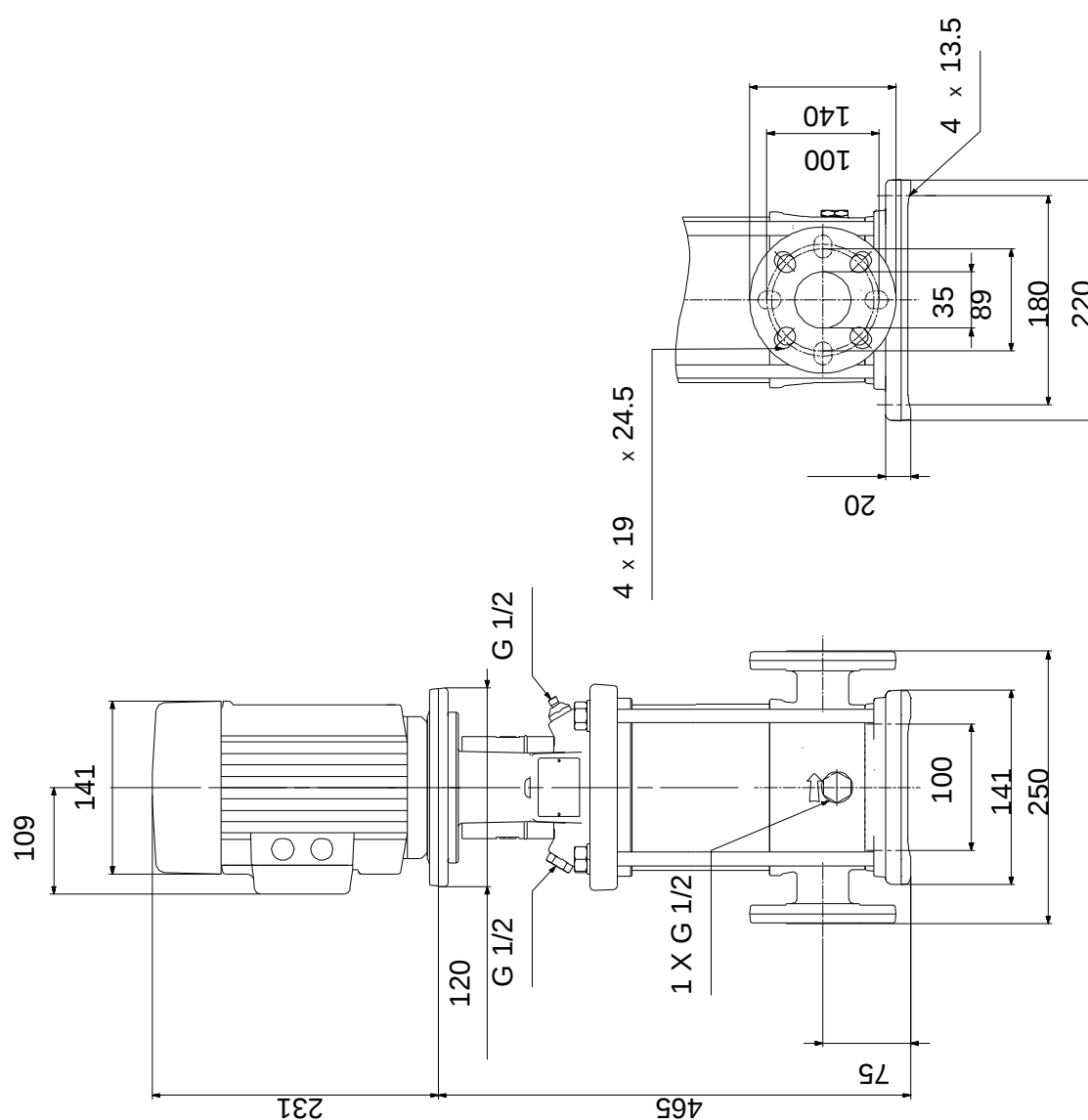
14/02/2019

| Description                      | Value                      |
|----------------------------------|----------------------------|
| Rated voltage:                   | 3 x 220-240D/380-415Y<br>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 protec:                    | NONE                       |
| Motor No:                        | 85U05104                   |
| <b>Controls:</b>                 |                            |
| Frequency converter:             | NONE                       |
| <b>Others:</b>                   |                            |
| Minimum efficiency index, MEI %: | 0.70                       |
| Net weight:                      | 29.6 kg                    |
| Gross weight:                    | 32.4 kg                    |
| Shipping volume:                 | 0.074 m <sup>3</sup>       |

