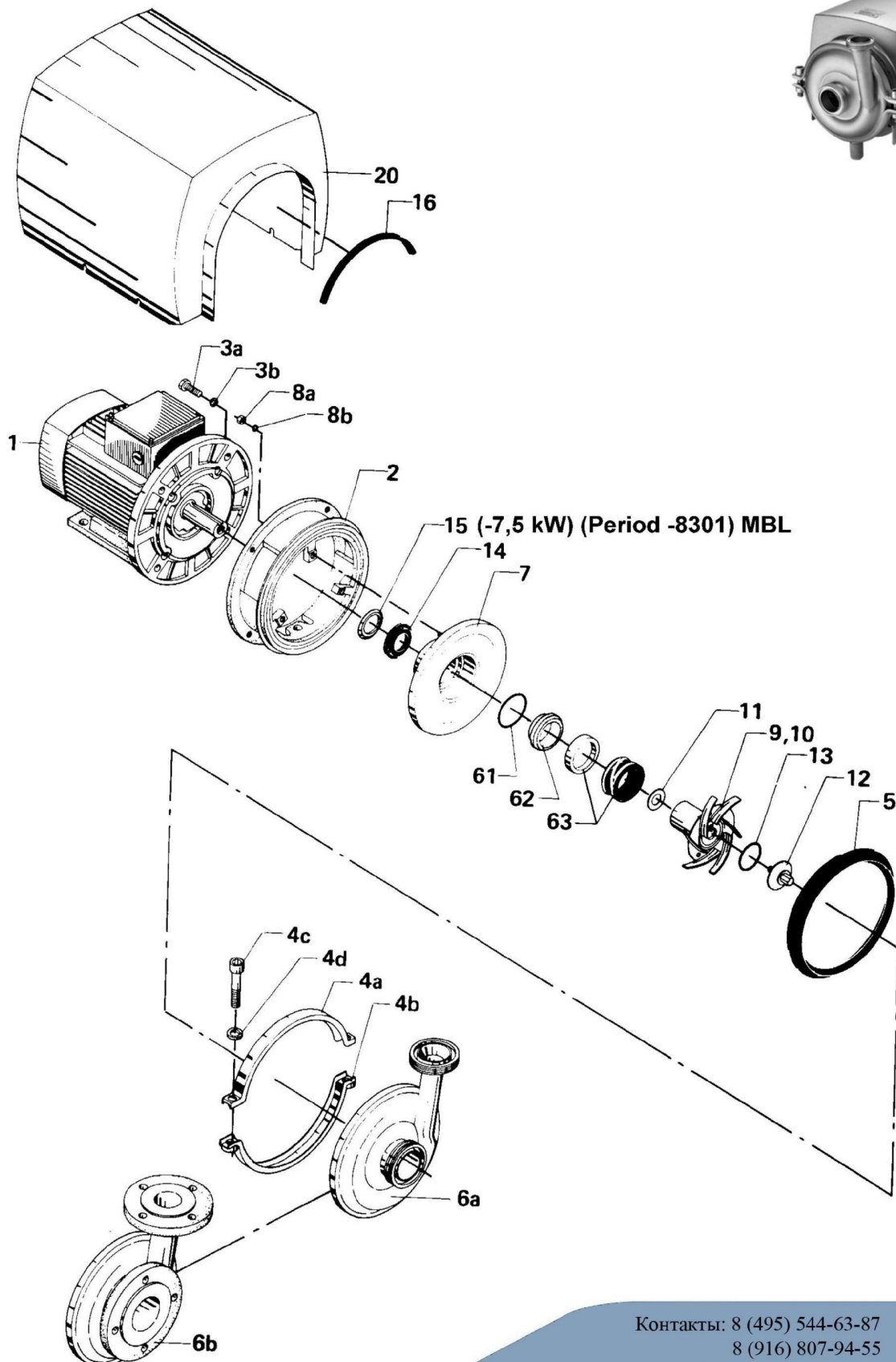


Centrifugal Pump – Single Shaft Seal Type ALC-3



**Centrifugal Pump – Single Shaft Seal
 Type ALC-3**



Pos.	Qty.	Denomination	Motors: 3000 r/min, 3-phase AC, 50 Hz						
			5.5 kW	7.5 kW	11 kW	15 kW	18.5 kW	22 kW	
1	1	M2AA motor, 380-420/660 V (Period 9310-)	9612-4028-15	9612-4028-30					
	1	M2AA motor, 220-240/380-420 V ... (Period 9310-)	9612-4028-17	9612-4028-32					
	1	MBT motor, 380-420/660 V (*Period -9310 not available anymore)	*31801-1865-3	*31801-1866-3	31801-0122-3	31801-1194-3	9612-3454-14	9612-3454-16	
	1	MBT motor, 220-240/380-420 V (*Period -9310 not available anymore)	*31801-1865-1	*31801-1866-1	31801-0122-1	31801-1194-1	9612-3454-13	9612-3454-15	
2	1	Adaptor	31460-0034-1	31460-0034-1	31460-0004-1	31460-0004-1	31460-0004-1	31460-0004-1	
3a	4	Screw	9611-99-1825	9611-99-1825	9611-99-1826	9611-99-1826	9611-99-1826	31460-1338-1	
3b	4	Spring washer	9611-99-0676	9611-99-0676	9611-99-1886	9611-99-1886	9611-99-1886	9611-99-1886	
4a	1	Clamp, upper half	31460-0396-1	31460-0396-1	31460-0396-1	31460-0396-1	31460-0396-1	31460-0396-1	
4b	1	Clamp, lower half	31460-0395-1	31460-0395-1	31460-0395-1	31460-0395-1	31460-0395-1	31460-0395-1	
4c	2	Screw	9611-99-1827	9611-99-1827	9611-99-1827	9611-99-1827	9611-99-1827	9611-99-1827	
4d	2	Washer	31460-0101-1	31460-0101-1	31460-0101-1	31460-0101-1	31460-0101-1	31460-0101-1	
5	Δ1	Joint ring, EPDM (Standard)	31460-0009-1	31460-0009-1	31460-0009-1	31460-0009-1	31460-0009-1	31460-0009-1	
	1	Joint ring, FPM	31460-0009-3	31460-0009-3	31460-0009-3	31460-0009-3	31460-0009-3	31460-0009-3	
6a	1	Pump casing with sanitary fittings (Standard) 101.6 mm inlet/76 mm outlet							
		ISO male	31460-0046-1	31460-0046-1	31460-0046-1	31460-0046-1	31460-0046-1	31460-0046-1	
		SMS	31460-0046-2	31460-0046-2	31460-0046-2	31460-0046-2	31460-0046-2	31460-0046-2	
