

# Open continuous current (DC) motors LSK

## General information



### LSK open continuous current (dc) motors

- frame size 112 to 355 mm,
- power 2 to 750 kW.

### Conditions of use

According to the standard IEC 34-1, the standard motors can operate in the following standard conditions :

- ambient temperature within the range +5 and +40 °C,
- altitude less than 1000 m,
- atmospheric pressure : 1050 mbar,
- absolute humidity taking values between 5 and 23 g/m<sup>3</sup>,

- ambient air chemically neutral and dust-free,
- current range from 50 to 100 % of  $I_N$  in continuous operation and higher in transient operation.

**• Under load : if the motor must be permanently used in under load (less than 50 % of the rated current) one must absolutely consult LEROY-SOMER for adaptation**

N.B.: refer to the technical catalogue to check axial or radial loads, overload abilities, protection system of the motor, IP 55 in particular.



Component	Materials	Remarks
Stator (or casing)	Insulated low carbon magnetic steel laminations Enameled cathode copper, class H	- the low carbon content guarantees long term stability of the characteristics - prestressed sheet steel laminations welded using MIG process - main poles built into the entire range (except for LSK 1324C and 1604C) - auxiliary poles built in up to LSK 1604, mentioned further on - insulation system class H
Armature	Insulated low carbon magnetic steel laminations Enameled electrolytic copper, class H	- the low carbon content guarantees long term stability of the characteristics - semi-enclosed inclined slots - binding reinforced with heat-treated polymerised fibreglass - cooling ducts - insulation system class H
Commutator	Silver-plated copper on resin	- toothed type - large number of blades - ventilated by ducts
Shaft	Steel	- open key - round-ended key
Brush holder Brushes	Thermoset resin and bronze Electrographitic compound	- moulded, rigid, it can be rotated - adjustment position marked in relation to neutral axis - evenly-spaced accurate brush holders - detection of wear limit on brush holders (optional) - brush with dampers
End shields	FGL cast iron	- front flange integrated into endshield (machined on request for LSK 1124 to 1804) - feet intergrated into front and rear endshields - inspection doors on front flange : 3 on LSK 1124 to 1604, 4 on larger models - 4 inspection doors on rear shield - square inspection doors, all with identical mounting to allow accessories to be fixed at 90° (LSK 1124 to 1324)
Bearings and lubrication	Steel	- ball bearings, series 6300 (wide), set C3, high load capacity - 2RS type, sealed, greased for life up to LSK 2004, open with a greasing system thereafter - front preloaded on the bearing - horizontal movement of rear bearing blocked
Fan	Steel sheet metal	- multivoltage, multifrequency, 2 poles, IP 55 fan motor - multiposition fan, independent of the position of the terminal box - axial fan cooling kit
Terminal box	Aluminium alloy (LSK 1124 to 1604) Cast iron (LSK 1804 to 2804C)	- multiposition - removable cable gland support plate - can be located at the rear (LSK 1124 to 1604) - IP 55 (sealed) - 6 terminals + connector for options

### Armature voltage according to power supplies

Single phase sector	Maximum armature voltage	Three-phase sector	Maximum armature voltage
V	V	V	V
220 - 230	180 - 190	220	250
380 - 400	310 - 320	230	260
415	340	240	270
		380	440
		400	460
		415	470
		440	500
		500	570
		660	600

### Excitation voltage<sup>1</sup> according to power supplies

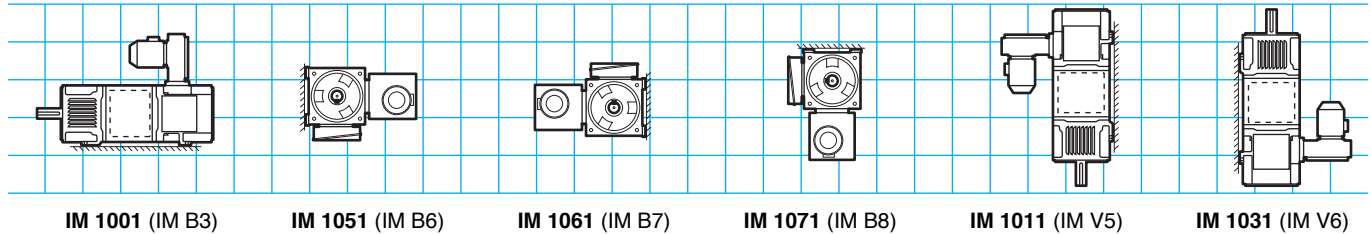
Single phase sector	Excitation voltage
V	V
230	210
400	360
"Parallel series" connection	
Rated voltage	can be used from
180 - 360	160 to 190 or 320 to 380

<sup>1</sup>. Excitation for a full wave rectified current supply.

# Open continuous current (DC) motors LSK

## Mounting positions

### Foot mounted motors



IM 1001 (IM B3)

IM 1051 (IM B6)

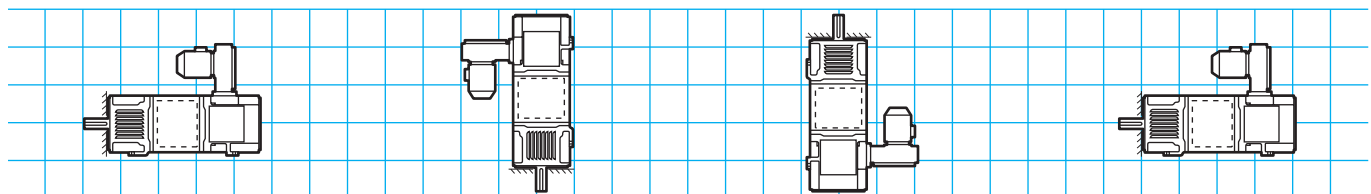
IM 1061 (IM B7)

IM 1071 (IM B8)

IM 1011 (IM V5)

IM 1031 (IM V6)

### (FF) plain holes flange mounted motors



IM 3001 (IM B5)

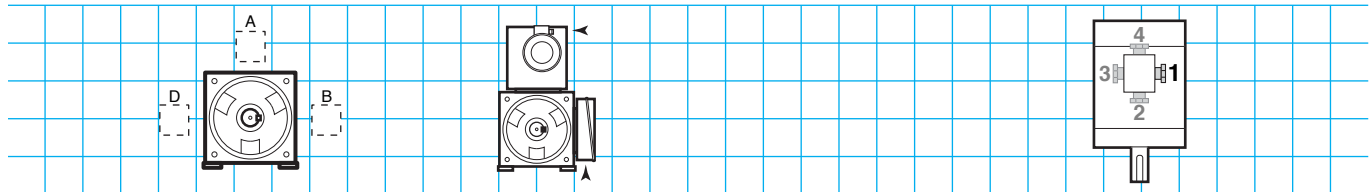
IM 3011 (IM V1)

IM 3031 (IM V3)

IM 2001 (IM B35)¹

### Positions of the terminals box (TB) and of the forced ventilation (VF)

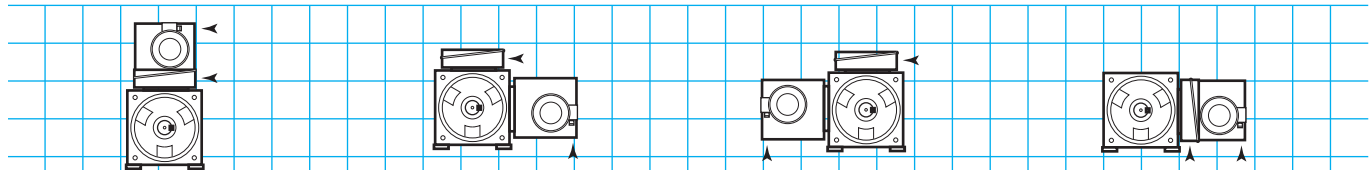
### Cable gland positions



Standard TB : B1², VF : A1

1 : standard

### Possible configurations

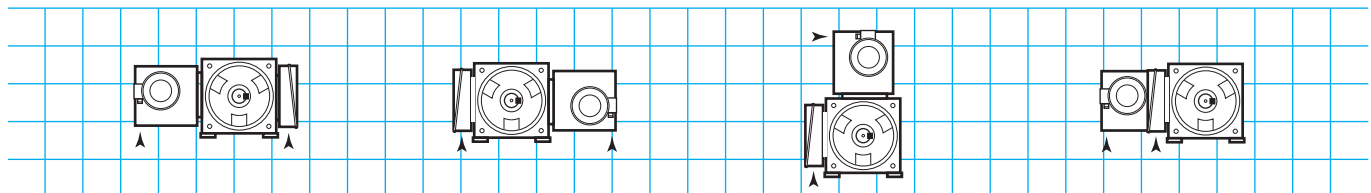


TB : A1, VF : A1³

TB : A1, VF : B1

TB : A1, VF : D3

TB : B1, VF : B1³



TB : B1, VF : D3

TB : D3, VF : B1

TB : D3, VF : A3

TB : D3, VF : D3³

1. Flange and foot position. 2. The arrow indicates the cables entry. 3. Cable gland mounting plate in position 2 for sizes 1124 and 1324.

### Mounting possibilities according to the frame size

Frame size	Mounting positions											
	IM 1001	IM 1051	IM 1061	IM 1071	IM 1011	IM 1031	IM 3001	IM 3011	IM 3031	IM 2001	IM 2011	IM 2031
112 - 132												
160												
180												
200 à 280												

¹ Possible mounting positions. Consult us for all other positions.

# Open continuous current (DC) motors LSK

## Adaptation possibilities

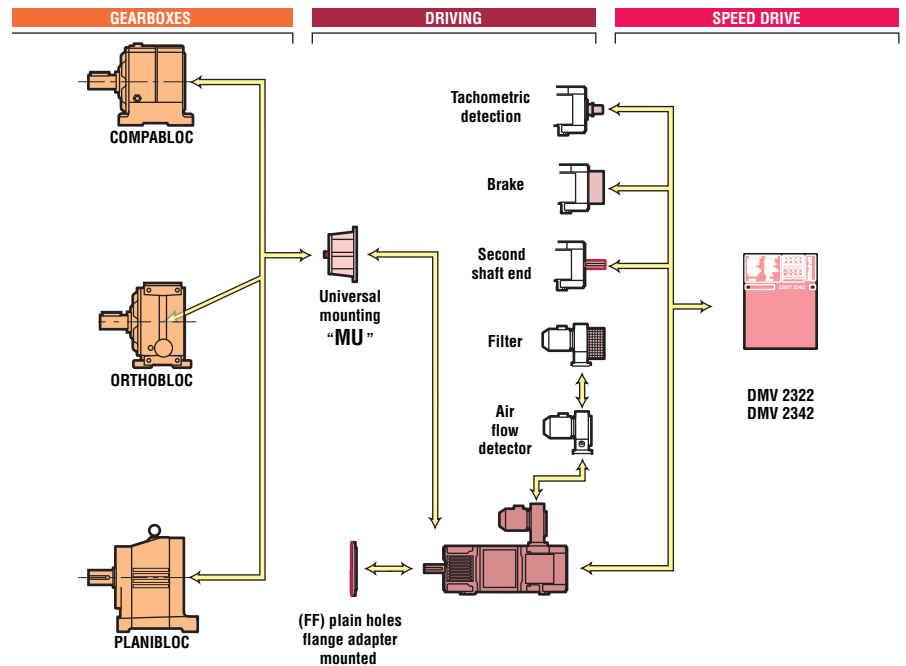
Leroy-Somer offers various options and adaptation possibilities for its motors. They are described below and offered in this catalogue, in the section relating to gearboxes, or in the chapter on speed variation for the types of motorised variable speed drives selected. For the applications that are not specified in the selection tables, consult the technical specialists at Leroy-Somer.

### LSK motors may be associated to :

- **gearboxes with universal mounting :**
  - Cb 2000 with coaxial or parallel axles,
  - Ot 2000 with conical gear,
  - PI 2000 with planetary gear .
- **electronic variable speed drive :**
  - 2 three-phase quadrants DMV 2322,
  - 4 three-phase quadrants DMV 2342.

### The options :

- roller bearings
- second shaft end
- plain hole flange adapter
- brush wear limit detector and pressure splitter incorporated
- air filter
- air flow detector
- **safety brake :**
  - For normal use : 32 to 360 N.m (sizes 1124 to 1604),
  - for intensive use : consult us.
- **coupling speed detection :**
  - tachometric dynamo, normal or reinforced, 60 V / 1000 min<sup>-1</sup>,
  - pulse generator (or encoder), 11 to 30 V.
- **hollow shaft speed detector :**
  - tachometric dynamo, 60 V / 1000 min<sup>-1</sup>.
- **safety brake with speed detection**



## Designation / Codification

<b>LSK</b>	<b>1604</b>	<b>L 10</b>	<b>460 V</b>	<b>2330 min<sup>-1</sup></b>	<b>113 kW</b>	<b>IM 1001</b>	<b>210 V</b>	<b>IC 06</b>	<b>IP 23S</b>
Motor type	Frame size Polarity	Stator designation Builder index	Armature voltage	Rated speed	Rated power	Construction form	Excitation voltage	Cooling index	Protection index

### Codification example:

Motor 113 kW, 2 330 min<sup>-1</sup>, IM 1001, 460/210 V

### Designation

LSK 1604 L10 113 kW

### Code

-

All the products in this catalogue have a code.

The coding table is incorporated in the price list together with the list of designations.

Each electromechanical product is classified first in order of power and then in order of speed.

# Open continuous current (DC) motors LSK

## Preselection chart

### Selection example :

#### Data:

- 48 kW at 2500 min<sup>-1</sup>
- variable speed drive output voltage 440 V
- operation constant power up to 3800 min<sup>-1</sup>.

