

Date: 16/02/2019

Qty. | Description

1 CRN 15-3 A-FGJ-A-E-HQQE



Product No.: 96501771

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 combined DIN-ANSI-JIS flanges.

The pump is fitted with a 3-phase, fan-cooled asynchronous motor.

Further product details

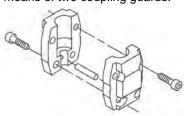
Steel, cast iron and aluminium components have an epoxy-based coating made in a cathodic electro-deposition (CED) process. CED is a high-quality dip-painting process where an electrical field around the products ensures deposition of paint particles as a thin, well-controlled layer on the surface. An 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.

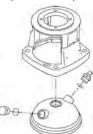
The colour code for the finished product is NCS 9000/RAL 9005.

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 and flange for motor mounting is made in one piece (cast iron). The pump head cover is a separate component (stainless steel). 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)



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Stationary seat material: silicon carbide (SiC)

This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

Secondary seal material: EPDM (ethylene-propylene rubber)

EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.



The shaft seal is screwed into the pump head.

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.

The pump has a stainless steel base mounted on a separate base plate. This base and base plate are kept in position by the tension of the staybolts which hold the pump together. 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. The flanges and base are cast in one piece and prepared for connection by means of DIN, ANSI or JIS.

Motor

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).

Motor-mounting designation in accordance with IEC 60034-7: IM B 14 (Code I) / IM 3601 (Code II).

Electrical tolerances comply with IEC 60034.

The motor efficiency is classified as IE3 in accordance with IEC 60034-30-1.

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.

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.

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.

Technical data

Controls:

Frequency converter: NONE

Liquid:

Pumped liquid: Water

Liquid temperature range: -20 .. 120 °C Liquid temperature during operation: 20 °C Density: 998.2 kg/m³

Technical:

Pump speed on which pump data are based: 2902 rpm

Rated flow: 17 m³/h
Rated head: 33.2 m
Pump orientation: Vertical
Shaft seal arrangement: Single
Code for shaft seal: HQQE

Approvals on nameplate: CE, EAC,ACS Curve tolerance: ISO9906:2012 3B



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Materials:

Base: Stainless steel

EN 1.4408

AISI 316

Impeller: Stainless steel

EN 1.4401 AISI 316

Bearing: SIC

Installation:

Maximum ambient temperature: 60 °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 50

2 inch

Size of outlet connection: DN 50

2 inch

Pressure rating for pipe connection: PN 25 Flange rating inlet: 300 lb Flange size for motor: FT130

Electrical data:

Motor standard: IEC
Motor type: 100LC
IE Efficiency class: IE3
Rated power - P2: 3 kW
Power (P2) required by pump: 3 kW
Mains frequency: 50 Hz

Rated voltage: 3 x 220-240D/380-415Y V

Rated current: 11.0/6.30 A Starting current: 840-920 % Cos phi - power factor: 0.87-0.82 Rated speed: 2900-2920 rpm Efficiency: IE3 87,1% Motor efficiency at full load: 87.1 % Motor efficiency at 3/4 load: 88.0 % Motor efficiency at 1/2 load: 87.7 %

Number of poles: 2

Enclosure class (IEC 34-5): 55 Dust/Jetting

Insulation class (IEC 85): F

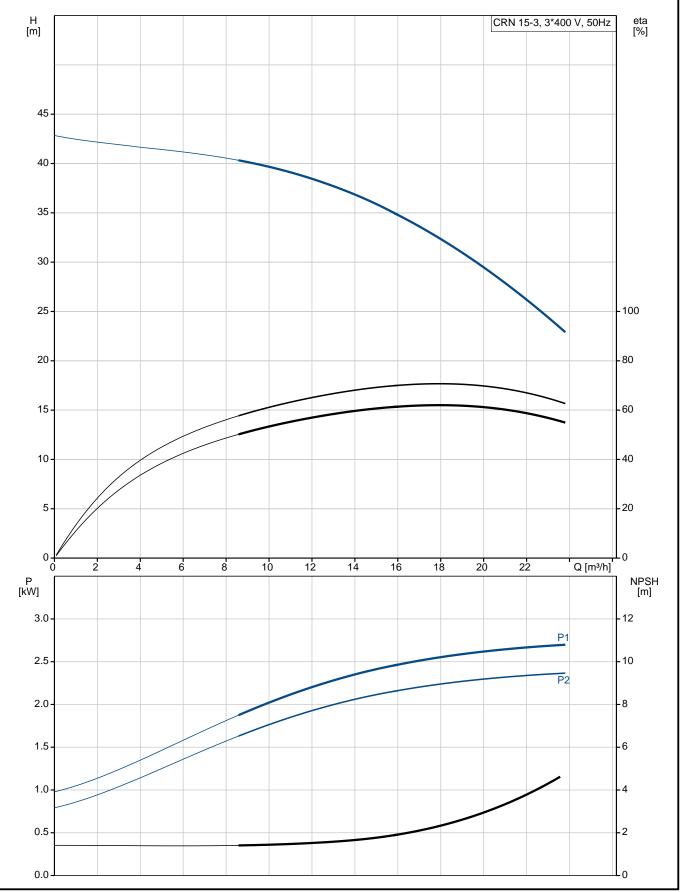
Others:

Minimum efficiency index, MEI ≥: 0.70
Net weight: 56 kg
Gross weight: 78 kg
Shipping volume: 0.234 m³