## 96516249 CR 1-13 A-FGJ-A-E-HQQE 50 Hz

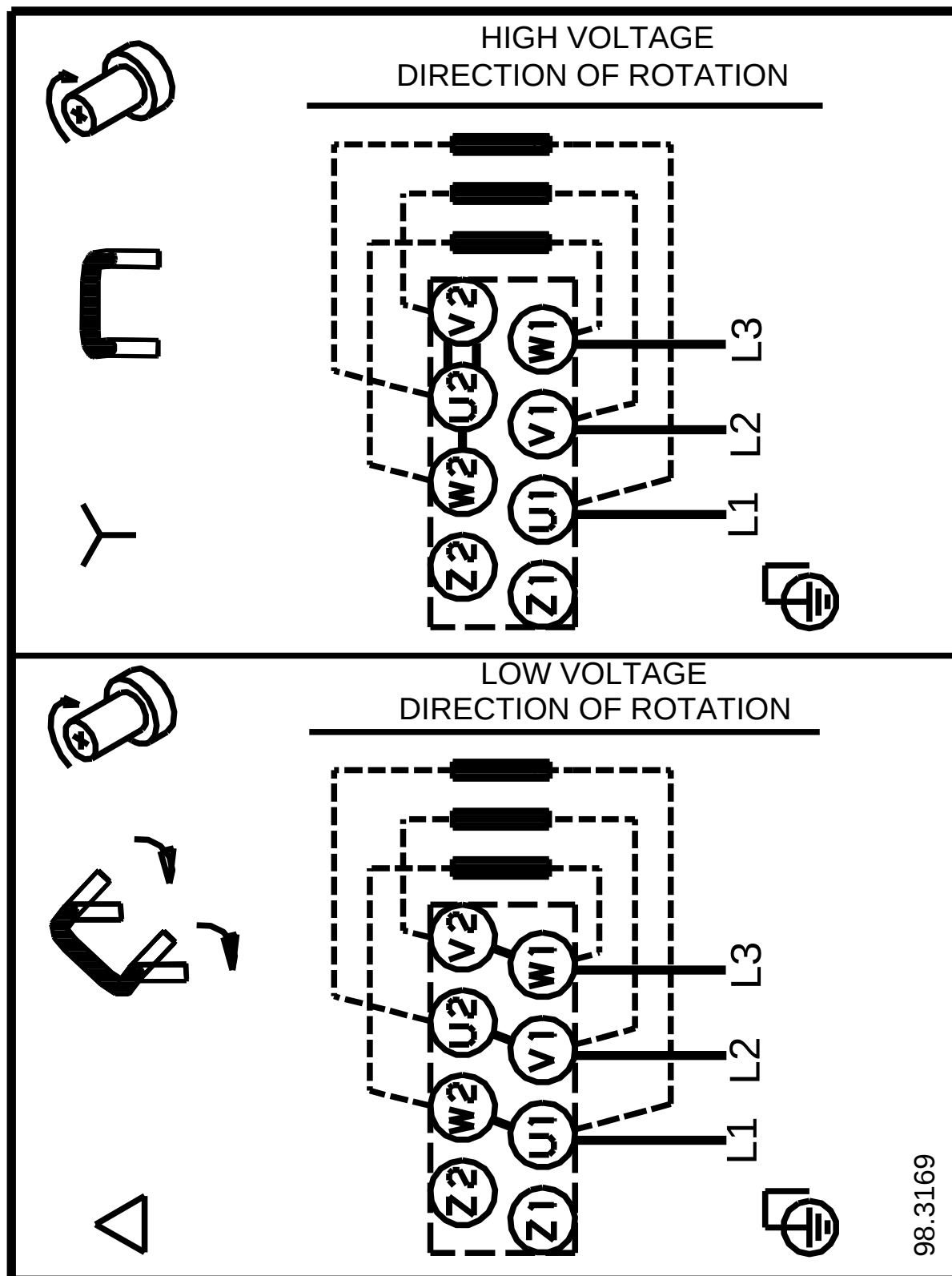


**96516249 CR 1-13 A-FGJ-A-E-HQQE 50 Hz**



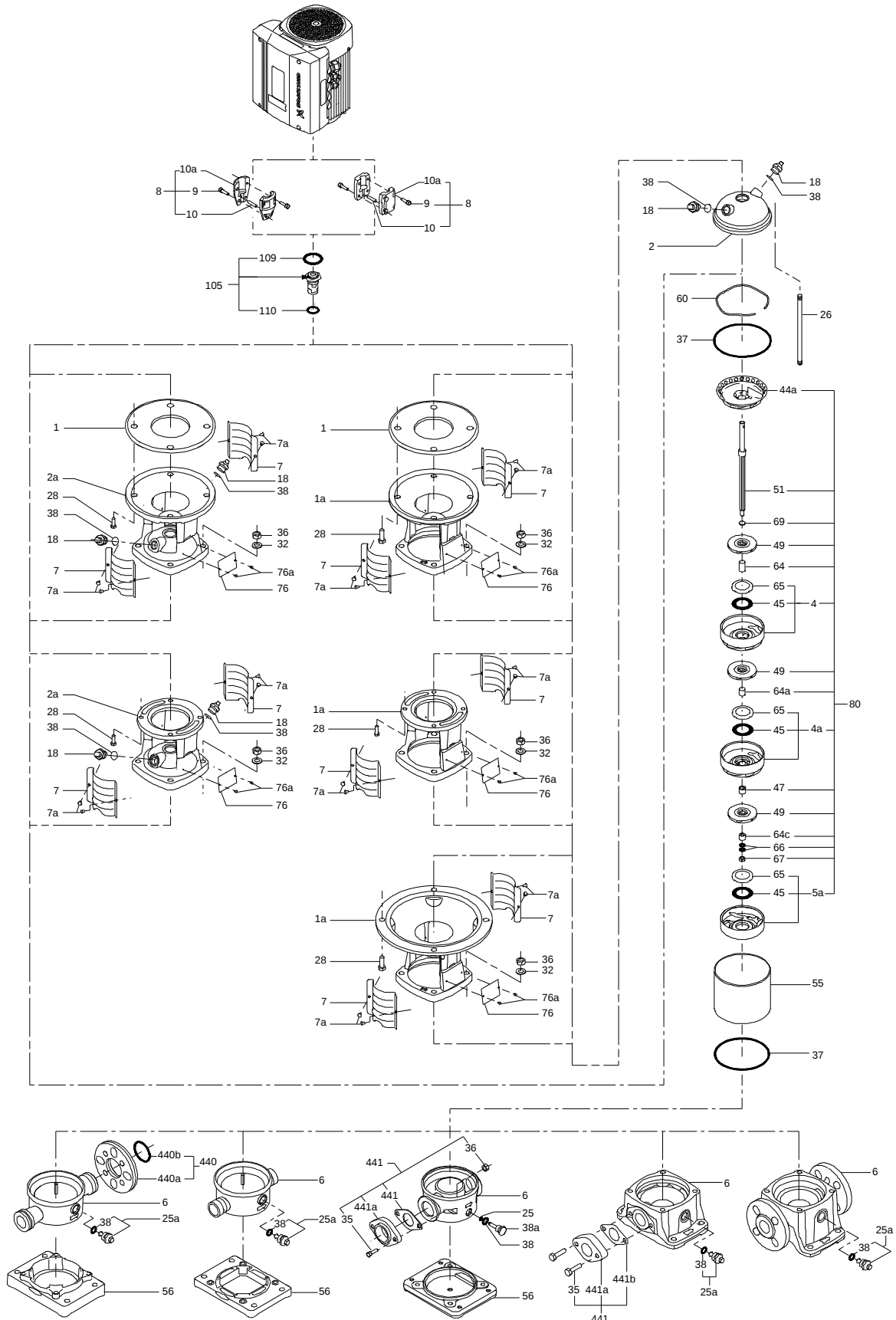
Note! All units are in [mm] unless others are stated.  
Disclaimer: This simplified dimensional drawing does not show all details.

