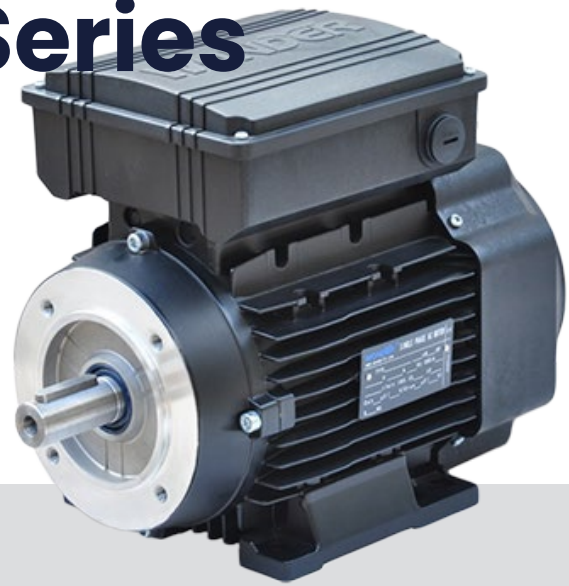


# MCd MYd MLd Series

Single Phase TEFC  
Aluminum Induction Motors  
(New Design)

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Single Phase TEFC Aluminum Induction Motors (New Design)



## General Information:

The lowercase letter following the traditional MC, MY and ML represents the generation of our products. MCd MYd and MLd Series are Wonder's most advanced 4<sup>th</sup> generation single phase motors. Those motors have the features of low noise, low vibration, high efficiency, wide voltage range, novel appearance.

MLd and MCd series motors are supplied with electronic switch which has no contacts, resulting in longer lifetime of switch (approx. one million times of usage) and a wider range of available voltage. MLd and MCd series are suitable for high starting torque application. MYd series motors are mainly used for low starting torque application.

Wonder motors are widely used in many industries such as : water treatment, air handling, mining, textile, marine, agriculture, aquaculture, energy industry, paper milling, construction, chemical & metallurgy, etc.

Wonder motors are suitable to be installed in pumps, compressors, gearboxes, hydraulic machines, air blowers, grinding machines, textile machines, road construction machines, building construction machines and other customized machines.

## Technical Specifications

- IP55 protection, class F insulation, B-level temperature rise, S1 duty.
- Rated voltage 230V, rated frequency 50Hz.
- Operation ambient temperature: -20°C~40°C. Operation altitude ≤1000m.
- Cooling method: IC411/IC416.

## Mounting Arrangements:

Types	Basic Type of Construction	Derived Types of Construction				
MCd MYd MLd 71-112	IM B3 IM 1001	IM V5 IM 1011	IM V6 IM 1031	IM B6 IM 1051	IM B7 IM 1061	IM B8 IM 1071
MCd MYd MLd 71-112	IM B35 IM 2001	IM V15 IM 2011	IM V36 IM 2031	* IM 2051	* IM 2061	* IM 2071
MCd MYd MLd 71-112	IM B34 IM 2101	* IM 2111	* IM 2131	* IM 2151	* IM 2161	* IM 2171
MCd MYd MLd 71-112	IM B5 IM 3001	IM V1 IM 3011	IM V3 IM 3031			
MCd MYd MLd 71-112	IM B14 IM 3601	IM V18 IM 3611	IM V19 IM 3631			

Basic types of construction may be used in all derived types of construction.

1) "\*" means not-defined mounting by IEC 60034-7.

2) for the types of construction IM V6, IM B6, IM B8 inquiry is necessary.