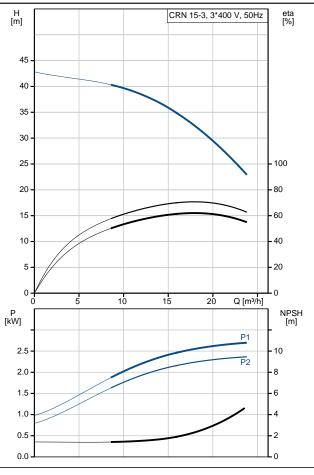
Date: 16/02/2019

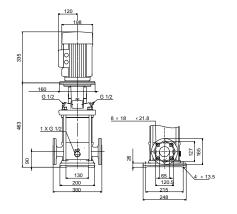
96501771 CRN 15-3 A-FGJ-A-E-HQQE 50 Hz

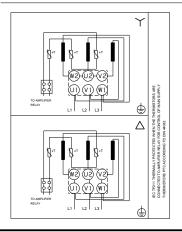




| Description | Value |
|---|--------------------------------|
| General information: | ODNI 45 O |
| Product name: | CRN 15-3 A-FGJ-A-E-HQQE |
| Product No: | 96501771 |
| EAN number: | 5700396228884 |
| Technical: | 0100000220001 |
| Pump speed on which pump data are | |
| based: | 2902 rpm |
| Rated flow: | 17 m³/h |
| Rated head: | 33.2 m |
| Head max: | 42.7 m |
| Stages: | 3 |
| Impellers: | 3 |
| Number of reduced-diameter impellers: | 0 |
| Low NPSH: | N |
| Pump orientation: | Vertical |
| Shaft seal arrangement: Code for shaft seal: | Single |
| - Couc for origin count | HQQE |
| Approvals on nameplate: Curve tolerance: | CE, EAC,ACS ISO9906:2012 3B |
| Pump version: | A |
| Model: | A |
| Materials: | ^ |
| Base: | Stainless steel |
| B 466. | EN 1.4408 |
| | AISI 316 |
| Impeller: | Stainless steel |
| | EN 1.4401 |
| | AISI 316 |
| Material code: | A |
| Code for rubber: | E |
| Bearing: | SIC |
| Installation: | |
| Maximum ambient temperature: | 60 °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 50 |
| Olean of author annual street | 2 inch |
| Size of outlet connection: | DN 50 2 inch |
| Proceure reting for pine connection: | PN 25 |
| Pressure rating for pipe connection: Flange rating inlet: | 300 lb |
| Flange size for motor: | FT130 |
| Connect code: | FGJ |
| Liquid: | 1 00 |
| Pumped liquid: | Water |
| Liquid temperature range: | -20 120 °C |
| Liquid temperature during operation: | 20 °C |
| Density: | 998.2 kg/m³ |
| Electrical data: | <u> </u> |
| Motor standard: | IEC |
| Motor type: | 100LC |
| IE Efficiency class: | IE3 |
| Rated power - P2: | 3 kW |
| Power (P2) required by pump: | 3 kW |
| Mains frequency: | 50 Hz |
| | |







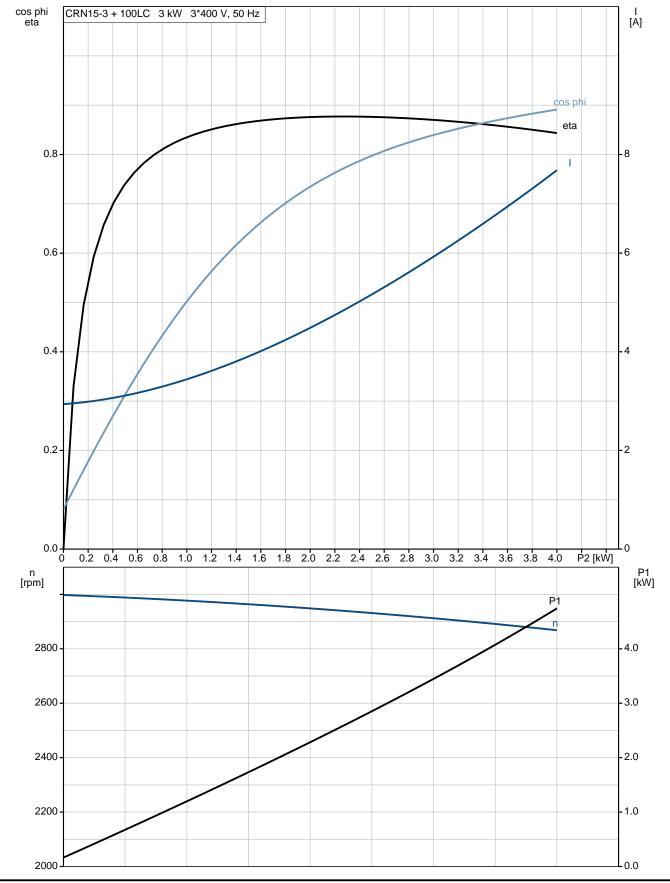


| Description | Value |
|----------------------------------|----------------------------|
| Rated voltage: | 3 x 220-240D/380-415Y V |
| Rated current: | 11.0/6.30 A |
| Starting current: | 840-920 % |
| Cos phi - power factor: | 0.87-0.82 |
| Rated speed: | 2900-2920 rpm |
| Efficiency: | IE3 87,1% |
| Motor efficiency at full load: | 87.1 % |
| Motor efficiency at 3/4 load: | 88.0 % |
| Motor efficiency at 1/2 load: | 87.7 % |
| Number of poles: | 2 |
| Enclosure class (IEC 34-5): | 55 Dust/Jetting |
| Insulation class (IEC 85): | F |
| Motor protec: | PTC |
| Motor No: | 85U05510 |
| Controls: | |
| Frequency converter: | NONE |
| Others: | |
| Minimum efficiency index, MEI ≥: | 0.70 |
| Net weight: | 56 kg |
| Gross weight: | 78 kg |
| Shipping volume: | 0.234 m³ |



