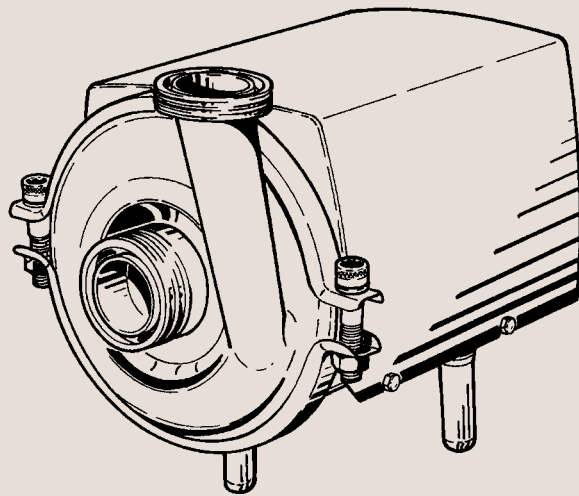




Spare Parts

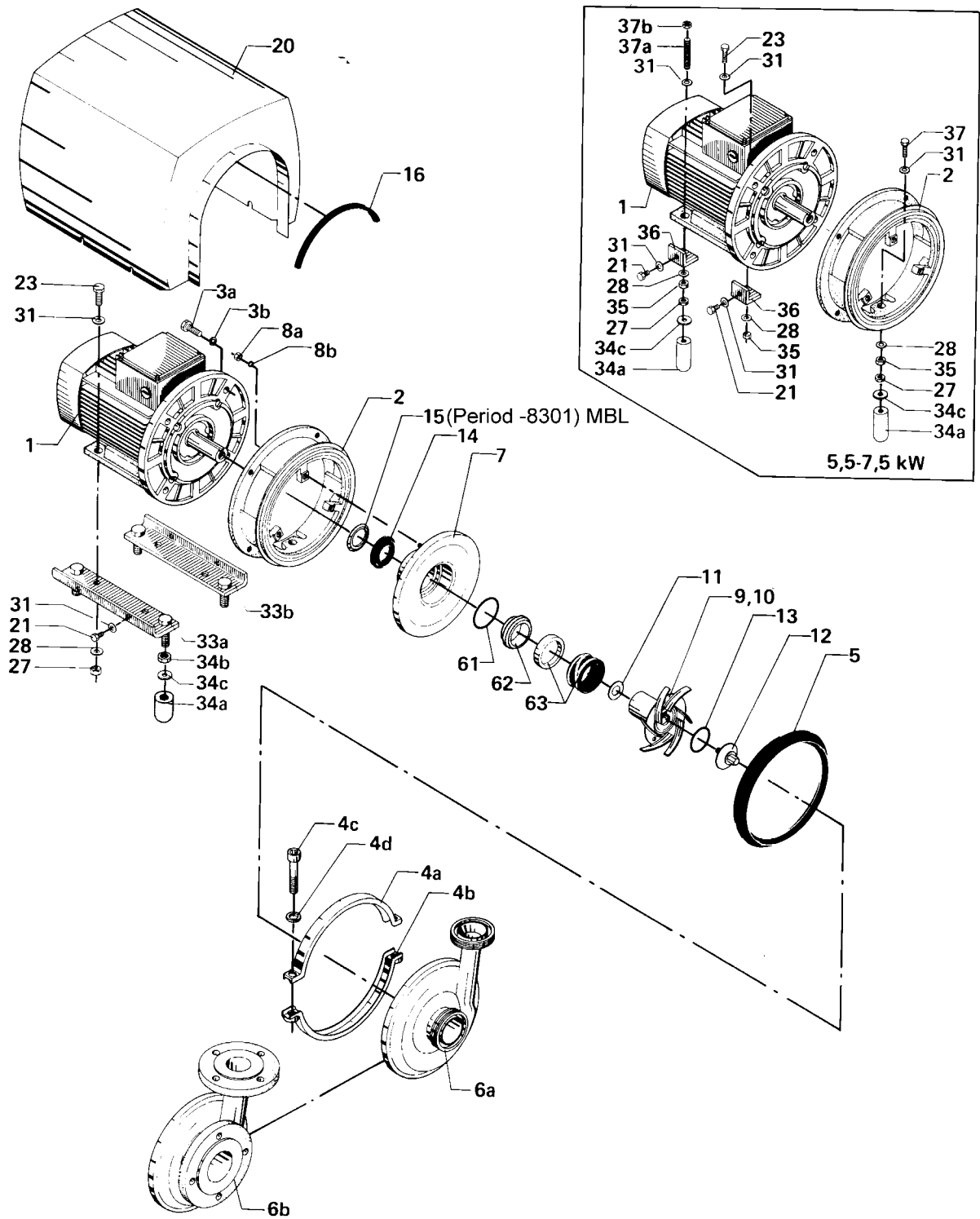
ALC Centrifugal Pump



SP70784-GB3 2002-10

Centrifugal Pump Type ALC-1

2



Centrifugal Pump Type ALC-1

Serial Nos. 31460-3500 and higher - Single seal

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
5Δ	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			31460-0354-1	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		
10	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				
13Δ	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 screw	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.

Centrifugal Pump Type ALC-1

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

Pos.	Qty.	Denomination	1.5-4 kW	5.5 -7.5 kW
Standard				
Δ	1	Shaft seal, complete, EPDM silicon carbide/carbon (Standard)	31801-2468-2	31801-2469-2
61	1	O-ring, EPDM	31801-2486-2	31801-2487-2
62	1	Stationary seal ring, carbon	31460-0377-1	31460-0379-1
63	1	Rotating seal ring, EPDM/silicon carbide	31460-0271-6	31460-0272-6

Alternatives				
Δ	1	Shaft seal, complete, FPM silicon carbide/carbone	31801-2468-1	31801-2469-1
61	1	O-ring, FPM	31801-2486-1	31801-2487-1
62	1	Stationary seal ring, carbon	31460-0377-1	31460-0379-1
63	1	Rotating seal ring, FPM/silicon carbide	31460-0271-5	31460-0272-5

Δ	1	Shaft seal, complete, FPM silicon carbide/silicon carbide	31801-2468-5	31801-2469-5
61	1	O-ring, FPM	31801-2486-1	31801-2487-1
62	1	Stationary seal ring, silicon carbide	31460-0377-2	31460-0379-2
63	1	Rotating seal ring, FPM/silicon carbide	31460-0271-5	31460-0272-5
Δ	1	Shaft seal, complete, EPDM silicon carbide/silicon carbide	31801-2468-6	31801-2469-6
61	1	O-ring, EPDM	31801-2486-2	31801-2487-2
62	1	Stationary seal ring, silicon carbide	31460-0377-2	31460-0379-2
63	1	Rotating seal ring, EPDM/silicon carbide	31460-0271-6	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
Shroud						
20	1	Shroud	31460-0186-1	31460-0187-1	31460-0187-1	31460-0188-1
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	9611-99-0587
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	
33b	1	Leg bracket, right	31460-0258-1	31460-0258-3	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	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			

