



IE1
Standard Efficiency

1-PHASE INDUCTION MOTORS
SERIES SE(M)H



1-PHASE INDUCTION MOTORS

SERIES SE(M)H

TD 209
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Changes and misprints reserved

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1. General information

1.1. Cantoni product range

Cantoni offers a full range of induction electric motors, from 0,04 kW up to 6000 kW, in standard and special executions. Cantoni motors operate in almost all industrial segments like: pumps, fans, compressors, conveyors, mining, power plants and many other fields. The Cantoni product range consists of standard motors according to IEC standard in efficiency classes IE1, IE2, IE3, IE4 and motors according to NEMA standard e.g. NEMA Premium motors. Apart from standard motors, it is possible to offer motors for special applications in marine, oil, gas, energy, construction and many other industries. All main components of the motors are produced in Europe (Poland) in order to guarantee the highest quality level. Particular importance is attached to the raw materials used for production, they are delivered only by qualified suppliers exclusively from the European Union.

The designs and solutions correspond to the customer requirements and international norms. All motors are manufactured according to Quality Management System consistent with ISO 9001 and Environmental Management System consistent with ISO 14001. Cantoni motors are provided with CE mark and fulfil the EU Directives regarding the safety measures. The motors comply with almost all international standards: German standards DIN VDE, British standards BS, Italian standards CEI and on request Canadian standards CSA, American standards UL, NEMA or EU standard ATEX.

1.2. Standards

The electric motors are manufactured according to the international standards:

Description	Standard
Rating and performance	IEC 60034-1
Methods for determining losses and efficiency	IEC 60034-2-1
Classification of degrees of protection	IEC 60034-5
Methods of cooling	IEC 60034-6
Symbols of construction and mounting arrangements	IEC 60034-7
Terminal markings and direction of rotation	IEC 60034-8
Noise limits	IEC 60034-9
Dimensions and output of electric machines	IEC 60072-1
Vibration limits	IEC 60034-14

1.3. Standard operating conditions

Cantoni motors can operate under the following conditions:

- Motor of series SE(M)h are efficiency class IE1
- Motors are insulated with Class F (105K) materials and Class B temperature rise
- PTC thermistors are available on request
- The standard degree of enclosure protection is IP55. Shafts are fitted with oil seal as standard
- The cooling method is IC411: TEFC (Totally Enclosed Fan Cooled)
- The standard voltage of the motors is 230V at a frequency of 50 Hz
- Motors are suitable for operating mode S1 (continuous operation)
- Motors are suitable to operate at an ambient temperature of -20°C / +40°C
- Motors are balanced Class A (½ key)

For other operating conditions, please contact Kolmer to check whether this condition is suitable or not.

1.4. Tolerances of motor parameters

Permissible deviations between real values and catalogue values according to IEC 60034-1:

Description	Permissible deviations
Power factor $\cos \varphi$	$\Delta \cos \varphi = -\frac{1}{6} \cdot (1 - \cos \varphi_N)$
Efficiency η	$\Delta \eta = -15\% \cdot (100 - \eta_N)$ for $P_N \leq 150$ kW $\Delta \eta = -10\% \cdot (100 - \eta_N)$ for $P_N > 150$ kW
Speed n	$\Delta n = \pm 20\% \cdot (n_s - n_N)$ for $P_N > 1$ kW $\Delta n = \pm 30\% \cdot (n_s - n_N)$ for $P_N \leq 1$ kW
Locked rotor current I_L/I_N	$\Delta \frac{I_L}{I_N} = +20\% \cdot \frac{I_L}{I_N}$
Locked rotor torque T_L/T_N	$\text{Min} \frac{T_L}{T_N} = -15\% \cdot \frac{T_L}{T_N}$ $\text{Max} \frac{T_L}{T_N} = +25\% \cdot \frac{T_L}{T_N}$
Breakdown torque T_B/T_N	$\Delta \frac{T_B}{T_N} = -10\% \cdot \frac{T_B}{T_N}$
Moment of inertia J [kg·m ²]	$\Delta J = \pm 10\% \cdot J$
Sound pressure level L_{PA} [dB]	$\Delta L_{PA} = +3$ dB /A/

