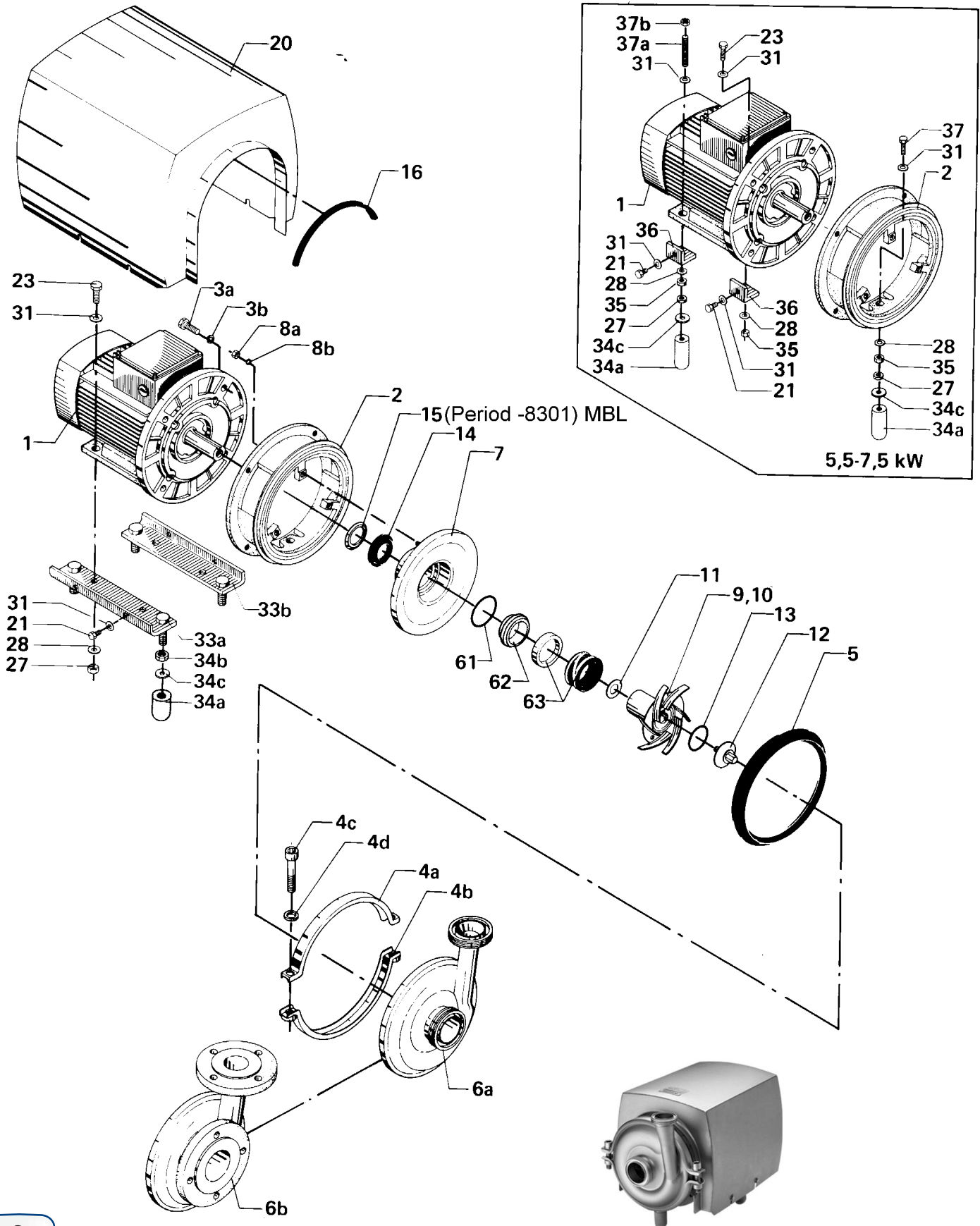


**Centrifugal Pump – Single Shaft Seal
Type ALC-1**



Centrifugal Pump – Single Shaft Seal Type ALC-1



Pos.	Qty.	Denomination	Motors: 3000 r/min, 3-phase AC, 50 Hz					
			1.5 kW	2.2 kW	3 kW	4 kW	5.5 kW	7.5 kW
1	1	M2AA motor, 220-240/380-420 V ... (Period 9310-)	31801-1982-1	31801-1983-1	31801-1984-1	9612-4028-07	9612-4028-15	9612-4028-30
	1	M2AA motor, 380-420/660 V (Period 9310-)	31801-1982-2	31801-1983-2	31801-1984-2	9612-4028-09	9612-4028-17	9612-4028-32
	1	MBT motor, 220-240/380-420 V (*Period -9310 not available anymore)				*31801-1985-1	*31801-1865-1	*31801-1866-1
	1	MBT motor, 380-420/660 V (*Period -9310 not available anymore)				*31801-1985-3	*31801-1865-3	*31801-1866-3
2	1	Adaptor	31460-0216-1	31460-0216-1	31460-0127-1	31460-0127-1	31460-0126-1	31460-0126-1
3a	4	Screw	9611-99-1823	9611-99-1823	9611-99-1217	9611-99-1217	9611-99-1825	9611-99-1825
3b	4	Spring washer	9611-99-1887	9611-99-1887	9611-99-0676	9611-99-0676	9611-99-0676	9611-99-0676
4a	1	Clamp, upper half	31460-0214-1	31460-0214-1	31460-0214-1	31460-0214-1	31460-0214-1	31460-0214-1
4b	1	Clamp, lower half	31460-0213-1	31460-0213-1	31460-0213-1	31460-0213-1	31460-0213-1	31460-0213-1
4c	2	Screw	9611-99-1889	9611-99-1889	9611-99-1889	9611-99-1889	9611-99-1889	9611-99-1889
4d	2	Washer	31460-0101-1	31460-0101-1	31460-0101-1	31460-0101-1	31460-0101-1	31460-0101-1
5	1	Joint ring, EPDM (Standard)	31460-0124-1	31460-0124-1	31460-0124-1	31460-0124-1	31460-0124-1	31460-0124-1
	1	Joint ring, FPM	31460-0124-3	31460-0124-3	31460-0124-3	31460-0124-3	31460-0124-3	31460-0124-3
6a	1	Pump casing with sanitary fittings 65 mm inlet/51 mm outlet						
		ISO male	31460-0400-1	31460-0400-1	31460-0400-1	31460-0400-1	31460-0400-1	31460-0400-1