Date: 16/02/2019

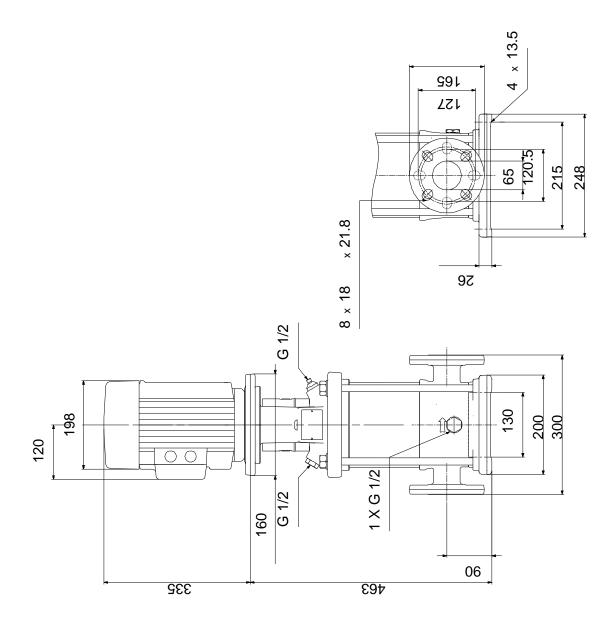
96501771 CRN 15-3 A-FGJ-A-E-HQQE 50 Hz





Date: 16/02/2019

96501771 CRN 15-3 A-FGJ-A-E-HQQE 50 Hz

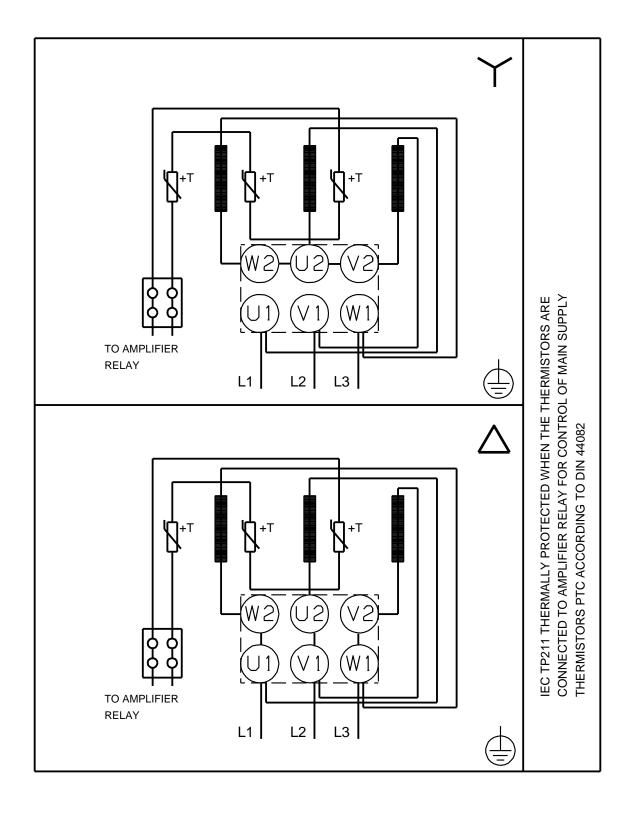


Note! All units are in [mm] unless others are stated. Disclaimer: This simplified dimensional drawing does not show all details.



Date: 16/02/2019

96501771 CRN 15-3 A-FGJ-A-E-HQQE 50 Hz

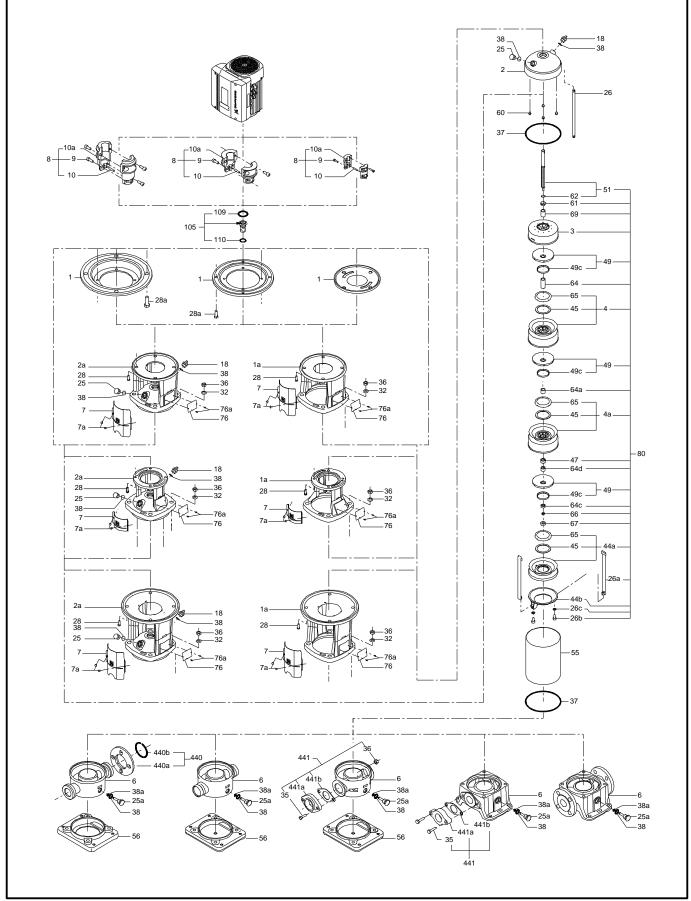


Note! All units are in [mm] unless others are stated.