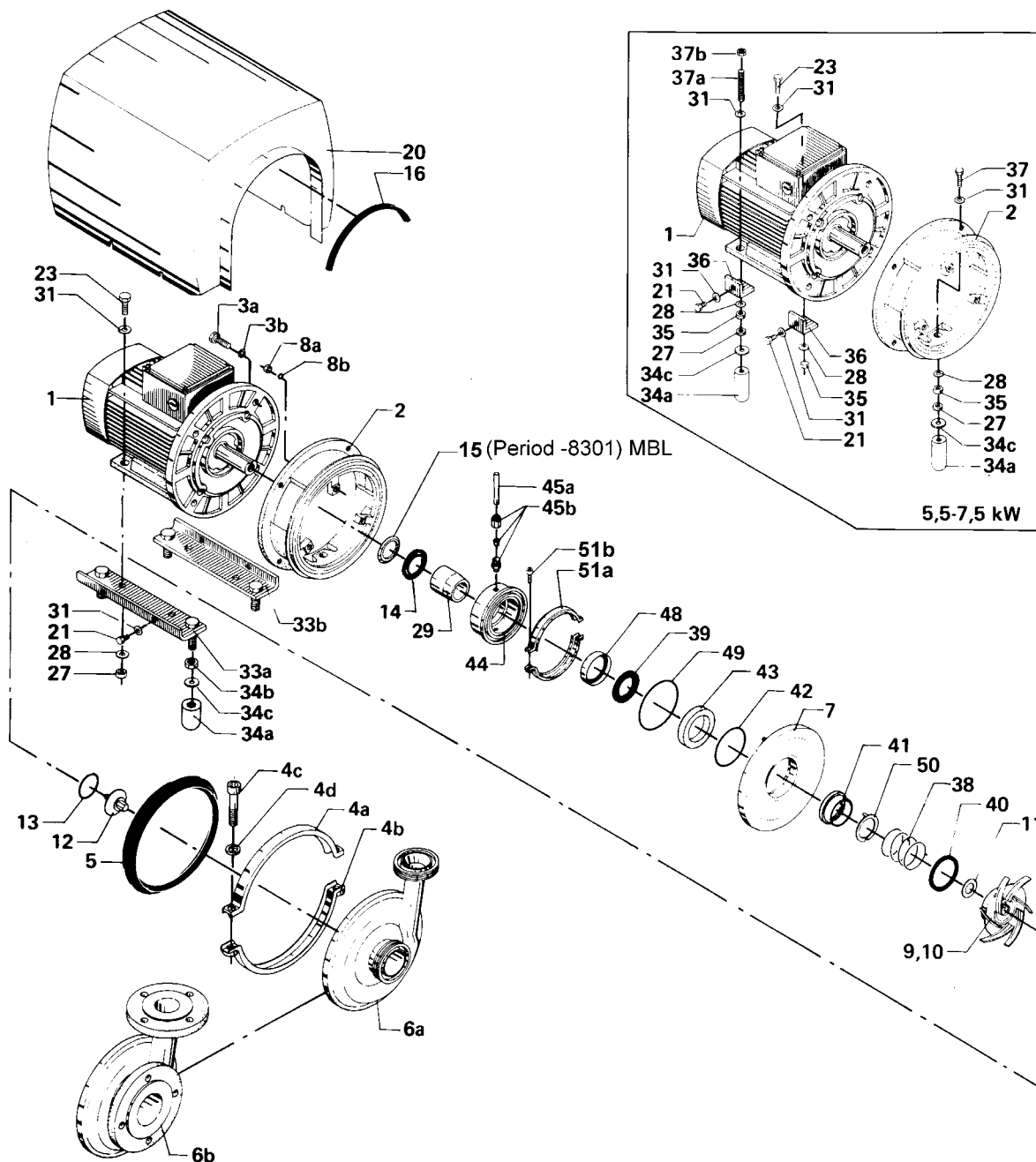
*Number in bracket for 5.5 - 7.5 kW.

Recommended spare parts: Service kit.

90052/0

Centrifugal Pump Type ALC-1

6



Centrifugal Pump Type ALC-1

Serial Nos. 31460-3500 and higher - Flushed Shaft Seal

7

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-)				9612-4028-07	9612-4028-15	9612-4028-30
	1	M2AA motor, 380-420/660 V (Period 9310-)				9612-4028-09	9612-4028-17	9612-4028-32
	1	MBT motor, 220-240/380-420 V ... (*Period -9310 not available anymore)	31801-1982-1	31801-1983-1	31801-1984-1	*31801-1985-1	*31801-1865-1	*31801-1866-1
	1	MBT motor, 380-420/660 V (*Period -9310 not available anymore)	31801-1982-2	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
5Δ	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, NBR	31460-0124-2	31460-0124-2	31460-0124-2	31460-0124-2	31460-0124-2	31460-0124-2
	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 63.5 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	31460-0323-2	31460-0323-2	31460-0323-2	31460-0323-2	31460-0323-2	31460-0323-2
		DN 65 inlet/DN 50 outlet						
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	31460-0119-1	31460-0119-1
	1	Impeller, diameter 120 mm	31460-0163-1	31460-0163-1	31460-0162-1	31460-0162-1		
10	1	Key (Inside the impeller)	31460-0139-1	31460-0139-1	31460-0139-1	31460-0139-1	31460-0063-1	31460-0063-1
		(Is included in pos 9)						
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	31460-0140-4	31460-0140-4	31460-0140-3	31460-0140-3	31460-0140-1	31460-0140-1
	1	Impeller screw for MBT 132					31460-0140-3	31460-0140-3
		motor (Period -9310)						
13Δ	1	O-ring, EPDM (Standard)	990014-14	990014-14	990014-14	990014-14	990014-14	990014-14
	1	O-ring, NBR	223406-61	223406-61	223406-61	223406-61	223406-61	223406-61
	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
	screw	
1	Impeller tool	31460-0050-1

Δ	Service kit, EPDM.	9611-92-2047	9611-92-2047	9611-92-2048	9611-92-2048	9611-92-2049	9611-92-2049
Δ	Service kit, NBR.	9611-92-2050	9611-92-2050	9611-92-2051	9611-92-2051	9611-92-2052	9611-92-2052
Δ	Service kit, FPM.	9611-92-2053	9611-92-2053	9611-92-2054	9611-92-2054	9611-92-2055	9611-92-2055

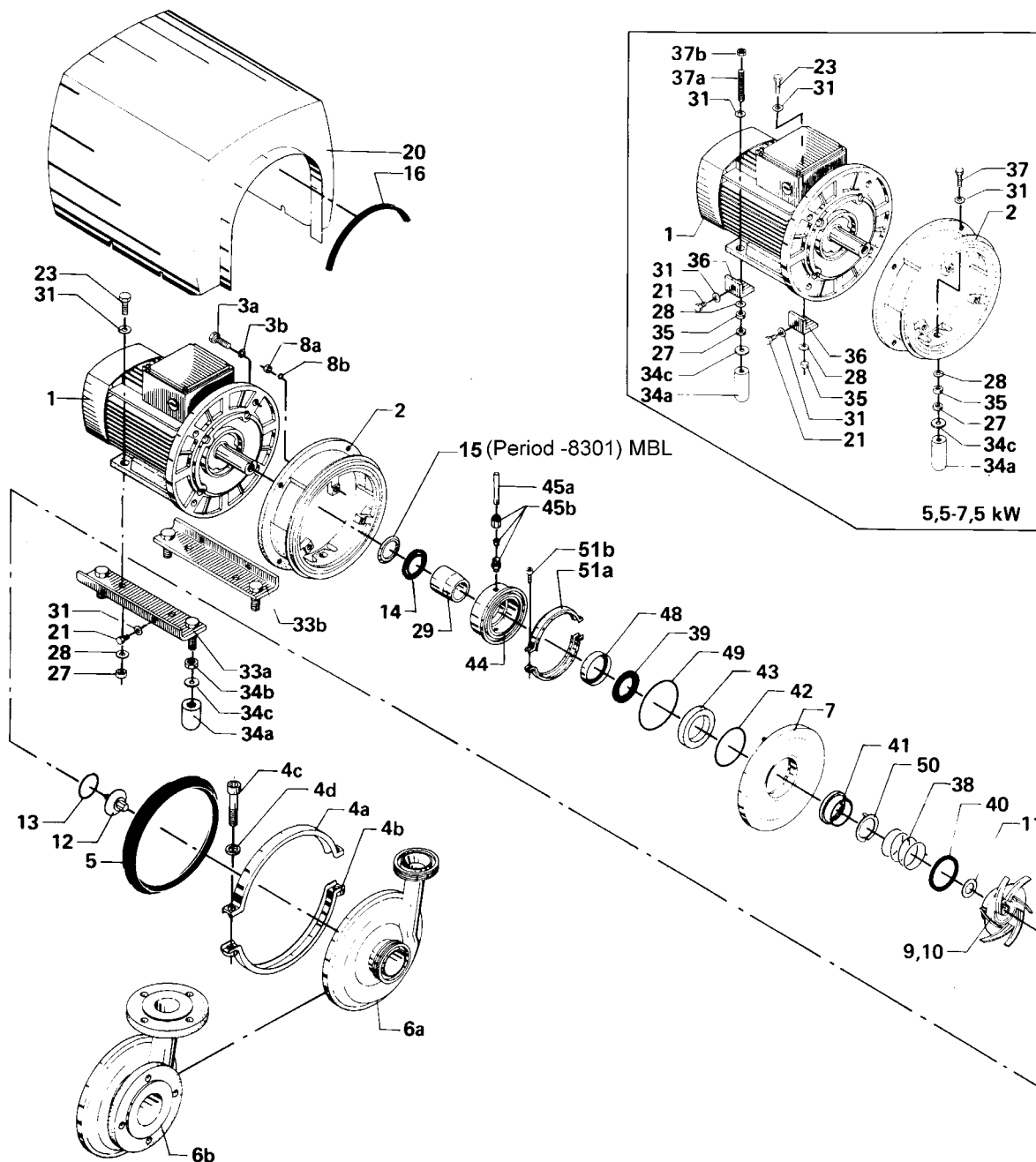
Parts marked with Δ are included in the **service kit**.
Recommended spare parts: **Service kit**.