## 96516249 CR 1-13 A-FGJ-A-E-HQQE 50 Hz

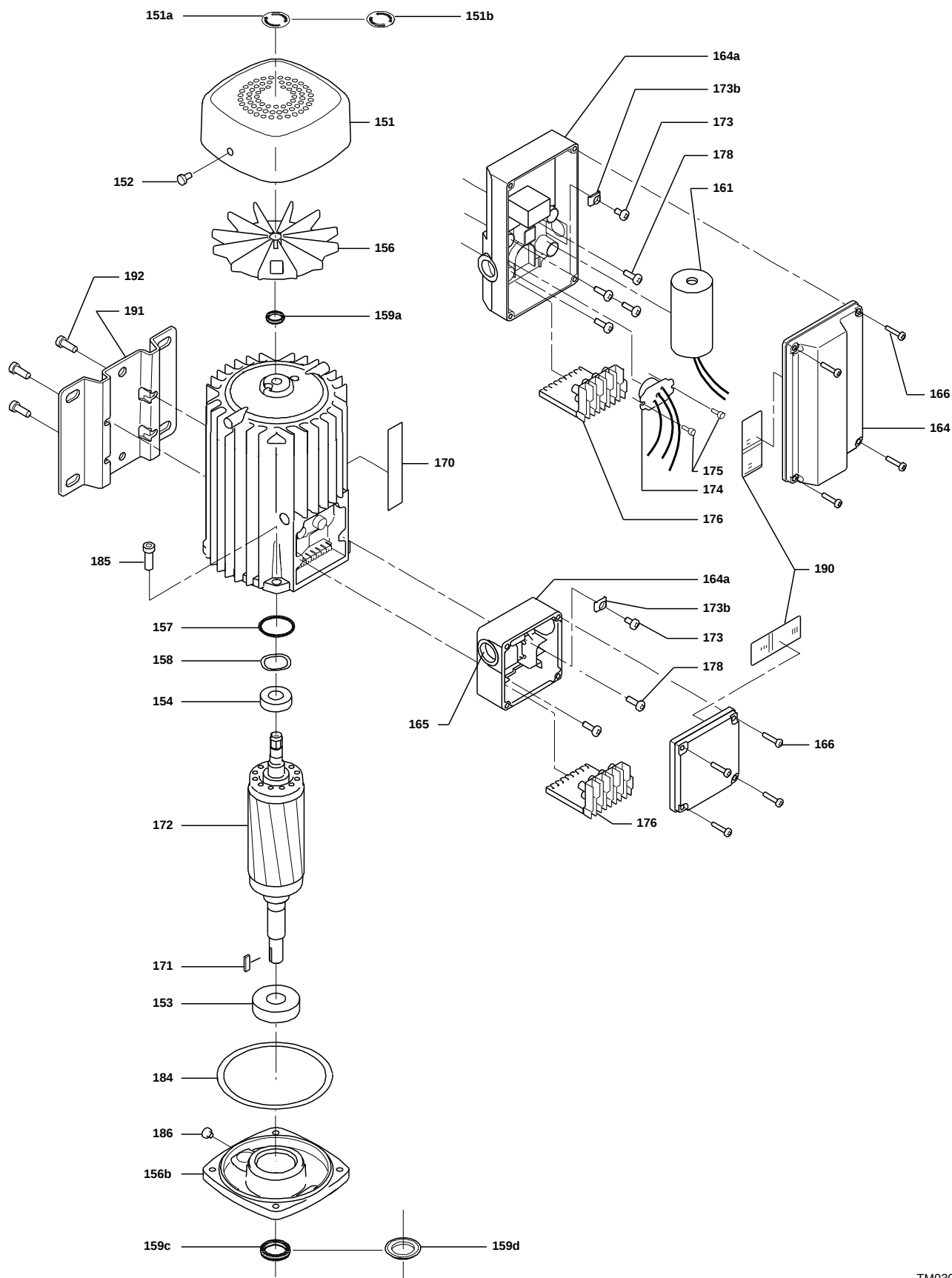


Note! All units are in [mm] unless others are stated.