#### Operating mode:

- Preselect the motor size using the chart opposite : LSK 1324.
  - In the selection table look for the power closest to 48 kW in the 440 V armature voltage column :
- P = 49 kW at 2530 min<sup>-1</sup>
- How can the rated speed be adjusted to the required speed?
- by adjusting the armature voltage (output of the variable speed drive), by up to + 5 %, the power is corrected proportionally ;
  - or by adjusting the excitation : by reducing this, the speed is increased at constant power.
- In this situation, in order to be used at 3200 min<sup>-1</sup>, the motor will be supplied at :

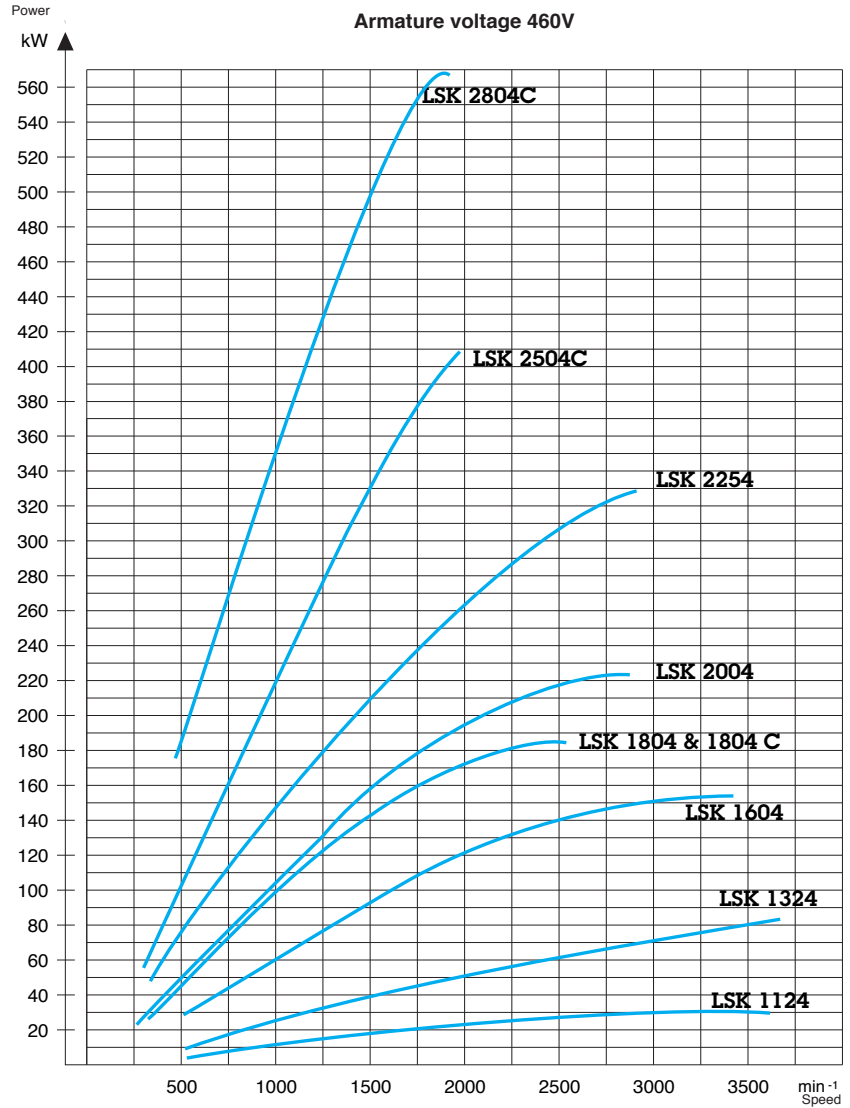
$$440 \times \frac{2500}{2530} = 435 \text{ V,}$$

$$\text{and } P = 49 \times \frac{435}{440}, \text{ or } 48.4 \text{ kW.}$$

The variation in armature voltage is 1.15 %, thus lower than the limit. In order to achieve the operation in overload at constant power, select the compensated version (for the non compensated version, the limit is 3500 min<sup>-1</sup>) See the extract from the selection table below.

#### Selected motor :

LSK 1324 VL 11 - 440 V - 49 kW...  
IC 06



P kW	Rotation speed n for armature voltage U						n <sub>maxi</sub> elec.		M N.m	I A	Manuf. index
	400 V min <sup>-1</sup>	400 V min <sup>-1</sup>	420V min <sup>-1</sup>	440 V min <sup>-1</sup>	460 V min <sup>-1</sup>	500 V min <sup>-1</sup>	N. C. min <sup>-1</sup>	C. min <sup>-1</sup>			
51.5								4000	172	96.5	C 10
28.1	1500						3200	4000	179	127	11
44.7		2300					3400	4000	186	126.5	11
46.6			2420				3500	4000	184	126	11
49				2530			3500	4000	185	126	11
49.5					2640		3500	4000	179	121	11
52.7						2870	3500	4000	175	116	11
61.4								4000	170	111.5	C 11
30.6							2920	4000	160	135.5	13
48							4000		163	134	13

# Open continuous current (DC) motors LSK 1124 M

## Selection

IP 23S motor - IC 06 ventilation - Class H  
Full bridge three-phase power supply  
S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight: 101 kg - Inertia moment : 0.053 kg.m<sup>2</sup>  
Excitation power : 0.65 kW - Maximum mechanical speed : 4000 min<sup>-1</sup>

P	Rotation speed n for armature voltage U							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty
	220 V	260 V	400 V	420 V	440 V	460 V	500 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A		mH	$\Omega$	V		
3.5	570							1120	59	24	0.67	41	3.76	500	03	
4.4		670						1320	63	24	0.71	41	3.76	500		
7.1			1070					1650	63	23.5	0.76	41	3.76	500		
7.6				1120				1730	65	23.5	0.77	41	3.76	500		
8					1170			1810	65	23.5	0.78	41	3.76	500		
8.5						1230		1900	66	23.5	0.79	41	3.76	500		
9.2							1330	2060	66	23	0.80	41	3.76	500		
4.7	730							1440	61	30	0.71	25	2.54	500	04	
5.9		860						1710	66	29.5	0.77	25	2.54	500		
9			1370					2120	63	29	0.78	25	2.54	500		
9.5				1440				2230	63	28.5	0.79	25	2.54	500		
10					1510			2340	63	28.5	0.80	25	2.54	500		
10.5						1580		2440	63	28.5	0.80	25	2.54	500		
11.6							1710	2650	65	28.5	0.81	25	2.54	500		
6.7	1020							2000	63	40.5	0.77	14	1.39	500	05	
8.2		1200						2380	65	40	0.79	14	1.39	500		
13			1910					2960	65	39.5	0.82	14	1.39	500		
13.5				2000				3100	64	39	0.83	14	1.39	500		
14.2					2100			3250	65	38.5	0.84	14	1.39	500		
14.9						2200		3410	65	38.5	0.84	14	1.39	500		
16.3							2390	3700	65	38.5	0.85	14	1.39	500		
11	1580							3070	66	60.5	0.83	6.5	0.61	500	06	
13.1		1860						3600	67	60	0.84	6.5	0.61	500		
20.2			2950					4000	65	59	0.85	6.5	0.61	500		
21.1				3100				4000	65	58.5	0.86	6.5	0.61	500		
22					3250			4000	65	58	0.86	6.5	0.61	500		
23.2						3400		4000	65	58	0.87	6.5	0.61	500		
25.3							3690	4000	65	58	0.87	6.5	0.61	500		

1. higher speed ranges by field weakening can be studied according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency  
L : Motor self-induction coil

R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 1124 L

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 126 kg - Inertia moment : 0.066 kg.m<sup>2</sup>

Excitation power : 0.65 kW - Maximum mechanical speed : 4000 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\text{mx}}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\text{max}}$	Index	Qty	
	220 V	260 V	400 V	420 V	440 V	460 V	500 V										
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V			
4	510							1000	75	28	0.66	35	3.26	500	04		
5.1		600						1200	81	28	0.70	35	3.26	500			
8.3			960					1480	83	27.5	0.75	35	3.26	500			
8.8				1010				1560	83	27.5	0.76	35	3.26	500			
9.3					1060			1640	84	27.5	0.77	35	3.26	500			
9.8						1110		1720	84	27.5	0.77	35	3.26	500			
10.7							1200	1860	85	27	0.79	35	3.26	500			
5.9	710							1420	79	36.5	0.74	20	1.79	500	05		
7.2		840						1700	82	36	0.77	20	1.79	500			
11.4			1350					2090	81	35.5	0.80	20	1.79	500			
12				1420				2200	81	35.5	0.81	20	1.79	500			
12.7					1490			2300	81	35.5	0.81	20	1.79	500			
13.4						1560		2410	82	35.5	0.82	20	1.79	500			
14.5							1700	2630	81	35	0.83	20	1.79	500			
9.7	1150							2200	81	55	0.80	9.5	0.787	500	06		
11.6		1350						2640	82	54.5	0.82	9.5	0.787	500			
18.2			2180					3280	80	54	0.84	9.5	0.787	500			
19.3				2290				3440	80	54	0.85	9.5	0.787	500			
20.4					2400			3610	81	54	0.86	9.5	0.787	500			
21.4						2500		3780	82	54	0.86	9.5	0.787	500			
23.3							2720	4000	82	53.5	0.87	9.5	0.787	500			
11.4	1430							2840	76	61	0.85	4.3	0.47	500	21	1	
13.7		1680						3280	78	60.5	0.87	4.3	0.47	500			
21.4			2730					4000	75	60	0.89	4.3	0.47	500			
22.6				2870				4000	75	60	0.90	4.3	0.47	500			
23.8					3000			4000	76	60	0.90	4.3	0.47	500			
24						3130		4000	73	58	0.90	4.3	0.47	500			
25.3							3400	4000	71	56	0.90	4.3	0.47	500			

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency  
L : Motor self-induction coil

R : Armature resistance at 115 °C  
 $U_{\text{max}}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 1124 VL

## Selection

IP 23S motor - IC 06 ventilation - Class H  
Full bridge three-phase power supply  
S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 152 kg - Inertia moment : 0.085 kg.m<sup>2</sup>  
Excitation power : 0.75 kW - Maximum mechanical speed : 4000 min<sup>-1</sup>

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							<i>n</i> <sub>max</sub>	<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	<i>R</i> <sub>115°</sub>	<i>U</i> <sub>max</sub>	Index	Qty		
	220 V	260 V	400 V	420 V	440 V	460 V	500 V											
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V				
3.6	370							650	93	27.5	0.63	40	3.64	500	04			
4.9		440						780	106	27	0.70	40	3.64	500				
8.1			720					970	107	26.5	0.76	40	3.64	500				
8.7				760				1020	109	26	0.79	40	3.64	500				
9.2					790			1060	111	26	0.79	40	3.64	500				
9.8						830		1120	113	26	0.81	40	3.64	500				
10.9							900	1210	116	26	0.83	40	3.64	500				
5.7	530							930	103	37	0.74	23	1.93	500	05			
7.4		630						1120	112	36.5	0.78	23	1.93	500				
11.5			1030					1390	107	34.5	0.83	23	1.93	500				
12.2				1080				1450	108	34	0.85	23	1.93	500				
12.9					1120			1510	110	34	0.86	23	1.93	500				
13.6						1180		1590	110	34	0.86	23	1.93	500				
14.9							1280	1720	111	34	0.87	23	1.93	500				
9.9	840							1410	113	55	0.82	10.2	0.832	500	06			
12		1000						1680	115	54.5	0.85	10.2	0.832	500				
18.2			1610					2500	108	53	0.86	10.2	0.832	500				
19.2				1700				2550	108	52.5	0.87	10.2	0.832	500				
20.2					1770			2600	109	52	0.88	10.2	0.832	500				
21.3						1850		2600	110	52	0.89	10.2	0.832	500				
23							2000	2600	110	52	0.89	10.2	0.832	500				
10.7	1140							1980	90	58.5	0.83	6.6	0.57	500	21	1		
12.6		1350						2360	89	58	0.83	6.6	0.57	500				
20.6			2180					2830	90	57	0.90	6.6	0.57	500				
22				2280				2960	92	57	0.92	6.6	0.57	500				
23					2400			3120	92	57	0.92	6.6	0.57	500				
24.2						2500		3250	92	57	0.92	6.6	0.57	500				
26.3							2710	3520	93	57	0.92	6.6	0.57	500				

1. higher speed ranges by field weakening can be studied according to the application : consult us.

*P* : Rated power  
*M* : Rated moment  
*I* : Permissible current in continuous operation  
 $\eta$  : Efficiency  
*L* : Motor self-induction coil

*R* : Armature resistance at 115 °C  
*U*<sub>max</sub> : Maximum armature voltage

# Open continuous current (DC) motors LSK 1324 S - LSK 1324C S

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 155 kg - Inertia moment : 0.12 kg.m<sup>2</sup>

Excitation power : 0.7 kW - Maximum mechanical speed : 4000 min<sup>-1</sup>

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							$n_{\max \text{élec}}$		<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V	N.C.	C.								
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
6.9	630							1000	1600	105	39	0.68	41	2.23	550	03	
12.2		970						1550	2480	120	38.5	0.79	41	2.23	550		
12.7			1020					1630	2610	119	38	0.79	41	2.23	550		
13.3				1070				1710	2740	119	38	0.79	41	2.23	550		
14					1120			1790	2860	119	38	0.80	41	2.23	550		
15.5						1220		1950	3120	121	38	0.81	41	2.23	550		
17.9							1460		3740	117	36.5	0.82	25	2.69	600	t	
9.7	890							2000	3200	104	49.5	0.75	22	1.3	550	05	1
16.5		1310						2200	3520	120	49.5	0.83	22	1.3	550		
17.3			1440					2320	3710	115	49	0.83	22	1.3	550		
18				1510				2410	3860	114	49	0.83	22	1.3	550		
18.7					1580			2520	4000	113	48.5	0.84	22	1.3	550		
20.6						1720		2750	4000	114	48.5	0.85	22	1.3	550		
23.6							2060		4000	109	46	0.86	14	1.59	600	t	
15.6	1470							2350	3760	101	73.5	0.82	10	0.56	550	08	
25.4		2260						3610	4000	107	72.5	0.87	10	0.56	550		
26.6			2380					3800	4000	107	72	0.88	10	0.56	550		
27.9				2490				3980	4000	107	72	0.88	10	0.56	550		
29.3					2600			4000	4000	108	72	0.88	10	0.56	550		
32						2830		4000	4000	108	72	0.89	10	0.56	550		
36.8							3390		4000	104	69	0.89	6.3	0.64	600	t	
19.9	1850							2400	4000	103	90	0.85	6.5	0.35	460	09	
32		2840						3260	4000	108	89.5	0.89	6.5	0.35	460		
33.4			2990					3400	4000	107	89	0.89	6.5	0.35	460		
34.4				3130				3400	4000	105	87.5	0.89	6.5	0.35	460		
35.3					3270			3470	4000	103	86	0.89	6.5	0.35	460		

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.

t: only compensated version motor : LSK 1324C S.