Recommended Spare Parts: Service kits.

Centrifugal Pump Type ALC-1

(Same drawing as on page 6)

8



Centrifugal Pump Type ALC-1

Serial Nos. 31460-3500 and higher - Flushed Shaft Seal

Pos.	Qty.	Denomination	1.5-2.2 kW	3-4 kW	5.5-7.5 kW
Parts for Flushed Shaft Seal					
29	1	Shaft sleeve	31460-0174-1	31460-0176-1	31460-0223-1
51a+b	1	Clamps and screws	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
51b	2	Screw (Period -9209)	2210936-18	2210936-18	2210936-18
39Δ	1	Seal, EPDM (Standard)	31460-0145-1	31460-0144-1	31460-0059-1
	1	Seal, NBR	31460-0145-2	31460-0144-2	31460-0059-2
	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

Pos.	Qty.	Denomination	EPDM	NBR	FPM
Δ Flushed Shaft Seal 1.5-4 kW					
	1	Shaft seal, complete	31460-0169-1	31460-0169-2	31460-0169-3
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	31446-0088-1	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

Δ Flushed Shaft Seal 5.5-7.5 kW					
	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			

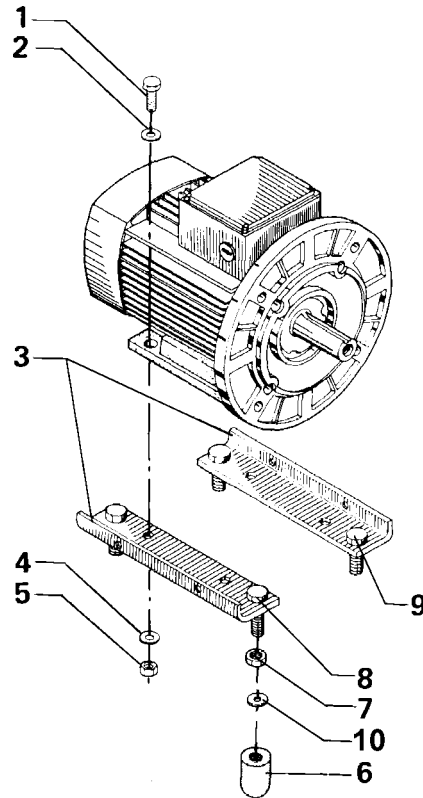
Pos.	Qty.	Denomination	(Period 8609-) 1.5-2.2 kW	(Period 8609-) 3 kW	(Period 8701-) 4 kW	(Period 8606-) 5.5 kW-7.5 kW
Shroud						
20	1	Shroud	31460-0186-1	31460-0187-1	31460-0187-1	31460-0188-1
21	4	Screw	9611-99-1824	9611-99-1824	9611-99-1824	9611-99-1824
31	4	Washer	9611-99-1831	9611-99-1831	9611-99-1831	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	
33b	1	Leg bracket, right	31460-0258-1	31460-0258-3	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				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	Studbolt (Period 9310-)				9611-85-072-1
37b	2	Nut (Period 9310-)				9611-99-0587

*Number in bracket for 5.5 - 7.5kW.