		SMS	31460-0400-2	31460-0400-2	31460-0400-2	31460-0400-2	31460-0400-2	31460-0400-2
		DIN	31460-0400-3	31460-0400-3	31460-0400-3	31460-0400-3	31460-0400-3	31460-0400-3
		ISO clamp	31460-0400-4	31460-0400-4	31460-0400-4	31460-0400-4	31460-0400-4	31460-0400-4
		BS	31460-0400-5	31460-0400-5	31460-0400-5	31460-0400-5	31460-0400-5	31460-0400-5
6b	1	Pump casing with flanges DN 65 inlet/DN 50 outlet	31460-0323-2	31460-0323-2	31460-0323-2	31460-0323-2	31460-0323-2	31460-0323-2
7	1	Back plate	31460-0356-1	31460-0356-1	31460-0356-1	31460-0356-1	31460-0357-1	31460-0357-1
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 162 mm	31460-0383-1	31460-0383-1	31460-0354-1	31460-0354-1	31460-0355-1	31460-0355-1
	1	Impeller, diameter 120 mm	31460-0383-1	31460-0383-1	31460-0353-1	31460-0353-1	31460-0353-1	31460-0353-1
	1	Key (Inside the impeller) (Is included in pos 9)	31460-0139-1	31460-0139-1	31460-0139-1	31460-0139-1	31460-0063-1	31460-0063-1
11	1-2	Shim 0.1 mm	31460-0012-1	31460-0012-1	31460-0012-2	31460-0012-2	31460-0012-3	31460-0012-3
	2-3	Shim 0.5 mm	31460-0011-1	31460-0011-1	31460-0011-2	31460-0011-2	31460-0011-3	31460-0011-3
12	1	Impeller screw	31460-0385-1	31460-0385-1	31460-0140-3	31460-0140-3	31460-0140-1	31460-0140-1
	1	Impeller screw for MBT 132 motor (Period -9310)					31460-0140-3	31460-0140-3
13a	1	O-ring, EPDM (Standard)	990014-14	990014-14	990014-14	990014-14	990014-14	990014-14
	1	O-ring, FPM	260104-08	260104-08	260104-08	260104-08	260104-08	260104-08
14	1	Thrower	31460-0143-1	31460-0143-1	31460-0375-4	31460-0375-4	31460-0375-3	31460-0375-3
15	1	Seal ring (Period to 8301)	31801-2476-1	31801-2476-1	31801-2476-2	31801-2476-2	31801-2476-3	31801-2476-3
16	1	Edge list (Included in pos. 20)						

* If reduced impeller diameter, please state diameter.