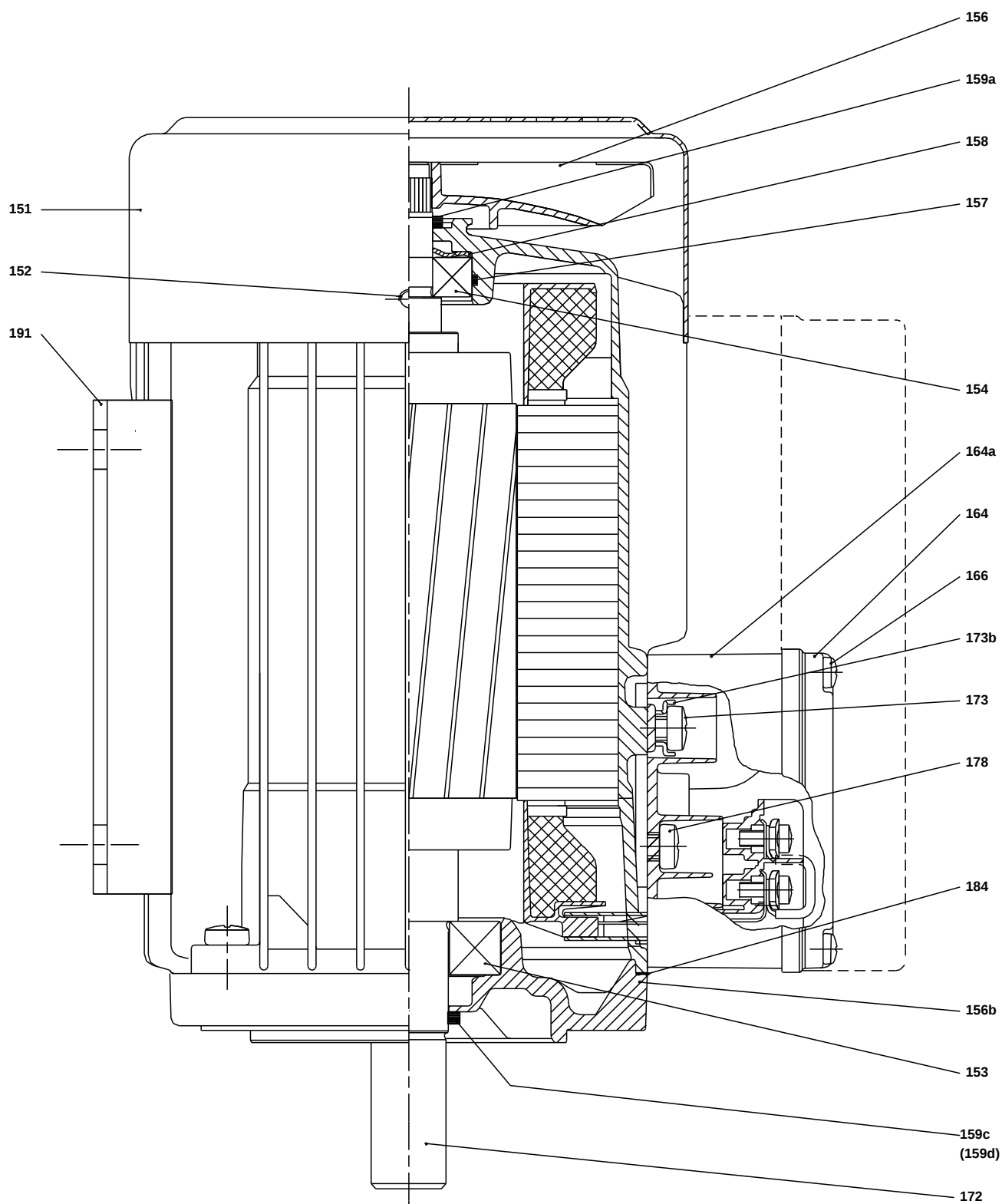
( TM069451 for SMCR standard)



(TM030163 0505)