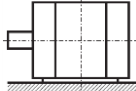
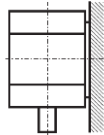
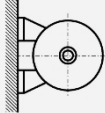
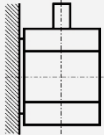
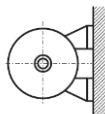
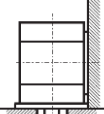
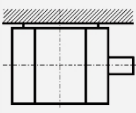
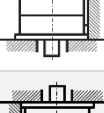
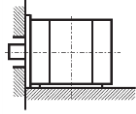
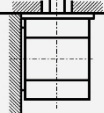
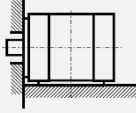
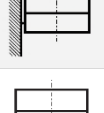
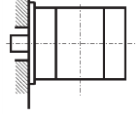
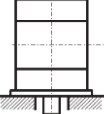
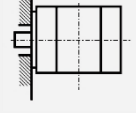
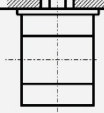
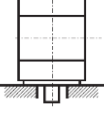
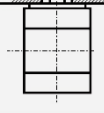
Standard motors comply with Voltage value and frequency variations within zone A according IEC 60034-1. Other tolerances of supply Voltage and their frequency are available on request.

Description	Permissible deviations
Voltage value U	$\Delta U = \pm 5\%$
Frequency f	$\Delta f = \pm 2\%$



1.5. Mounting arrangements

The most commonly used mounting arrangements are shown in the table below. Other mounting arrangements are available on request. According to the safety standard for electrical machines, foreign objects must be prevented from falling into the fan cover. On request, a protective hood (rain cover) can be mounted over the fan cover.

Horizontal shaft				Vertical shaft			
	IEC EN 60034-7 code II	IEC EN 60034-7 code I	Frame size		IEC EN 60034-7 code II	IEC EN 60034-7 code I	Frame size
	IM 1001	IM B3	56 - 112		IM 1011	IM V5	56 - 112
	IM 1051	IM B6	56 - 112		IM 1031	IM V6	56 - 112
	IM 1061	IM B7	56 - 112		IM 2011	IM V15	56 - 112
	IM 1071	IM B8	56 - 112		IM 2111	IM V17	56 - 112
	IM 2001	IM B35	56 - 112		IM 2031	IM V36	56 - 112
	IM 2101	IM B34	56 - 112		IM 2131	IM V37	56 - 112
	IM 3001	IM B5	56 - 112		IM 3011	IM V1	56 - 112
	IM 3601	IM B14	56 - 112		IM 3031	IM V3	56 - 112
					IM 3611	IM V18	56 - 112
					IM 3631	IM V19	56 - 112

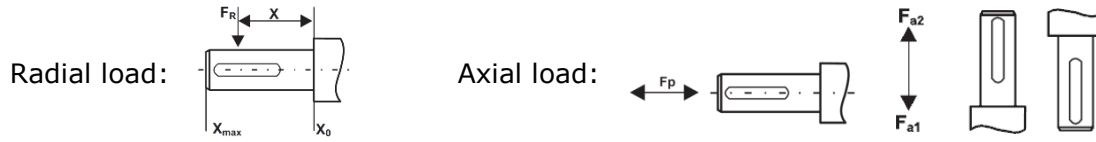
1.6. Terminal box equipment

Frame size	Number of terminals	Terminal size	Terminal box position	Cable glands	Cable gland direction	Temperature sensors
56	6	M4	Top	M20 (1x)	To right	On request
63	6	M4	Top	M20 (1x)	To right	On request
71	6	M4	Top	M20 (1x)	To right	On request
80	6	M4	Top	M20 (1x)	To right	On request
90	6	M5	Top	M20 (1x)	To right	On request
100	6	M5	Top	M20 (1x), Blindplug M20 (1x)	To right	On request
112	6	M5	Top	M20 (1x), Blindplug M20 (1x)	To right	On request

1.7. Bearings

Frame size	Number of poles	Bearing DE	Bearing NDE
56	2 - 4		6201 2Z C3
63	2 - 4		6202 2Z C3
71	2 - 4		6203 2Z C3
80	2 - 4		6204 2Z C3
90	2 - 4		6205 2Z C3
100	2 - 4		6206 2Z C3
112	2 - 4		6306 2Z C3