		DIN	31460-0046-3	31460-0046-3	31460-0046-3	31460-0046-3	31460-0046-3	31460-0046-3	
		ISO clamp	31460-0046-4	31460-0046-4	31460-0046-4	31460-0046-4	31460-0046-4	31460-0046-4	
		BS	31460-0046-5	31460-0046-5	31460-0046-5	31460-0046-5	31460-0046-5	31460-0046-5	
6b	1	Pump casing with flanges DN 100 inlet/DN 80 outlet	31460-0325-1	31460-0325-1	31460-0325-1	31460-0325-1	31460-0325-1	31460-0325-1	
7	1	Back plate	31460-0362-1	31460-0362-1	31460-0362-1	31460-0362-1	31460-0362-1	31460-0362-1	
8a	3	Nut	221803-28	221803-28	221803-28	221803-28	221803-28	221803-28	
8b	3	Spring washer	223107-25	223107-25	223107-25	223107-25	223107-25	223107-25	
9*	1	Impeller, diameter 166 mm	31460-0364-1	31460-0364-1	31460-0365-1	31460-0365-1	31460-0365-1	31460-0365-1	
	1	Impeller, diameter 195 mm			31460-0366-1	31460-0366-1	31460-0366-1	31460-0366-1	
10	1	Key (Inside the impeller) (Is included in pos. 9)	31460-0063-1	31460-0063-1	31460-0013-1	31460-0013-1	31460-0013-1	31460-0052-1	
11	1-2	Shim 0.1 mm	31460-0012-3	31460-0012-3	31460-0012-4	31460-0012-4	31460-0012-4	31460-0012-5	
	2-3	Shim 0.5 mm	31460-0011-3	31460-0011-3	31460-0011-4	31460-0011-4	31460-0011-4	31460-0011-5	
12	1	Impeller screw	31460-0010-3	31460-0010-3	31460-0010-1	31460-0010-1	31460-0010-1	31460-0053-1	
	1	Impeller screw for MBT 132 motor (Period -9310)	31460-0010-4	31460-0010-4					
13Δ	1	O-ring, EPDM (Standard)	990014-05	990014-05	990014-05	990014-05	990014-05	990014-08	
	1	O-ring, FPM	990014-06	990014-06	990014-06	990014-06	990014-06	990014-09	
14	1	Thrower	31460-0375-3	31460-0375-3	31460-0375-2	31460-0375-2	31460-0375-2	31460-0375-1	
15	1	Seal ring (Period to 8301)	31801-2476-3	31801-2476-3					
16	1	Edge list (Included in pos. 20)							
20	1	Shroud	31460-0189-1	31460-0189-1	31460-0190-1	31460-0190-1	31460-0190-1	31460-1322-1	