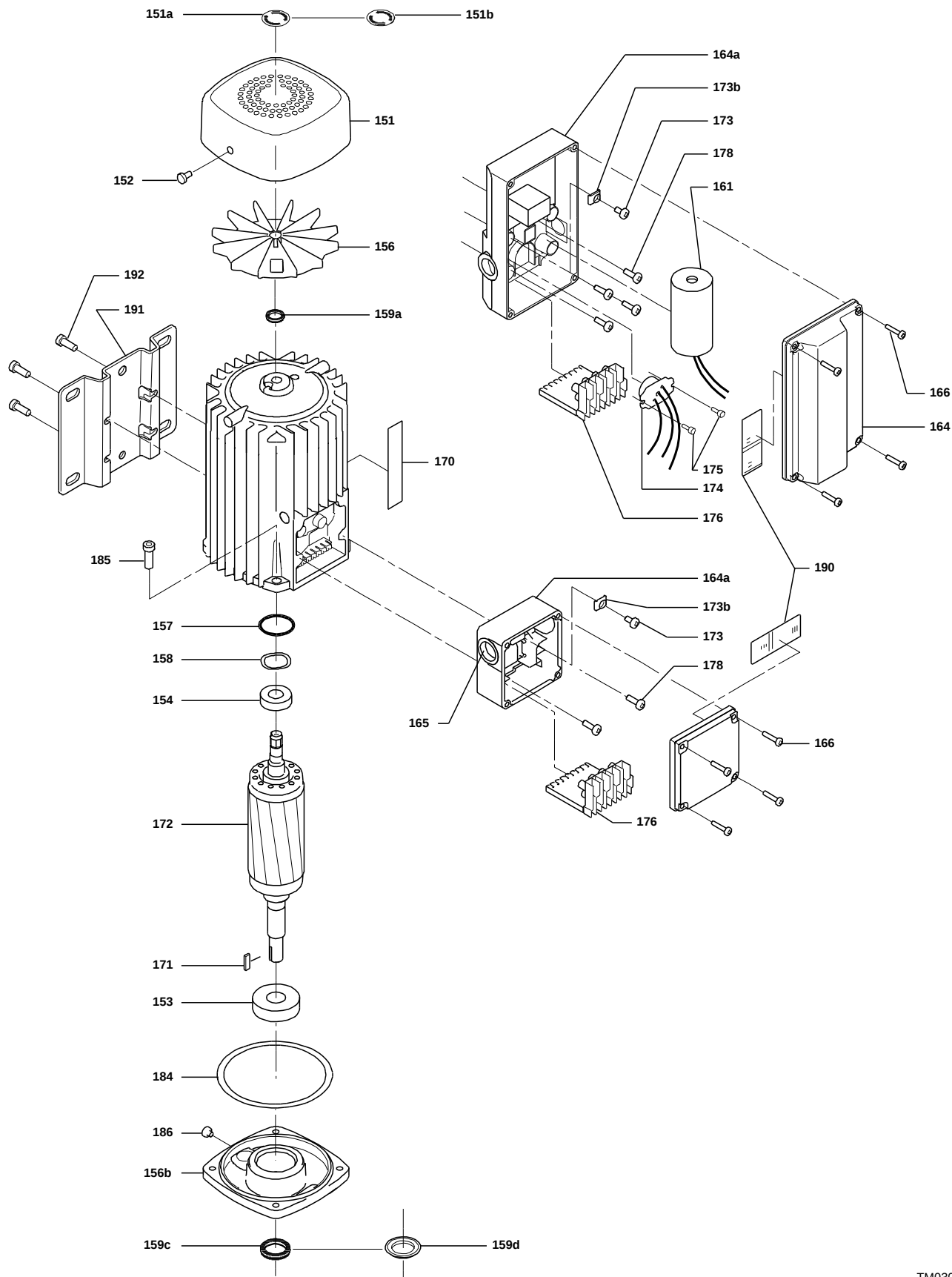


(TM029177)

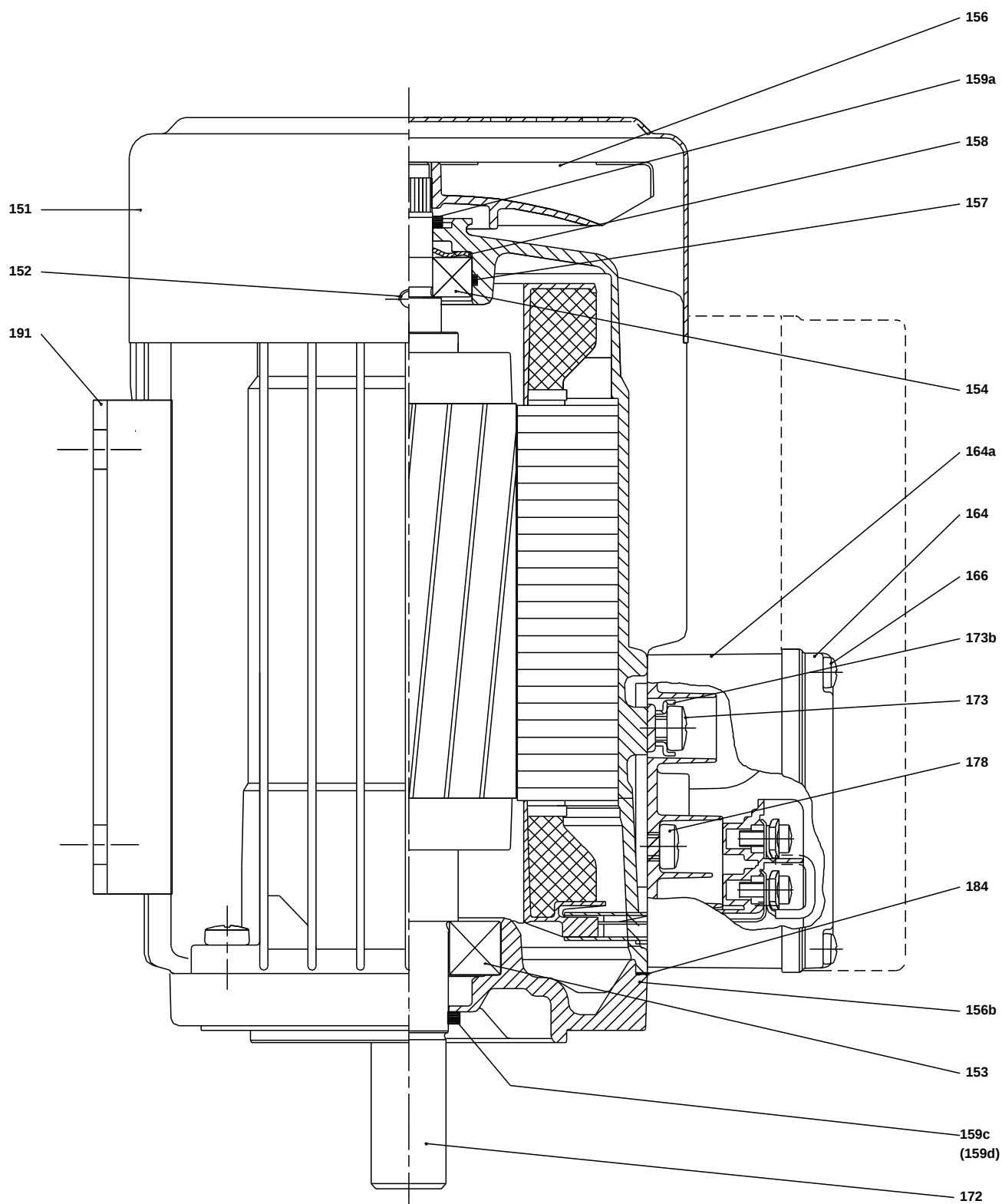


TM029177)