1.8. Permissible loads on the shaft end



Frame size	Number of poles	Horizontal operation		Vertical operation		
		$F_R (X=0)$	$F_R (X=\max)$	F_P	F_{a1}	F_{a2}
56	2	0,20	0,16	0,04	0,03	0,05
	4	0,25	0,20	0,05	0,04	0,06
63	2	0,20	0,16	0,04	0,04	0,06
	4	0,25	0,20	0,06	0,05	0,07
71	2	0,29	0,24	0,07	0,05	0,09
	4	0,36	0,30	0,09	0,07	0,11
80	2	0,33	0,27	0,09	0,06	0,12
	4	0,44	0,37	0,12	0,09	0,15
90	2	0,68	0,44	0,68	0,35	0,38
	4	0,78	0,44	0,78	0,35	0,38
100	2	0,88	0,46	0,90	0,28	0,40
	4	1,06	0,46	0,98	0,38	0,40
112	2	1,00	0,48	1,00	0,40	0,45
	4	1,45	0,48	1,40	0,40	0,45



2. SE(M)h series

2.1. Technical data

2-Pole motors (3000 rpm)

Type	Rated output	Rated speed	Rated torque	Efficiency	Power Factor	Full load current	Locked rotor current	Locked rotor torque	Breakdown torque	Moment of inertia	Start capacitor	Run capacitor	Sound pressure level	Netto weight B3
	P_N [kW]	n_N [min ⁻¹]	T_N [N·m]	η_N [%] 100% load	$\cos\phi_N$ [-]	I_N [A] 230V	I_L/I_N [-]	T_L/T_N [-]	T_B/T_N [-]	J [kg·m ²]	[μF/450V]		L_{PA} [dB]	m [kg]
Standard starting torque														
SEh 56-2A	0,09	2840	0,30	55,0	0,80	0,9	2,4	0,55	1,9	0,000070		3		2,9
SEh 56-2B	0,12	2860	0,40	60,0	0,85	1,0	2,7	0,50	2,0	0,000090		5		3,3
SEh 56-2C	0,18	2830	0,61	60,0	0,87	1,5	2,8	0,55	1,7	0,000100		6		3,4
SEh 63-2A	0,18	2840	0,61	57,0	0,98	1,4	2,4	0,75	1,9	0,000175		8		3,7
SEh 63-2B	0,25	2840	0,84	65,0	0,98	1,7	2,6	0,65	1,9	0,000235		10		4,2
SEh 63-2C	0,37	2840	1,24	71,0	0,97	2,4	2,8	0,50	1,7	0,000310		12		5
SEh 71-2B	0,55	2820	1,86	70,0	0,96	3,6	3,0	0,36	1,6	0,000530		14		6,3
SEh 71-2C	0,75	2820	2,54	71,0	0,98	4,9	3,0	0,40	1,5	0,000691		25		7,7
SEh 80-2B	1,1	2780	3,78	72,0	0,97	7,0	2,7	0,40	1,4	0,00111		40		9,8
SEh 80-2C	1,5	2740	5,23	73,0	0,99	9,0	2,7	0,50	1,5	0,00142		50		11,8
SEh 80-2D	2,0	2780	6,87	74,0	0,99	13,0	2,5	0,40	1,4	0,0021		40		15,20
SEh 90-2S	1,5	2740	5,12	73,0	0,99	9,0	2,7	0,50	1,5	0,0012		50		11,8
SEh 90-2L	2,0	2780	6,87	74,0	0,99	13,0	2,5	0,40	1,4	0,0016		40		15,2
SEhR 90-2S	1,5	2800	5,12	75,0	0,97	9,0	3,0	0,45	1,6	0,0012		40		12,4
SEhR 90-2L	2,2	2810	7,48	76,0	0,99	12,8	3,4	0,38	1,5	0,0016		50		15,2
SEhR 90-2M	2,7	2840	9,10	79,0	0,98	16,0	3,8	0,36	1,6	0,0024		60		18,0
SEh 100L-2	3,0	2800	10,2	72,0	0,90	21,0	3,5	0,4	1,8	0,0048		70		25,0
Increased starting torque														
SEMh 56-2A	0,06	2800	0,21	45,0	0,75	0,85	1,8	1,4	2,5	0,000070		3		2,9
SEMh 56-2B	0,09	2790	0,31	50,0	0,80	1,0	2,2	1,1	2,3	0,000090		5		3,3
SEMh 56-2C	0,12	2800	0,41	52,0	0,77	1,3	2,7	0,8	2,0	0,000100		5		3,4
SEMh 63-2A	0,12	2800	0,41	52,0	0,88	1,1	2,1	1,2	2,4	0,000175		6		3,7
SEMh 63-2B	0,18	2780	0,62	57,0	0,92	1,5	2,4	1,0	2,0	0,000235		8		4,2
SEMh 63-2C	0,25	2760	0,87	64,0	0,92	1,9	2,2	0,9	2,0	0,000310		10		4,8
SEMh 71-2A	0,25	2720	0,88	57,0	0,97	2,0	2,3	0,8	1,7	0,000390		10		5,2
SEMh 71-2B	0,37	2800	1,262	64,0	0,84	2,0	2,7	0,7	1,8	0,000536		12		6,4
SEMh 71-2C	0,55	2780	1,889	70,0	0,98	3,6	3,2	0,65	1,6	0,000691		20		7,7
SEMh 80-2A	0,55	2780	1,89	67,0	0,84	4,1	3,5	0,7	1,8	0,00080		20		8
SEMh 80-2B	0,75	2800	2,56	70,0	0,94	5,0	3,4	0,65	1,9	0,00111		25		9,7
SEMh 80-2C	1,1	2780	3,75	76,0	0,98	6,4	3,5	0,55	1,8	0,00142		30		11,5
SEMh 80-2D	1,5	2780	5,31	71,0	0,90	10,2	2,8	0,7	1,6	0,0021		40		13,5
SEMh 90-2S	1,1	2760	3,81	76,0	0,98	6,4	3,0	0,55	1,8	0,0012		30		11,7
SEMh 90-2L	1,5	2700	5,31	71,0	0,90	10,2	2,8	0,7	1,6	0,0016		40		15,7
SEMhR 90-2S	1,1	2760	3,80	74,0	0,98	7,0	3,2	0,6	1,6	0,0012		30		12,4
SEMhR 90-2L	1,5	2750	5,02	72,0	0,97	9,4	5,02	0,7	1,6	0,0016		40		15,2
SEMh 100L-2	2,2	2780	7,5	73,0	0,88	16,2	3,5	0,75	2,0	0,0048		60		25,0