*P* : Rated power  
*M* : Rated moment  
*I* : Permissible current in continuous operation  
 $\eta$  : Efficiency  
*L* : Motor self-induction coil

*R* : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage  
 N.C : Non compensated motor  
 C : Compound motor



# Open continuous current (DC) motors LSK 1324 M - LSK 1324C M

## Selection

IP 23S motor - IC 06 ventilation - Class H  
Full bridge three-phase power supply  
S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 175 kg - Inertia moment : 0.15 kg.m<sup>2</sup>  
Excitation power : 0.8 kW - Maximum mechanical speed : 4000 min<sup>-1</sup>

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							<i>n</i> <sub>max elec</sub> <sup>1</sup>		<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	<i>R</i> <sub>115°</sub>	<i>U</i> <sub>max</sub>	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V	N.C.	C.								
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
8.9	620							990	1580	137	48.5	0.71	29.5	1.57	550	05	
15.3		960						1530	2450	152	48	0.79	29.5	1.57	550		
15.8			1000					1600	2560	151	47	0.80	29.5	1.57	550		
16.5				1050				1680	2690	150	47	0.80	29.5	1.57	550		
17.3					1100			1760	2820	150	47	0.80	29.5	1.57	550		
18.8						1200		1920	3070	150	47	0.80	29.5	1.57	550		
21.5							1430		4000	144	44.5	0.81	16.8	1.8	600		t
15.1	1040							1660	2660	139	75	0.77	12.6	0.68	550	08	
24.8		1600						2560	4000	148	73.5	0.84	12.6	0.68	550		
26.3			1690					2700	4000	149	73	0.85	12.6	0.68	550		
27.6				1770				2830	4000	149	73	0.86	12.6	0.68	550		
29					1850			2960	4000	150	73	0.86	12.6	0.68	550		
31.5						2010		3210	4000	150	73	0.86	12.6	0.68	550		
36.4							2410		4000	144	70	0.87	7.2	0.77	600		t
19.2	1380							1790	2860	133	88	0.84	8	0.4	460	09	
30.5		2130						2450	4000	137	88	0.87	8	0.4	460		
32			2230					2500	4000	137	87.5	0.87	8	0.4	460		
33.6				2340				2500	4000	137	87.5	0.87	8	0.4	460		
35.5					2450			2600	4000	138	87.5	0.88	8	0.4	460		
38.5						2660			4000	138	87.5	0.88	4.5	0.49	500		t
23.6	1870							2990	4000	121	108	0.84	4.6	0.25	600		
37.3		2870						4000		124	106	0.88	4.6	0.25	600	10	
39.2			3020					4000		124	106	0.88	4.6	0.25	600		
41.5				3160				4000		125	106	0.89	4.6	0.25	600		
42.6					3300			4000		123	104	0.89	4.6	0.25	600		
45.4						3590		4000		121	101	0.90	4.6	0.25	600		

1. higher speed ranges by field weakening can be studied according to the application : consult us.  
t: only compensated version motor : LSK 1324C M.

*P* : Rated power  
*M* : Rated moment  
*I* : Permissible current in continuous operation  
 $\eta$  : Efficiency  
*L* : Motor self-induction coil

*R* : Armature resistance at 115 °C  
*U*<sub>max</sub> : Maximum armature voltage  
N.C : Non compensated motor  
C : Compound motor

# Open continuous current (DC) motors LSK 1324 VL - LSK 1324C VL

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 215 kg - Inertia moment : 0.2 kg.m<sup>2</sup>

Excitation power : 0.85 kW - Maximum mechanical speed : 4000 min<sup>-1</sup>

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							<i>n</i> <sub>max elec</sub> <sup>t</sup>		<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	<i>R</i> <sub>115°</sub>	<i>U</i> <sub>max</sub>	Index	Qty	
	260 V	400 V	420 V	440 V	460 V	500 V	600 V	N.C.	C.									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V			
12.7	700							960	1470	173	67	0.73	21.4	0.88	500	08		
21.4		1070						1460	2240	191	66	0.81	21.4	0.88	500			
22.7			1120					1530	2350	194	65	0.83	21.4	0.88	500			
24.2				1170				1600	2450	198	65	0.84	21.4	0.88	500			
24.9					1220			1670	2560	195	64.5	0.84	21.4	0.88	500			
26.9						1320		1800	2770	195	64	0.84	21.4	0.88	500			
32.1							1580		3300	194	63	0.85	10.1	0.88	600		t	
16.8	910							1180	1890	176	80	0.80	13.8	0.57	460	09		
27.3		1390						1600	2560	188	79.5	0.86	13.8	0.57	460			
28.8			1460					1650	2640	188	79	0.87	13.8	0.57	460			
30.2				1530				1650	2640	189	79	0.87	13.8	0.57	460			
30.5					1600			1700	2720	182	76.5	0.87	13.8	0.57	460			
33						1730			2960	182	75	0.88	7.8	0.68	500		t	
23.5	1240							1980	3170	181	105.5	0.85	8	0.33	550		10	
36.8		1910						3050	4000	184	105	0.87	8	0.33	550			
38.8			2000					3200	4000	185	104.5	0.88	8	0.33	550			
40.5				2100				3360	4000	184	104.5	0.88	8	0.33	550			1
41.8					2190			3500	4000	182	101.5	0.89	8	0.33	550			
44						2380		3570	4000	177	99	0.89	8	0.33	550			
51.5							2860		4000	172	96.5	0.89	4.6	0.37	600	t		
28.1	1500							3200	4000	179	127	0.85	4.6	0.23	550	11		
44.7		2300						3400	4000	186	126.5	0.88	4.6	0.23	550			
46.6			2420					3500	4000	184	126	0.88	4.6	0.23	550			
49				2530				3500	4000	185	126	0.88	4.6	0.23	550			1
49.5					2640			3500	4000	179	121	0.89	4.6	0.23	550			
52.7						2870		3500	4000	175	116	0.89	4.6	0.23	550			
61.4							3450		4000	170	111.5	0.89	2.6	0.26	600		t	
30.6	1830							2920	4000	160	135.5	0.87	3.2	0.15	460	13		
48		2820						4000		163	134	0.89	3.2	0.15	460			
49.8			2960					4000		161	133	0.89	3.2	0.15	460			
52.5				3100				4000		162	132	0.90	3.2	0.15	460			1
53.2					3240			4000		157	128.5	0.90	3.2	0.15	460			
56.7						3520			4000	154	126	0.90	1.9	0.17	500		t	

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.

t: only compensated version motor : LSK 1324C VL.

*P* : Rated power

*M* : Rated moment

*I* : Permissible current in continuous operation

$\eta$  : Efficiency

*L* : Motor self-induction coil

*R* : Armature resistance at 115 °C

*U*<sub>max</sub> : Maximum armature voltage

N.C : Non compensated motor

C : Compound motor

# Open continuous current (DC) motors LSK 1324 XVL - LSK 1324C XVL

## Selection

**IP 23S motor - IC 06 ventilation - Class H**  
**Full bridge three-phase power supply**  
**S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 249 kg - Inertia moment : 0.24 kg.m<sup>2</sup>**  
**Excitation power : 1.2 kW - Maximum mechanical speed : 4000 min<sup>-1</sup>**

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							<i>n</i> <sub>max elec</sub> <sup>1</sup>		<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	<i>R</i> <sub>115°</sub>	<i>U</i> <sub>max</sub>	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V	N.C.	C.								
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
12.9	550							750	1200	224	67	0.74	20.5	1.03	550	08	
21.8		840						1150	1840	248	66	0.83	20.5	1.03	550		
23			880					1210	1940	250	65	0.84	20.5	1.03	550		
24				920				1260	2020	249	64.5	0.84	20.5	1.03	550		
25.2					960			1320	2110	251	64.5	0.85	20.5	1.03	550		
27.5						1040		1430	2290	253	64	0.86	20.5	1.03	550		
32.5							1250		2750	248	63	0.86	13	1.15	600	t	
16.8	720							990	1580	223	81.5	0.79	13	0.64	460	09	
28		1100						1270	2030	243	81	0.86	13	0.64	460		
29.5			1160					1330	2130	243	80.5	0.87	13	0.64	460		
31				1210				1330	2130	245	80.5	0.87	13	0.64	460		
32.5					1260			1360	2180	246	80.5	0.88	13	0.64	460		
35.2						1370			2620	245	80	0.88	8.3	0.72	500		t
22.4	970							1330	2130	221	107	0.80	7.4	0.39	550	10	
36.2		1490						2050	3280	232	106	0.85	7.4	0.39	550		
38.3			1570					2160	3460	233	106	0.86	7.4	0.39	550		
40				1640				2260	3620	233	105.5	0.86	7.4	0.39	550		
42					1710			2350	3760	235	105.5	0.87	7.4	0.39	550		
45.8						1860		2410	3860	235	105	0.87	7.4	0.39	550		
54.5							2230		4000	233	104	0.88	4.8	0.44	600	t	
27.3	1190							2200	3520	219	125	0.84	5.5	0.28	550	11	
43.8		1830						2400	3840	229	123	0.89	5.5	0.28	550		
45.6			1920					2500	4000	227	121.5	0.89	5.5	0.28	550		
47.3				2010				2610	4000	225	120	0.90	5.5	0.28	550		
49.5					2100			2730	4000	225	119.5	0.90	5.5	0.28	550		
53.8						2280		2960	4000	225	118.5	0.91	5.5	0.28	550		
64.3							2740		4000	224	118	0.91	3.5	0.32	600	t	
34	1450							2000	3200	224	149.5	0.87	3.7	0.17	460	13	
53.7		2220						2880	4000	231	147.5	0.90	3.7	0.17	460		
56.4			2330					3020	4000	231	147	0.91	3.7	0.17	460		
59.2				2440				3170	4000	232	147	0.91	3.7	0.17	460		
61.8					2550			3310	4000	231	146.5	0.92	3.7	0.17	460		
67.3						2770			4000	232	146.5	0.92	2.3	0.18	600		t
80.2							3330		4000	230	145	0.92	2.3	0.18	600	t	

1. higher speed ranges by field weakening can be studied according to the application : consult us.  
t: only compensated version motor : LSK 1324C XVL.

*P* : Rated power  
*M* : Rated moment  
*I* : Permissible current in continuous operation  
 $\eta$  : Efficiency  
*L* : Motor self-induction coil

*R* : Armature resistance at 115 °C  
*U*<sub>max</sub> : Maximum armature voltage  
N.C : Non compensated motor  
C : Compensated motor

# Open continuous current (DC) motors LSK 1604 S - LSK 1604C S

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 285 kg - Inertia moment : 0.45 kg.m<sup>2</sup>

Excitation power : 1.3 kW - Maximum mechanical speed : 4000 min<sup>-1</sup>

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							<i>n</i> <sub>max elec</sub> <sup>1</sup>		<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	<i>R</i> <sub>115°</sub>	<i>U</i> <sub>max</sub>	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V	N.C.	C.								
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
20.4	680							1020	1630	287	99	0.79	9.8	0.63	600	02	
33.6		1050						1570	2510	306	98	0.86	9.8	0.63	600		
34.9			1100					1650	2640	303	96	0.86	9.8	0.63	600		
36.3				1150				1720	2750	301	95.5	0.86	9.8	0.63	600		
37.1					1200			1800	2880	295	93	0.87	9.8	0.63	600		
39.2						1300		1950	3120	288	89	0.88	9.8	0.63	600		
46.2							1560	2100	3360	283	87.5	0.88	9.8	0.63	600		
24.8	850							1270	2030	279	118	0.81	6.6	0.46	500		04
40.4		1310						1960	3140	295	116.5	0.87	6.6	0.46	500		
42.3			1380					2070	3310	293	115	0.87	6.6	0.46	500		
44.1				1440				2160	3460	292	114.5	0.97	6.6	0.46	500		
45.2					1500			2250	3600	288	112	0.88	6.6	0.46	500		
47						1630		2400	3840	275	106	0.89	6.6	0.46	500		
55.8							1960	4000	4000	272	104.5	0.89	3.8	0.57	600	t	
29.6	1010							1510	2420	280	137.5	0.83	4.9	0.35	460	05	
47.8		1550						2320	3710	295	136	0.88	4.9	0.35	460		
49.6			1630					2440	3900	291	134	0.88	4.9	0.35	460		
52				1700				2550	4000	292	133.5	0.89	4.9	0.35	460		
53					1770			2600	4000	286	130	0.89	4.9	0.35	460		
55						1930		4000	4000	272	124	0.89	2.9	0.43	600		t
65.6							2310	4000	4000	271	121.5	0.90	2.9	0.43	600		t
87.5	1250							1870	2990	287	166.5	0.87	3.3	0.2	600		06
59.9		1910						2670	4000	300	165	0.90	3.3	0.2	600		
62			2010					2800	4000	295	162.5	0.90	3.3	0.2	600		
64.7				2100				2940	4000	294	162	0.91	3.3	0.2	600		
66.4					2190			3000	4000	290	158	0.91	3.3	0.2	600		
68.5						2380		3300	4000	275	150.5	0.91	3.3	0.2	600		
80.5							2860	4000	4000	269	147.5	0.91	3.3	0.2	600		
45.5	1460							2190	3500	298	197	0.88	2.4	0.14	600	07	
71		2240						3100	4000	303	195	0.91	2.4	0.14	600		
73.5			2350					3290	4000	299	192	0.91	2.4	0.14	600		
77.4				2460				3400	4000	300	191	0.92	2.4	0.14	600		
79.1					2570			2590	4000	294	187	0.92	2.4	0.14	600		
81.9						2790		3900	4000	280	178	0.92	2.4	0.14	600		
96.6							3350	4000	4000	275	175	0.92	2.4	0.14	600		
54.2	1860							2600	4000	278	234	0.89	2	0.09	500		09
84.7		2860						4000	4000	283	230	0.92	2	0.09	500		
87.7			3000					4000	4000	279	227	0.92	2	0.09	500		
91				3140				4000	4000	277	225	0.92	2	0.09	500		
95.8					3280			4000	4000	279	224	0.93	2	0.09	500		
102						3570		4000	4000	274	220	0.93	2	0.09	500		

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.  
t: only compensated version motor : LSK 1604C S.