## MCd Series Technical Specifications

Type	Rated Output		Rated Speed r/m	Nominal Torque N.m	Full Load Efficiency $\eta\%$	Power Factor $\cos\phi$	Full Load Current $I_n(A)$	Locked Current/ Rated Current $I_L/I_n$	Locked Torque/ Rated Torque $T_L/T_n$	Maximum Torque/ Rated Torque $T_b/T_n$
	kW	HP								
MCd7112	0.18	0.25	2750	0.64	60	0.72	1.80	6.7	3.0	1.8
MCd7122	0.25	0.33	2770	0.88	64	0.74	2.30	6.6	3.0	1.8
MCd8012	0.37	0.5	2800	1.28	65	0.77	3.20	6.6	2.8	1.8
MCd8022	0.55	0.75	2790	1.90	68	0.79	4.45	6.6	2.8	1.8
MCd90S2	0.75	1	2820	2.59	70	0.8	5.80	6.4	2.5	1.8
MCd90L2	1.1	1.5	2820	3.80	72	0.8	8.30	7.3	2.5	1.8
MCd100LA2	1.5	2	2830	5.17	74	0.81	10.80	7.4	2.5	1.8
MCd100LB2	2.2	3	2830	7.50	75	0.81	15.70	7.7	2.2	1.8
MCd112M2	3	4	2840	10.20	76	0.82	20.90	7.2	2.2	1.8
MCd7114	0.12	0.16	1350	0.87	50	0.58	1.80	5.0	3.0	1.8
MCd7124	0.18	0.25	1370	1.28	53	0.62	2.38	5.1	2.8	1.8
MCd8014	0.25	0.33	1400	1.74	58	0.63	2.97	5.1	2.8	1.8
MCd8024	0.37	0.5	1410	2.55	62	0.64	4.05	5.2	2.5	1.8
MCd90S4	0.55	0.75	1420	3.77	66	0.69	4.98	5.2	2.5	1.8
MCd90L4	0.75	1	1420	5.10	68	0.73	6.56	5.7	2.5	1.8
MCd100LA4	1.1	1.5	1430	7.50	71	0.74	9.10	6.6	2.5	1.8
MCd100LB4	1.5	2	1430	10.20	73	0.75	11.90	6.8	2.5	1.8
MCd112M4	2.2	3	1440	14.9	74	0.76	17.00	7.1	2.2	1.8

## MYd Series Technical Specifications

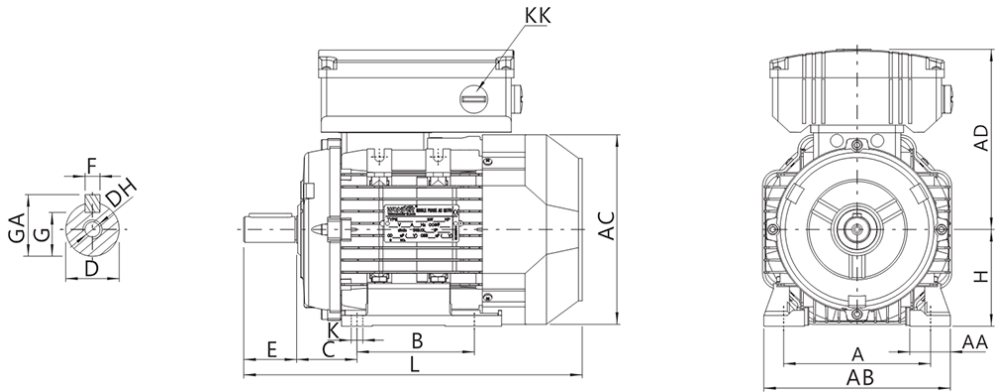
Type	Rated Output		Rated Speed r/m	Nominal Torque N.m	Full Load Efficiency $\eta\%$	Power Factor $\cos\phi$	Full Load Current $I_n(A)$	Locked Current/ Rated Current $I_L/I_n$	Locked Torque/ Rated Torque $T_L/T_n$	Maximum Torque/ Rated Torque $T_b/T_n$
	kW	HP								
MYd7112	0.37	0.5	2750	1.31	67	0.92	2.60	3.9	0.4	1.7
MYd7122	0.55	0.75	2760	1.94	70	0.92	3.70	4.1	0.4	1.7
MYd8012	0.75	1	2780	2.63	72.1	0.92	4.92	4.0	0.3	1.7
MYd8022	1.1	1.5	2790	3.84	75	0.95	6.70	4.4	0.3	1.7
MYd90S2	1.5	2	2800	5.22	77.2	0.95	8.90	5.0	0.3	1.7
MYd90L2	2.2	3	2800	7.66	79.7	0.95	12.60	5.0	0.3	1.7
MYd7114	0.25	0.33	1370	1.78	61.5	0.92	1.92	3.6	0.4	1.7
MYd7124	0.37	0.5	1370	2.63	66	0.92	2.65	3.5	0.4	1.7
MYd8014	0.55	0.75	1380	3.88	70	0.92	3.71	3.8	0.4	1.7
MYd8024	0.75	1	1380	5.30	72.1	0.92	4.92	3.9	0.3	1.7
MYd90S4	1.1	1.5	1390	7.71	75	0.95	6.71	4.7	0.3	1.7
MYd90L4	1.5	2	1400	10.40	77.2	0.95	8.89	4.8	0.3	1.7