2-Pole motors (3000 rpm)

Type	Rated output	Rated speed	Rated torque	Efficiency	Power Factor	Full load current	Locked rotor current	Locked rotor torque	Breakdown torque	Moment of inertia	Start capacitor	Run capacitor	Sound pressure level	Netto weight B3
	P_N [kW]	n_N [min ⁻¹]	T_N [N·m]	η_N [%] 100% load	$\cos\phi_N$ [-]	I_N [A] 230V	I_L/I_N [-]	T_L/T_N [-]	T_B/T_N [-]	J [kg·m ²]	[μF/450V]		L_{PA} [dB]	m [kg]
High starting torque														
SEh 63-2AF	0,18	2840	0,61	57,0	0,98	1,4	4,2	1,9	1,9	0,000175	25	8		3,9
SEh 63-2BF	0,25	2840	0,84	65,0	0,98	1,7	4,2	2,1	1,9	0,000235	30	10		4,4
SEh 63-2CF	0,37	2840	1,24	71,0	0,97	2,4	4,7	1,8	1,7	0,000310	40	12		5,3
SEh 71-2BF	0,55	2820	1,86	70,0	0,96	3,6	3,6	1,7	1,6	0,000530	25	14		6,5
SEh 71-2CF	0,75	2820	2,54	71,0	0,98	4,9	4,0	1,7	1,5	0,000691	70	25		8,1
SEh 80-2BF	1,1	2780	3,78	72,0	0,97	7,0	3,5	1,7	1,4	0,00111	70	25		10,6
SEh 80-2CF	1,5	2800	5,12	75,0	0,96	9,5	3,7	1,9	1,7	0,00142	60	40		12,2
SEh 90-2SF	1,5	2740	5,12	73,0	0,99	9,1	3,6	1,7	1,6	0,0012	60	40		13,5
SEh 90-2LF	2,0	2780	6,87	74,0	0,99	13,0	3,5	1,6	1,4	0,0016	75	50		16,3
SEhR 90-2SF	1,5	2800	5,12	77,0	0,99	9,0	4,1	1,9	1,6	0,0012	120	40		12,8
SEhR 90-2LF	2,2	2810	7,48	76,0	0,99	12,8	3,8	1,7	1,7	0,0016	200	50		15,5
SEhR 90-2MF	2,7	2840	9,10	79,0	0,98	16,0	4,2	2,0	1,6	0,0024	250	60		18,5
SEh 100L-2F	3,0	2800	10,2	72,0	0,90	21,0	3,5	1,7	1,8	0,0048	250	70		27,5
SEh 112-M2F	4,0	2840	13,5	74,0	0,96	25,0	4,0	1,7	1,4	0,0079	2x 250-315 1x 125-160	75		35,0