*P* : Rated power

*M* : Rated moment

*I* : Permissible current in continuous operation

$\eta$  : Efficiency

*L* : Motor self-induction coil

*R* : Armature resistance at 115 °C

*U*<sub>max</sub> : Maximum armature voltage

N.C : Non compensated motor

C : Compensated motor

# Open continuous current (DC) motors LSK 1604 M - LSK 1604C M

## Selection

IP 23S motor - IC 06 ventilation - Class H  
Full bridge three-phase power supply  
S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 325 kg - Inertia moment : 0.55 kg.m<sup>2</sup>  
Excitation power : 1.6 kW - Maximum mechanical speed : 4000 min<sup>-1</sup>

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							<i>n</i> <sub>max elec</sub> <sup>1</sup>		<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	<i>R</i> <sub>115°</sub>	<i>U</i> <sub>max</sub>	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V	N.C.	C.								
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
24.3	620							930	1490	374	121.5	0.77	8.8	0.562	500	04	
40.2		950						1330	2130	404	119.5	0.84	8.8	0.562	500		
42.3			990					1380	2210	408	118.5	0.85	8.8	0.562	500		
44.1				1040				1450	2320	405	117.5	0.86	8.8	0.562	500		
45.4					1080			1510	2420	401	114.5	0.86	8.8	0.562	500		
47.8						1180		1650	2640	387	110	0.87	8.8	0.562	500		
56.2							1410		3170	381	107.5	0.87	5	0.562	600		t
29	740							1110	1780	374	140	0.80	6.5	0.429	460	05	
47.4		1130						1580	2530	401	138	0.85	6.5	0.429	460		
49.4			1190					1660	2660	396	136.5	0.86	6.5	0.429	460		
52				1240				1730	2770	400	135.5	0.87	6.5	0.429	460		
53.2					1290			1800	2880	394	132.5	0.87	6.5	0.429	460		
56.3						1400			3110	384	128	0.88	3.7	0.53	600		t
65.5							1690		3730	370	124	0.88	3.7	0.53	600		t
37.9	910							1360	2180	398	171.5	0.85	4.4	0.249	600	06	
60.3		1390						1940	3100	414	169.5	0.89	4.4	0.249	600		
62.8			1460					2040	3260	411	168	0.89	4.4	0.249	600		
65.2				1530				2140	3420	407	166.5	0.89	4.4	0.249	600		
67					1590			2220	3550	402	162	0.90	4.4	0.249	600		
70.2						1730		2400	3840	388	156	0.90	4.4	0.249	600		
82.4							2080	2700	4000	378	152.5	0.90	4.4	0.249	600		
46	1070							1710	2740	411	203	0.87	4.1	0.169	600	07	
72.7		1650						2360	3780	421	201.5	0.90	4.1	0.169	600		
75			1730					2400	3840	414	198.5	0.90	4.1	0.169	600		
78.3				1800				2500	4000	415	197.5	0.90	4.1	0.169	600		
81					1870			2610	4000	414	193	0.91	4.1	0.169	600		
83.8						2040		2840	4000	392	184	0.91	4.1	0.169	600		
98.3							2450	3400	4000	383	180	0.91	4.1	0.169	600		
65	1580							2370	3790	393	280	0.89	1.57	0.08	460	10	
101		2420						3140	4000	399	275	0.92	1.57	0.08	460		
105			2540					3300	4000	395	272	0.92	1.57	0.08	460		
109				2660				3450	4000	392	270	0.92	1.57	0.08	460		
114					2780			3600	4000	392	269.5	0.92	1.57	0.08	460		
123						3020			4000	388	264	0.93	0.9	0.1	600		t
145							3620		4000	383	260	0.93	0.9	0.1	600		t
74	1770							2440	3900	399	315	0.90	1.77	0.07	500	11	
108		2740						3750	4000	376	295	0.91	1.77	0.07	500		
111			2870					3930	4000	369	290	0.91	1.77	0.07	500		
117				3000				4000		372	289	0.92	1.77	0.07	500		
122					3130			4000		372	286	0.93	1.77	0.07	500		
131						3400		4000		368	281	0.93	1.77	0.07	500		

1. higher speed ranges by field weakening can be studied according to the application : consult us.  
t: only balanced version motor : LSK 1604C M.

*P* : Rated power  
*M* : Rated moment  
*I* : Permissible current in continuous operation  
 $\eta$  : Efficiency  
*L* : Motor self-induction coil  
*R* : Armature resistance at 115 °C  
*U*<sub>max</sub> : Maximum armature voltage  
N.C : Non compensated motor  
C : Compensated motor

# Open continuous current (DC) motors LSK 1604 L - LSK 1604C L

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 375 kg - Inertia moment : 0.6kg.m<sup>2</sup>

Excitation power : 1.8 kW - Maximum mechanical speed : 4000 min<sup>-1</sup>

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							<i>n</i> <sub>max elec</sub> <sup>1</sup>		<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	<i>R</i> <sub>115°</sub>	<i>U</i> <sub>max</sub>	Index	Qty	
	260 V	400 V	420 V	440 V	460 V	500 V	600 V	N.C.	C.									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V			
26.4	610							910	1460	413	130	0.78	8.25	0.49	460	05		
43.7		930						1300	2080	449	130	0.84	8.25	0.49	460			
46.4			980					1370	2190	452	130	0.85	8.25	0.49	460			
49				1020				1420	2270	459	130	0.86	8.25	0.49	460			
50.5					1060			1480	2370	455	127	0.86	8.25	0.49	460			
52.5						1150			2560	436	121	0.87	4.7	0.61	600	t		
62							1390		3070	426	118.5	0.87	4.7	0.61	600	t		
36.7	740							1100	1760	474	170	0.83	5.22	0.284	600	06		
59.2		1130						1580	2530	500	170	0.87	5.22	0.284	600			
62.8			1190					1660	2660	504	170	0.88	5.22	0.284	600			
66				1240				1730	2770	508	170	0.88	5.22	0.284	600			
68					1290			1800	2880	503	166	0.89	5.22	0.284	600			
70.8						1400		1960	3140	483	158.5	0.90	5.22	0.284	600			
82.8							1690	2190	3500	468	155	0.90	5.22	0.284	600			
41.6	970							1530	2450	410	198	0.85	3.83	0.193	600	07		
66.2		1480						2180	3490	427	198	0.88	3.83	0.193	600			
70.3			1560					2290	3660	430	198	0.89	3.83	0.193	600			
74.4				1620				2390	3820	439	198	0.89	3.83	0.193	600			
76.5					1690			2490	3980	432	193.5	0.90	3.83	0.193	600			
80.2						1840		2650	4000	416	185.5	0.91	3.83	0.193	600			
94.5							2210	3020	4000	408	182	0.91	3.83	0.193	600			
52.4	1160							1740	2780	431	231.5	0.87	2.53	0.132	500	09		
83.3		1780						2450	3920	447	231.5	0.90	2.53	0.132	500			
88.5			1870					2430	3890	452	231.5	0.91	2.53	0.132	500			
92.7				1950				2530	4000	454	231.5	0.91	2.53	0.132	500			
96.9					2030			2630	4000	456	230	0.91	2.53	0.132	500			
104						2210		2870	4000	449	226	0.92	2.53	0.132	500			
123							2650		4000	441	222	0.92	1.4	0.16	600	t		
62.7	1310							2070	3310	457	271	0.89	1.92	0.093	460	10		
98.7		2020						2760	4000	467	271	0.91	1.92	0.093	460			
105			2120					2890	4000	472	271	0.92	1.92	0.093	460			1
110				2230				3020	4000	470	271	0.92	1.92	0.093	460			
113					2330			3150	4000	462	266.5	0.92	1.92	0.093	460			
118						2530			4000	447	257	0.92	1.1	0.11	600	t		
139							3040		4000	436	251.5	0.92	1.1	0.11	600	t		
70.6	1780							2490	3980	379	305	0.89	1.62	0.06	600	12		
111		2730						3540	4000	388	305	0.91	1.62	0.06	600			
117			2870					3730	4000	388	305	0.91	1.62	0.06	600			
124				3000				3900	4000	393	305	0.92	1.62	0.06	600			
130					3130			4000		397	304	0.93	1.62	0.06	600			
140						3400		4000		392	300	0.93	1.62	0.06	600			

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.  
t: only compensated version motor : LSK 1604C L.

*P* : Rated power

*M* : Rated moment

*I* : Permissible current in continuous operation

$\eta$  : Efficiency

*L* : Motor self-induction coil

*R* : Armature resistance at 115 °C

*U*<sub>max</sub> : Maximum armature voltage

N.C : Non compensated motor

C : Compensated motor

# Open continuous current (DC) motors LSK 1604 VL - LSK 1604C VL

## Selection

IP 23S motor - IC 06 ventilation - Class H  
Full bridge three-phase power supply  
S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 450 kg - Inertia moment : 0.65 kg.m<sup>2</sup>  
Excitation power : 2.1 kW - Maximum mechanical speed : 4000 min<sup>-1</sup>

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							<i>n</i> <sub>max elec</sub> <sup>1</sup>		<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	<i>R</i> <sub>115°</sub>	<i>U</i> <sub>max</sub>	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V	N.C.	C.								
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
30.3	560							840	1340	517	151.5	0.77	7	0.35	600	06	
50.3		860						1160	1860	559	151.5	0.83	7	0.35	600		
53.5			900					1215	1940	568	151.5	0.84	7	0.35	600		
56.2				940				1270	2030	571	151.5	0.84	7	0.35	600		
58.8					980			1320	2110	573	151	0.85	7	0.35	600		
64.2						1060		1430	2290	578	150	0.86	7	0.35	600		
75.8							1280	1720	2750	566	147	0.86	7	0.35	600		
37.4	650							970	1550	549	179.5	0.80	7.5	0.249	600	07	
61.8		1000						1350	2160	590	179.5	0.86	7.5	0.249	600		
64.8			1050					1410	2260	589	179.5	0.86	7.5	0.249	600		
68.4				1100				1480	2370	594	179.5	0.87	7.5	0.249	600		
71.5					1150			1550	2480	594	179	0.87	7.5	0.249	600		
77.4						1250		1680	2690	591	177	0.88	7.5	0.249	600		
92.1							1500	2000	3200	586	174.5	0.88	7.5	0.249	600		
47.4	830							1240	1980	545	219.5	0.83	4.8	0.16	500	09	
75.5		1280						1720	2750	563	219.5	0.86	4.8	0.16	500		
79.3			1340					1800	2880	565	219.5	0.86	4.8	0.16	500		
84.6				1400				1890	3020	577	219.5	0.87	4.8	0.16	500		
88.5					1460			1970	3150	579	219	0.88	4.8	0.16	500		
95.4						1590		2140	3420	573	217	0.88	4.8	0.16	500		
114							1900		4000	573	213.5	0.89	1.7	0.2	600		t
55.5	990							1480	2370	535	254	0.84	3.5	0.12	460	10	
88.4		1510						2030	3250	559	254	0.87	3.5	0.12	460		
93.9			1590					2140	3420	564	254	0.88	3.5	0.12	460		
99				1660				2240	3580	570	254	0.88	3.5	0.12	460		
104					1730			2300	3680	571	253	0.89	3.5	0.12	460		
111						1880			3970	565	250	0.89	1.3	0.14	600		t
133							2260		4000	562	246.5	0.90	1.3	0.14	600		t
69	1230							1840	2940	536	305	0.87	2.4	0.083	600	12	
110		1900						2310	3700	552	305	0.90	2.4	0.083	600		
115			1990					2420	3870	553	305	0.90	2.4	0.083	600		
123				2080				2530	4000	563	305	0.91	2.4	0.083	600		
128					2170			2640	4000	561	304	0.91	2.4	0.083	600		
138						2360		2800	4000	558	300	0.92	2.4	0.083	600		
163							2830	3400	4000	551	296	0.92	2.4	0.083	600		
81.4	1600							1950	4000	486	360	0.87	1.5	0.04	500	13	
130		2460						3000	4000	503	360	0.90	1.5	0.04	500		
136			2580					3140	4000	503	360	0.90	1.5	0.04	500		
145				2700				3290	4000	512	360	0.91	1.5	0.04	500		
147					2820			3430	4000	496	350	0.91	1.5	0.04	500		
156						3060		3730	4000	488	340	0.92	1.5	0.04	500		

1. higher speed ranges by field weakening can be studied according to the application : consult us.  
t: only compensated version motor : LSK 1604C VL.