* If reduced impeller diameter, please state diameter.

Accessories (Delivered with the pump)

1	Key for hexagonal socket screw	66884
1	Impeller tool	31460-0050-1

**Centrifugal Pump – Single Shaft Seal
 Type ALC-3**

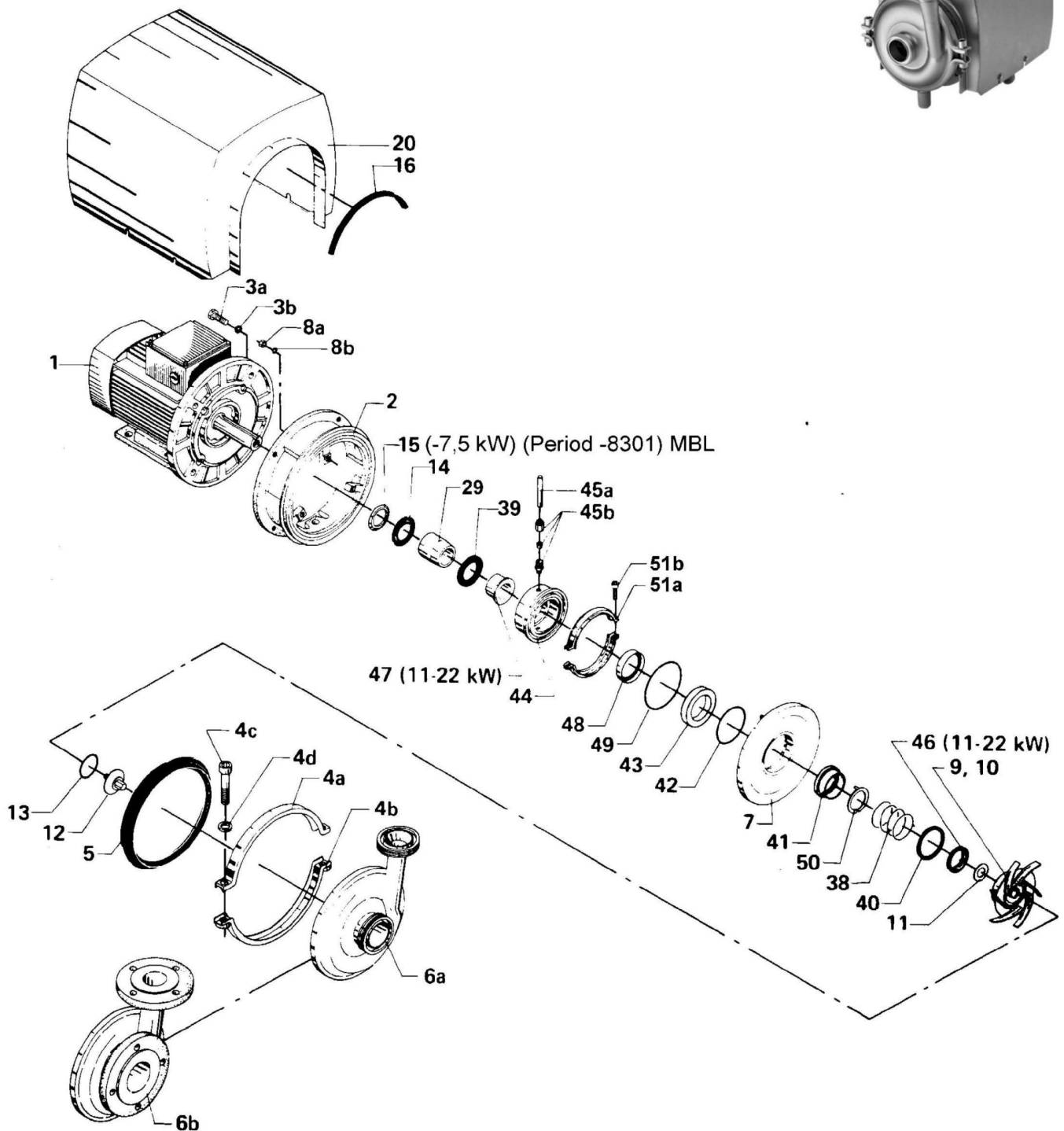


Serial Nos. 31460-3500 and higher - D-seal

Pos.	Qty.	Denomination	5.5 -18.5 kW	22 kW
Standard				
Δ	1	Shaft seal, complete, EPDM silicon carbide/carbon	31801-2469-2	31801-2470-2
61	1	O-ring, EPDM	31801-2487-2	31801-2488-2
62	1	Stationary seal ring, carbon	31460-0379-1	31460-0381-1
63	1	Rotating seal ring, EPDM / silicon carbide	31460-0272-6	31460-0273-6
Alternatives				
Δ	1	Shaft seal, complete, FPM silicone carbide/carbon	31801-2469-1	31801-2470-1
61	1	O-ring, FPM	31801-2487-1	31801-2488-1
62	1	Stationary seal ring, carbon	31460-0379-1	31460-0381-1
63	1	Rotating seal ring, FPM / silicon carbide	31460-0272-5	31460-0273-5
	1	Shaft seal, complete, FPM tungsten carbide	31801-2469-3	31801-2470-3
61	1	O-ring, FPM	31801-2487-1	31801-2488-1
62	1	Stationary seal ring, tungsten carbide	31460-0379-3	31460-0381-3