4-Pole motors (1500 rpm)

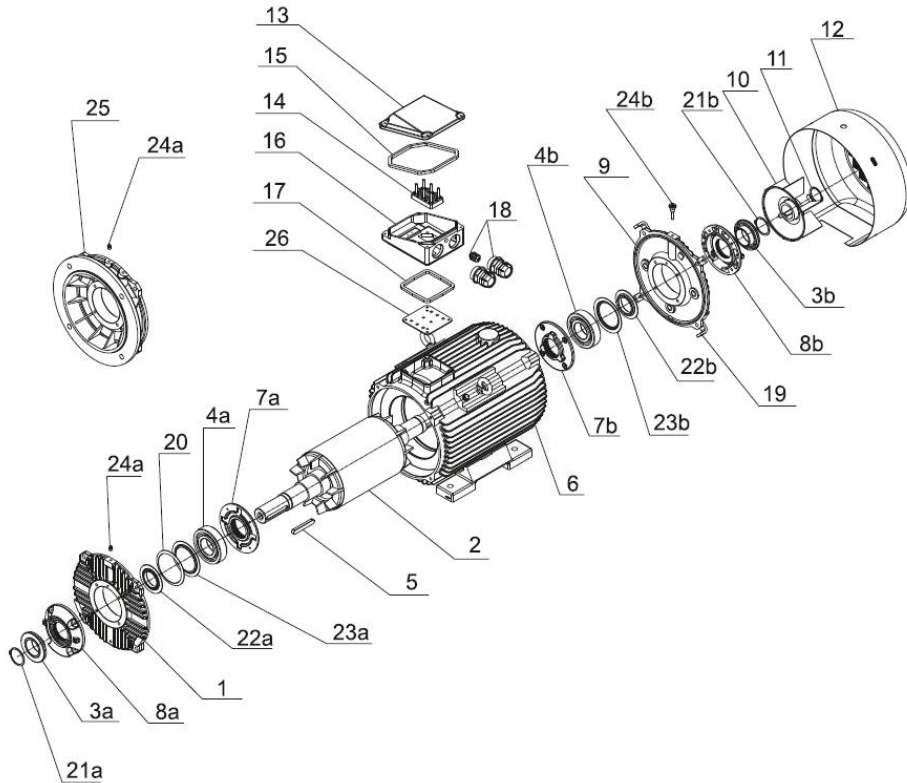
Type	Rated output	Rated speed	Rated torque	Efficiency	Power Factor	Full load current	Locked rotor current	Locked rotor torque	Breakdown torque	Moment of inertia	Start capacitor	Run capacitor	Sound pressure level	Netto weight B3
	P_N [kW]	n_N [min ⁻¹]	T_N [N·m]	η_N [%] 100% load	$\cos\phi_N$ [-]	I_N [A] 230V	I_L/I_N [-]	T_L/T_N [-]	T_B/T_N [-]	J [kg·m ²]	[µF/450V]		L_{PA} [dB]	m [kg]
Standard starting torque														
SEh 56-4A	0,06	1410	0,41	45,0	0,90	0,65	2,0	0,70	1,7	0,0002		3		2,8
SEh 56-4B	0,09	1420	0,61	50,0	0,95	0,95	1,9	0,70	1,7	0,00025		4		3,3
SEh 63-4A	0,12	1400	0,82	50,0	0,86	1,2	1,8	0,55	1,5	0,00024		5		4,1
SEh 63-4B	0,18	1400	1,23	57,0	0,95	1,5	1,9	0,70	1,4	0,000307		8		4,3
SEh 63-4C	0,25	1360	1,76	62,0	0,95	1,9	2,0	0,50	1,4	0,00038		10		4,9
SEh 71-4A	0,25	1350	1,76	50,0	0,95	2,4	2,0	0,50	1,4	0,00061		8		5,3
SEh 71-4B	0,37	1370	2,598	64,0	0,87	2,9	2,1	0,50	1,4	0,000852		10		7,3
SEh 71-4C	0,55	1350	3,89	65,0	0,92	4,2	2,2	0,40	1,4	0,00101		18		6,6
SEh 80-4A	0,55	1380	3,81	68,0	0,90	3,9	2,6	0,45	1,4	0,00157		16		9,9
SEh 80-4B	0,75	1370	5,23	70,0	0,95	4,9	2,5	0,40	1,3	0,00208		20		9,6
SEh 80-4C	1,1	1370	7,67	72,0	0,93	7,2	2,6	0,40	1,4	0,002652		30		11,4
SEh 80-4D	1,3	1370	9,1	72,0	0,90	9,0	2,8	0,40	1,4	0,0019		40		14
SEh 90-4S	1,1	1370	7,7	72,0	0,93	7,2	2,6	0,40	1,4	0,0024		30		11,4
SEh 90-4L	1,3	1370	9,1	72,0	0,91	9,0	2,8	0,38	1,4	0,0032		40		14
SEhR 90-4S	1,1	1380	7,6	70,0	0,96	7,5	2,5	0,40	1,4	0,0024		30		12
SEhR 90-4L	1,5	1400	10,2	76,0	0,97	9,3	3,0	0,40	1,5	0,0032		35		15