Date: 16/02/2019

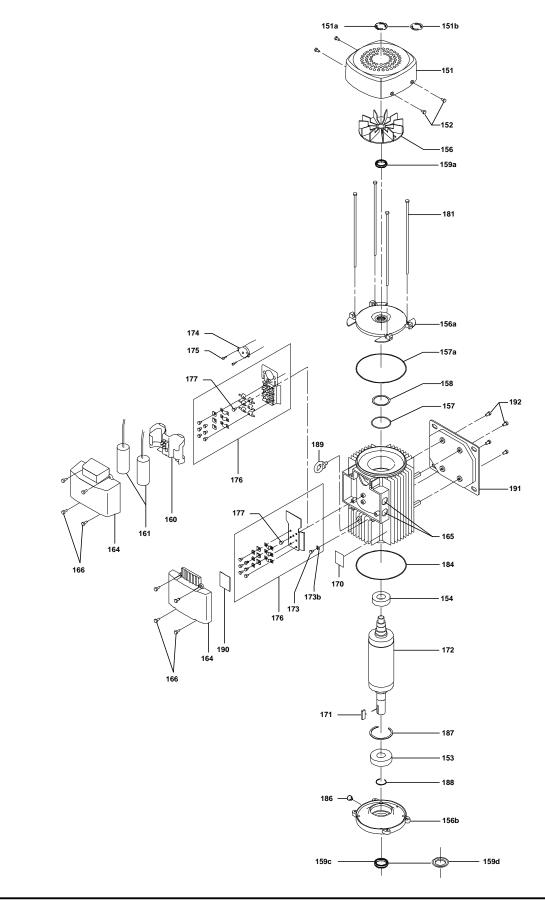
(tm069469 for MECR15,20 standard)





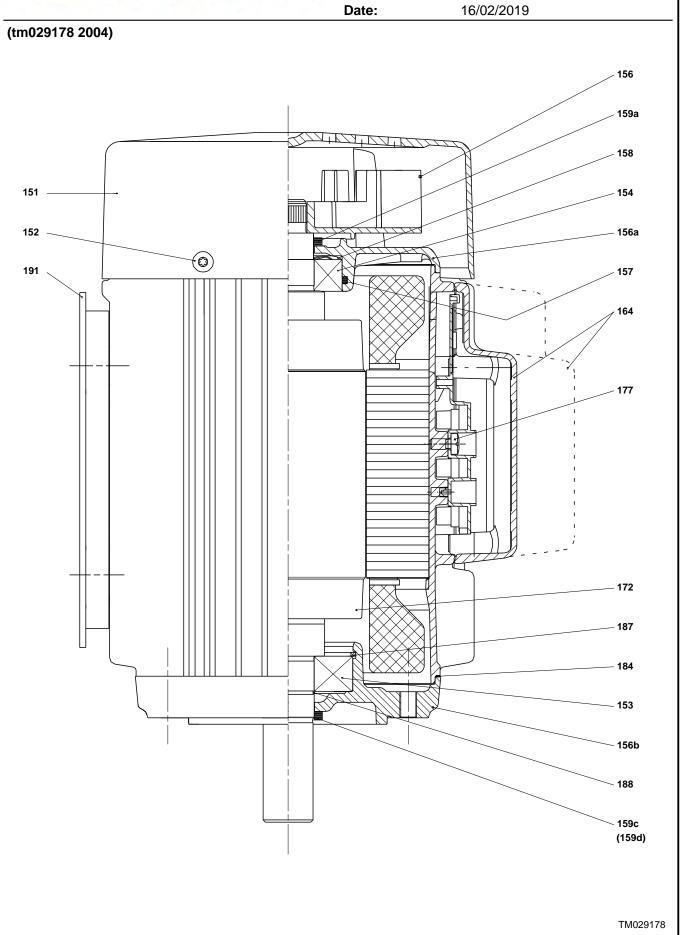
Date: 16/02/2019

(tm029184 0505)



TM029184







Date: 16/02/2019

Spare parts CRN 15-3, Product No. 96501771 Valid from 1.1.2011 (1152)

| | Pos | Description Kit shamber steels | Annotation | Classification Data | Part no. | | Uni |
|---|------|---------------------------------|------------|-------------------------|----------|---|-----|
| | 00 | Kit, chamber stack | | | 96491761 | 1 | pcs |
| | 80 | Chamber stack | | | | 1 | 1 |
| | 3 | Top intermediate chamber | | | | | |
| | | Guide vane | | | | | |
| | | Cover plate | | | | | |
| | 3 | Intermediate chamber | | | | | |
| | 4a | Intermediate chamber cpl. | | | | | |
| | | Sand Lifter | | | | | |
| | | Guide cup | | | | | |
| | | Bearing plate | | | | | |
| | | Guide vane | | | | | |
| | 3 | Intermediate chamber | | | | | |
| | 45a | Neck ring cpl. | | | | | |
| | 47 | Bearing bush | | | | | |
| | 65 | Retainer | | | | | |
| | 4 | Intermediate chamber cpl. | | | | | |
| | 3 | Intermediate chamber | | | | | |
| | 45a | Neck ring cpl. | | | | | |
| | 65 | Retainer | | | | | |
| | 26a | Strap cpl. | | | | | |
| | 26.c | Washer | | Designation: DIN 125A | | | |
| | | | | Thickness: 1,6 | | | |
| | 26.b | Hex head screw | | · | | | |
| | 44b | Inlet part | | | | | |
| | 44a | Inlet part cpl. | | | | | |
| | 45a | Neck ring cpl. | | | | | |
| | 65 | Retainer | | | | | |
| | 47 | Bearing ring | | | | | |
| | 49 | Impeller cpl. | | | | | |
| | 49c | Wear ring | | | | | |
| | 49 | Impeller | | | | | |
| | 51 | Shaft, spline, cpl. | | | | | |
| | 01 | Bar | | | | | |
| | 62 | Stop ring | | | | | |
| | 64d | Spacing bush | | | | | |
| | 64c | Spacing bush | | Length (mm): 12.7 | | | |
| | 64a | Spacing pipe Spacing pipe | | Internal diameter: 17,5 | | | |
| | 04a | Spacing pipe | | Length (mm): 17 | | | |
| | 64 | Spacing pipe | | Length (mm): 43.6 | | | |
| | 64 | | | Lengin (mm). 43.6 | | | |
| | 66 | Wedge lock washer | | Thursday NAO | | | |
| | 67 | Lock nut | | Thread: M8 | | | |
| | 69 | Spacing bush | | | 00544050 | | |
| • | | Kit, coupling | | | 96511350 | | pcs |
| | | Adjusting fork | | B : // BD1040 | | 1 | |
| | 9 | Hex socket head cap screw | | Designation: DIN 912 | | 4 | 1 |
| | | | | Length (mm): 25 | | | |
| | | | | Thread: M8 | | | _ |
| | 10a | Coupling half | | | | | 2 |
| | 10 | Shaft pin | | Diameter: 5 | | 1 | 1 |
| | | | | Length (mm): 26 | | | |
| | | Kit, coupling guard | | | 96509612 | 1 | pc |
| | 7.a | Combi Slot Torx screw | | | | 4 | 1 |
| | 7 | Coupling guard | | | | 2 | 2 |