63	1	Rotating seal ring, FPM/tungsten carbide	31460-0272-3	31460-0273-3
	1	Shaft seal, complete, EPDM tungsten carbide	31801-2469-4	31801-2470-4
61	1	O-ring, EPDM	31801-2487-2	31801-2488-2
62	1	Stationary seal ring, tungsten carbide	31460-0379-3	31460-0381-3
63	1	Rotating seal ring, EPDM/tungsten carbide	31460-0272-4	31460-0273-4
	1	Shaft seal, complete, FPM silicon carbide/silicon carbide	31801-2469-5	31801-2470-5
61	1	O-ring, FPM	31801-2487-1	31801-2488-1
62	1	Stationary seal ring, silicon carbide	31460-0379-2	31460-0381-2
63	1	Rotating seal ring, FPM/silicon carbide	31460-0272-5	31460-0273-5
60	1	Shaft seal, complete, EPDM silicon carbide/silicone carbide	31801-2469-6	31801-2470-6
61	1	O-ring, EPDM	31801-2487-2	31801-2488-2
62	1	Stationary seal ring, silicon carbide	31460-0379-2	31460-0381-2
63	1	Rotating seal ring, EPDM/silicon carbide	31460-0272-6	31460-0273-6
Δ		Service kit, EPDM sic/carbon	9611-92-2056	9611-92-2057
Δ		Service kit, FPM sic/carbon	9611-92-2058	9611-92-2059

Parts marked with Δ are included in the **service kit**.