## MLd Series Technical Specifications

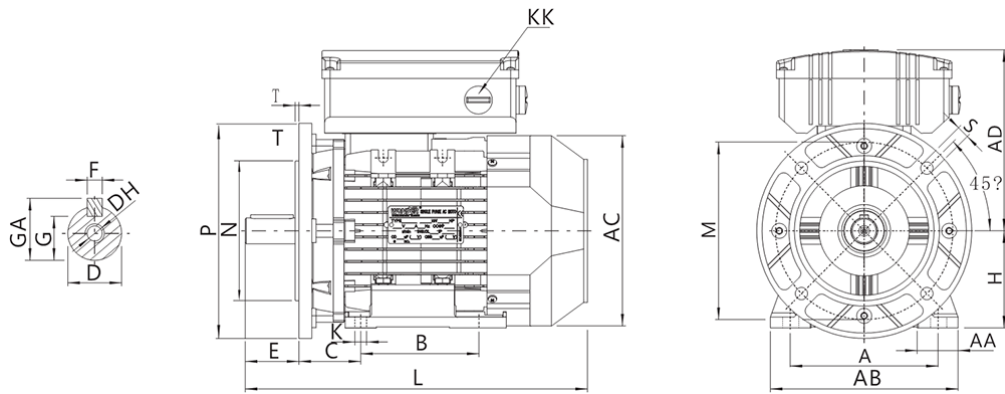
Type	Rated Output		Rated Speed r/m	Nominal Torque N.m	Full Load Efficiency $\eta\%$	Power Factor $\cos\phi$	Full Load Current $I_n(A)$	Locked Current/ Rated Current $I_L/I_n$	Locked Torque/ Rated Torque $T_L/T_n$	Maximum Torque/ Rated Torque $T_D/T_n$
	kW	HP								
MLd7112	0.37	0.5	2750	1.31	67	0.92	2.60	3.7	1.8	1.6
MLd7122	0.55	0.75	2760	1.94	70	0.92	3.70	3.9	1.8	1.6
MLd8012	0.75	1	2780	2.63	72.1	0.92	4.92	5.5	1.8	1.6
MLd8022	1.1	1.5	2790	3.84	75	0.95	6.71	5.5	1.8	1.6
MLd90S2	1.5	2	2800	5.22	77.2	0.95	8.89	5.5	1.8	1.6
MLd90L2	2.2	3	2800	7.66	79.7	0.95	12.60	5.5	1.7	1.6
MLd100L2	3	4	2820	10.3	81.5	0.95	16.80	6	1.7	1.6
MLd112M2	3.7	5	2820	12.7	82.6	0.95	20.50	6	1.7	1.6
MLd7114	0.25	0.33	1370	1.78	62	0.92	1.90	3.9	1.7	1.6
MLd7124	0.37	0.5	1370	2.63	66	0.92	2.65	4	1.7	1.6
MLd8014	0.55	0.75	1380	3.88	70	0.95	3.60	5.5	1.7	1.6
MLd8024	0.75	1	1380	5.3	72.1	0.95	4.76	5.5	1.7	1.6
MLd90S4	1.1	1.5	1390	7.71	75	0.95	6.71	5	1.7	1.6
MLd90L4	1.5	2	1400	10.4	77.2	0.95	8.89	5	1.7	1.6
MLd100LA4	2.2	3	1410	15.2	79.7	0.95	12.60	5	1.7	1.6
MLd100LB4	3	4	1420	20.5	81.5	0.95	16.80	5	1.7	1.6
MLd112M4	3.7	5	1430	25.2	82.6	0.95	20.50	5.5	1.7	1.6