Centrifugal Pump Type ALC-1

Older legs

10



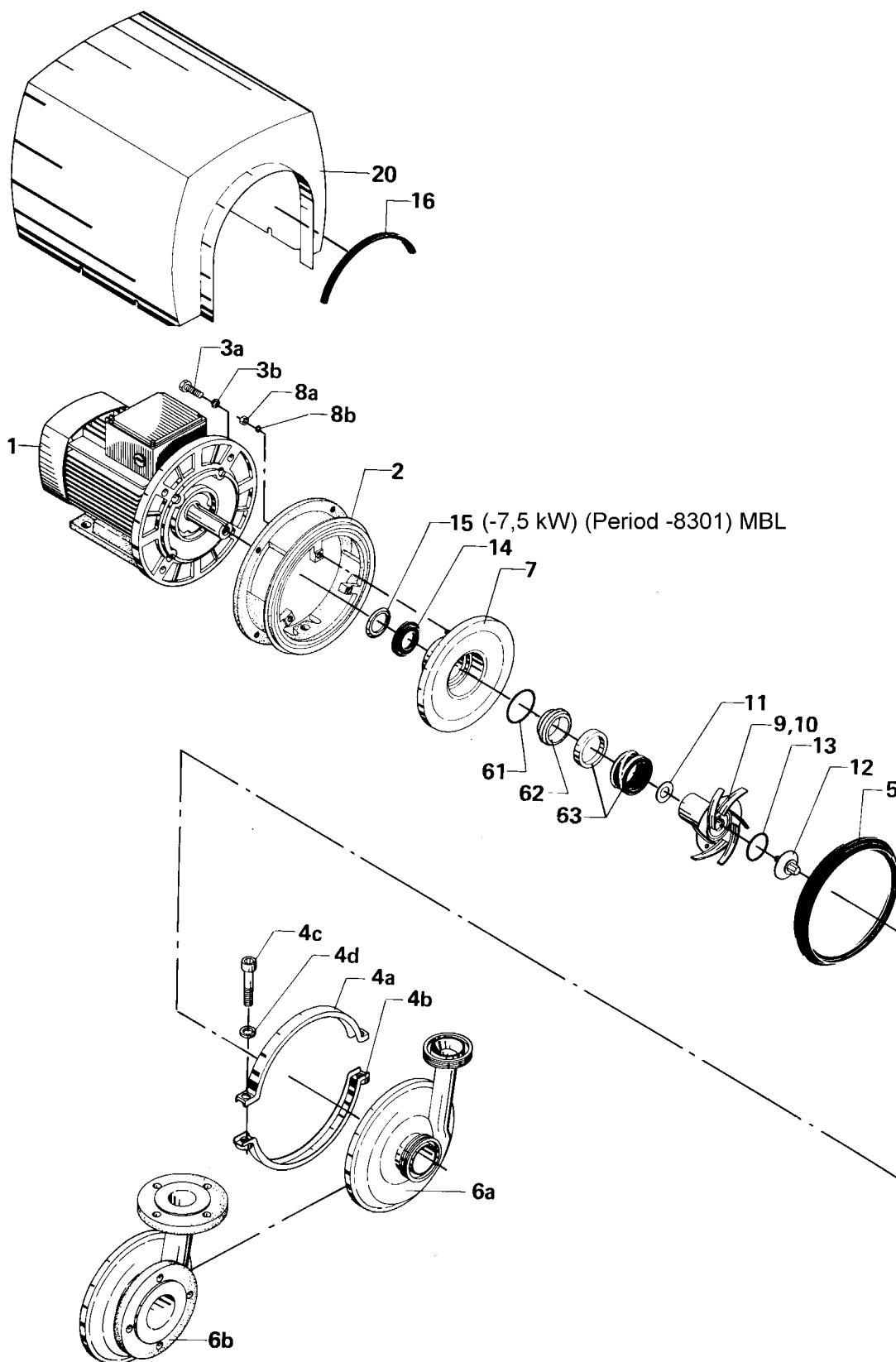
Centrifugal Pump Type ALC-1

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

Centrifugal Pump Type ALC-2

12



Centrifugal Pump Type ALC-2

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

Pos.	Qty.	Denomination	Motors: 3000 r/min, 3-phase AC, 50 Hz					22 kW
			5.5 kW	7.5 kW	11 kW	15 kW	18.5 kW	
1	1	M2AA motor, 380-420/660 V (Period 9310-)	9612-4028-17	9612-4028-32				
	1	M2AA motor, 220-240/380-420V ... (Period 9310-)	9612-4028-15	9612-4028-30				
	1	MBT motor, 380-420/660 V (Standard) (*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
5Δ	1	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) 76 mm inlet/63.5 mm outlet						
		ISO male	31460-0394-1	31460-0394-1	31460-0394-1	31460-0394-1	31460-0394-1	31460-0394-1
		SMS	31460-0394-2	31460-0394-2	31460-0394-2	31460-0394-2	31460-0394-2	31460-0394-2
		DIN	31460-0394-3	31460-0394-3	31460-0394-3	31460-0394-3	31460-0394-3	31460-0394-3
		ISO clamp	31460-0394-4	31460-0394-4	31460-0394-4	31460-0394-4	31460-0394-4	31460-0394-4
		BS	31460-0394-5	31460-0394-5	31460-0394-5	31460-0394-5	31460-0394-5	31460-0394-5
	1	Pump casing with sanitary fittings 63.5 mm inlet/51 mm outlet						
		ISO male	31460-0393-1	31460-0393-1	31460-0393-1	31460-0393-1	31460-0393-1	31460-0393-1
		SMS	31460-0393-2	31460-0393-2	31460-0393-2	31460-0393-2	31460-0393-2	31460-0393-2
		DIN	31460-0393-3	31460-0393-3	31460-0393-3	31460-0393-3	31460-0393-3	31460-0393-3
		ISO clamp	31460-0393-4	31460-0393-4	31460-0393-4	31460-0393-4	31460-0393-4	31460-0393-4
		BS	31460-0393-5	31460-0393-5	31460-0393-5	31460-0393-5	31460-0393-5	31460-0393-5
6b	1	Pump casing with flanges (Standard) DN 80 inlet/DN 65 outlet	31460-0324-3	31460-0324-3	31460-0324-3	31460-0324-3	31460-0324-3	31460-0324-3
	1	Pump casing with flanges (Standard) DN 65 inlet/DN 50 outlet	31460-0324-4	31460-0324-4	31460-0324-4	31460-0324-4	31460-0324-4	31460-0324-4
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 180 mm	31460-0358-1	31460-0358-1	31460-0359-1	31460-0359-1	31460-0359-1	
	1	Impeller, diameter 240 mm			31460-0360-1	31460-0360-1	31460-0360-1	31460-0361-1
10	1	Key (Inside the impeller) (Is included in pos. 10)	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)

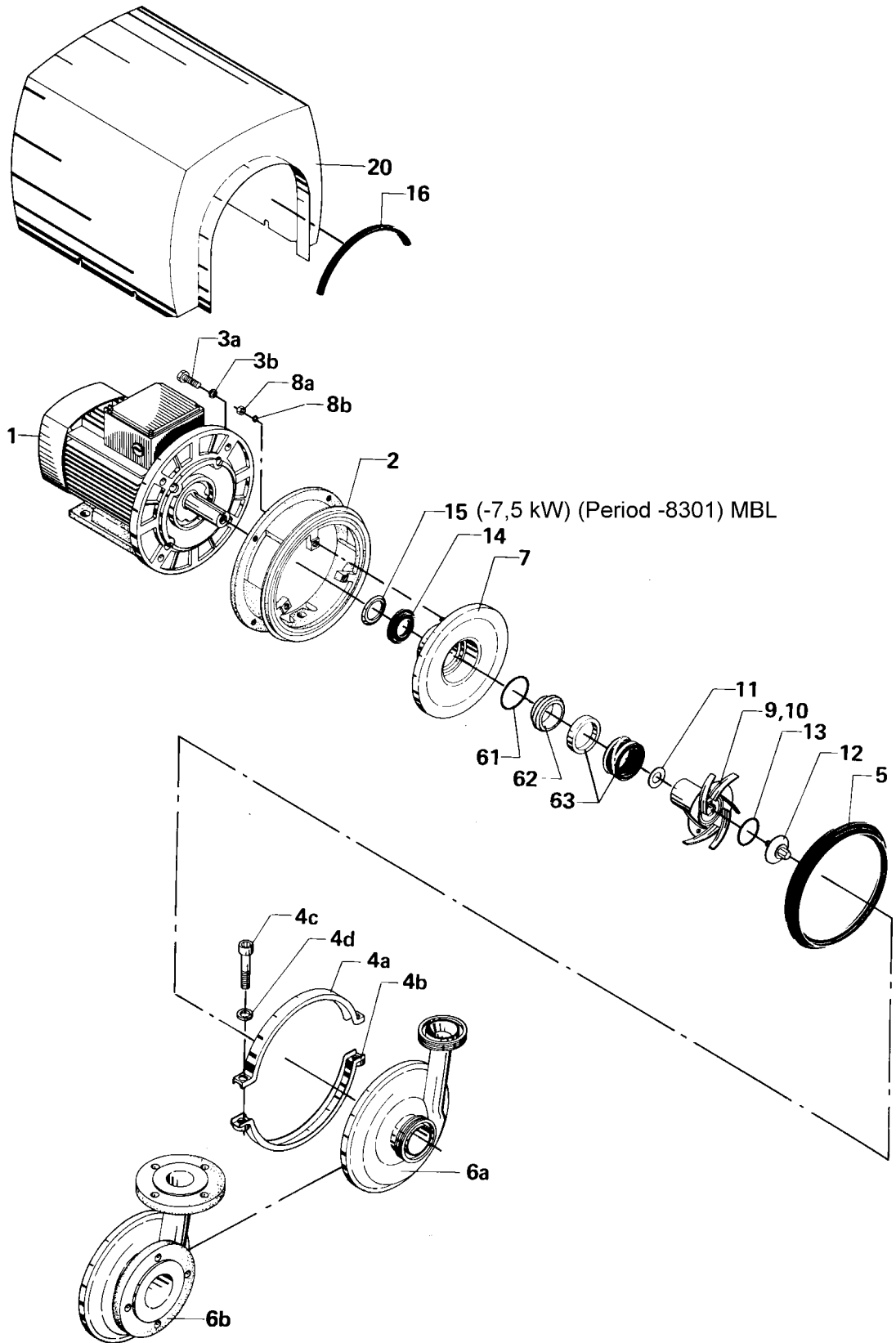
1	Key for hexagonal socket screw	66884
1	Impeller tool	31460-0050-1
1	Shroud for 22 kW	31460-1322-1

Recommended spare parts: Service kits.