(TM030163 0505)



(TM029177)



TM029177)

## Spare parts CR 1-13, Product No. 96516249

Valid from 1.1.2011 (1152)

| Pos   | Description               | Annotation | Classification Data           | Part no. | Qty. | Unit |
|-------|---------------------------|------------|-------------------------------|----------|------|------|
| -     | Kit, chamber stack        |            | Bearing type: SILICON CARBIDE | 96453496 | 1    | pcs  |
| - 4a  | Chamber w. bearing cpl.   |            |                               |          | 2    |      |
|       | Vane                      |            |                               |          |      |      |
|       | Intermediate chamber      |            |                               |          |      |      |
|       | Retainer for bearing      |            |                               |          |      |      |
|       | Guide vane                |            |                               |          |      |      |
| 45    | Neck ring                 |            |                               |          |      |      |
| 47    | Bearing bush              |            |                               |          |      |      |
| 65    | Retainer                  |            |                               |          |      |      |
| 65    | Retainer                  |            |                               |          |      |      |
| - 4   | Chamber cpl.              |            |                               |          | 10   |      |
|       | Vane                      |            |                               |          |      |      |
|       | Intermediate chamber      |            |                               |          |      |      |
|       | Plate                     |            |                               |          |      |      |
|       | Guide vane                |            |                               |          |      |      |
| 45    | Neck ring                 |            |                               |          |      |      |
| 65    | Retainer                  |            |                               |          |      |      |
| 65    | Retainer                  |            |                               |          |      |      |
| - 5a  | Chamber cpl.              |            |                               |          | 1    |      |
|       | Vane                      |            |                               |          |      |      |
|       | Intermediate chamber      |            |                               |          |      |      |
| 45    | Neck ring                 |            |                               |          |      |      |
| 65    | Retainer                  |            |                               |          |      |      |
| 65    | Retainer                  |            |                               |          |      |      |
| - 44a | Guide vane cpl.           |            |                               |          | 1    |      |
|       | Plate                     |            |                               |          |      |      |
|       | Guide vane                |            |                               |          |      |      |
| 50    | Top plate                 |            |                               |          |      |      |
| 47    | Bearing ring, rotating    |            |                               |          | 2    |      |
| 49    | Impeller                  |            |                               |          | 13   |      |
| 51    | Shaft, spline, cpl.       |            |                               |          | 1    |      |
| 64d   | Spacing pipe              |            | Internal diameter: 12,85      |          | 2    |      |
|       |                           |            | Outer diameter: 15,85         |          |      |      |
|       |                           |            | Length (mm): 4,50             |          |      |      |
| 64c   | Clamp, splined            |            | Internal diameter: 8,5        |          | 1    |      |
|       |                           |            | Outer diameter: 15            |          |      |      |
| 64a   | Spacing pipe              |            |                               |          | 10   |      |
| 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                    |            | Diameter: 16,3                |          | 1    |      |
|       |                           |            | Material type: EPDM           |          |      |      |

| Pos   | Description                   | Annotation | Classification Data            | Part no. | Qty. | Unit |
|-------|-------------------------------|------------|--------------------------------|----------|------|------|
|       |                               |            | Thickness: 2,4                 |          |      |      |
| 38    | O-ring                        |            | Diameter: 16,3                 |          | 2    |      |
|       |                               |            | Material type: EPDM            |          |      |      |
|       |                               |            | Thickness: 2,4                 |          |      |      |
| 109   | O-ring                        |            | Diameter: 22,00                |          | 1    |      |
|       |                               |            | Material type: EPDM            |          |      |      |
|       |                               |            | Thickness: 2,75                |          |      |      |
| -     | Kit, plug                     |            |                                | 96505133 | 1    | pcs  |
| - 18  | Air vent screw                |            |                                |          | 1    |      |
|       | Spindle                       |            |                                |          |      |      |
|       | Plug                          |            |                                |          |      |      |
| 23b   | Spindle                       |            |                                |          | 1    |      |
| 25    | Plug                          |            |                                |          | 1    |      |
| 25    | Plug                          |            |                                |          | 1    |      |
| 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                 |          |      |      |
| 38    | O-ring                        |            | Diameter: 16,3                 |          | 1    |      |
|       |                               |            | Material type: EPDM            |          |      |      |
|       |                               |            | Thickness: 2,4                 |          |      |      |
| 38    | O-ring                        |            | Diameter: 16,3                 |          | 2    |      |
|       |                               |            | Material type: EPDM            |          |      |      |
|       |                               |            | Thickness: 2,4                 |          |      |      |
| -     | Kit, shaft seal HQQE          |            |                                | 96455086 | 1    | pcs  |
| + 105 | Shaft seal                    |            | Material type: HQQE            |          | 1    |      |
| -     | Kit, wear parts               |            | Material type: SILICON CARBIDE | 96455092 | 1    | pcs  |
| - 4a  | Chamber w. bearing cpl.       |            |                                |          | 2    |      |
| 4a    | Intermediate chamber          |            |                                |          |      |      |
| 45    | Neck ring                     |            |                                |          |      |      |
| 65    | Neck ring retainer            |            |                                |          |      |      |
| 45    | Neck ring                     |            |                                |          | 17   |      |
| 47    | Bearing ring, rotating        |            |                                |          | 2    |      |
| 64d   | Spacing pipe                  |            | Internal diameter: 12,85       |          | 2    |      |
|       |                               |            | Outer diameter: 15,85          |          |      |      |
|       |                               |            | Length (mm): 4,50              |          |      |      |
| 64c   | Clamp, splined                |            | Internal diameter: 8,5         |          | 1    |      |
|       |                               |            | Outer diameter: 15             |          |      |      |
| 65    | Neck ring retainer            |            |                                |          | 17   |      |
| 66    | Wedge lock washer             |            |                                |          | 1    |      |
| 67    | Lock nut                      |            | Thread: M8                     |          | 1    |      |
| 441b  | Gasket                        |            |                                |          | 2    |      |
| -     | Motor                         |            |                                | 85903982 | 1    | pcs  |
| -     | Kit, Ball bearing             |            |                                | 96279730 | 1    |      |
| 111   | Ball bearing                  |            | Designation: 6204.2Z.C3.SYN    |          |      |      |
| 111   | Ball bearing                  |            |                                |          |      |      |
| 157   | O-ring                        |            | Diameter: 32                   |          |      |      |
|       |                               |            | Material type: NBR             |          |      |      |
|       |                               |            | Thickness: 2                   |          |      |      |
| 158   | Waved washer                  |            |                                |          |      |      |
| -     | Kit, fan                      |            |                                | 96279721 | 1    |      |
| 156   | Fan                           |            |                                |          |      |      |
| 159a  | Seal ring                     |            |                                |          |      |      |
| -     | Kit, fan cover                |            |                                | 96279720 | 1    |      |
| 151   | Fan cover                     |            |                                |          |      |      |
| 152   | Pan head thread forming screw |            |                                |          |      |      |