Accessories (Delivered with the pump)

1	Key for hexagonal socket	66884						
1	Impeller tool	31460-0050-1						
Δ	Service kit, EPDM Sic/carbon	9611-92-2043	9611-92-2043	9611-92-2043	9611-92-2043	9611-92-2044	9611-92-2044	
Δ	Service kit, FPM Sic/carbon	9611-92-2045	9611-92-2045	9611-92-2045	9611-92-2045	9611-92-2046	9611-92-2046	

Parts marked with Δ are included in the service kit.

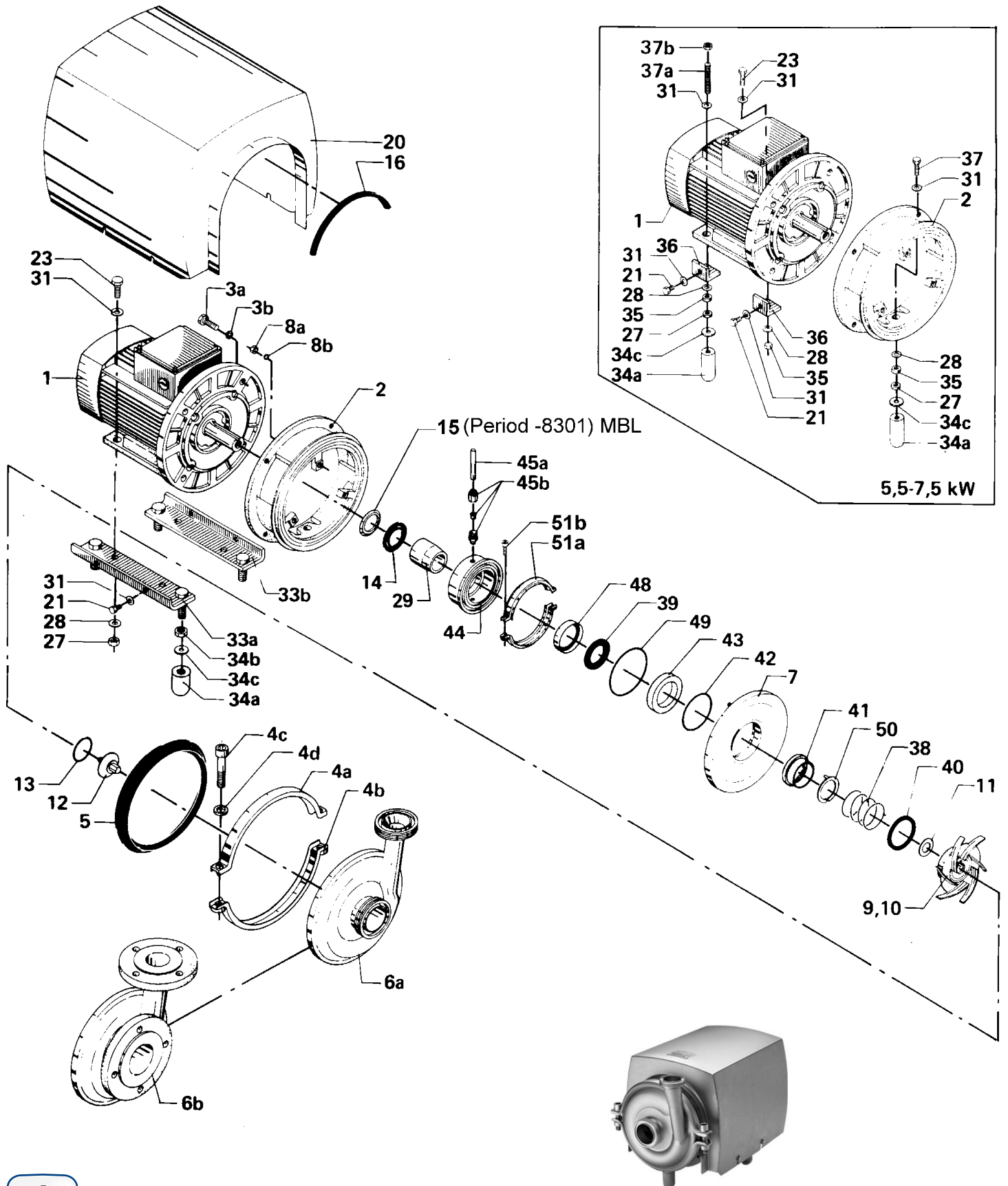
Pos.	Qty.	Denomination	1.5-4 kW		5.5-7.5 kW	
			1.5-2.2 kW	3 kW	4 kW	5-7.5 kW
Standard						
Δ	1	Shaft seal, complete, EPDM silicon carbide/carbon (Standard)	31801-2469-2		31801-2469-2	31801-2469-2
61	1	O-ring, EPDM	31801-2486-1		31801-2486-2	31801-2487-2
62	1	Stationary seal ring, carbon	31460-0377-1		31460-0379-1	31460-0379-1
63	1	Rotating seal ring, EPDM/silicon carbide	31460-0271-6		31460-0272-6	31460-0272-6
Alternatives						
Δ	1	Shaft seal, complete, FPM silicon carbide/carbon	31801-2469-1		31801-2469-1	31801-2469-1
61	1	O-ring, FPM	31801-2486-1		31801-2487-1	31801-2487-1
62	1	Stationary seal ring, carbon	31460-0377-1		31460-0379-1	31460-0379-1