**Centrifugal Pump – Flushed Shaft Seal
 Type ALC-3**



**Centrifugal Pump – Flushed Shaft Seal
Type ALC-3**



Pos.	Qty.	Denomination	Motors: 3000 r/min, 3-phase AC, 50 Hz					18.5 kW	22 kW
			5.5 kW	7.5 kW	11 kW	15 kW	15 kW		
1	1	M2AA motor, 380-420/660 V (Period 9310-)	9612-4028-15	9612-4028-30					
	1	M2AA motor, 220-240/380-420 V ... (Period 9310-)	9612-4028-17	9612-4028-32					
	1	MBT motor, 380-420/660 V (*Period -9310 not available anymore)	*31801-1865-3	*31801-1866-3	31801-0122-3	31801-1194-3	9612-3454-14	9612-3454-16	
	1	MBT motor, 220-240/380-420 V (*Period -9310 not available anymore)	*31801-1865-1	*31801-1866-1	31801-0122-1	31801-1194-1	9612-3454-13	9612-3454-15	
2	1	Adaptor	31460-0034-1	31460-0034-1	31460-0004-1	31460-0004-1	31460-0004-1	31460-0004-1	
3a	4	Screw	9611-99-1825	9611-99-1825	9611-99-1826	9611-99-1826	9611-99-1826	31460-1338-1	
3b	4	Spring washer	9611-99-0676	9611-99-0676	9611-99-1886	9611-99-1886	9611-99-1886	9611-99-1886	
4a	1	Clamp, upper half	31460-0396-1	31460-0396-1	31460-0396-1	31460-0396-1	31460-0396-1	31460-0396-1	
4b	1	Clamp, lower half	31460-0395-1	31460-0395-1	31460-0395-1	31460-0395-1	31460-0395-1	31460-0395-1	
4c	2	Screw	9611-99-1827	9611-99-1827	9611-99-1827	9611-99-1827	9611-99-1827	9611-99-1827	
4d	2	Washer	31460-0101-1	31460-0101-1	31460-0101-1	31460-0101-1	31460-0101-1	31460-0101-1	
5	Δ1	Joint ring, EPDM (Standard)	31460-0009-1	31460-0009-1	31460-0009-1	31460-0009-1	31460-0009-1	31460-0009-1	
	1	Joint ring, NBR	31460-0009-2	31460-0009-2	31460-0009-2	31460-0009-2	31460-0009-2	31460-0009-2	
	1	Joint ring, FPM	31460-0009-3	31460-0009-3	31460-0009-3	31460-0009-3	31460-0009-3	31460-0009-3	
6a	1	Pump casing with sanitary fittings (Standard) 101.6 mm inlet/76 mm outlet							
		ISO male	31460-0046-1	31460-0046-1	31460-0046-1	31460-0046-1	31460-0046-1	31460-0046-1	
		SMS	31460-0046-2	31460-0046-2	31460-0046-2	31460-0046-2	31460-0046-2	31460-0046-2	
		DIN	31460-0046-3	31460-0046-3	31460-0046-3	31460-0046-3	31460-0046-3	31460-0046-3	
		ISO clamp	31460-0046-4	31460-0046-4	31460-0046-4	31460-0046-4	31460-0046-4	31460-0046-4	
		BS	31460-0046-5	31460-0046-5	31460-0046-5	31460-0046-5	31460-0046-5	31460-0046-5	
6b	1	Pump casing with flanges (Standard) DN 100 inlet/DN 80 outlet	31460-0325-1	31460-0325-1	31460-0325-1	31460-0325-1	31460-0325-1	31460-0325-1	
7	1	Back plate	31460-0058-1	31460-0058-1	31460-0006-1	31460-0006-1	31460-0006-1	31460-0006-1	
8a	3	Nut	221803-28	221803-28	221803-28	221803-28	221803-28	221803-28	
8b	3	Spring washer	223107-25	223107-25	223107-25	223107-25	223107-25	223107-25	
9*	1	Impeller, diameter 166 mm	31460-0077-1	31460-0077-1	31460-0005-1	31460-0005-1	31460-0005-1	31460-0005-1	
	1	Impeller, diameter 195 mm			31460-0039-1	31460-0039-1	31460-0039-1	31460-0040-1	
10	1	Key (Inside the impeller) (Is included in pos. 9)	31460-0063-1	31460-0063-1	31460-0013-1	31460-0013-1	31460-0013-1	31460-0052-1	
11	1-2	Shim 0.1 mm	31460-0012-3	31460-0012-3	31460-0012-4	31460-0012-4	31460-0012-4	31460-0012-5	
	2-3	Shim 0.5 mm	31460-0011-3	31460-0011-3	31460-0011-4	31460-0011-4	31460-0011-4	31460-0011-5	
12	1	Impeller screw	31460-0010-3	31460-0010-3	31460-0010-1	31460-0010-1	31460-0010-1	31460-0053-1	
	1	Impeller screw for MBT 132 motor (Period -9210)	31460-0010-4	31460-0010-4					
13A	1	O-ring, EPDM (Standard)	990014-05	990014-05	990014-05	990014-05	990014-05	990014-08	
	1	O-ring, NBR	990014-07	990014-07	990014-07	990014-07	990014-07	223406-64	
	1	O-ring, FPM	990014-06	990014-06	990014-06	990014-06	990014-06	990014-09	
14	1	Thrower	31460-0084-1	31460-0084-1	31460-0017-4	31460-0017-4	31460-0017-4	31460-0017-5	
15	1	Seal ring (Period to 8301)	31801-2476-3	31801-2476-3					
16	1	Edge list (Included in pos. 20)							
20	1	Shroud	31460-0189-1	31460-0189-1	31460-0190-1	31460-0190-1	31460-0190-1	31460-1322-1	

* If reduced impeller diameter, please state diameter.