| Pos | Description | Annotation Classification Data Part r | | ⊋ty. | |
|------------|---------------------------|---|----------------|------|----|
| | Kit, gaskets | 96509 | 9609 1 | | pc |
| | Gasket | | | 2 | |
| 24 | O-ring | | | 2 | |
| 37 | O-ring | | | 2 | |
| 38a | O-ring | Diameter: 5,3 | | 1 | |
| | | Material type: EPDM | | | |
| | | 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 | | | |
| 60 | Spring | | | 4 | |
| 415 | Gasket | | | 2 | |
| 441b | Gasket | Internal diameter: 49 | | 2 | |
| | | Outer diameter: 92 | | | |
| | | Thickness: 2 | | | |
| | Kit, plug | 96511 | 1312 1 | | р |
| 18 | Air vent screw | | | 1 | |
| | Spindle | | | | |
| | Plug | | | | |
| 25a | Drain plug | | | 1 | |
| 25 | Plug | | | 1 | |
| 38a | O-ring | Diameter: 5,3 | | 1 | |
| | <u> </u> | Material type: FKM | | | |
| | | Thickness: 2,4 | | | |
| 38a | O-ring | Diameter: 5,3 | | 1 | |
| | <u> </u> | Material type: EPDM | | | |
| | | Thickness: 2,4 | | | |
| 38 | O-ring | Diameter: 16,3 | | 1 | |
| | - 3 | Material type: FKM | | | |
| | | Thickness: 2,4 | | | |
| 38 | O-ring | Diameter: 16,3 | | 2 | |
| | - ····g | 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 | |
| | g | Material type: EPDM | | | |
| | | Thickness: 2,4 | | | |
| | Kit, shaft seal HQQE | | 1844 1 | | рс |
| | Emery cloth | 3001 | | 1 | • |
| | Grinding device | | | 1 | |
| 105 | Shaft seal | Material type: HQQE | | 1 | |
| | Kit, wear parts | | 1824 1 | | рс |
| 4a | Intermediate chamber cpl. | 9031 | . J <u>.</u> ¬ | 1 | |
| | Sand Lifter | | | | |
| | Guide cup | | | | |
| | Bearing plate | | | | |
| | Guide vane | | | | |
| 3 | Intermediate chamber | | | | |
| ა 45a | | | | | |
| | Neck ring cpl. | | | | |
| 47 | Bearing bush | | | | |
| \sim r | Retainer | | | | |
| 65 | \\/ | B 1 (1 B)11054 | | _ | |
| 65 26.c | Washer | Designation: DIN 125A Thickness: 1,6 | | 2 | |