*P* : Rated power

*M* : Rated moment

*I* : Permissible current in continuous operation

$\eta$  : Efficiency

*L* : Motor self-induction coil

*R* : Armature resistance at 115 °C

*U*<sub>max</sub> : Maximum armature voltage

N.C : Non compensated motor

C : Compensated motor

# Open continuous current (DC) motors LSK 1804 M

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 480 kg - Inertia moment : 0.7 kg.m<sup>2</sup>

Excitation power : 1.9 kW - Maximum mechanical speed : 3600 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty	
	260 V	400 V	420 V	440 V	460 V	500 V	600 V										
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V			
40.8	680							1290	573	194	0.81	7	0.19	600	03		
67.2		1050						1780	611	193	0.87	7	0.19	600			
71			1100					1870	616	192	0.88	7	0.19	600			
74.3				1150				1950	617	192	0.88	7	0.19	600			
76.1					1200			2040	606	188	0.88	7	0.19	600			
81.6						1300		2170	599	185	0.88	7	0.19	600			
96							1560	2300	588	180	0.89	7	0.19	600			
51.5	810							1010	607	240	0.83	4.9	0.13	550		04	
83.5		1240						1550	643	237	0.88	4.9	0.13	550			
87.3			1300					1620	641	234	0.89	4.9	0.13	550			
90.9				1360				1700	638	232	0.89	4.9	0.13	550			
94.9					1420			1770	638	230	0.90	4.9	0.13	550			
102						1540		1920	631	226	0.90	4.9	0.13	550			
57.5	940							1320	584	260	0.85	3.6	0.1	500	05		
91.2		1450						2040	601	256	0.89	3.6	0.1	500			
96			1520					2140	603	254	0.90	3.6	0.1	500			
100				1590				2240	602	253	0.90	3.6	0.1	500			1
104					1660			2300	597	248	0.91	3.6	0.1	500			
112						1800		2340	592	245	0.91	3.6	0.1	500			
77.8	1240							1550	599	340	0.88	2.2	0.055	600		06	
122		1910						2290	610	335	0.91	2.2	0.055	600			
127			2010					2410	601	330	0.91	2.2	0.055	600			
131				2100				2520	596	325	0.92	2.2	0.055	600			
135					2190			2620	588	320	0.92	2.2	0.055	600			
143						2380		2850	573	310	0.92	2.2	0.055	600			
169							2860	3430	564	305	0.92	2.2	0.055	600			
89.2	1420							1980	600	390	0.88	1.8	0.045	600	10		
132		2180						2700	577	370	0.89	1.8	0.045	600			
142			2290					2840	593	368	0.92	1.8	0.045	600			
148				2390				2960	591	366	0.92	1.8	0.045	600			
150					2490			3080	575	354	0.92	1.8	0.045	600			
157						2710		3360	553	340	0.92	1.8	0.045	600			
183							3250	3800	538	330	0.93	1.8	0.045	600			
82.4	1600							2000	492	360	0.88	1.6	0.038	550		11	
114		2460						2830	443	320	0.89	1.6	0.038	550			
122			2580					2970	452	316	0.92	1.6	0.038	550			
128				2700				3110	451	315	0.92	1.6	0.038	550			
132					2820			3200	447	312	0.92	1.6	0.038	550			
143						3060		3300	445	310	0.92	1.6	0.038	550			

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.

P : Rated power

M : Rated moment

I : Permissible current in continuous operation

$\eta$  : Efficiency

L : Motor self-induction coil

R : Armature resistance at 115 °C

$U_{\max}$  : Maximum armature voltage



# Open continuous current (DC) motors LSK 1804 L

## Selection

IP 23S motor - IC 06 ventilation - Class H  
Full bridge three-phase power supply  
S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 515 kg - Inertia moment : 0.8 kg.m<sup>2</sup>  
Excitation power : 2 kW - Maximum mechanical speed : 3600 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty	
	260 V	400 V	420 V	440 V	460 V	500 V	600 V										
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>f</sup>	N.m	A	Except for excit.	mH	$\Omega$	V			
40.4	600							1260	643	194	0.80	9.2	0.223	600	03		
66.4		920						1560	689	193	0.86	9.2	0.223	600			
70.2			970					1650	691	192	0.87	9.2	0.223	600			
74.2				1010				1710	703	192	0.88	9.2	0.223	600			
76.1					1050			1760	692	188	0.88	9.2	0.223	600			
81.6						1140		1800	684	185	0.88	9.2	0.223	600			
96							1370	2020	669	180	0.89	9.2	0.223	600			
50.7	710							880	682	238	0.82	6.4	0.16	550		04	
83		1090						1360	727	236	0.88	6.4	0.16	550			
86.5			1150					1430	718	234	0.88	6.4	0.16	550			
90.9				1200				1500	723	232	0.89	6.4	0.16	550			
94.2					1250			1560	720	230	0.89	6.4	0.16	550			
102						1360		1700	714	226	0.90	6.4	0.16	550			
57.5	830							1170	662	260	0.85	4.7	0.128	500	05		
91.2		1280						1790	680	256	0.89	4.7	0.128	500			
96			1340					1880	684	254	0.90	4.7	0.128	500			
100				1400				1960	684	253	0.90	4.7	0.128	500			
103					1460			2000	672	248	0.90	4.7	0.128	500			
112						1590		2070	670	245	0.91	4.7	0.128	500			
77.8	1100							1370	675	340	0.88	2.6	0.065	600	06	1	
122		1690						2110	689	335	0.91	2.6	0.065	600			
126			1770					2210	681	330	0.91	2.6	0.065	600			
130				1850				2220	671	325	0.91	2.6	0.065	600			
135					1930			2310	666	320	0.91	2.6	0.065	600			
143						2100		2520	648	310	0.92	2.6	0.065	600			
169							2520	3020	640	305	0.92	2.6	0.065	600			
89.2	1250							1750	681	390	0.88	2	0.053	600			10
132		1920						2380	655	370	0.89	2	0.053	600			
142			2020					2500	672	368	0.92	2	0.053	600			
148				2110				2610	670	366	0.92	2	0.053	600			
150					2200			2720	651	354	0.92	2	0.053	600			
157						2390		2900	627	340	0.92	2	0.053	600			
183							2870	3500	610	330	0.93	2	0.053	600			

1. higher speed ranges by field weakening can be studied according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency

L : Motor self-induction coil  
R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 1804 VL

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 620 kg - Inertia moment : 1 kg.m<sup>2</sup>

Excitation power : 2.1 kW - Maximum mechanical speed : 3600 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty	
	260 V	400 V	420 V	440 V	460 V	500 V	600 V										
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V			
28.3	280							600	965	145	0.75	27	0.54	500	02		
46.3		420						650	1053	143	0.81	27	0.54	500			
49.1			440					680	1066	143	0.82	27	0.54	500			
51.5				460				700	1069	143	0.82	27	0.54	500			
54.6					480			740	1086	143	0.83	27	0.54	500			
58.8						520		800	1080	140	0.84	27	0.54	500			
43.8	400							960	1046	213	0.79	11	0.23	600	03		
71.3		680						1200	1001	205	0.87	11	0.23	600			
76.6			720					1250	1016	205	0.89	11	0.23	600			
81.6				750				1300	1039	205	0.90	11	0.23	600			
82.8					780			1360	1014	200	0.90	11	0.23	600			
87.8						850		1470	986	195	0.90	11	0.23	600			
103							1010	1760	970	190	0.90	11	0.23	600	04		
49	480							730	975	235	0.80	9.3	0.19	550			
79.4		800						1130	948	223	0.89	9.3	0.19	550			
84.2			850					1200	946	223	0.90	9.3	0.19	550			
88.3				880				1240	958	223	0.90	9.3	0.19	550			
91.5					910			1280	960	221	0.90	9.3	0.19	550			
98.7						1000		1400	943	217	0.91	9.3	0.19	550	05		
54.8	560							860	935	257	0.82	6.9	0.14	500			
87.6		920						1310	909	246	0.89	6.9	0.14	500			
93			970					1380	916	246	0.90	6.9	0.14	500			
98.5				1010				1440	931	246	0.91	6.9	0.14	500			
101					1050			1490	918	241	0.91	6.9	0.14	500			
109						1150		1630	903	239	0.91	6.9	0.14	500			

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency

L : Motor self-induction coil  
R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 1804 VL

## Selection

**IP 23S motor - IC 06 ventilation - Class H**  
**Full bridge three-phase power supply**  
**S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 620 kg - Inertia moment : 1 kg.m<sup>2</sup>**  
**Excitation power : 2.1 kW - Maximum mechanical speed : 3600 min<sup>-1</sup>**

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
79.5	750							1050	1012	360	0.85	3.2	0.07	600	06	
118		1230						1540	916	334	0.90	3.2	0.07	600		
126			1290					1600	933	334	0.91	3.2	0.07	600		
134				1350				1680	948	334	0.92	3.2	0.07	600		
140					1400			1750	955	332	0.92	3.2	0.07	600		
150						1520		1900	942	327	0.92	3.2	0.07	600		
178							1830	2280	929	322	0.92	3.2	0.07	600		
81.8	900							1280	868	370	0.85	2.6	0.06	600	10	
129		1380						1690	893	360	0.91	2.6	0.06	600		
136			1460					1780	890	360	0.92	2.6	0.06	600		
143				1520				1860	898	360	0.92	2.6	0.06	600		
144					1580			1930	870	348	0.92	2.6	0.06	600		
151						1720		2000	838	334	0.92	2.6	0.06	600		
179							2060	2420	830	325	0.92	2.6	0.06	600		
89.4	1160							1620	736	395	0.87	1.9	0.045	570	11	
136		1790						2140	726	382	0.89	1.9	0.045	570		
148			1870					2240	756	382	0.92	1.9	0.045	570		
155				1960				2350	755	382	0.92	1.9	0.045	570		
161					2040			2400	754	379	0.92	1.9	0.045	570		
175						2210		2600	756	375	0.93	1.9	0.045	570		1

1. higher speed ranges by field weakening can be studied according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency

L : Motor self-induction coil  
R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 1804C M

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 480 kg - Inertia moment : 0.7 kg.m<sup>2</sup>

Excitation power : 1.9 kW - Maximum mechanical speed : 3600 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty	
	260 V	400 V	420 V	440 V	460 V	500 V	600 V										
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V			
25.4	440							790	551	130	0.75	1.8	0.49	550	01		
43.2		680						1225	607	130	0.83	1.8	0.49	550			
45.9			710					1280	617	130	0.84	1.8	0.49	550			
48.3				740				1330	623	130	0.85	1.8	0.49	550			
50.8					780			1390	622	130	0.85	1.8	0.49	550			
55.9						850		1510	628	130	0.86	1.8	0.49	550			
29.6	490							880	577	147	0.78	1.5	0.39	500		02	
49.7		750						1350	633	147	0.85	1.5	0.39	500			
52.5			790					1420	635	147	0.85	1.5	0.39	500			
55.3				830				1490	636	147	0.86	1.5	0.39	500			
58.2					870			1560	639	147	0.86	1.5	0.39	500			
63.9						940		1690	649	147	0.87	1.5	0.39	500			
34.3	560							1010	585	165	0.80	1.2	0.306	500	03		
56.8		860						1550	631	165	0.86	1.2	0.306	500			
59.9			900					1620	636	165	0.87	1.2	0.306	500			
63.2				950				1710	635	165	0.87	1.2	0.306	500			
66.4					990			1790	641	165	0.88	1.2	0.306	500			
72.6						1080		1940	642	165	0.88	1.2	0.306	500			
42.8	680							1225	601	200	0.82	0.83	0.217	700		04	
70		1050						1890	637	200	0.88	0.83	0.217	700			
73.9			1100					1980	642	200	0.88	0.83	0.217	700			
77.6				1150				2070	644	200	0.88	0.83	0.217	700			
81.4					1200			2160	648	200	0.89	0.83	0.217	700			
89						1310		2350	649	200	0.89	0.83	0.217	700			
107							1570	2820	650	200	0.89	0.83	0.217	700			
53	850							1530	595	240	0.85	0.55	0.146	600	05		
85.4		1310						2360	623	240	0.89	0.55	0.146	600			
89.7			1370					2470	625	240	0.89	0.55	0.146	600			
94				1440				2590	623	240	0.89	0.55	0.146	600			
99.4					1500			2710	633	240	0.90	0.55	0.146	600			
109						1630		2940	636	240	0.91	0.55	0.146	600			
131							1960	3530	638	240	0.91	0.55	0.146	600			

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency

L : Motor self-induction coil  
R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 1804C M

## Selection

IP 23S motor - IC 06 ventilation - Class H  
Full bridge three-phase power supply  
S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 480 kg - Inertia moment : 0,7 kg.m<sup>2</sup>  
Excitation power : 1.9 kW - Maximum mechanical speed : 3600 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty	
	260 V	400 V	420 V	440 V	460 V	500 V	600 V										
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V			
59.5	940							1690	604	266	0.86	0.46	0.123	550	06		
94.7		1450						2610	624	266	0.89	0.46	0.123	550			
99.4			1520					2740	625	266	0.89	0.46	0.123	550			
104				1590				2860	626	266	0.89	0.46	0.123	550			
110					1660			2990	633	266	0.90	0.46	0.123	550			
120						1810		3250	635	266	0.91	0.46	0.123	550			
66.7	1050							1890	607	295	0.87	0.37	0.097	500	07		
106		1620						2920	626	295	0.90	0.37	0.097	500			
112			1700					3060	626	295	0.90	0.37	0.097	500			
118				1780				3200	630	295	0.91	0.37	0.097	500			
123					1860			3340	632	295	0.91	0.37	0.097	500			
134						2020		3600	634	295	0.91	0.37	0.097	500			
75.5	1200							2160	601	330	0.88	0.3	0.076	500	08		
118		1850						3330	608	325	0.91	0.3	0.076	500			
120			1940					3490	593	315	0.91	0.3	0.076	500			
124				2030				3600	584	310	0.91	0.3	0.076	500			
128					2120			3600	575	305	0.91	0.3	0.076	500			
137						2310		3600	566	300	0.91	0.3	0.076	500			
87.9	1410							2540	595	383	0.88	0.22	0.061	700	10		
130		2170						3600	571	357	0.91	0.22	0.061	700			
130			2280					3600	544	340	0.91	0.22	0.061	700			
132				2390				3600	528	330	0.91	0.22	0.061	700			
132					2490			3600	507	315	0.91	0.22	0.061	700			
139						2710		3600	490	305	0.91	0.22	0.061	700			
161							3250	3600	473	294	0.91	0.22	0.061	700			

1. higher speed ranges by field weakening can be studied according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency

L : Motor self-induction coil  
R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 1804C L

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 515 kg - Inertia moment : 0.8 kg.m<sup>2</sup>