| Pos  | Description                   | Annotation | Classification Data         | Part no. | Qty. | Unit |
|------|-------------------------------|------------|-----------------------------|----------|------|------|
| -    | Kit, flange                   |            |                             | 96279854 | 1    |      |
| 156b | Flange                        |            |                             |          |      |      |
| 159c | Seal ring                     |            |                             |          |      |      |
| 184  | Gasket                        |            | Internal diameter: 114,80   |          |      |      |
|      |                               |            | Outer diameter: 121,20      |          |      |      |
|      |                               |            | Thickness: 0,25             |          |      |      |
| 185  | Pan head screw                |            |                             |          |      |      |
| 186  | Drain plug                    |            |                             |          |      |      |
| -    | Kit, shaft seal               |            |                             | 96279722 | 1    |      |
| 159c | Seal ring                     |            |                             |          |      |      |
| 159a | Seal ring                     |            |                             |          |      |      |
| -    | Kit, terminal box             |            |                             | 96279724 | 1    |      |
| 152  | Pan head thread forming screw |            |                             |          |      |      |
| 164a | Terminal box w/gasket         |            |                             |          |      |      |
| 164  | Terminal box cover w/gasket   |            |                             |          |      |      |
| 173a | Washer                        |            | Designation: SQUARE         |          |      |      |
|      |                               |            | Internal diameter: 5,5      |          |      |      |
|      |                               |            | Outer diameter: 10X10       |          |      |      |
|      |                               |            | Thickness: 1,5              |          |      |      |
| 173a | Base                          |            |                             |          |      |      |
| 173  | Pan head thread forming screw |            | Designation: COMBI TORX T25 |          |      |      |
| 173  | Pan head screw                |            | Designation: DIN 7985       |          |      |      |
| 175  | Pan head screw                |            | Designation: DIN 7985       |          |      |      |
| 176  | Terminal cpl.                 |            |                             |          |      |      |
| -    | Motor                         |            |                             | 85900490 | 1    | pcs  |
| -    | Kit, Ball bearing             |            |                             | 96279730 | 1    |      |
| 111  | Ball bearing                  |            | Designation: 6204.2Z.C3.SYN |          |      |      |
| 111  | Ball bearing                  |            |                             |          |      |      |
| 157  | O-ring                        |            | Diameter: 32                |          |      |      |
|      |                               |            | Material type: NBR          |          |      |      |
|      |                               |            | Thickness: 2                |          |      |      |
| 158  | Waved washer                  |            |                             |          |      |      |
| -    | Kit, fan                      |            |                             | 96279721 | 1    |      |
| 156  | Fan                           |            |                             |          |      |      |
| 159a | Seal ring                     |            |                             |          |      |      |
| -    | Kit, fan cover                |            |                             | 96279720 | 1    |      |
| 151  | Fan cover                     |            |                             |          |      |      |
| 152  | Pan head thread forming screw |            |                             |          |      |      |
| -    | Kit, flange                   |            |                             | 96279854 | 1    |      |
| 156b | Flange                        |            |                             |          |      |      |
| 159c | Seal ring                     |            |                             |          |      |      |
| 184  | Gasket                        |            | Internal diameter: 114,80   |          |      |      |
|      |                               |            | Outer diameter: 121,20      |          |      |      |
|      |                               |            | Thickness: 0,25             |          |      |      |
| 185  | Pan head screw                |            |                             |          |      |      |
| 186  | Drain plug                    |            |                             |          |      |      |
| -    | Kit, shaft seal               |            |                             | 96279722 | 1    |      |
| 159c | Seal ring                     |            |                             |          |      |      |
| 159a | Seal ring                     |            |                             |          |      |      |
| -    | Kit, terminal box             |            |                             | 96279724 | 1    |      |
| 152  | Pan head thread forming screw |            |                             |          |      |      |
| 164a | Terminal box w/gasket         |            |                             |          |      |      |
| 164  | Terminal box cover w/gasket   |            |                             |          |      |      |
| 173a | Washer                        |            | Designation: SQUARE         |          |      |      |
|      |                               |            | Internal diameter: 5,5      |          |      |      |
|      |                               |            | Outer diameter: 10X10       |          |      |      |
|      |                               |            | Thickness: 1,5              |          |      |      |
| 173a | Base                          |            |                             |          |      |      |