Accessories (Delivered with the pump)

1	Key for hexagonal socket screw	66884
1	Impeller tool	31460-0050-1

**Centrifugal Pump – Flushed Shaft Seal
 Type ALC-3**



Pos.	Qty.	Denomination	5.5-7.5 kW	11-18.5 kW	22 kW (Period -9203)	22 kW (Period 9203-)
Parts for Flushed Shaft Seal						
29	1	Shaft sleeve, back	31460-0223-1	31460-0225-1	31460-0225-2	31460-1340-1
51a+b	1	Clamps and screws	31320-0027-2	31320-0027-2	31320-0027-2	31320-0027-2
		(Period 9209-)				
51a	2	Clamp half (Period -9209)	31320-0021-1	31320-0021-1	31320-0021-1	31320-0021-1
51b	2	Screw (Period -9209)	2210936-18	2210936-18	2210936-18	2210936-18
39A	1	Seal, EPDM (Standard)	31460-0059-1	31460-0227-1	31460-0227-4	
	1	Seal, NBR	31460-0059-2	31460-0227-2	31460-0227-5	
	1	Seal, FPM	31460-0059-3	31460-0227-3	31460-0227-6	
	1	Seal, PTFE				31460-1339-1
44	1	Seal housing	31460-0222-1	31460-0222-1	31460-0222-1	31460-0222-1
45a	2	Flushing tube	31439-0122-5	31439-0122-5	31439-0122-5	31439-0122-5
45b	2	Fitting	42368	42368	42368	42368
46A	1	Seal, EPDM (Standard)		31460-0014-1	31460-0055-1	31460-0055-1
	1	Seal, NBR		31460-0014-2	31460-0055-2	31460-0055-2
	1	Seal, FPM		31460-0014-3	31460-0055-3	31460-0055-3
47	1	Shaft sleeve, front		31460-0226-1	31460-0226-2	31460-1341-1

Flushed Shaft Seal 5.5-22 kW			EPDM (Standard)	NBR	FPM
Δ	1	Shaft seal, complete	31460-0268-1	31460-0268-2	31460-0268-3
38	1	Spring	31460-0199-1	31460-0199-1	31460-0199-1
40	1	O-ring	990051-02	990051-01	990051-03
41	1	*Rotating seal ring	31460-0028-1	31460-0028-1	31460-0028-1
42	1	O-ring	990014-11	990014-10	990014-12
43	1	Stationary seal ring	31460-0022-4	31460-0022-4	31460-0022-4
48	1	Lip seal	31446-0088-2	31446-0088-2	31446-0088-2
49	1	O-ring	260104-25	260104-25	260104-25
50	1	Drive washer	31460-0198-1	31460-0198-1	31460-0198-1
Alternative					
41*	1	Rotating seal ring,	31460-0028-2	31460-0028-2	31460-0028-2
		silicone carbide			
Δ		Service kit, EPDM.	9611-92-2060	9611-92-2061	9611-92-2062
Δ		Service kit, NBR.	9611-92-2064	9611-92-2065	9611-92-2066
Δ		Service kit, FPM.	9611-92-2068	9611-92-2069	9611-92-2070

Parts marked with Δ are included in the **service kit**.