63	1	Rotating seal ring, FPM/silicon carbide	31460-0271-5		31460-0272-5	31460-0272-5
	1	Shaft seal, complete, FPM tungsten carbide	31801-2469-3		31801-2469-3	31801-2469-3
61	1	O-ring, EPDM	31801-2486-2		31801-2487-2	31801-2487-2
62	1	Stationary seal ring, tungsten carbide	31460-0377-3		31460-0379-3	31460-0379-3
63	1	Rotating seal ring, EPDM/tungsten carbide	31460-0271-4		31460-0272-4	31460-0272-4
	1	Shaft seal, complete, FPM silicon carbide/silicon carbide	31801-2469-5		31801-2469-5	31801-2469-5
61	1	O-ring, FPM	31801-2486-1		31801-2487-1	31801-2487-1
62	1	Stationary seal ring, silicon carbide	31460-0377-2		31460-0379-2	31460-0379-2
63	1	Rotating seal ring, FPM/silicon carbide	31460-0271-5		31460-0272-5	31460-0272-5
	1	Shaft seal, complete, EPDM silicon carbide/silicon carbide	31801-2469-6		31801-2469-6	31801-2469-6
61	1	O-ring, EPDM	31801-2486-2		31801-2487-2	31801-2487-2
62	1	Stationary seal ring, silicon carbide	31460-0377-2		31460-0379-2	31460-0379-2
63	1	Rotating seal ring, EPDM/silicon carbide	31460-0271-6		31460-0272-6	31460-0272-6

Pos. Qty. Denomination (Period 8609-) 1.5-2.2 kW (Period 8609-) 3 kW (Period 8701-) 4 kW (Period 8606-) 5-7.5 kW