Excitation power : 2 kW - Maximum mechanical speed : 3600 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty	
	260 V	400 V	420 V	440 V	460 V	500 V	600 V										
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>f</sup>	N.m	A	Except for excit.	mH	$\Omega$	V			
24.9	380							685	626	130	0.74	2.1	0.52	550	01		
42.7		580						1045	703	130	0.82	2.1	0.52	550			
45.3			610					1100	709	130	0.83	2.1	0.52	550			
47.8				640				1150	713	130	0.84	2.1	0.52	550			
50.3					670			1200	717	130	0.84	2.1	0.52	550			
55.3						730		1310	723	130	0.85	2.1	0.52	550			
29.2	430							775	649	147	0.77	1.7	0.412	500		02	
49.4		660						1190	715	147	0.84	1.7	0.412	500			
52.2			690					1240	722	147	0.85	1.7	0.412	500			
55				730				1310	720	147	0.85	1.7	0.412	500			
57.8					760			1370	726	147	0.86	1.7	0.412	500			
63.6						830		1490	732	147	0.87	1.7	0.412	500			
33.9	490							880	661	165	0.79	1.35	0.324	500	03		
56.4		750						1350	718	165	0.86	1.35	0.324	500			
59.6			790					1420	720	165	0.86	1.35	0.324	500			
62.8				830				1490	723	165	0.87	1.35	0.324	500			
66					870			1560	724	165	0.87	1.35	0.324	500			
72.4						940		1690	736	165	0.88	1.35	0.324	500			
42.4	600							1190	675	200	0.82	0.94	0.23	700		04	
69.6		920						1660	722	200	0.87	0.94	0.23	700			
73.5			970					1750	724	200	0.88	0.94	0.23	700			
77.4				1020				1840	725	200	0.88	0.94	0.23	700			
81.4					1060			1920	733	200	0.89	0.94	0.23	700			
89						1150		2090	739	200	0.89	0.94	0.23	700			
107							1380	2510	739	200	0.89	0.94	0.23	700			
52.5	750							1350	669	240	0.84	0.63	0.155	600	05		
85		1150						2070	706	240	0.89	0.63	0.155	600			
89.7			1210					2180	708	240	0.89	0.63	0.155	600			
94.3				1270				2290	709	240	0.89	0.63	0.155	600			
98.9					1330			2390	710	240	0.90	0.63	0.155	600			
108						1440		2600	717	240	0.90	0.63	0.155	600			
130							1730	3120	715	240	0.90	0.63	0.155	600			

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency

L : Motor self-induction coil  
R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 1804C L

## Selection

**IP 23S motor - IC 06 ventilation - Class H**  
**Full bridge three-phase power supply**  
**S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 515 kg - Inertia moment : 0.8 kg.m<sup>2</sup>**  
**Excitation power : 2 kW - Maximum mechanical speed : 3600 min<sup>-1</sup>**

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty	
	260 V	400 V	420 V	440 V	460 V	500 V	600 V										
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V			
58.9	820							1480	686	266	0.85	0.52	0.13	550	06		
94.8		1260						2270	719	266	0.89	0.52	0.13	550			
100			1320					2380	723	266	0.90	0.52	0.13	550			
105				1390				2500	722	266	0.90	0.52	0.13	550			
110					1450			2610	725	266	0.90	0.52	0.13	550			
120						1580		2840	728	266	0.91	0.52	0.13	550			
66	920							1660	685	295	0.86	0.42	0.103	500	07		
102		1420						2560	687	295	0.87	0.42	0.103	500			
109			1490					2680	699	295	0.88	0.42	0.103	500			
117				1560				2810	718	295	0.90	0.42	0.103	500			
123					1630			2930	721	295	0.91	0.42	0.103	500			
134						1770		3190	724	295	0.91	0.42	0.103	500			
75.2	1040							1870	691	330	0.88	0.34	0.081	500	08		
120		1600						2880	713	330	0.91	0.34	0.081	500			
126			1680					3020	715	330	0.91	0.34	0.081	500			
132				1760				3170	716	330	0.91	0.34	0.081	500			
138					1840			3310	717	330	0.91	0.34	0.081	500			
146						2000		3600	699	320	0.92	0.34	0.081	500			
87	1230							2210	675	383	0.87	0.25	0.064	700	10		
129		1890						3400	650	365	0.88	0.25	0.064	700			
139			1990					3580	668	365	0.91	0.25	0.064	700			
145				2080				3600	663	360	0.91	0.25	0.064	700			
149					2180			3600	654	355	0.91	0.25	0.064	700			
158						2370		3600	637	345	0.92	0.25	0.064	700			
188							2840	3600	631	340	0.92	0.25	0.064	700			

1. higher speed ranges by field weakening can be studied according to the application : consult us.

$P$  : Rated power  
 $M$  : Rated moment  
 $I$  : Permissible current in continuous operation  
 $\eta$  : Efficiency

$L$  : Motor self-induction coil  
 $R$  : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 2004 M

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 630 kg - Inertia moment : 1.3 kg.m<sup>2</sup>

Excitation power : 2.4 kW - Maximum mechanical speed : 3200 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max \text{ elec}}^1$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
20.8	270							340	736	111	0.72	17.7	0.637	750	03	
36.1		420						525	821	111	0.81	17.7	0.637	750		
38.2			440					550	829	111	0.82	17.7	0.637	750		
40.4				460				575	839	111	0.83	17.7	0.637	750		
42.6					480			600	848	111	0.84	17.7	0.637	750		
47						520		650	863	111	0.85	17.7	0.637	750		
56.6							620	775	872	111	0.85	17.7	0.637	750		
32.2	390							500	788	155	0.80	8.8	0.33	550	04	
53.4		600						750	850	155	0.86	8.8	0.33	550		
56.2			630					790	852	155	0.86	8.8	0.33	550		
59				660				825	854	155	0.87	8.8	0.33	550		
62					690			860	858	155	0.87	8.8	0.33	550		
67.6						750		940	861	155	0.87	8.8	0.33	550		
38	430							740	844	180	0.81	6.5	0.25	500		05
62.6		710						1150	842	180	0.87	6.5	0.25	500		
66.5			750					1200	847	180	0.88	6.5	0.25	500		
69.9				790				1250	845	180	0.88	6.5	0.25	500		
73.2					830			1300	842	180	0.88	6.5	0.25	500		
80.2						910		1450	842	180	0.89	6.5	0.25	500		
49.3	570							750	826	224	0.85	4.2	0.16	750	06	
79.9		880						1100	867	224	0.89	4.2	0.16	750		
83.9			920					1150	871	224	0.89	4.2	0.16	750		
87.9				960				1200	874	224	0.89	4.2	0.16	750		
92.9					1010			1270	878	224	0.90	4.2	0.16	750		
102						1100		1375	883	224	0.91	4.2	0.16	750		
122							1320	1600	885	224	0.91	4.2	0.16	750		
71.5	790							1000	864	310	0.89	2.2	0.081	550	07	
113		1220						1500	886	310	0.91	2.2	0.081	550		
119			1280					1550	889	310	0.92	2.2	0.081	550		
125				1340				1650	892	310	0.92	2.2	0.081	550		
131					1400			1700	895	310	0.92	2.2	0.081	550		
143						1520		1830	899	310	0.92	2.2	0.081	550		

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency  
L : Motor self-induction coil

R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage



# Open continuous current (DC) motors LSK 2004 M

## Selection

**IP 23S motor - IC 06 ventilation - Class H**  
**Full bridge three-phase power supply**  
**S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 630 kg - Inertia moment : 1.3 kg.m<sup>2</sup>**  
**Excitation power : 2.4 kW - Maximum mechanical speed : 3200 min<sup>-1</sup>**

P	Rotation speed $n$ for armature voltage $U$							$n_{\max \text{ elec}}^1$	M	I	$\eta$ Except for excit.	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A		mH	$\Omega$	V		
83.9	940							1500	852	363	0.89	1.55	0.063	500	08	1
133		1490						2200	852	363	0.92	1.55	0.063	500		
140			1570					2250	852	363	0.92	1.55	0.063	500		
147				1650				2300	851	363	0.92	1.55	0.063	500		
154					1730			2350	851	363	0.92	1.55	0.063	500		
168						1885		2500	852	363	0.93	1.55	0.063	500		
93.6	1130							1400	791	400	0.90	1.25	0.048	750	10	
148		1740						2100	810	400	0.92	1.25	0.048	750		
151			1830					2200	789	390	0.92	1.25	0.048	750		
153				1910				2300	763	375	0.93	1.25	0.048	750		
156					2000			2400	743	365	0.93	1.25	0.048	750		
162						2170		2600	714	350	0.93	1.25	0.048	750		
184							2610	3000	674	330	0.93	1.25	0.048	750	11	
102	1560							1900	624	430	0.91	0.85	0.03	650		
155		2400						2800	615	420	0.92	0.85	0.03	650		
160			2520					2900	606	410	0.93	0.85	0.03	650		
163				2640				3000	591	400	0.93	0.85	0.03	650		
171					2865			3200	569	400	0.93	0.85	0.03	650		

1. higher speed ranges by field weakening can be studied according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency  
L : Motor self-induction coil

R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 2004 L

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 710 kg - Inertia moment : 1.5 kg.m<sup>2</sup>

Excitation power : 2.7 kW - Maximum mechanical speed : 3200 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max \text{ elec}}^1$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty	
	260 V	400 V	420 V	440 V	460 V	500 V	600 V										
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V			
20.1	225							280	853	111	0.70	21.4	0.702	750	03		
35.4		350						440	966	111	0.80	21.4	0.702	750			
37.5			360					450	995	111	0.81	21.4	0.702	750			
39.8				380				480	1000	111	0.81	21.4	0.702	750			
42					400			500	1003	111	0.82	21.4	0.702	750			
46.3						430		540	1028	111	0.84	21.4	0.702	750			
55.6							520	650	1021	111	0.84	21.4	0.702	750			
31.8	330							410	920	155	0.79	10.4	0.36	550	04		
53		510						640	992	155	0.86	10.4	0.36	550			
56			530					660	1009	155	0.86	10.4	0.36	550			
59.2				560				700	1010	155	0.87	10.4	0.36	550			
62.2					580			725	1024	155	0.87	10.4	0.36	550			
68.1						630		790	1032	155	0.88	10.4	0.36	550	05		
37.3	385							480	925	180	0.80	7.7	0.276	500			
62		590						740	1004	180	0.86	7.7	0.276	500			
65.4			620					780	1007	180	0.87	7.7	0.276	500			
69.1				650				810	1015	180	0.87	7.7	0.276	500			
72.6					680			850	1020	180	0.88	7.7	0.276	500			
79.6						740		925	1027	180	0.88	7.7	0.276	500			
48.6	455							590	1020	224	0.84	5	0.175	750	06		
79.4		745						870	1018	224	0.89	5	0.175	750			
83.7			790					910	1012	224	0.89	5	0.175	750			
88.1				830				960	1014	224	0.89	5	0.175	750			
92.4					870			1000	1014	224	0.90	5	0.175	750			
101						955		1080	1011	224	0.90	5	0.175	750			
121							1160	1300	999	224	0.90	5	0.175	750			
70.5	670							840	1005	310	0.88	2.6	0.09	550	07		
113		1030						1250	1046	310	0.91	2.6	0.09	550			
119			1080					1300	1051	310	0.91	2.6	0.09	550			
125				1130				1350	1055	310	0.92	2.6	0.09	550			
131					1190			1430	1050	310	0.92	2.6	0.09	550			
143						1290		1550	1057	310	0.92	2.6	0.09	550			

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency  
L : Motor self-induction coil

R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 2004 L

## Selection

**IP 23S motor - IC 06 ventilation - Class H**  
**Full bridge three-phase power supply**  
**S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 710 kg - Inertia moment : 1.5 kg.m<sup>2</sup>**  
**Excitation power : 2.7 kW - Maximum mechanical speed : 3200 min<sup>-1</sup>**

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							<i>n</i> <sub>max elec</sub> <sup>1</sup>	<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	<i>R</i> <sub>115°</sub>	<i>U</i> <sub>max</sub>	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
83.3	785							1200	1013	363	0.88	1.85	0.07	500	08	
133		1255						1800	1010	363	0.91	1.85	0.07	500		
140			1325					1900	1007	363	0.92	1.85	0.07	500		
147				1390				2000	1007	363	0.92	1.85	0.07	500		
154					1455			2100	1008	363	0.92	1.85	0.07	500		
168						1590		2250	1007	363	0.92	1.85	0.07	500		
95.8	910							1090	1005	412	0.89	1.45	0.053	750	10	
152		1400						1680	1034	412	0.92	1.45	0.053	750		
160			1470					1765	1036	412	0.92	1.45	0.053	750		
167				1540				1850	1034	410	0.92	1.45	0.053	750		
173					1610			1930	1029	407	0.93	1.45	0.053	750		
184						1750		2100	1001	395	0.93	1.45	0.053	750		
209							2100	2500	949	374	0.93	1.45	0.053	750		
119	1210							1450	942	505	0.91	0.95	0.033	650	11	
187		1860						2230	960	503	0.93	0.95	0.033	650		
188			1950					2350	921	481	0.93	0.95	0.033	650		
189				2050				2500	880	462	0.93	0.95	0.033	650		
190					2140			2600	848	444	0.93	0.95	0.033	650		
196						2330		2700	802	420	0.93	0.95	0.033	650		
220							2790	3200	752	393	0.93	0.95	0.033	650		

1. higher speed ranges by field weakening can be studied according to the application : consult us.

*P* : Rated power  
*M* : Rated moment  
*I* : Permissible current in continuous operation  
 $\eta$  : Efficiency  
*L* : Motor self-induction coil

*R* : Armature resistance at 115 °C  
*U*<sub>max</sub> : Maximum armature voltage

# Open continuous current (DC) motors LSK 2254 M

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 810 kg - Inertia moment : 2.2 kg.m<sup>2</sup>

Excitation power : 2.7 kW - Maximum mechanical speed : 3000 min<sup>-1</sup>

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							<i>n</i> <sub>max elec</sub> <sup>1</sup>	<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	<i>R</i> <sub>115°</sub>	<i>U</i> <sub>max</sub>	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
43.3	400							600	1034	205	0.81	6	0.187	650	07	
71		655						900	1035	205	0.87	6	0.187	650		
74.7			690					950	1034	205	0.87	6	0.187	650		
79.1				730				1000	1035	205	0.88	6	0.187	650		
82.9					765			1050	1035	205	0.88	6	0.187	650		
91						840		1150	1035	205	0.88	6	0.187	650		
112							1030	1400	1035	205	0.89	6	0.187	650		
61.6	560							1200	1051	275	0.86	3.3	0.102	650	08	
100		900						1900	1061	275	0.90	3.3	0.102	650		
104			950					1950	1049	275	0.90	3.3	0.102	650		
110				1000				2000	1051	275	0.91	3.3	0.102	650		
116					1050			2050	1051	275	0.91	3.3	0.102	650		
125						1140		2150	1050	275	0.91	3.3	0.102	650		
151							1390	2400	1035	275	0.91	3.3	0.102	650		
85.7	790							1100	1036	365	0.90	1.85	0.053	500	09	
135		1220						1650	1059	365	0.93	1.85	0.053	500		
142			1280					1750	1062	365	0.93	1.85	0.053	500		
150				1340				1800	1065	365	0.93	1.85	0.053	500		
157					1400			1900	1069	365	0.93	1.85	0.053	500		
171						1520		2050	1072	365	0.94	1.85	0.053	500		
105	970							1350	1029	438	0.92	1.25	0.034	750		10
164		1490						2000	1051	438	0.94	1.25	0.034	750		
172			1570					2100	1049	438	0.94	1.25	0.034	750		
181				1640				2200	1053	438	0.94	1.25	0.034	750		
186					1720			2300	1031	430	0.94	1.25	0.034	750		
200						1870		2400	1020	425	0.94	1.25	0.034	750		
234							2240	2800	996	414	0.94	1.25	0.034	750		

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.