**Centrifugal Pump
 Type ALC-3**

Legs

Pos.	Qty.	Denomination	(Period 8606-) 5.5-7.5 kW	(Period 8701-) 11-18.5 kW	22 kW
Legs					
1	2	Screw	9611-99-1834	9611-99-1834	
2	5	Washer	9611-99-0706	9611-99-0706	
3	2	Screw (Period 9310-)	9611-85-072-1		
3a	2	Nut (Period 9310-)	9611-99-0587		
3	2	Screw, back (Period -9310)	9611-99-1736	9611-99-1736	
4	4	Bracket (pump w/shroud)	31460-0019-1	31460-0019-1	
5	4	Screw (pump w/shroud)	9611-99-1824	9611-99-1824	
6*	5	Spring washer (pump w/shroud)	9611-99-0676	9611-99-0676	
7	2	Nut	9611-99-0587	9611-99-0587	
8	6	Nut	9611-99-1829	9611-99-1829	
9	3	Washer	31460-0104-1	31460-0104-1	
10	2	Back leg	31460-1248-5		
11	3	Leg		31460-1248-1	
11	1	Front leg	31460-1248-6		
12	1	Screw, front	9611-99-1736	9611-99-1833	
13	3	Screw			31460-0087-1
14	3	Washer			9611-99-0706
14a	2	Washer			9611-99-0706
15	2	Washer			31460-0051-1
16	3	Spring washer			9611-99-0676
16a	2	Spring washer			9611-99-0676
17	3	Nut			9611-99-0587
17a	2	Nut			9611-99-0587
18	3	Sleeve nut			31460-0109-1
19	2	Back leg			31460-0106-5
20	1	Front leg			31460-0106-1
21	1	Washer			31460-0110-1
22	4	Screw (pump w/shroud)			9611-99-1824
26	2	Screw			9611-99-1834
27	4	Bracket (pump w/shroud)			31460-0019-1
28	4	Washer (pump w/shroud)	9611-99-1831	9611-99-1831	9611-99-1831

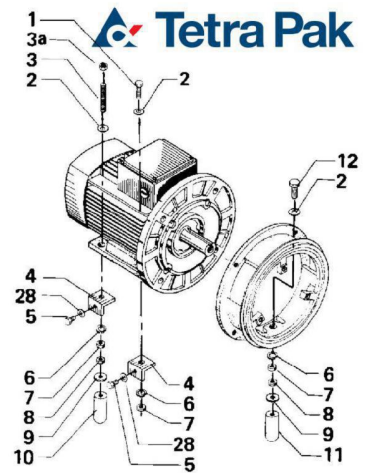
Older legs

Pos.	Qty.	Denomination	(Period -8606) 5.5-7.5 kW	(Period -8701) 11-18.5 kW
Legs				
9	4	Washer	(4-legs) 31460-0104-1	(3-legs)
13	4	Screw	9611-99-1834	
13	3	Screw		31460-0087-1
14*	3(4)	Washer	9611-99-0706	9611-99-0706
15	2	Washer, back leg		31460-0051-1
16*	3(4)	Spring washer	9611-99-0676	9611-99-0676
17*	3(4)	Nut	9611-99-0587	9611-99-0587
18	3	Sleeve nut		31460-0109-1
19**	2	Back leg		31460-0106-4
20**	1	Front leg		31460-0106-1
21	1	Washer, front leg		31460-0110-1
22	4	Screw (pump w/shroud)	9611-99-1824	9611-99-1824
23	2	Leg bracket	31460-0232-1	
24	4	Leg	31460-0241-5	
25	4	Nut	990092-01	
26*	2(4)	Screw (pump w/shroud)	9611-99-1834	9611-99-1834
27	4	Bracket (pump w/shroud)		31460-0019-1
28	4	Washer (pump w/shroud)	9611-99-1831	9611-99-1831

* Number in brackets for 5.5-7.5 kW

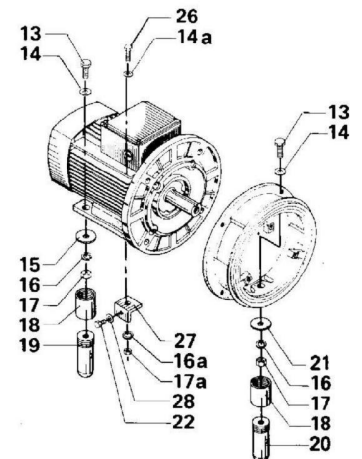
** Pos. 19 can be replaced by 9611-92-2040, complete plast leg.

** Pos. 20 can be replaced by 9611-92-2041, complete plast leg.

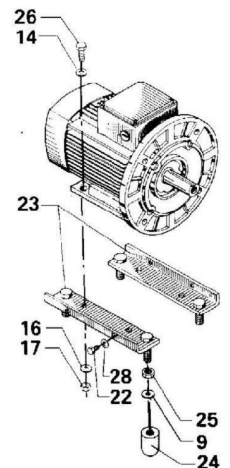


5.5 - 7.5 kW (Period 8606-)
 11 - 18.5 kW (Period 8701-)

Older legs



22 kW (for both old and new legs)
 11 - 18.5 kW (Period - 8701)



5.5 - 7.5 kW (Period - 8606)