## B3, B35, B5 Mounting and Overall Dimensions

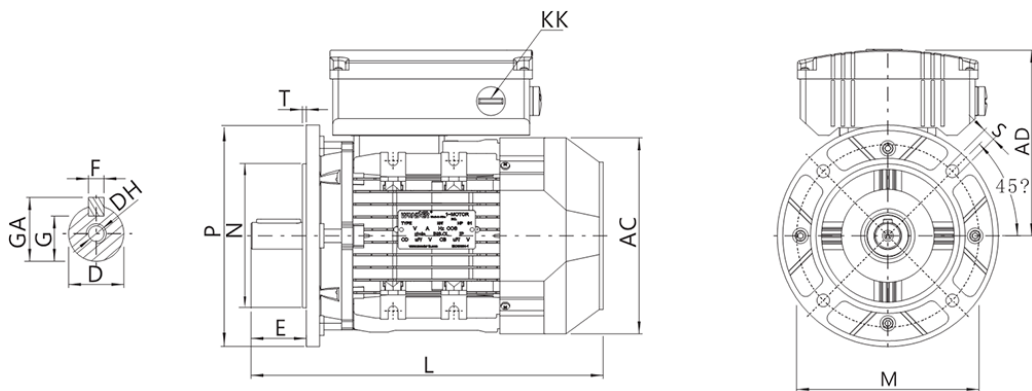
**B3**



**B35**



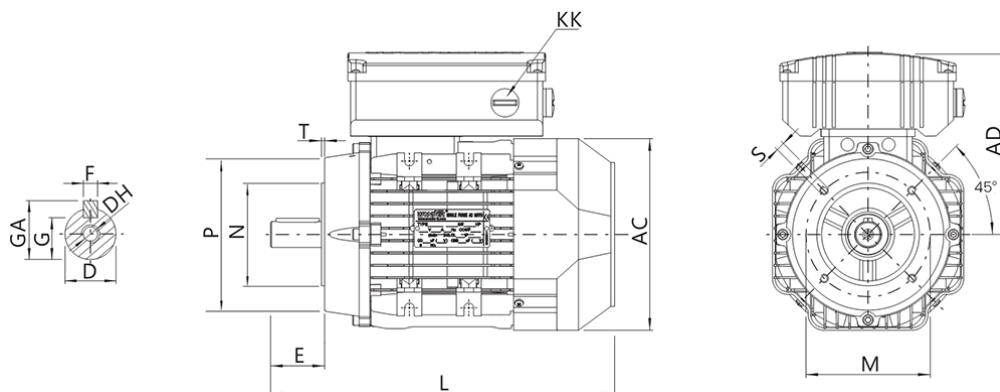
**B5**



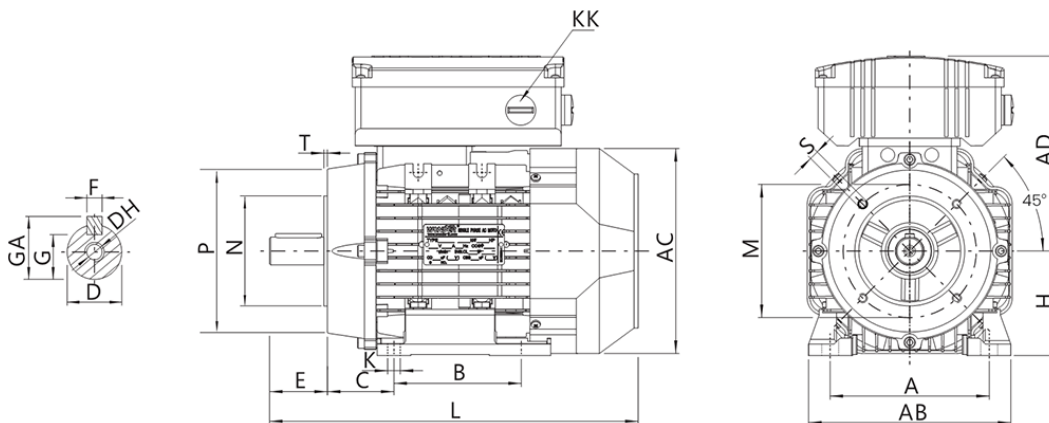
Frame Size	Mounting and Overall Dimensions (mm)																					
	A	AA	AB	AC	AD	B	C	D	DH	E	F	G	H	K	KK	L	M	N	P	S	T	GA
71	112	26	136	141	109	90	45	14	M5	30	5	11	71	7	M18	218	130	110	160	10	3.5	16
80	125	30	153	157	158	100	50	19	M6	40	6	15.5	80	10	M20	288	165	130	200	12	3.5	21.5
90S	140	37	174	176	167	100	56	24	M8	50	8	20	90	10	M20	319	165	130	200	12	3.5	27
90L	140	37	174	176	167	125	56	24	M8	50	8	20	90	10	M20	337	165	130	200	12	3.5	27
100	160	38	193	191	177	140	63	28	M10	60	8	24	100	12	M20	378	215	180	250	14.5	4	31
112	190	41	220	215	190	140	70	28	M10	60	8	24	112	12	M20	398	215	180	250	14.5	4	31