*P* : Rated power  
*M* : Rated moment  
*I* : Permissible current in continuous operation  
 $\eta$  : Efficiency  
*L* : Motor self-induction coil

*R* : Armature resistance at 115 °C  
*U*<sub>max</sub> : Maximum armature voltage

# Open continuous current (DC) motors LSK 2254 M

## Selection

IP 23S motor - IC 06 ventilation - Class H  
Full bridge three-phase power supply  
S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 810 kg - Inertia moment : 2.2 kg.m<sup>2</sup>  
Excitation power : 2.7 kW - Maximum mechanical speed : 3000 min<sup>-1</sup>

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							<i>n</i> <sub>max elec</sub> <sup>1</sup>	<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	<i>R</i> <sub>115°</sub>	<i>U</i> <sub>max</sub>	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
120	1140							1500	1006	500	0.92	1	0.026	700	11	
188		1750						2300	1024	500	0.94	1	0.026	700		
197			1840					2350	1024	500	0.94	1	0.026	700		
198				1930				2500	981	480	0.94	1	0.026	700		
203					2020			2600	961	470	0.94	1	0.026	700		
216						2280		2800	906	460	0.94	1	0.026	700		
251							2740	3000	875	445	0.94	1	0.026	700		
130	1260							1650	983	540	0.92	0.85	0.023	650	12	
195		1940						2500	960	520	0.94	0.85	0.023	650		
201			2040					2550	941	510	0.94	0.85	0.023	650		
207				2130				2600	926	500	0.94	0.85	0.023	650		
213					2230			2800	912	493	0.94	0.85	0.023	650		
227						2540		3000	854	484	0.94	0.85	0.023	650		
141	1410							1850	956	584	0.93	0.7	0.019	600	13	
216		2170						2700	947	575	0.94	0.7	0.019	600		
217			2280					2800	909	550	0.94	0.7	0.019	600		
219				2390				2900	875	529	0.94	0.7	0.019	600		
223					2540			3000	839	516	0.94	0.7	0.019	600		
236						2880		3000	784	503	0.94	0.7	0.019	600		
155	1550							2050	954	640	0.93	0.6	0.017	550	14	
225		2380						2900	903	600	0.94	0.6	0.017	550		
223			2500					3000	853	567	0.94	0.6	0.017	550		
227				2620				3000	797	550	0.94	0.6	0.017	550		
232					2750			3000	760	537	0.94	0.6	0.017	550		

1. higher speed ranges by field weakening can be studied according to the application : consult us.

*P* : Rated power  
*M* : Rated moment  
*I* : Permissible current in continuous operation  
 $\eta$  : Efficiency  
*L* : Motor self-induction coil

*R* : Armature resistance at 115 °C  
*U*<sub>max</sub> : Maximum armature voltage

# Open continuous current (DC) motors LSK 2254 L

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 920 kg - Inertia moment : 2.4 kg.m<sup>2</sup>

Excitation power : 3.2 kW - Maximum mechanical speed : 3000 min<sup>-1</sup>

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							<i>n</i> <sub>max elec</sub> <sup>1</sup>	<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	R115°	<i>U</i> <sub>max</sub>	Index	Qty	
	260 V	400 V	420 V	440 V	460 V	500 V	600 V										
QtykW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V			
47.2	320							450	1409	225	0.83	6.85	0.215	650	07		
75.5		525						700	1373	225	0.86	6.85	0.215	650			
82			555					750	1411	225	0.87	6.85	0.215	650			
86.4				585				800	1410	225	0.88	6.85	0.215	650			
91.5					620			850	1409	225	0.89	6.85	0.215	650			
99.6						675		950	1409	225	0.89	6.85	0.215	650			
122							825	1200	1412	225	0.90	6.85	0.215	650			
66.7	445							1000	1431	300	0.86	3.75	0.117	650	08		
108		720						1500	1433	300	0.90	3.75	0.117	650			
114			760					1550	1433	300	0.91	3.75	0.117	650			
120				800				1600	1433	300	0.91	3.75	0.117	650			
126					840			1700	1433	300	0.91	3.75	0.117	650			
138						920		1800	1433	300	0.92	3.75	0.117	650			
166							1120	2200	1415	300	0.92	3.75	0.117	650			
91.1	650							900	1338	394	0.89	2.1	0.061	500	09		
143		1000						1350	1362	394	0.91	2.1	0.061	500			
152			1050					1450	1384	394	0.92	2.1	0.061	500			
160				1100				1500	1389	394	0.92	2.1	0.061	500			
168					1150			1550	1392	394	0.93	2.1	0.061	500			
183						1250		1700	1395	394	0.93	2.1	0.061	500			
112	790							1100	1355	475	0.91	1.4	0.039	750		10	
177		1220						1650	1385	475	0.93	1.4	0.039	750			
186			1280					1750	1388	475	0.93	1.4	0.039	750			
195				1340				1800	1393	475	0.94	1.4	0.039	750			
205					1400			1900	1395	475	0.94	1.4	0.039	750			
223						1520		2050	1401	475	0.94	1.4	0.039	750			
268							1820	2450	1406	475	0.94	1.4	0.039	750			

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.

*P* : Rated power  
*M* : Rated moment  
*I* : Permissible current in continuous operation  
 $\eta$  : Efficiency  
*L* : Motor self-induction coil

*R* : Armature resistance at 115 °C  
*U*<sub>max</sub> : Maximum armature voltage

# Open continuous current (DC) motors LSK 2254 L

## Selection

IP 23S motor - IC 06 ventilation - Class H  
Full bridge three-phase power supply  
S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 920 kg - Inertia moment : 2.4 kg.m<sup>2</sup>  
Excitation power : 3.2 kW - Maximum mechanical speed : 3000 min<sup>-1</sup>

P	Rotation speed <i>n</i> for armature voltage <i>U</i>							<i>n</i> <sub>max elec</sub> <sup>1</sup>	<i>M</i>	<i>I</i>	$\eta$	<i>L</i>	<i>R</i> <sub>115°</sub>	<i>U</i> <sub>max</sub>	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
129	900							1200	1364	540	0.92	1.1	0.03	700	11	1
202		1380						1800	1398	540	0.94	1.1	0.03	700		
212			1450					1900	1398	540	0.94	1.1	0.03	700		
223				1520				2000	1400	540	0.94	1.1	0.03	700		
233					1590			2100	1401	540	0.94	1.1	0.03	700		
254						1750		2300	1387	540	0.94	1.1	0.03	700		
294							2100	2750	1335	520	0.94	1.1	0.03	700		
139	970							1300	1367	582	0.92	0.95	0.027	650		
218		1490						1950	1395	582	0.94	0.95	0.027	650		
227			1570					2050	1378	575	0.94	0.95	0.027	650		
237				1640				2150	1378	573	0.94	0.95	0.027	650		
247					1720			2250	1369	571	0.94	0.95	0.027	650		
265						1930		2400	1311	563	0.94	0.95	0.027	650		
308							2320	2800	1269	546	0.94	0.95	0.027	650		
152	1075							1400	1349	633	0.92	0.8	0.022	600	13	
238		1650						2150	1376	633	0.94	0.8	0.022	600		
250			1740					2250	1372	633	0.94	0.8	0.022	600		
257				1820				2300	1347	620	0.94	0.8	0.022	600		
262					1930			2400	1295	604	0.94	0.8	0.022	600		
280						2150		2700	1242	593	0.94	0.8	0.022	600		
324							2600	3000	1189	572	0.94	0.8	0.022	600		
167	1180							1600	1348	693	0.92	0.66	0.019	550		
254		1820						2300	1330	675	0.94	0.66	0.019	550		
261			1910					2400	1303	660	0.94	0.66	0.019	550		
269				2050				2600	1254	650	0.94	0.66	0.019	550		
276					2170			2700	1215	637	0.94	0.66	0.019	550		
294						2440		2900	1150	624	0.94	0.66	0.019	550		

1. higher speed ranges by field weakening can be studied according to the application : consult us.

*P* : Rated power  
*M* : Rated moment  
*I* : Permissible current in continuous operation  
 $\eta$  : Efficiency  
*L* : Motor self-induction coil

*R* : Armature resistance at 115 °C  
*U*<sub>max</sub> : Maximum armature voltage

# Open continuous current (DC) motors LSK 2254 VL

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 1000 kg - Inertia moment : 2.7 kg.m<sup>2</sup>

Excitation power : 3.2 kW - Maximum mechanical speed : 3000 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>f</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
48.7	300							400	1549	225	0.83	7.5	0.212	650	07	
75.9		480						650	1510	225	0.84	7.5	0.212	650		
81.3			500					675	1552	225	0.86	7.5	0.212	650		
86				530				700	1550	225	0.87	7.5	0.212	650		
90.8					560			750	1549	225	0.88	7.5	0.212	650		
98.9						610		850	1549	225	0.88	7.5	0.212	650		
121.9							750	1050	1552	225	0.90	7.5	0.212	650		
65.9	400							550	1573	300	0.84	4.13	0.116	650	08	
107		650						900	1575	300	0.89	4.13	0.116	650		
114			690					950	1575	300	0.90	4.13	0.116	650		
119				720				1000	1575	300	0.90	4.13	0.116	650		
125					760			1050	1575	300	0.91	4.13	0.116	650		
137						830		1150	1575	300	0.91	4.13	0.116	650		
166							1020	1400	1555	300	0.92	4.13	0.116	650		
90.9	590							800	1471	395	0.88	2.28	0.068	500	09	
141		900						1250	1498	395	0.89	2.28	0.068	500		
151			950					1300	1522	395	0.91	2.28	0.068	500		
158				990				1350	1527	395	0.91	2.28	0.068	500		
168					1050			1450	1531	395	0.93	2.28	0.068	500		
185						1150		1600	1534	395	0.94	2.28	0.068	500		
111	710							1000	1490	475	0.90	1.55	0.049	750		10
175		1100						1475	1523	475	0.92	1.55	0.049	750		
184			1150					1550	1526	475	0.92	1.55	0.049	750		
194				1210				1600	1531	475	0.93	1.55	0.049	750		
202					1260			1700	1534	475	0.93	1.55	0.049	750		
221						1370		1850	1540	475	0.93	1.55	0.049	750		
267							1650	2200	1546	475	0.94	1.55	0.049	750		

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency  
L : Motor self-induction coil

R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage



# Open continuous current (DC) motors LSK 2254 VL

## Selection

IP 23S motor - IC 06 ventilation - Class H  
Full bridge three-phase power supply  
S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 1500 kg - Inertia moment : 2.7 kg.m<sup>2</sup>  
Excitation power : 3.2 kW - Maximum mechanical speed : 2100 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Qty	
	260 V	400 V	420 V	440 V	460 V	500 V	600 V										
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>f</sup>	N.m	A	Except for excit.	mH	$\Omega$	V			
127	810							1100	1500	540	0.91	1.2	0.038	700	11		
200		1240						1675	1537	540	0.92	1.2	0.038	700			
211			1310					1750	1537	540	0.93	1.2	0.038	700			
221				1370				1850	1539	540	0.93	1.2	0.038	700			
232					1440			1950	1540	540	0.93	1.2	0.038	700			
251						1570		2100	1525	540	0.93	1.2	0.038	700			
292							1900	2500	1468	520	0.94	1.2	0.038	700			
138	870							1250	1510	585	0.90	1.03	0.031	650		12	
216		1340						1800	1541	585	0.92	1.03	0.031	650			
224			1410					1900	1520	575	0.93	1.03	0.031	650			
239				1500				2000	1520	575	0.94	1.03	0.031	650			
248					1560			2100	1520	575	0.94	1.03	0.031	650			
265						1750		2300	1446	565	0.94	1.03	0.031	650			
309							2100	2600	1406	550	0.94	1.03	0.031	650			
150	965							1300	1488	635	0.91	0.88	0.029	600	13		
235		1480						1900	1517	635	0.93	0.88	0.029	600			
247			1560					2000	1513	635	0.93	0.88	0.029	600			
254				1640				2150	1481	620	0.93	0.88	0.029	600			
260					1740			2250	1425	605	0.93	0.88	0.029	600			
278						1940		2500	1370	595	0.94	0.88	0.029	600			
323							2350	2800	1314	575	0.94	0.88	0.029	600			
166	1060							1400	1498	695	0.92	0.72	0.024	550		14	
253		1640						2150	1475	675	0.94	0.72	0.024	550			
263			1720					2250	1460	670	0.93	0.72	0.024	550			
273				1850				2400	1410	665	0.93	0.72	0.024	550			
281					1960			2500	1370	650	0.94	0.72	0.024	550			
298						2200		2700	1295	635	0.94	0.72	0.024	550			

1. higher speed ranges by field weakening can be studied according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency  
L : Motor self-induction coil

R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 2504C M

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 1400 kg - Inertia moment : 4.1 kg.m<sup>2</sup>

Excitation power : 3 kW - Maximum mechanical speed : 2100 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	$M$	$I$	$\eta$	$L$	$R_{115^{\circ}}$	$U_{\max}$	Index	Time limit
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>f</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
51	310							430	1571	260	0.75	1.85	0.25	650	0A	
86		510						710	1610	260	0.83	1.85	0.25	650		
92			540					760	1627	260	0.84	1.85	0.25	650		
97				570				800	1625	260	0.85	1.85	0.25	650		
103					610			840	1613	260	0.86	1.85	0.25	650		
113						660		910	1635	260	0.87	1.85	0.25	650		
136							810	1090	1603	260	0.87	1.85	0.25	650		
88	530							740	1586	400	0.85	0.74	0.092	650	0B	
142		870						1220	1559	400	0.89	0.74	0.092	650		
151			910					1270	1585	400	0.90	0.74	0.092	650		
158				960				1340	1572	400	0.90	0.74	0.092	650		
167					1010			1400	1579	400	0.91	0.74	0.092	650		
182						1100		1520	1580	400	0.91	0.74	0.092	650		
221							1320	1830	1599	400	0.92	0.74	0.092	650		
139	780							1090	1702	600	0.89	0.38	0.044	750	01	
218		1200						1680	1735	600	0.91	0.38	0.044	750		
232			1260					1760	1758	600	0.92	0.38	0.044	750		
243				1320				1850	1758	600	0.92	0.38	0.044	750		
257					1380			1930	1779	600	0.93	0.38	0.044	750		
279						1500		2100	1776	600	0.93	0.38	0.044	750		
335							1800	2100	1777	600	0.93	0.38	0.044	750		

1. higher speed ranges by de-energisation can be analysed according to the application : consult us.