| 99a Retaining ring 99 Retaining ring 111 Ball bearing 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Kit, end shield 9627 156a End shield 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer 159a Seal ring Kit, fan 9627 159a Seal ring Kit, fan cover 9627 151b Label 151 Label 151 Fan cover 152 Pan head thread forming screw Kit, flange 9627 156b Flange 157c Seal ring 158c Drain plug 159c Seal ring Kit, tetaining ring 9627 159c Seal ring Kit, shaft seal 9627 | | . Ur |
|--|--------|------|
| 49c Wear ring 62 Retaining ring 64d Spacing bush 64c Spacing pipe Length (mm): 12.7 64b Spacing pipe Internal diameter: 17.5 65 Retainer Length (mm): 17 66 Wedge lock washer Ferming from title (mm): 17 67 Lock nut Thread: M8 Motor Kit, 8all bearing 8590373 99a Retaining ring 9627 99a Retaining ring Perminder (mm): 17 111 Ball bearing Ball bearing 111 Ball bearing Diameter: 52 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Waterial type: NBR 158 End shield 9627 158 Waved washer Thickness: 3 158 Waved washer Farming (ma) 159a Seal ring Farming 159a Seal ring Perming 151b La | | 5 |
| 624 Spacing push 64c Spacing push Length (mm): 12.7 64b Spacing push Length (mm): 5.00 64a Spacing pipe Internal diameter: 17.5 65 Retainer Retainer 66 Wedge lock washer Thread: M8 67 Lock nut Thread: M8 Motor 8590373 Kit, Ball bearing 9627 99a Retaining ring 19627 111 Ball bearing Diameter: 52 Material type: NBR Thickness: 3 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Waterial type: NBR 159a End shield 9627 158 Waved washer Thickness: 3 158 Waved washer Thickness: 3 158 Waved washer Thickness: 3 159a Seal ring Paczing 159a Seal ring Paczing 159a Seal ring Paczing | | 1 |
| 64d Spacing bush Length (mm): 12.7 64b Spacing pipe Internal diameter: 17.5 64a Spacing pipe Internal diameter: 17.5 65 Retainer Length (mm): 17 66 Wedge lock washer 66 67 Lock nut Thread: M8 89a Retaining ing 8590372 99a Retaining ring 9627 111 Ball bearing Diameter: 52 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer 9627 158a End shield 9627 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158a Waved washer 19627 159a Seal ring 19627 159a Seal ring 9627 159a Seal ring 9627 151b Label 19627 151c Fan cover 9627 155c Dera | | 6 |
| Act | | 1 |
| 64a Spacing pipe Length (mm): 5.00 64a Spacing pipe Internal diameter: 17,5 65 Retainer 66 Wedge lock washer 67 Lock nut Thread: M8 Motor 8590373 Kit, Ball bearing 9627 99a Retaining ring 9627 99 Retaining ring 9627 111 Ball bearing Diameter: 52 117 O-ring Diameter: 52 Material type: NBR Thrickness: 3 158 Waved washer Waterial type: NBR 157 O-ring Diameter: 52 Material type: NBR Thrickness: 3 158 Waved washer Waterial type: NBR 159a Seal ring Seal ring Kit, tan 9627 158 Waved washer 9627 159a Seal ring 9627 Kit, tan cover 9627 151b Label 9627 151b Label 9627 < | | 1 |
| 64a Spacing pipe Internal diameter: 17,5 65 Retainer 66 Wedge lock washer 7 Lock nut Thread: M8 Motor 8590373 Kit, Ball bearing 9627 99a Retaining ring 99 99 Retaining ring Diameter: 52 111 Ball bearing Diameter: 52 115 O-ring Diameter: 52 Kit, end shield 9627 158 Waved washer Washer Kit, end shield 9627 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Washer 159a Seal ring Material type: NBR Kit, fan 9627 158 Waved washer 9627 159a Seal ring 9627 Kit, fan 9627 151b Fan 9627 152b Fan lead thread forming screw 9627 154b | | 1 |
| Length (mm): 17 | | 1 |
| 66 Retainer 66 Wedge lock washer 67 Lock nut Thread: M8 68 Motor 8590373 Kit, Ball bearing 9627 99a Retaining ring 99 111 Ball bearing Diameter: 52 111 Ball bearing Diameter: 52 111 Ball bearing Diameter: 52 157 O-ring Material type: NBR 158 Waved washer Thickness: 3 158 End shield 9627 158 Waved washer Seal ring 159 Seal ring Material type: NBR 159a Seal ring 9627 Kit, tan 9627 159a Seal ring 9627 Kit, fan cover 9627 151b Label 9627 152b Pan head thread forming screw 9627 155c Flange 9627 156b Flange 9627 159c Seal ring 9627 <td></td> <td>1</td> | | 1 |
| 66 Wedge lock washer Thread: M8 67 Lock nut Thread: M8 Motor 8590373 Kit, Ball bearing 9627 99a Retaining ring 9627 99 Retaining ring Diameter: 52 111 Ball bearing Diameter: 52 157 O-ring Diameter: 52 Kit, end shield 9627 158 Waved washer Material type: NBR 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Material type: NBR 159 Seal ring Material type: NBR 159 Seal ring 9627 Kit, fan 9627 159 Seal ring 9627 Kit, fan cover 9627 151b Label 9627 Kit, fange 9627 152 Pan head thread forming screw 8627 159a Seal ring 9627 159c Seal ring 9627 <td></td> <td></td> | | |
| Motor Responsa Kit, Ball bearing 8590373 99a Retaining ring 99 Retaining ring 111 Ball bearing 111 Ball bearing 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 Thickness: 3 158 Waved washer Kit, end shield 9627 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Thickness: 3 159 Seal ring Seal ring Kit, fan 9627 158 Waved washer 9627 159a Seal ring 9627 Kit, fan cover 9627 151b Label 9627 151b Label 9627 156b Flange 9627 156c Drain plug 9627 < | | 5 |
| Motor Responsa Kit, Ball bearing 8590373 99a Retaining ring 99 Retaining ring 111 Ball bearing 111 Ball bearing 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 Thickness: 3 158 Waved washer Kit, end shield 9627 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Thickness: 3 159 Seal ring Seal ring Kit, fan 9627 158 Waved washer 9627 159a Seal ring 9627 Kit, fan cover 9627 151b Label 9627 151b Label 9627 156b Flange 9627 156c Drain plug 9627 < | | 1 |
| Motor Kit, Ball bearing 8590373 799a Retaining ring 992 999 Retaining ring 993 111 Ball bearing 994 111 Ball bearing 995 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer 9627 156a End shield 9627 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer 156 159 Seal ring 9627 158 Waved washer 9627 159 Seal ring 9627 159 Seal ring 9627 151 Label 9627 151 Label 9627 151 Fan cover 9627 152 Pan head thread forming screw 9627 154 Calaring 9627 158 Flange 9627 159.c | | 1 |
| Kit, Ball bearing 9627 99a Retaining ring 111 Ball bearing 117 Ball bearing 118 Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Kit, end shield 9627 156a End shield 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer 158 Waved washer 158 Waved washer 159a Seal ring Kit, fan 9627 159a Seal ring Kit, fan cover 9627 151b Label 151 Fan cover 152 Pan head thread forming screw Kit, flange 9627 156b Flange 156c Drain plug 157c Seal ring Kit, staling ring 9627 158 Retaining ring 188 Retaining ring | 30 1 | рс |
| 99a Retaining ring 99 Retaining ring 111 Ball bearing 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 Thickness: 3 158 Waved washer Kit, end shield 9627 156a End shield 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Seal ring 159a Seal ring Seal ring Kit, fan 9627 151b Label Seal ring Kit, fan cover 9627 152 Pan head thread forming screw Kit, flange Kit, flange 9627 156b Flange 9627 157b Seal ring 9627 158c Drain plug 9627 159c Seal ring 9627 159c Seal ring 9627 159c Seal ring 9627 159c Seal ring | | 1 |
| 99 Retaining ring 111 Ball bearing 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Kit, end shield 9627 156a End shield 9627 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Thickness: 3 159a Seal ring Seal ring Kit, fan 9627 159a Seal ring 9627 Kit, fan cover 9627 151b Label 9627 151b Fan cover 9627 152 Pan head thread forming screw Kit, flange 9627 155b Flange 9627 156c Drain plug 9627 159.c Seal ring 9627 Kit, tetaining ring 9627 159.c Seal ring 9627 159a Seal ring 9627 159a Seal ring | 10100 | |