Centrifugal Pump Type ALC-2

(Same drawing as on page 12)

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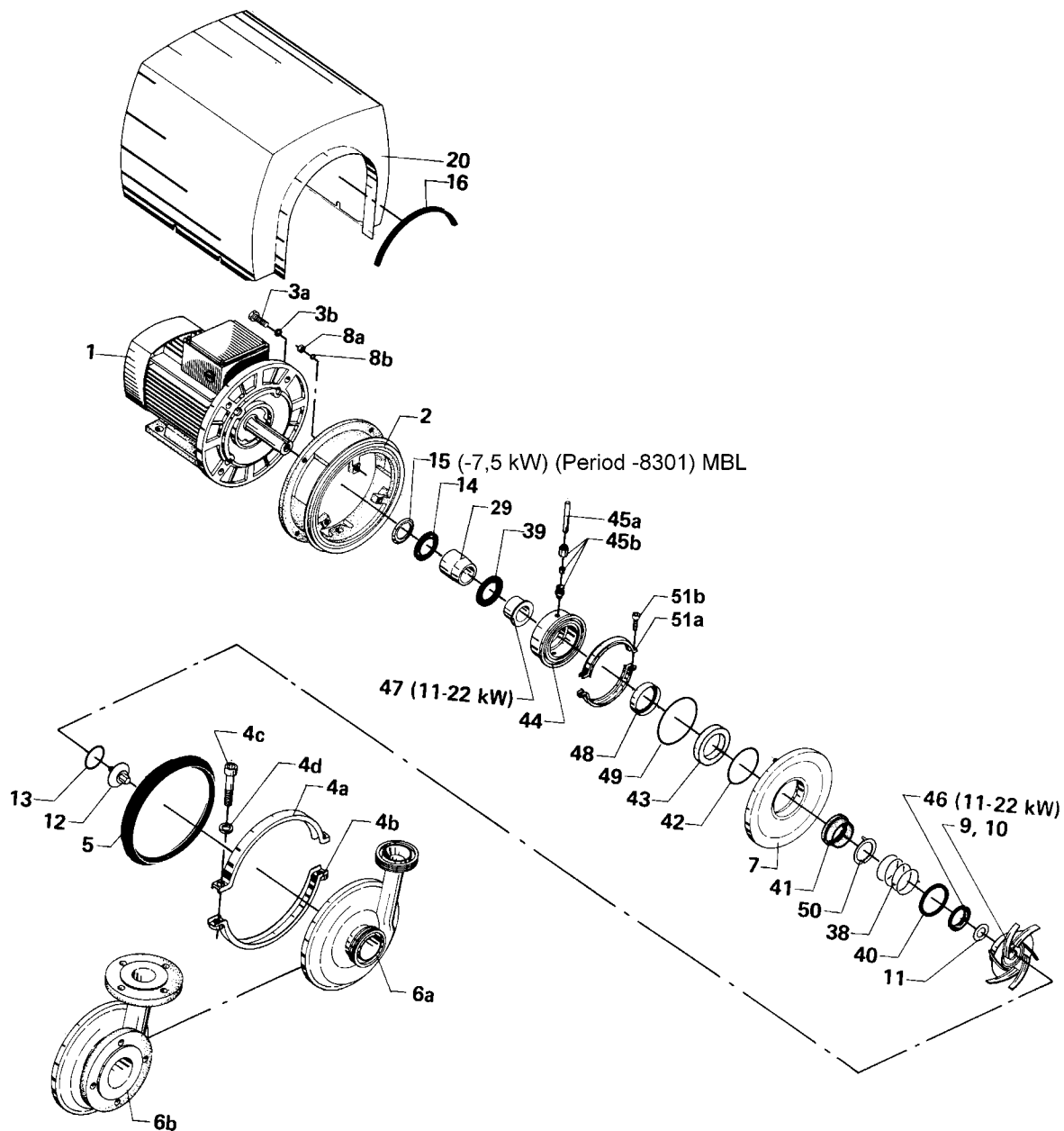
Centrifugal Pump Type ALC-2

Pos.	Qty.	Denomination	Serial Nos. 31460-3500 and higher - D-seal	
			5.5 -18.5 kW	22 kW
Standard				
Δ	1	Shaft seal, complete, EPDM silicon carbide/carbon (Standard)	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 silicon 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 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/silicon 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 Type ALC-2

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Centrifugal Pump Type ALC-2

Serial Nos. 31460-3500 and higher - Flushed Shaft Seal

Pos.	Qty.	Denomination	Motors: 3000 r/min, 3-phase AC, 50 Hz					22 kW
			5.5 kW	7.5 kW	11 kW	15 kW	18.5 kW	
1	1	M2AA motor, 380-420/660 V (Period 9310-)	9612-4028-17	9612-4028-32				
	1	M2AA motor, 220-240/380-420 V . (Period 9310-)	9612-4028-15	9612-4028-30				
	1	MBT motor, 380-420/660 V (Standard) (*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
5Δ	1	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) 76 mm inlet/63.5 mm outlet						
		ISO male	31460-0394-1	31460-0394-1	31460-0394-1	31460-0394-1	31460-0394-1	31460-0394-1
		SMS	31460-0394-2	31460-0394-2	31460-0394-2	31460-0394-2	31460-0394-2	31460-0394-2
		DIN	31460-0394-3	31460-0394-3	31460-0394-3	31460-0394-3	31460-0394-3	31460-0394-3
		ISO clamp	31460-0394-4	31460-0394-4	31460-0394-4	31460-0394-4	31460-0394-4	31460-0394-4
		BS	31460-0394-5	31460-0394-5	31460-0394-5	31460-0394-5	31460-0394-5	31460-0394-5
	1	Pump casing with sanitary fittings 63.5 mm inlet/51 mm outlet						
		ISO male	31460-0393-1	31460-0393-1	31460-0393-1	31460-0393-1	31460-0393-1	31460-0393-1
		SMS	31460-0393-2	31460-0393-2	31460-0393-2	31460-0393-2	31460-0393-2	31460-0393-2
		DIN	31460-0393-3	31460-0393-3	31460-0393-3	31460-0393-3	31460-0393-3	31460-0393-3
		ISO clamp	31460-0393-4	31460-0393-4	31460-0393-4	31460-0393-4	31460-0393-4	31460-0393-4
		BS	31460-0393-5	31460-0393-5	31460-0393-5	31460-0393-5	31460-0393-5	31460-0393-5
6b	1	Pump casing with flanges (Standard) DN 80 inlet/DN 65 outlet	31460-0324-3	31460-0324-3	31460-0324-3	31460-0324-3	31460-0324-3	31460-0324-3
	1	Pump casing with flanges (Standard) DN 65 inlet/DN 50 outlet	31460-0324-4	31460-0324-4	31460-0324-4	31460-0324-4	31460-0324-4	31460-0324-4
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 180 mm	31460-0075-1	31460-0075-1	31460-0076-1	31460-0076-1	31460-0076-1	31460-0076-1
	1	Impeller, diameter 240 mm	31460-0196-1	31460-0196-1	31460-0069-1	31460-0069-1	31460-0069-1	31460-0070-1
10	1	Key (Inside the impeller)	31460-0063-1	31460-0063-1	31460-0013-1	31460-0013-1	31460-0013-1	31460-0052-1
		included in pos. 9)						
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, 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)