Pos.	Qty.	Denomination	1.5-2.2 kW		3 kW		4 kW		5-7.5 kW	
			1.5-2.2 kW	3 kW	4 kW	5-7.5 kW	5-7.5 kW	5-7.5 kW		
Shroud										
20	1	Shroud	31460-0186-1	31460-0187-1	31460-0187-1	31460-0187-1	31460-0187-1	31460-0188-1	31460-0188-1	
21	4	Screw	9611-99-1824	9611-99-1824	9611-99-1824	9611-99-1824	9611-99-1824	9611-99-1824	9611-99-1824	
31	4	Washer	9611-99-1831	9611-99-1831	9611-99-1831	9611-99-1831	9611-99-1831	9611-99-1831	9611-99-1831	
Legs										
23*	4(2)	Screw	9611-99-1176	9611-99-1825	9611-99-1825	9611-99-1825	9611-99-1825	9611-99-1825	9611-99-1825	9611-99-1834
27*	4(2)	Nut	9611-99-0360	9611-99-0587	9611-99-0587	9611-99-0587	9611-99-0587	9611-99-0587	9611-99-0587	9611-99-0587
28*	4(5)	Spring washer	9611-99-1888	9611-99-0676	9611-99-0676	9611-99-0676	9611-99-0676	9611-99-0676	9611-99-0676	9611-99-0676
31*	4(5)	Washer	9611-99-1831	9611-99-0706	9611-99-0706	9611-99-0706	9611-99-0706	9611-99-0706	9611-99-0706	9611-99-0706
33a	1	Leg bracket, left	31460-0258-2	31460-0258-4	31460-0258-4	31460-0258-4	31460-0258-4	31460-0258-4	31460-0258-4	
33b	1	Leg bracket, right	31460-0258-1	31460-0258-3	31460-0258-3	31460-0258-3	31460-0258-3	31460-0258-3	31460-0258-3	
34a*	4(3)	Leg	31460-1248-1	31460-1248-2	31460-1248-3	31460-1248-3	31460-1248-3	31460-1248-3	31460-1248-3	31460-1248-4
34b*	4(3)	Nut	9611-99-1829	9611-99-1829	9611-99-1829	9611-99-1829	9611-99-1829	9611-99-1829	9611-99-1829	9611-99-1829
34c*	4(3)	Washer	31460-0104-1	31460-0104-1	31460-0104-1	31460-0104-1	31460-0104-1	31460-0104-1	31460-0104-1	31460-0104-1
35	3	Nut								9611-99-0587
36	4	Bracket								31460-0019-1
37	1	Screw (Period 9310-)								9611-99-1833
	3	Screw (Period 9310-)								9611-99-1833
37a	2	Stud bolt (Period 9310-)								9611-85-072-1
37b	2	Nut (Period 9310-)								9611-99-0587

*Number in bracket for 5.5 - 7.5 kW.