| 111 Ball bearing 157 O-ring Diameter: 52 158 Waved washer Thickness: 3 158 Kit, end shield 9627 156a End shield 9627 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Waved washer 159a Seal ring Kit, fan 9627 159a Seal ring 9627 151b Label 151b Label 151 Fan cover 9627 152 Pan head thread forming screw 8627 152 Pan head thread forming screw 9627 155b Flange 9627 155c Seal ring 9627 157c Seal ring 9627 158c Designation: COMBI TORX T25 159c Seal ring 9627 159c Seal ring 9627 159c Seal ring 9627 159c Seal ring | | |
| 111 Ball bearing Diameter: 52 157 O-ring Material type: NBR 158 Waved washer Thickness: 3 156a End shield Diameter: 52 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Thickness: 3 159a Seal ring Seal ring Kit, fan 9627 151b Label 151b Label 151 Fan cover 152 Pan head thread forming screw Kit, flange 9627 156b Flange 157c Seal ring Kit, retaining ring 9627 159a Seal ring Kit, shaft seal 9627 159c Seal ring Kit, shaft seal 9627 159c Seal ring Kit, shaft seal 9627 159a Seal ring Kit, staybolts 9627 159a Seal ring <t< td=""><td></td><td></td></t<> | | |
| 157 | | |
| Material type: NBR Thickness: 3 | | |
| Thickness: 3 Thic | | |
| 158 Waved washer 156a End shield 157 O-ring Diameter: 52 158 Waved washer 159a Seal ring Kit, fan 9627 156 Fan 159a Seal ring Kit, fan cover 9627 151b Label 151 Fan cover 152 Pan head thread forming screw Kit, flange 9627 156b Flange 157c.c Drain plug 159c.c Seal ring Kit, retaining ring 9627 159c Seal ring Kit, shaft seal 9627 159a Seal ring Kit, staybolts 9627 159a Seal ring Kit, tsyabolts 9627 159a Seal ring Kit, tsyabolts 9627 Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 | | |
| Kit, end shield 9627 156a End shield 157 O-ring Diameter: 52 Material type: NBR Thickness: 3 158 Waved washer Seal ring 159a Seal ring Fixed responsible to the seal ring of the | | |
| 156a | | |
| 157 | 79831 | 1 |
| Material type: NBR Thickness: 3 | | |
| Thickness: 3 | | |
| 158 Waved washer 159a Seal ring Kit, fan 9627 156 Fan 159a Seal ring Kit, fan cover 9627 151b Label 151 Fan cover 152 Pan head thread forming screw Kit, flange 9627 156b Flange 156c. Drain plug 159.c Seal ring Kit, retaining ring 9627 99 Retaining ring 188 Retaining ring Kit, shaft seal 9627 159c Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Connecting piece 176 Wire clamp | | |
| 159a | | |
| Kit, fan 9627 156 Fan 159a Seal ring Kit, fan cover 9627 151b Label 151 Fan cover 152 Pan head thread forming screw Kit, flange 9627 156b Flange 156c. Drain plug 159.c Seal ring Kit, retaining ring 9627 99 Retaining ring 188 Retaining ring Kit, shaft seal 9627 159a Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 1773 Pan head thread forming screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Connecting piece 177 Wire clamp <td></td> <td></td> | | |
| 156 Fan 159a Seal ring Kit, fan cover 9627 151b Label 151 Fan cover 152 Pan head thread forming screw Kit, flange 9627 156b Flange 156c Drain plug 159c Seal ring 159c Seal ring 188 Retaining ring 189 Retaining ring Kit, shaft seal 9627 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| 159a Seal ring Kit, fan cover 9627 151b Label 151 Fan cover 152 Pan head thread forming screw Kit, flange 9627 156b Flange 156.c Drain plug 159.c Seal ring Kit, retaining ring 9627 99 Retaining ring 188 Retaining ring Kit, shaft seal 9627 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 1773 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Connecting piece 176 Wire clamp | 79757 | 1 |
| Kit, fan cover 9627 151b Label 151 Fan cover 152 Pan head thread forming screw Kit, flange 9627 156b Flange 156c. Drain plug 159.c Seal ring Kit, retaining ring 9627 188 Retaining ring Kit, shaft seal 9627 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| Kit, fan cover 9627 151b Label 151 Fan cover 152 Pan head thread forming screw Kit, flange 9627 156b Flange 156.c Drain plug 159.c Seal ring Kit, retaining ring 9627 188 Retaining ring Kit, shaft seal 9627 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| 151b Label 151 Fan cover 152 Pan head thread forming screw Kit, flange 9627 156b Flange 156c. Drain plug 159c. Seal ring Kit, retaining ring 9627 99 Retaining ring Kit, shaft seal 9627 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | 79826 | 1 |
| 151 Fan cover 152 Pan head thread forming screw Kit, flange 9627 156b Flange 156.c Drain plug 159.c Seal ring Kit, retaining ring 9627 199 Retaining ring 188 Retaining ring Kit, shaft seal 9627 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | - |
| 152 Pan head thread forming screw Kit, flange 9627 156b Flange 156c Drain plug 159c Seal ring 8 Retaining ring 188 Retaining ring Kit, shaft seal 9627 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| Kit, flange 9627 156b Flange 156.c Drain plug 159.c Seal ring Kit, retaining ring 9627 99 Retaining ring 188 Retaining ring Kit, shaft seal 9627 159c Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| 156b Flange 156.c Drain plug 159.c Seal ring Kit, retaining ring 9627 99 Retaining ring 188 Retaining ring Kit, shaft seal 9627 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | 70929 | 1 |
| 156.c Drain plug 159.c Seal ring Kit, retaining ring 9627 99 Retaining ring 188 Retaining ring Kit, shaft seal 9627 159c Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | 1 3020 | |
| 159.c Seal ring 99 Retaining ring 188 Retaining ring Kit, shaft seal 9627 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| Kit, retaining ring 9627 99 Retaining ring 188 Retaining ring Kit, shaft seal 9627 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| 99 Retaining ring 188 Retaining ring Kit, shaft seal 9627 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 176 Terminal 176 Terminal 176 Connecting piece 176 Wire clamp | 70700 | _ |
| 188 Retaining ring Kit, shaft seal 9627 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | 79799 | 1 |
| Kit, shaft seal 9627 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| 159c Seal ring 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| 159a Seal ring Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | 79762 | 1 |
| Kit, staybolts 9627 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| 181 Pan head staybolt Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| Kit, terminal board 9627 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | 79832 | 1 |
| 173a Base 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | 79769 | 1 |
| 173 Pan head thread forming screw Designation: COMBI TORX T25 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| 176 Slot cheese head screw Designation: COMBI TORX T25 Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| Length (mm): 10 Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| Thread: M5 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| 176 Terminal 176 Connecting piece 176 Wire clamp | | |
| 176 Connecting piece 176 Wire clamp | | |
| 176 Wire clamp | | |
| · | | |
| | | |
| 176 Terminal board 177 Pan head screw | | |