SEhR 90-4M	2,2	1380	15,2	70,0	0,96	14,7	3,5	0,40	1,5	0,0046		50		17,8
SEh 100L-4A	2,2	1410	15,0	75,0	0,99	13,0	2,9	0,40	1,5	0,0070		50		26,0
SEh 100L-4B	3,0	1370	21,0	70,0	0,87	23,0	3,5	0,40	1,6	0,0082		70		29,0
Increased starting torque														
SEMh 56-4A	0,04	1390	0,28	35,0	0,85	0,6	1,5	1,60	2,4	0,000200		3		2,8
SEMh 56-4B	0,06	1390	0,41	35,0	0,80	0,9	1,5	1,50	2,5	0,000250		4		3,3
SEMh 56-4C	0,09	1340	0,64	45,0	0,83	1,1	1,8	1,00	1,9	0,000300		5		3,4
SEMh 63-4A	0,09	1350	0,63	44,0	0,83	1,1	1,7	1,10	1,8	0,000240		5		4,1
SEMh 63-4B	0,12	1360	0,84	53,0	0,88	1,25	1,8	1,20	1,9	0,000307		6		4,3
SEMh 63-4C	0,18	1320	1,30	52,0	0,90	1,8	1,6	1,10	1,7	0,000380		8		4,9
SEMh 71-4B	0,25	1340	1,78	56,0	0,80	2,5	2,0	1,00	1,7	0,000852		10		6,3
SEMh 71-4C	0,37	1320	2,68	59,0	0,88	3,2	2,1	0,80	1,6	0,001099		16		7,4
SEMh 80-4A	0,37	1350	2,62	64,0	0,85	3,0	2,3	0,90	1,8	0,00156		14		8,3
SEMh 80-4B	0,55	1360	3,86	68,0	0,91	3,9	3,2	0,50	1,6	0,00208		20		9,5
SEMh 80-4C	0,75	1340	5,35	65,0	0,90	5,6	2,5	0,65	1,5	0,002652		25		11,5
SEMh 90-4S	0,75	1340	5,19	65,0	0,90	5,6	3,0	0,65	1,6	0,0024		25		12,5
SEMh 90-4L	1,1	1300	8,08	67,0	0,92	7,8	2,2	0,50	1,4	0,0032		40		14,5
SEMhR 90-4S	0,75	1380	5,2	66,0	0,95	5,5	3,1	0,60	1,6	0,0024		25		12
SEMhR 90-4L	1,1	1360	7,7	65,0	0,95	8,1	2,6	0,60	1,5	0,0032		30		15
SEMhR 90-4M	1,5	1340	10,7	63,0	0,98	11,0	2,5	0,70	1,5	0,0046		40		17,5
SEMh 100L-4A	1,5	1400	10,2	65,0	0,80	13,5	2,9	0,70	2,3	0,0070		40		25,0
SEMh 100L-4B	2,2	1380	15,0	68,0	0,83	17,7	3,2	0,70	1,8	0,0082		60		29,0