**Centrifugal Pump – Flushed Shaft Seal
Type ALC-1**



Centrifugal Pump – Flushed Shaft Seal Type ALC-1



Pos.	Qty.	Denomination	Motors: 3000 r/min, 3-phase AC, 50 Hz					
			1.5 kW	2.2 kW	3 kW	4 kW	5.5 kW	7.5 kW
1	1	MZAA motor, 220-240/380-420 V (Period 9310-)				9612-4028-07	9612-4028-15	9612-4028-30
1	1	MZAA motor, 380-420/660 V (Period 9310-)				9612-4028-09	9612-4028-17	9612-4028-32
1	1	MBT motor, 220-240/380-420 V 31801-1982-1 (*Period -9310 not available anymore)	31801-1983-1	31801-1984-1		*31801-1985-1	*31801-1865-1	*31801-1866-1
1	1	MBT motor, 380-420/660 V 31801-1982-2 (*Period -9310 not available anymore)	31801-1983-2	31801-1984-2		*31801-1985-3	*31801-1865-3	*31801-1866-3
2	1	Adaptor	31460-0128-1	31460-0128-1	31460-0127-1	31460-0127-1	31460-0126-1	31460-0126-1
3a	4	Screw	9611-99-1823	9611-99-1823	9611-99-1217	9611-99-1217	9611-99-1825	9611-99-1825
3b	4	Spring washer	9611-99-1887	9611-99-1887	9611-99-0676	9611-99-0676	9611-99-0676	9611-99-0676
4a	1	Clamp, upper half	31460-0214-1	31460-0214-1	31460-0214-1	31460-0214-1	31460-0214-1	31460-0214-1
4b	1	Clamp, lower half	31460-0213-1	31460-0213-1	31460-0213-1	31460-0213-1	31460-0213-1	31460-0213-1
4c	2	Screw	9611-99-1889	9611-99-1889	9611-99-1889	9611-99-1889	9611-99-1889	9611-99-1889
4d	2	Washer	31460-0101-1	31460-0101-1	31460-0101-1	31460-0101-1	31460-0101-1	31460-0101-1
5	Δ 1	Joint ring, EPDM (Standard) ...	31460-0124-1	31460-0124-1	31460-0124-1	31460-0124-1	31460-0124-1	31460-0124-1
1	1	Joint ring, NBR	31460-0124-2	31460-0124-2	31460-0124-2	31460-0124-2	31460-0124-2	31460-0124-2
1	1	Joint ring, FPM	31460-0124-3	31460-0124-3	31460-0124-3	31460-0124-3	31460-0124-3	31460-0124-3
6a	1	Pump casing with sanitary fittings 53.5 mm inlet/51 mm outlet						
		ISO male	31460-0400-1	31460-0400-1	31460-0400-1	31460-0400-1	31460-0400-1	31460-0400-1
		SMS	31460-0400-2	31460-0400-2	31460-0400-2	31460-0400-2	31460-0400-2	31460-0400-2
		DIN	31460-0400-3	31460-0400-3	31460-0400-3	31460-0400-3	31460-0400-3	31460-0400-3
		ISO clamp	31460-0400-4	31460-0400-4	31460-0400-4	31460-0400-4	31460-0400-4	31460-0400-4
		BS	31460-0400-5	31460-0400-5	31460-0400-5	31460-0400-5	31460-0400-5	31460-0400-5
6b	1	Pump casing with flanges DN 55 inlet/DN 50 outlet	31460-0323-2	31460-0323-2	31460-0323-2	31460-0323-2	31460-0323-2	31460-0323-2
7	1	Back plate	31460-0173-3	31460-0173-3	31460-0173-3	31460-0173-3	31460-0112-1	31460-0112-1
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 162 mm	31460-0120-1	31460-0120-1	31460-0120-1	31460-0119-1	31460-0119-1	31460-0119-1
1	1	Impeller, diameter 120 mm	31460-0163-1	31460-0163-1	31460-0162-1	31460-0162-1	31460-0162-1	31460-0162-1
10	1	Key (inside the impeller) (ts included in pos 9)	31460-0139-1	31460-0139-1	31460-0139-1	31460-0139-1	31460-0063-1	31460-0063-1
11	1-2	Shim 0.1 mm	31460-0012-1	31460-0012-1	31460-0012-2	31460-0012-2	31460-0012-3	31460-0012-3
1	2-3	Shim 0.5 mm	31460-0011-1	31460-0011-1	31460-0011-2	31460-0011-2	31460-0011-3	31460-0011-3
12	1	Impeller screw	31460-0140-4	31460-0140-4	31460-0140-3	31460-0140-3	31460-0140-1	31460-0140-1
		Impeller screw for MBT 132 motor (Period -9310)						
13a	1	O-ring, EPDM (Standard)	990014-14	990014-14	990014-14	990014-14	990014-14	990014-14
1	1	O-ring, NBR	223406-61	223406-61	223406-61	223406-61	223406-61	223406-61
1	1	O-ring, FPM	260104-08	260104-08	260104-08	260104-08	260104-08	260104-08
14	1	Thrower	31460-0143-1	31460-0143-1	31460-0375-4	31460-0375-4	31460-0375-3	31460-0375-3
15	1	Seal ring (Period to 8301)	31801-2476-1	31801-2476-1	31801-2476-2	31801-2476-2	31801-2476-2	31801-2476-3
16	1	Edge list (included in pos. 20)						

* If reduced impeller diameter, please state diameter.

Accessories (Delivered with the pump)	
1	Key for hexagonal socket screw
1	Impeller tool

	Service kit, EPDM	Service kit, NBR	Service kit, FPM
Δ	9611-92-2047	9611-92-2047	9611-92-2048
Δ	9611-92-2050	9611-92-2050	9611-92-2051
Δ	9611-92-2053	9611-92-2053	9611-92-2054

Parts marked with Δ are included in the service kit.