# B14, B34 Mounting and Overall Dimensions

## B14

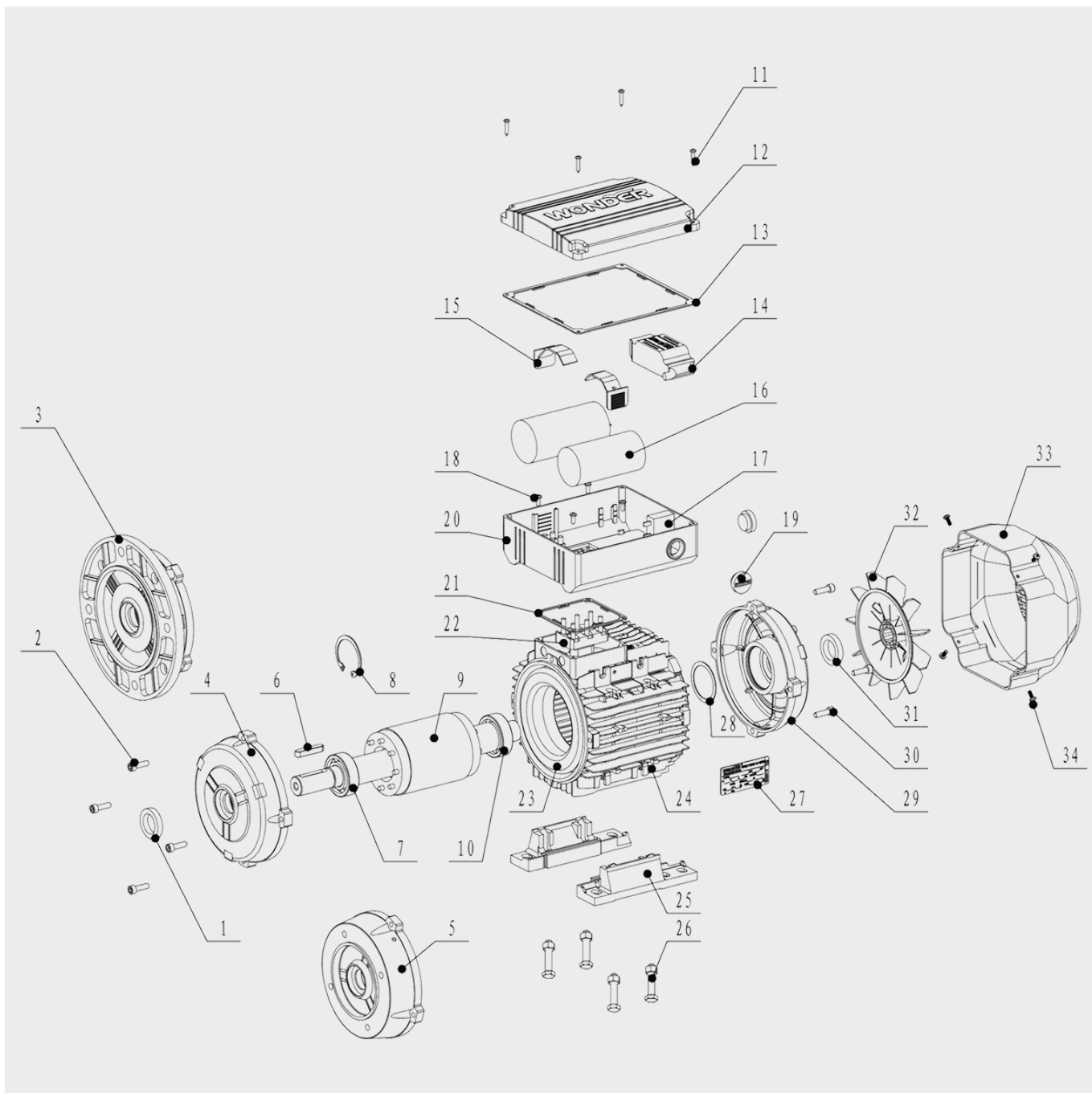


## B34



Frame Size	Mounting and Overall Dimensions (mm)																					
	A	AA	AB	AC	AD	B	C	D	DH	E	F	G	H	K	KK	L	M	N	P	S	T	GA
71	112	26	136	141	109	90	45	14	M5	30	5	11	71	7	M18	218	85	70	105	M6	2.5	16
80	125	30	153	157	158	100	50	19	M6	40	6	15.5	80	10	M20	288	100	80	120	M6	3	21.5
90S	140	37	174	176	167	100	56	24	M8	50	8	20	90	10	M20	319	115	95	140	M8	3	27
90L	140	37	174	176	167	125	56	24	M8	50	8	20	90	10	M20	337	115	95	140	M8	3	27
100	160	38	193	191	177	140	63	28	M10	60	8	24	100	12	M20	378	130	110	160	M8	3.5	31
112	190	41	220	215	190	140	70	28	M10	60	8	24	112	12	M20	398	130	110	160	M8	3.5	31

# Motor Spare Parts List/Drawing



- |                       |                                    |                       |                                   |                       |
|-----------------------|------------------------------------|-----------------------|-----------------------------------|-----------------------|
| 1. Oil Seal           | 2. Screws                          | 3. B5 Flange          | 4. B3 End Shield                  | 5. B14 Flange         |
| 6. Key                | 7. Bearings                        | 8. Circlips           | 9. Rotor With Shaft               | 10. Bearing           |
| 11. Screws            | 12. Terminal Box Cover             | 13. Terminal Box Seal | 14. Electrical Centrifugal Switch | 15. Capacitor Bracket |
| 16. Capacitor         | 17. Manual Reset Thermal Protector | 18. Screws            | 19. Cable Gland/Cap               | 20. Terminal Box Base |
| 21. Terminal Box Seal | 22. Terminal Board                 | 23. Wound Stator      | 24. Motor Housing                 | 25. Removable Feet    |
| 26. Screws            | 27. Name Plate                     | 28. Spring Washer     | 29. NDE Shield                    | 30. Screws            |
| 31. Oil Seal          | 32. Cooling Fan                    | 33. Fan Cover         | 34. Screws                        |                       |



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