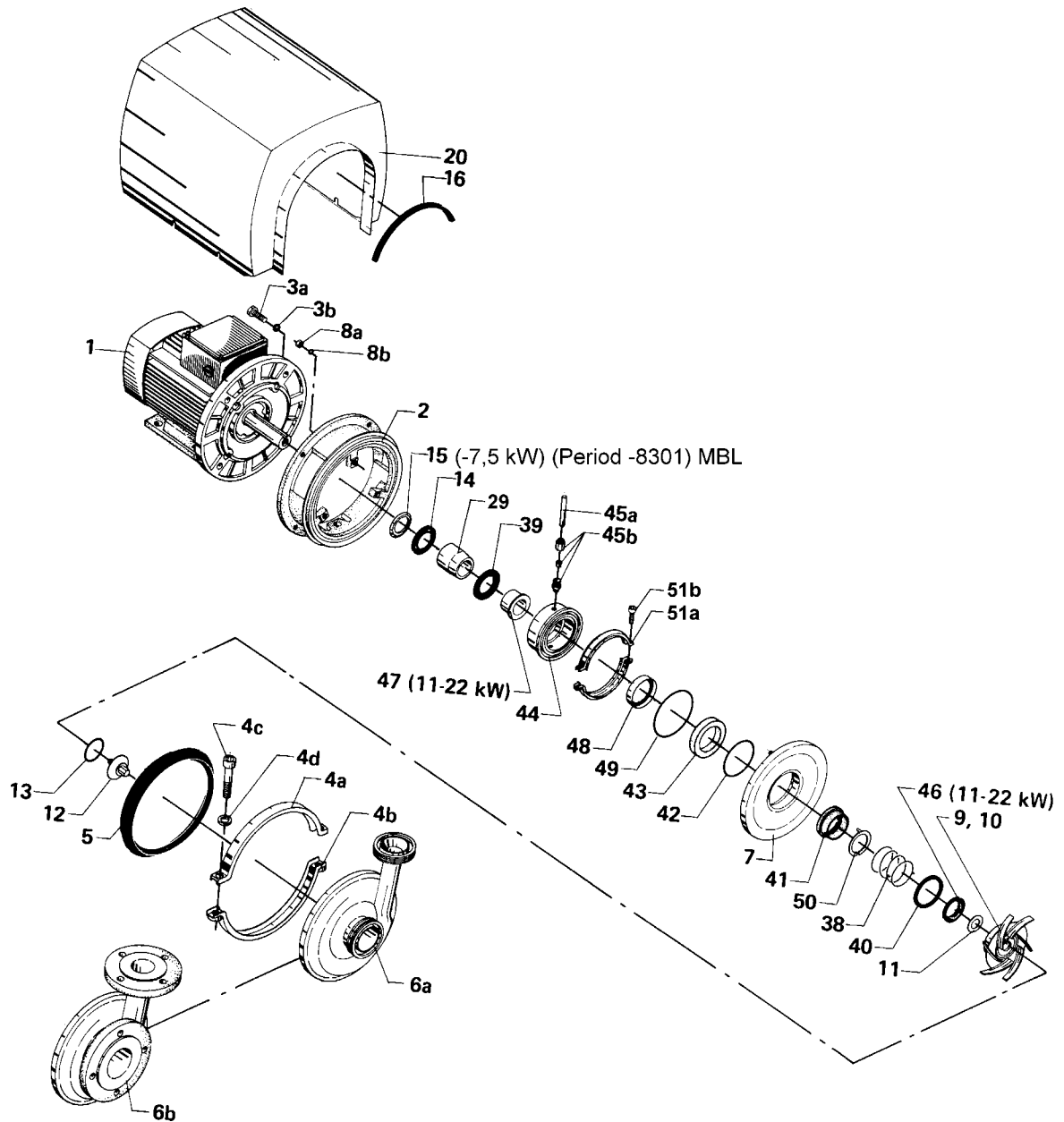
1	Key for hexagonal socket screw	66884
1	Impeller tool	31460-0050-1

Recommended spare parts: **Service kits.**

Centrifugal Pump Type ALC-2

(Same drawing as on page 16)

18



Centrifugal Pump Type ALC-2

Serial Nos. 31460-3500 and higher - Flushed Shaft Seal

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
39Δ	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
46Δ	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

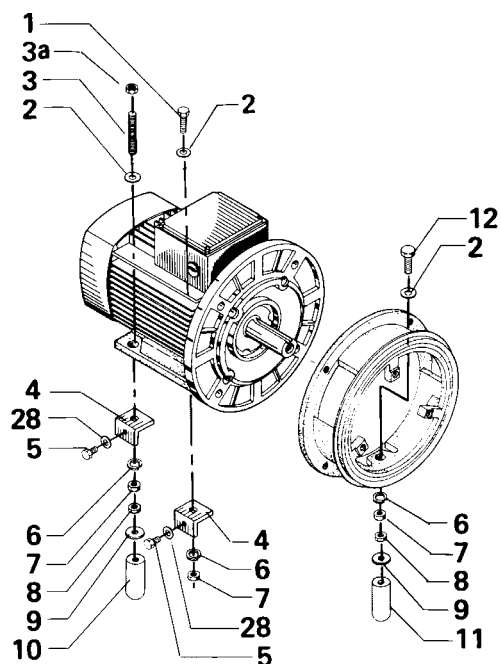
Alternative					
41*	1	Rotating seal ring,	31460-0028-2	31460-0028-2	31460-0028-2
		silicone carbide			

Δ	Service kit, EPDM.....	9611-92-2060	9611-92-2061	9611-92-2062	9611-92-2063
Δ	Service kit, NBR.	9611-92-2064	9611-92-2065	9611-92-2066	9611-92-2067
Δ	Service kit, FPM.	9611-92-2068	9611-92-2069	9611-92-2070	9611-92-2071

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

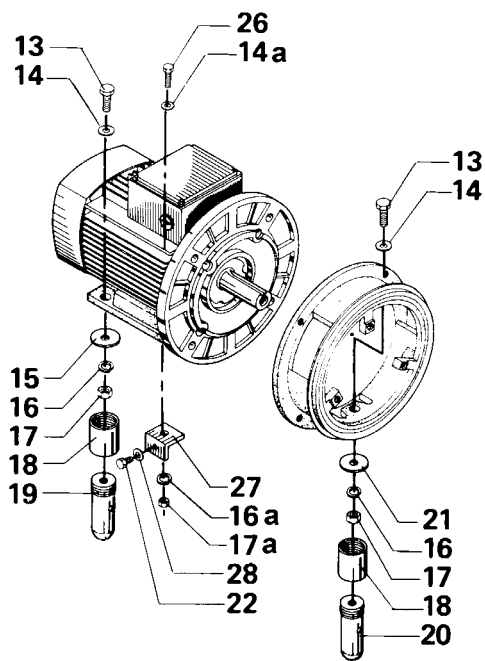
Centrifugal Pump Type ALC-2

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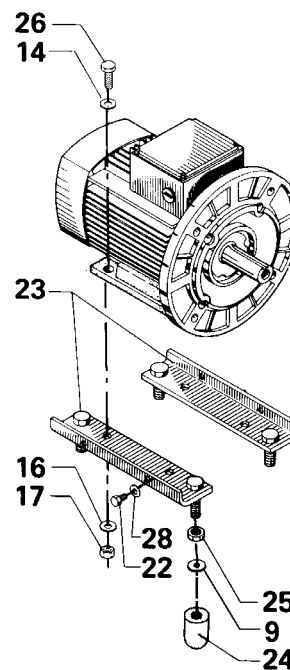


5.5 - 7.5 kW (Period 8606-)
11 - 18.5 kW (Period 8701-)

Older legs



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



5.5 - 7.5 kW (Period - 8606)

Centrifugal Pump Type ALC-2

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	
3a	2	Nut (Period 9310-)	9611-99-0587		
3	2	Stud bolt (Period 9310-)	9611-85-072-1		
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	5	Nut	9611-99-0587	9611-99-0587	
8	3	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