4-Pole motors (1500 rpm)

Type	Rated output	Rated speed	Rated torque	Efficiency	Power Factor	Full load current	Locked rotor current	Locked rotor torque	Breakdown torque	Moment of inertia	Start capacitor	Run capacitor	Sound pressure level	Netto weight B3
	P_N [kW]	n_N [min ⁻¹]	T_N [N·m]	η_N [%] 100% load	$\cos\phi_N$ [-]	I_N [A] 230V	I_L/I_N [-]	T_L/T_N [-]	T_B/T_N [-]	J [kg·m ²]	[μF/450V]		L_{PA} [dB]	m [kg]
High starting torque														
SEh 63-4AF	0,12	1400	0,82	50,0	0,86	1,2	3,6	1,8	1,5	0,000240	14	5		4,3
SEh 63-4BF	0,18	1400	1,23	57,0	0,95	1,5	3,5	1,6	1,4	0,000307	16	8		4,5
SEh 63-4CF	0,25	1360	1,76	62,0	0,95	1,9	3,3	1,6	1,4	0,00038	20	10		5,2
SEh 71-4BF	0,37	1370	2,6	64,0	0,88	2,9	3,5	1,8	1,4	0,00085	25	10		6,5
SEh 71-4CF	0,55	1350	3,86	65,0	0,90	4,1	3,6	1,9	1,4	0,00101	60	18		8,0
SEh 80-4BF	0,75	1370	5,23	70,0	0,95	4,9	3,0	1,8	1,4	0,00208	60	20		10,4
SEh 80-4CF	1,1	1400	7,5	74,0	0,91	7,4	3,6	1,9	1,5	0,00265	75	30		12,2
SEh 90-4SF	1,1	1400	7,5	73,0	0,90	7,5	4,0	1,6	1,5	0,0024	75	30		13,7
SEh 90-4LF	1,3	1360	9,13	72,0	0,91	9,0	3,2	1,8	1,4	0,0032	90	40		14,8
SEhR 90-4SF	1,1	1380	7,6	70,0	0,96	7,5	3,8	1,6	1,4	0,0024	100	25		12,4
SEhR 90-4LF	1,5	1400	10,2	76,0	0,97	9,3	4,0	1,7	1,5	0,0032	160	35		15,4
SEhR 90-4MF	2,2	1380	15,2	70,0	0,96	14,7	4,2	2,0	1,5	0,0046	200	50		17,8
SEh 100L-4AF	2,2	1410	15,0	75,0	0,99	13,0	3,5	1,7	1,7	0,0070	160	50		27,5
SEh 100L-4BF	3,0	1370	21,0	70,0	0,87	23,0	3,8	1,7	1,6	0,0082	200	70		31,5
SEh 112-M4F	4,0	1400	27,3	78,0	0,95	24,0	4,0	1,7	1,4	0,0118	2x 250-315	70		35,0



2.2. Spare parts



#	Description
1	DE shield
2	Rotor
3	Shaft seal
4	Bearing
5	Key
6	Housing with feet
7	Internal bearing cap
8	External bearing cap
9	NDE shield
10	Fan
11	Seeger ring
12	Fan cover
13	Terminal box cover

#	Description
14	Terminal board
15	Rubber gasket
16	Terminal box housing
17	Rubber gasket
18	Cable glands
19	Fan cover support
20	Spring washer
21	Seeger ring
22	Grease shield
23	Bearing internal ring
24	Grease nipple
25	Flange B5
26	Rubber gasket



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MOTORS WITH ADDED VALUE