| Pos | Description | Annotation | Classification Data | | Un |
|-------|--|------------|-------------------------|------------|-----|
| | Kit, terminal box | | | 96279771 | 1 |
| 164 | Terminal box cover w/gasket | | | | |
| 166 | Pan head thread forming screw | | | | |
| 1a | Pump head | | | 98824712 1 | pcs |
| 2 | Pump cover | | | 98481138 1 | pcs |
| + 3 | Bulk, Top intermediate chamber (3 pcs) | | | 98371113 1 | pcs |
| - 3 | Top intermediate chamber | | | 98734577 1 | pcs |
| + 4a | Bulk, Intermediate chamber cpl. (10 pcs) | | | 96538853 1 | pcs |
| + 4a | Intermediate chamber cpl. | | | 98371117 1 | pcs |
| 4 | Bulk, Intermediate chamber cpl. (10 pcs) | | | 96538840 1 | pcs |
| 3 | Intermediate chamber | | | 98371143 | 1 |
| 65 | Retainer | | | 96547341 | 1 |
| + 4 | Intermediate chamber cpl. | | | 98371115 1 | pc |
| 6 | Base | | | 98482550 1 | pcs |
| 7.a | Bulk, Combi Slot Torx screw (1000 pcs) | | | 96886324 4 | pcs |
| 10 | Bulk, Shaft pin (10 pcs) | | Diameter: 5 | 96536473 1 | pcs |
| -10 | Built, Griant piri (10 poo) | | Length (mm): 26 | 00000+10 1 | poc |
| + 18 | Bulk, Air vent screw (5 pcs) | | Longui (iiiii). 20 | 96547461 1 | nor |
| | Air vent screw | | | | pcs |
| + 18 | | | | | pcs |
| 25 | Bulk, Plug (10 pcs) | | | 96536013 1 | pcs |
| 26a | Strap cpl. | | Designation Division: | 98952934 2 | pcs |
| 26.c | Bulk, Washer (4 pcs) | | Designation: DIN 125A | 99262704 2 | pcs |
| | | | Thickness: 1,6 | | |
| 26.c | Washer | | Designation: DIN 125A | 96586880 2 | pc |
| | | | Thickness: 1,6 | | |
| 26 | Staybolt | | | 98902653 4 | pcs |
| 37.a | Bulk, O-ring (20 pcs) | | | 96538857 1 | pcs |
| 38a | Bulk, O-ring (10 pcs) | | Diameter: 5,3 | 99198791 1 | pc |
| | | | Material type: EPDM | | |
| | | | Thickness: 2,4 | | |
| 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 | | |
| 44b | Inlet part | | · | 98814593 1 | pcs |
| + 44a | • | | | 98818922 1 | pcs |
| 47 | Bulk, Bearing ring (10 pcs) | | | 96538795 1 | pcs |
| 49 | Bulk, Impeller cpl. (5 pcs) | | | 98394288 3 | pcs |
| 49c | Bulk, Wear ring (10 pcs) | | | 96547340 | |
| + 49 | <u> </u> | | | 98394449 3 | |
| | Impeller cpl. | | | | pcs |
| + 51 | Shaft, spline, cpl. | | | 98368628 1 | pcs |
| 55 | Outer sleeve | | | 98812634 1 | pcs |
| 56 | Base plate | | | 98481136 1 | pcs |
| 60 | Bulk, Spring (20 pcs) | | | 96538963 4 | pcs |
| 64d | Bulk, Spacing bush (20 pcs) | | | 96538947 1 | pcs |
| 64c | Bulk, Spacing pipe (5 pcs) | | Length (mm): 12.7 | 97980241 1 | pcs |
| 64a | Bulk, Spacing pipe (10 pcs) | | Internal diameter: 17,5 | 98417487 1 | pcs |
| | | | Length (mm): 17 | | |
| 64 | Bulk, Spacing pipe (20 pcs) | | Length (mm): 43.6 | 96535107 1 | pcs |
| 66 | Bulk, Wedge lock washer (10 pcs) | | | 96536157 1 | рс |
| 67 | Bulk, Lock nut (10 pcs) | | Thread: M8 | 98277008 1 | pcs |
| 69 | Bulk, Spacing bush (20 pcs) | | | 96538949 1 | pcs |
| 76a | Bulk, Rivet (100 pcs) | | | 96620489 1 | pcs |
| 105 | Bulk, Shaft seal (11 pcs) | | Material type: HQQE | 96538914 1 | pcs |
| 105 | | | | | |