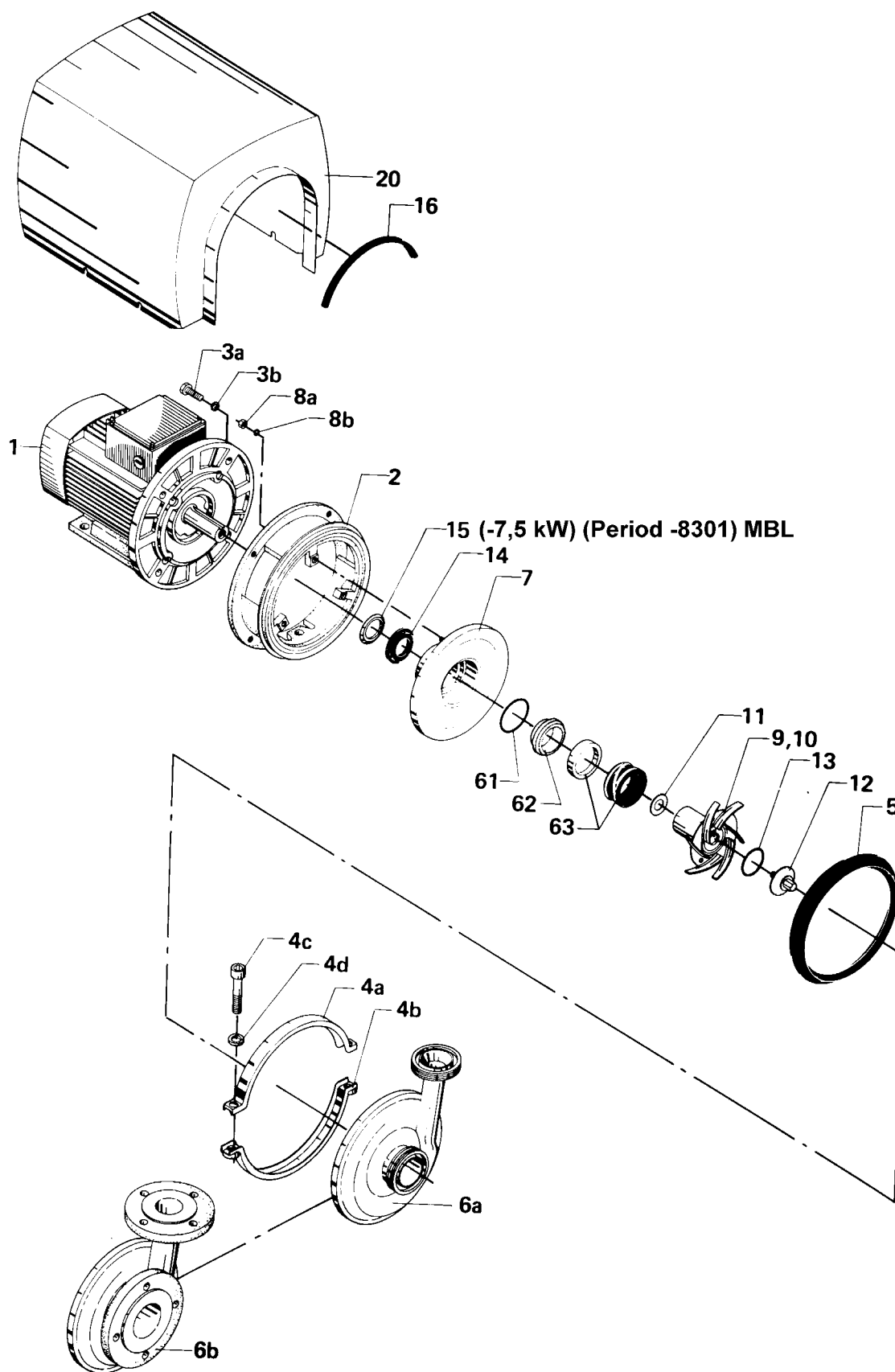
* Number in brackets for 5.5-7.5 kW

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

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

Centrifugal Pump Type ALC-3

22



Centrifugal Pump Type ALC-3

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

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	31460-0004-1
3a	4	Screw	9611-99-1825	9611-99-1825	9611-99-1826	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	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	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	31460-0395-1
4c	2	Screw	9611-99-1827	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	31460-0101-1
5Δ	1	Joint ring, EPDM (Standard)	31460-0009-1	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	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	31460-0046-1
		SMS	31460-0046-2	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	31460-0046-3
		ISO clamp	31460-0046-4	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	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	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	31460-0362-1
8a	3	Nut	221803-28	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	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	31460-0367-1			
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	31460-0010-4	31460-0010-4	(Period -9310)				
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)

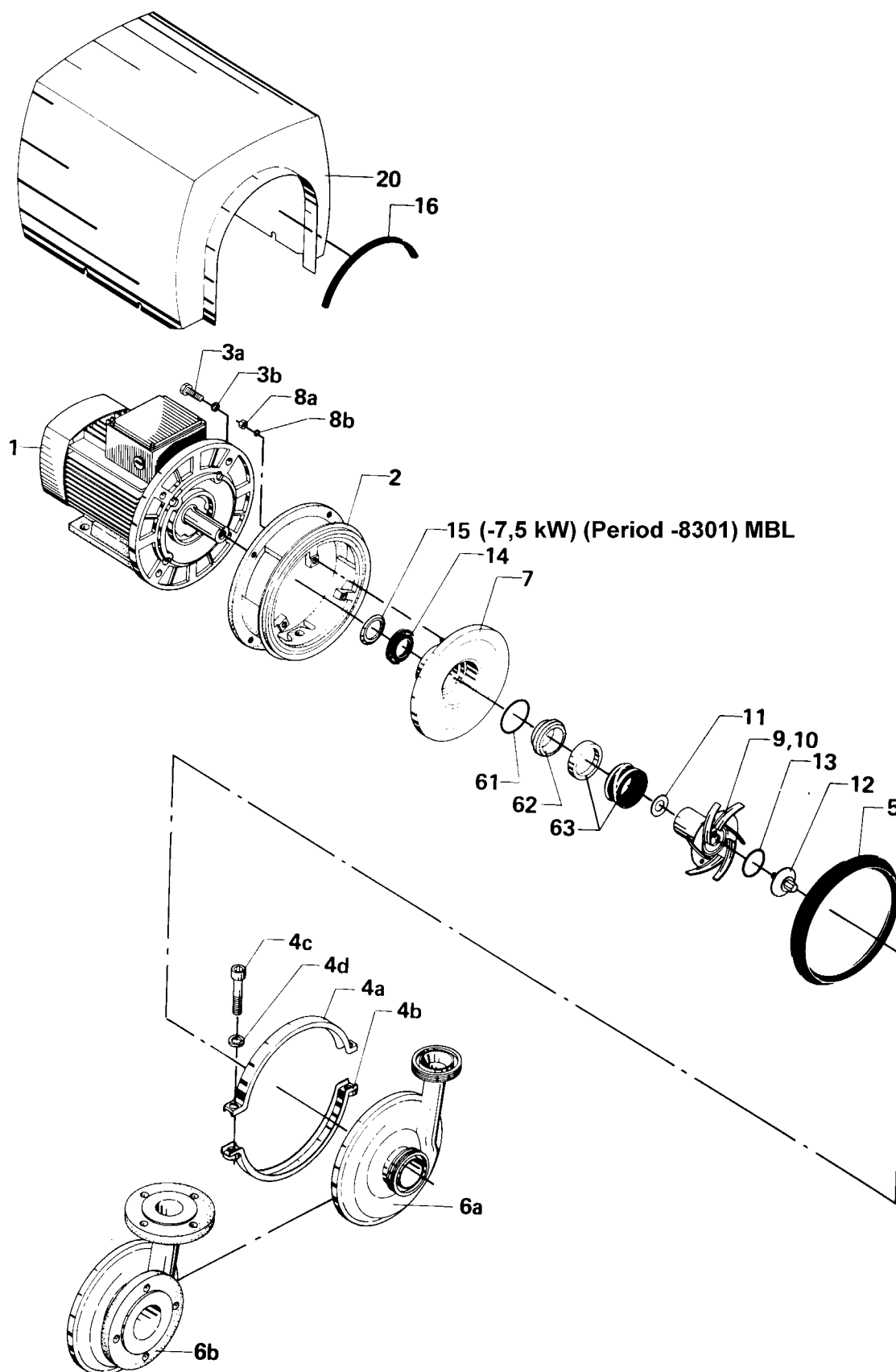
- 1 Key for hexagonal socket 66884 screw
- 1 Impeller tool 31460-0050-1

Recommended spare parts: Service kits.

Centrifugal Pump Type ALC-3

(Same drawing as on page 22)

24



Centrifugal Pump 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 (Standard)	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 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.