| Pos   | Description                           | Annotation | Classification Data                          | Part no. | Qty. | Unit |
|-------|---------------------------------------|------------|----------------------------------------------|----------|------|------|
| 173   | Pan head thread forming screw         |            | Designation: COMBI TORX T25                  |          |      |      |
| 173   | Pan head screw                        |            | Designation: DIN 7985                        |          |      |      |
| 175   | Pan head screw                        |            | Designation: DIN 7985                        |          |      |      |
| 176   | Terminal cpl.                         |            |                                              |          |      |      |
| + 4a  | Bulk, Chamber w. bearing cpl. (3 pcs) |            |                                              | 98371208 | 2    | pcs  |
| + 4a  | Bulk, Chamber w. bearing cpl. (5 pcs) |            |                                              | 97690601 | 2    | pcs  |
| + 4a  | Bulk, Chamber w. bearing cpl. (5 pcs) |            |                                              | 97690590 | 2    | pcs  |
| + 4a  | Chamber w. bearing cpl.               |            |                                              | 98371207 | 2    | pcs  |
| - 4   | Bulk, Chamber cpl. (5 pcs)            |            |                                              | 97690020 | 10   | pcs  |
| 45    | Bulk, Neck ring (24 pcs)              |            |                                              | 96536194 | 1    |      |
| 65    | Bulk, Retainer (24 pcs)               |            |                                              | 98270018 | 1    |      |
| + 4   | Bulk, Chamber cpl. (10 pcs)           |            |                                              | 96547662 | 10   | pcs  |
| + 4   | Chamber cpl.                          |            |                                              | 98371206 | 10   | pcs  |
| + 5a  | Bulk, Chamber cpl. (10 pcs)           |            |                                              | 98371205 | 1    | pcs  |
| + 5a  | Chamber cpl.                          |            |                                              | 96588148 | 1    | pcs  |
| 6     | Base                                  |            |                                              | 96588146 | 1    | pcs  |
| 10a   | Coupling half                         |            |                                              | 96588030 | 2    | pcs  |
| 10    | Bulk, Shaft pin (10 pcs)              |            | Diameter: 5<br>Length (mm): 26               | 96536473 | 1    | pcs  |
| - 25a | Drain plug w/bypass valve             |            |                                              | 96588242 | 1    | pcs  |
| 38    | Bulk, O-ring (10 pcs)                 |            | Diameter: 16,3                               | 99198815 | 1    |      |
|       |                                       |            | Material type: EPDM                          |          |      |      |
|       |                                       |            | Thickness: 2,4                               |          |      |      |
| 38    | Bulk, O-ring (50 pcs)                 |            | Diameter: 16,3                               | 99412727 | 1    |      |
|       |                                       |            | Material type: EPDM                          |          |      |      |
|       |                                       |            | Thickness: 2,4                               |          |      |      |
| 26    | Bulk, Staybolt (4 pcs)                |            | Length (mm): 259<br>Thread: M12              | 96536327 | 4    | pcs  |
| 26    | Staybolt                              |            | Length (mm): 259<br>Thread: M12              | 98986273 | 4    | pcs  |
| 36    | Bulk, Nut (20 pcs)                    |            | Thread: M12                                  | 96620479 | 4    | pcs  |
| 37    | Bulk, O-ring (24 pcs)                 |            |                                              | 96547656 | 2    | pcs  |
| 38    | Bulk, O-ring (10 pcs)                 |            | Diameter: 16,3                               | 99198815 | 2    | pcs  |
|       |                                       |            | Material type: EPDM                          |          |      |      |
|       |                                       |            | Thickness: 2,4                               |          |      |      |
| 38    | Bulk, O-ring (50 pcs)                 |            | Diameter: 16,3                               | 99412727 | 2    | pcs  |
|       |                                       |            | Material type: EPDM                          |          |      |      |
|       |                                       |            | Thickness: 2,4                               |          |      |      |
| + 44a | Bulk, Guide vane cpl. (5 pcs)         |            |                                              | 96547669 | 1    | pcs  |
| + 44a | Guide vane cpl.                       |            |                                              | 98371221 | 1    | pcs  |
| 47    | Bulk, Bearing ring, rotating (10 pcs) |            |                                              | 97905743 | 2    | pcs  |
| 47    | Bearing ring, rotating                |            |                                              | 96547649 | 2    | pcs  |
| 49    | Bulk, Impeller (10 pcs)               |            |                                              | 98394237 | 13   | pcs  |
| 49    | Bulk, Impeller (24 pcs)               |            |                                              | 96547665 | 13   | pcs  |
| 49    | Impeller                              |            |                                              | 98394397 | 13   | pcs  |
| 51    | Shaft, spline, cpl.                   |            |                                              | 96588234 | 1    | pcs  |
| 64c   | Bulk, Clamp, splined (5 pcs)          |            | Internal diameter: 8,5<br>Outer diameter: 15 | 98496968 | 1    | pcs  |
| 64a   | Bulk, Spacing pipe (24 pcs)           |            |                                              | 96536198 | 10   | pcs  |
| 66    | Bulk, Wedge lock washer (10 pcs)      |            |                                              | 96536157 | 1    | pcs  |
| 67    | Bulk, Lock nut (10 pcs)               |            | Thread: M8                                   | 98277008 | 1    | pcs  |
| + 105 | Bulk, Shaft seal (15 pcs)             |            | Material type: HQQE                          | 96983415 | 1    | pcs  |