Recommended spare parts: Service kit

Pos.	Qty.	Denomination	1.5-2.2 kW			3-4 kW			5.5-7.5 kW		
			EPDM	NBR	FPM	EPDM	NBR	FPM	EPDM	NBR	FPM
Parts for Flushed Shaft Seal											
29	1	Shaft sleeve	31460-0174-1	31460-0176-1	31460-0223-1						
51a+b	1	Clamps and screws (Period 9209-)	31320-0027-2	31320-0027-2	31320-0027-2						
51a	2	Clamp half (Period -9209)	31320-0021-1	31320-0021-1	31320-0021-1						
51b	2	Screw (Period -9209)	2210936-18	2210936-18	2210936-18						
39a	1	Seal, EPDM (Standard)	31460-0145-1	31460-0144-1	31460-0059-1						
1	1	Seal, NBR	31460-0145-2	31460-0144-2	31460-0059-2						
1	1	Seal, FPM	31460-0145-3	31460-0144-3	31460-0059-3						
44	1	Seal housing	31460-0172-1	31460-0172-1	31460-0222-1						
45a	2	Flushing tube	31439-0122-5	31439-0122-5	31439-0122-5						
45b	2	Fitting	42368	42368	42368						
Parts for Flushed Shaft Seal 1.5-4 kW											
38	1	Shaft seal, complete	31460-0169-1	31460-0169-2	31460-0169-3						
40	1	Spring	31460-0199-1	31460-0199-1	31460-0199-1						
41	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	31446-0088-1	31446-0088-1						
49	1	O-ring	260104-25	260104-25	260104-25						
50	1	Drive washer	31460-0198-1	31460-0198-1	31460-0198-1						
Parts for Flushed Shaft Seal 5.5-7.5 kW											
38	1	Shaft seal, complete	31460-0268-1	31460-0268-2	31460-0268-3						
40	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, silicone carbide	31460-0028-2	31460-0028-2	31460-0028-2						
Shroud											
20	1	Shroud	31460-0186-1	31460-0187-1	31460-0187-1	31460-0189-1					
21	4	Screw	9611-99-1824	9611-99-1824	9611-99-1824	9611-99-1824					
31	4	Washer	9611-99-1831	9611-99-1831	9611-99-1831	9611-99-1831					
Legs											
23*	4(2)	Screw	9611-99-1176	9611-99-1825	9611-99-1825	9611-99-1834					
27*	4(2)	Nut	9611-99-0360	9611-99-0587	9611-99-0587	9611-99-1829					
28*	4(5)	Spring washer	9611-99-1888	9611-99-0676	9611-99-0676	9611-99-0676					
31*	4(5)	Washer	9611-99-1831	9611-99-0706	9611-99-0706	9611-99-0706					
33a	1	Leg bracket, left	31460-0258-2	31460-0258-4	31460-0258-6	31460-0258-6					
33b	1	Leg bracket, right	31460-0258-1	31460-0258-3	31460-0258-5	31460-0258-5					
34a*	4(3)	Leg	31460-1248-1	31460-1248-2	31460-1248-3	31460-1248-4					
34b*	4(3)	Nut	9611-99-1829	9611-99-1829	9611-99-1829	9611-99-1829					
34c*	4(3)	Washer	31460-0104-1	31460-0104-1	31460-0104-1	31460-0104-1					
35	3	Nut									
36	4	Bracket									
37	1	Screw (Period 9310-)									
3	3	Screw (Period -9310)									
37a	2	Studbolt (Period 9310-)									
37b	2	Nut (Period 9310-)									

*Number in bracket for 5.5 - 7.5kW.

**Centrifugal Pump
Type ALC-1**



Older legs

Pos.	Qty.	Denomination	(Period - 8609) 1.5-2.2 kW	(Period - 8609) 3 kW	(Period - 8701) 4 kW	(Period - 8606) 5-7.5 kW
Legs						
1	4	Screw	9611-99-1825	9611-99-1825	9611-99-1825	9611-99-1834
2	4	Washer	9611-99-1831	9611-99-0706	9611-99-0706	9611-99-0706
3	2	Leg bracket				31460-0232-1
4	4	Spring washer	9611-99-1888	9611-99-0676	9611-99-0676	9611-99-0676
5	4	Nut	9611-99-0360	9611-99-0587	9611-99-0587	9611-99-0587
6	4	Leg	31460-0241-1	31460-0241-2	31460-0241-3	31460-0241-4
7	4	Nut	990092-01	990092-01	990092-01	990092-01
8	1	Leg bracket, left	31460-0231-1	31460-0231-3	31460-0231-5	
9	1	Leg bracket, right	31460-0231-2	31460-0231-4	31460-0231-6	
10	4	Washer	31460-0104-1	31460-0104-1	31460-0104-1	31460-0104-1