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 Type ALC-3

26



Centrifugal Pump Type ALC-3

Serial Nos. 31460-3500 and higher - Flushed Shaft Seal

Motors: 3000 r/min, 3-phase AC, 50 Hz

Pos.	Qty.	Denomination	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
5Δ	1	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	
	1	Impeller, diameter 195 mm			31460-0039-1	31460-0039-1	31460-0039-1	31460-0040-1
10	1	Key (Inside the impeller)	31460-0063-1	31460-0063-1	31460-0013-1	31460-0013-1	31460-0013-1	31460-0052-1
		(Is included in pos. 9)						
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				
13Δ	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)

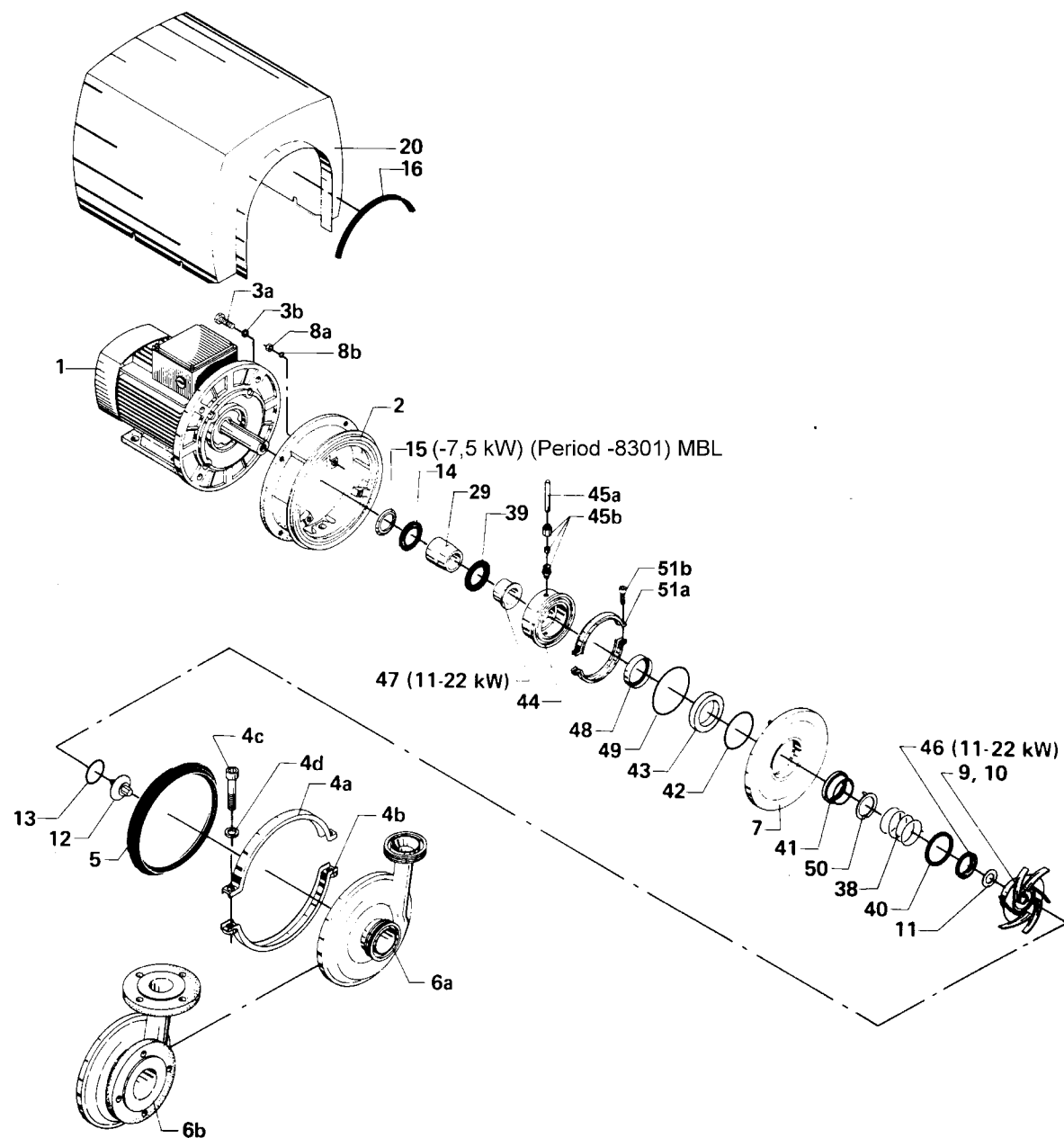
1	Key for hexagonal socket	66884
	screw	
1	Impeller tool	31460-0050-1

Recommended spare parts: **Service kits.**

Centrifugal Pump Type ALC-3

(Same drawing as on page 26)

28



Centrifugal Pump Type ALC-3

Serial Nos. 31460-3500 and higher - Flushed Shaft Seal

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
39Δ	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
46Δ	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

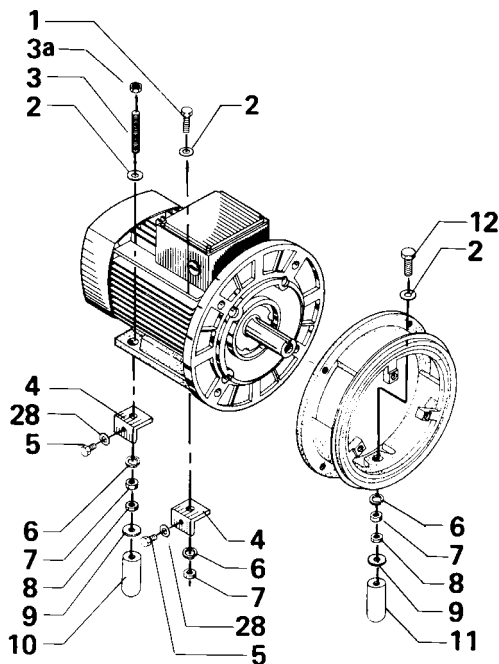
Alternative

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	9611-92-2063
Δ		Service kit, NBR.	9611-92-2064	9611-92-2065	9611-92-2066	9611-92-2067
Δ		Service kit, FPM.	9611-92-2068	9611-92-2069	9611-92-2070	9611-92-2071

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

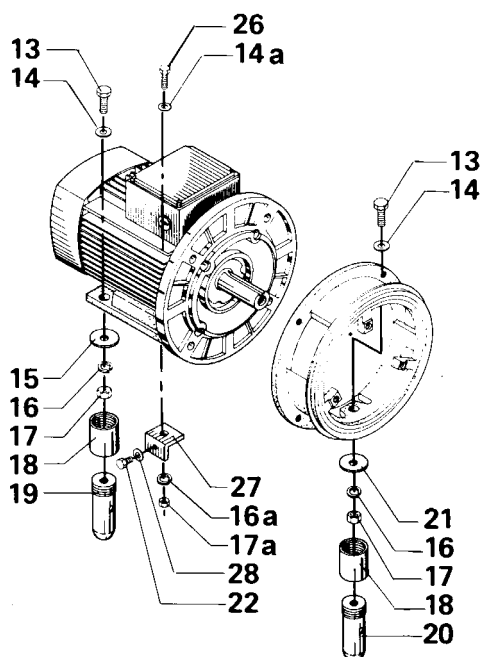
Centrifugal Pump Type ALC-3

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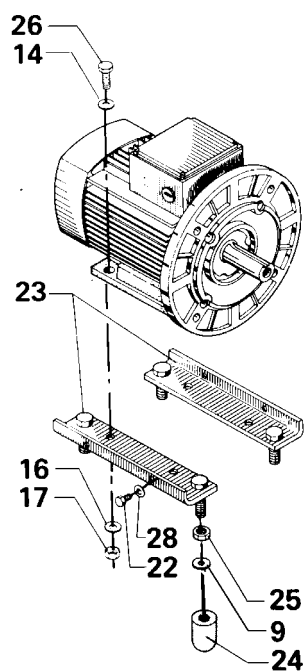


5.5 - 7.5 kW (Period 8606-)
11 - 18.5 kW (Period 8701-)

Older legs



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



5.5 - 7.5 kW (Period - 8606)

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	(4-legs)	(3-legs)
9	4	Washer	31460-0104-1	
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.

How to contact Alfa Laval
Contact details for all countries are
continually updated on our website.
Please visit www.alfalaval.com to
access the information direct.