$P$  : Rated power  
 $M$  : Rated moment  
 $I$  : Permissible current in continuous operation  
 $\eta$  : Efficiency  
 $L$  : Motor self-induction coil

$R$  : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 2504C M

## Selection

IP 23S motor - IC 06 ventilation - Class H  
Full bridge three-phase power supply  
S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 1400 kg - Inertia moment : 4.1 kg.m<sup>2</sup>  
Excitation power : 3 kW - Maximum mechanical speed : 2100 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Time limit
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>f</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
161	910							1270	1690	690	0.90	0.28	0.034	550	02	
251		1400						1960	1712	690	0.91	0.28	0.034	550		
267			1470					2060	1735	690	0.92	0.28	0.034	550		
282				1540				2100	1749	690	0.93	0.28	0.034	550		
295					1610			2100	1750	690	0.93	0.28	0.034	550		
321						1750		2100	1752	690	0.93	0.28	0.034	550		
189	1110							1540	1626	800	0.91	0.2	0.023	550	03	1
294		1710						2100	1642	800	0.92	0.2	0.023	550		
312			1790					2100	1665	800	0.93	0.2	0.023	550		
319				1880				2100	1620	800	0.93	0.2	0.023	550		
333					1960			2100	1623	800	0.94	0.2	0.023	550		
208	1200							1680	1655	870	0.92	0.17	0.0184	500	04	
324		1850						2100	1673	870	0.93	0.17	0.0184	500		
340			1940					2100	1674	860	0.94	0.17	0.0184	500		
343				2080				2100	1575	830	0.94	0.17	0.0184	500		
227	1360							1900	1594	950	0.92	0.13	0.015	500	06	

1. higher speed ranges by field weakening can be studied according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency  
L : Motor self-induction coil

R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 2504C L

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 1500 kg - Inertia moment : 4.6 kg.m<sup>2</sup>

Excitation power : 3 kW - Maximum mechanical speed : 2100 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	$M$	$I$	$\eta$	$L$	$R_{115^{\circ}}$	$U_{\max}$	Index	Time limit
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
51	260							360	1873	260	0.75	2.2	0.27	650	0A	
86		430						600	1910	260	0.83	2.2	0.27	650		
92			450					630	1952	260	0.84	2.2	0.27	650		
97				480				670	1930	260	0.85	2.2	0.27	650		
103					510			710	1929	260	0.86	2.2	0.27	650		
113						560		760	1927	260	0.87	2.2	0.27	650		
136							690	920	1882	260	0.87	2.2	0.27	650		
88	450							630	1868	400	0.85	0.88	0.1	650	0B	
142		730						1020	1858	400	0.89	0.88	0.1	650		
151			770					1080	1873	400	0.90	0.88	0.1	650		
158				810				1130	1863	400	0.90	0.88	0.1	650		
167					850			1180	1876	400	0.91	0.88	0.1	650		
182						930		1280	1869	400	0.91	0.88	0.1	650		
221							1120	1540	1884	400	0.92	0.88	0.1	650		
139	660							920	2011	600	0.89	0.44	0.048	750	01	
218		1020						1430	2041	600	0.91	0.44	0.048	750		
232			1070					1500	2071	600	0.92	0.44	0.048	750		
243				1120				1570	2072	600	0.92	0.44	0.048	750		
257					1170			1640	2098	600	0.93	0.44	0.048	750		
279						1270		1780	2098	600	0.93	0.44	0.048	750		
335							1520	2100	2105	600	0.93	0.44	0.048	750		

†. higher speed ranges by de-energisation can be analysed according to the application : consult us.

$P$  : Rated power  
 $M$  : Rated moment  
 $I$  : Permissible current in continuous operation  
 $\eta$  : Efficiency  
 $L$  : Motor self-induction coil

$R$  : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 2504C L

## Selection

**IP 23S motor - IC 06 ventilation - Class H**  
**Full bridge three-phase power supply**  
**S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 1500 kg - Inertia moment : 4.6 kg.m<sup>2</sup>**  
**Excitation power : 3 kW - Maximum mechanical speed : 2100 min<sup>-1</sup>**

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Time limit
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>1</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
161	770							1080	1997	690	0.90	0.33	0.038	550	02	
251		1180						1650	2031	690	0.91	0.33	0.038	550		
267			1240					1740	2056	690	0.92	0.33	0.038	550		
282				1300				1820	2072	690	0.93	0.33	0.038	550		
295					1360			1900	2072	690	0.93	0.33	0.038	550		
321						1480		2100	2071	690	0.93	0.33	0.038	550		
189	920							1080	1962	800	0.91	0.23	0.025	550	03	1
294		1420						1650	1977	800	0.92	0.23	0.025	550		
312			1490					1740	2000	800	0.93	0.23	0.025	550		
327				1560				1820	2002	800	0.93	0.23	0.025	550		
342					1630			1900	2004	800	0.93	0.23	0.025	550		
376						1770		2070	2029	800	0.94	0.23	0.025	550		
208	1020							1430	1947	870	0.92	0.17	0.0184	500	04	
324		1570						2100	1971	870	0.93	0.17	0.0184	500		
340			1650					2100	1968	870	0.93	0.17	0.0184	500		
360				1730				2100	1987	870	0.94	0.17	0.0184	500		
376					1800			2100	1995	870	0.94	0.17	0.0184	500		
409						1960		2100	1993	870	0.94	0.17	0.0184	500		
230	1200							1680	1830	950	0.93	0.15	0.016	500	06	
353		1850						2100	1822	950	0.93	0.15	0.016	500		
375			1940					2100	1846	950	0.94	0.15	0.016	500		
393				2030				2100	1849	950	0.94	0.15	0.016	500		

1. higher speed ranges by field weakening can be studied according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency  
L : Motor self-induction coil

R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 2804C SM

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 1800 kg - Inertia moment : 5.75 kg.m<sup>2</sup>

Excitation power : 5.5 kW - Maximum mechanical speed : 2000 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Time limit
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>†</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
98	325							600	2880	430	0.88	0.96	0.109	650	01	
151		500						900	2884	430	0.88	0.96	0.109	650		
161			530					950	2901	430	0.89	0.96	0.109	650		
168				550				1000	2917	430	0.89	0.96	0.109	650		
176					580			1040	2898	430	0.89	0.96	0.109	650		
194						630		1130	2941	430	0.90	0.96	0.109	650		
235							750	1350	2992	430	0.91	0.96	0.109	650		
130	435							590	2854	560	0.89	0.52	0.074	750	02	
199		670						870	2836	560	0.89	0.52	0.074	750		
209			700					910	2851	560	0.89	0.52	0.074	750		
222				740				960	2865	560	0.90	0.52	0.074	750		
232					770			1000	2877	560	0.90	0.52	0.074	750		
252						840		1090	2865	560	0.90	0.52	0.074	750		
309							1000	1300	2951	560	0.92	0.52	0.074	750		
151	510							910	2828	640	0.91	0.36	0.047	750	03	
233		780						1300	2853	640	0.91	0.36	0.047	750		
245			820					1460	2853	640	0.91	0.36	0.047	750		
256				860				1550	2843	640	0.91	0.36	0.047	750		
271					900			1610	2876	640	0.92	0.36	0.047	750		
294						980		1750	2865	640	0.92	0.36	0.047	750		
357							1180	2000	2889	640	0.93	0.36	0.047	750		

†. higher speed ranges by de-energisation can be analysed according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency  
L : Motor self-induction coil

R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 2804C M

## Selection

IP 23S motor - IC 06 ventilation - Class H  
Full bridge three-phase power supply  
S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 1800 kg - Inertia moment : 5.75 kg.m<sup>2</sup>  
Excitation power : 5.5 kW - Maximum mechanical speed : 2000 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Time limit		
	260 V	400 V	420 V	440 V	460 V	500 V	600 V											
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>f</sup>	N.m	A	Except for excit.	mH	$\Omega$	V				
199	650							910	2924	830	0.92	0.23	0.03	650	04			
305		1000						1400	2913	830	0.92	0.23	0.03	650				
321			1050					1470	2920	830	0.92	0.23	0.03	650				
340				1100				1540	2952	830	0.93	0.23	0.03	650				
355					1150			1610	2948	830	0.93	0.23	0.03	650				
386						1250		1750	2949	830	0.93	0.23	0.03	650				
468							1500	2000	2980	830	0.94	0.23	0.03	650				
235	810							1050	2771	970	0.93	0.16	0.02	550			05	
361		1250						1620	2758	970	0.93	0.16	0.02	550				
379			1310					1700	2763	970	0.93	0.16	0.02	550				
397				1375				1790	2757	970	0.93	0.16	0.02	550				
419					1440			1870	2779	970	0.94	0.16	0.02	550				
456						1560		2000	2792	970	0.94	0.16	0.02	550				
269	920							1250	2792	1100	0.94	0.125	0.0136	500	06	1		
414		1420						1920	2784	1100	0.94	0.125	0.0136	500				
434			1490					2000	2782	1100	0.94	0.125	0.0136	500				
455				1560				2000	2785	1100	0.94	0.125	0.0136	500				
476					1630			2000	2789	1100	0.94	0.125	0.0136	500				
517						1775		2000	2782	1100	0.94	0.125	0.0136	500				
318	1090							1300	2786	1300	0.94	0.13	0.0082	460			07	
489		1680						2000	2780	1300	0.94	0.13	0.0082	460				
513			1765					2000	2776	1300	0.94	0.13	0.0082	460				
538				1850				2000	2777	1300	0.94	0.13	0.0082	460				
562					1930			2000	2781	1300	0.94	0.13	0.0082	460				

1. higher speed ranges by field weakening can be studied according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency  
L : Motor self-induction coil

R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK 2804C SL

## Selection

IP 23S motor - IC 06 ventilation - Class H

Full bridge three-phase power supply

S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 1900 kg - Inertia moment : 6.9 kg.m<sup>2</sup>

Excitation power : 5.5 kW - Maximum mechanical speed : 2000 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\max}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\max}$	Index	Time limit
	260 V	400 V	420 V	440 V	460 V	500 V	600 V									
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>†</sup>	N.m	A	Except for excit.	mH	$\Omega$	V		
98	270							500	3466	430	0.88	1.14	0.12	650	01	
151		420						750	3433	430	0.88	1.14	0.12	650		
161			440					790	3494	430	0.89	1.14	0.12	650		
168				460				830	3488	430	0.89	1.14	0.12	650		
176					480			870	3502	430	0.89	1.14	0.12	650		
194						525		940	3529	430	0.90	1.14	0.12	650		
235							630	1120	3562	430	0.91	1.14	0.12	650		
130	360							490	3449	560	0.89	0.62	0.081	750	02	
199		560						725	3394	560	0.89	0.62	0.081	750		
209			590					760	3383	560	0.89	0.62	0.081	750		
222				620				800	3420	560	0.90	0.62	0.081	750		
232					650			830	3409	560	0.90	0.62	0.081	750		
252						700		910	3438	560	0.90	0.62	0.081	750		
309							840	1080	3513	560	0.92	0.62	0.081	750		
151	425							760	3393	640	0.91	0.43	0.052	750	03	
233		650						1080	3423	640	0.91	0.43	0.052	750		
245			680					1220	3441	640	0.91	0.43	0.052	750		
256				720				1290	3396	640	0.91	0.43	0.052	750		
271					750			1340	3451	640	0.92	0.43	0.052	750		
294						820		1460	3424	640	0.92	0.43	0.052	750		
357							980	1750	3479	640	0.93	0.43	0.052	750		

†. higher speed ranges by de-energisation can be analysed according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency  
L : Motor self-induction coil

R : Armature resistance at 115 °C  
 $U_{\max}$  : Maximum armature voltage



# Open continuous current (DC) motors LSK 2804C L

## Selection

IP 23S motor - IC 06 ventilation - Class H  
Full bridge three-phase power supply  
S1 duty - Ambient temperature  $\leq 40^{\circ}\text{C}$  - Total weight : 1900 kg - Inertia moment : 6.9 kg.m<sup>2</sup>  
Excitation power : 5.5 kW - Maximum mechanical speed : 2000 min<sup>-1</sup>

P	Rotation speed $n$ for armature voltage $U$							$n_{\text{mai}}$	M	I	$\eta$	L	$R_{115^{\circ}}$	$U_{\text{max}}$	Index	Time limit		
	260 V	400 V	420 V	440 V	460 V	500 V	600 V											
kW	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	min <sup>-1</sup>	Elec <sup>f</sup>	N.m	A	Except for excit.	mH	$\Omega$	V				
199	540							760	3519	830	0.92	0.28	0.033	650	04			
305		830						1170	3509	830	0.92	0.28	0.033	650				
321			875					1220	3503	830	0.92	0.28	0.033	650				
340				920				1280	3529	830	0.93	0.28	0.033	650				
355					960			1340	3532	830	0.93	0.28	0.033	650				
386						1040		1460	3545	830	0.93	0.28	0.033	650				
468							1250	1750	3576	830	0.94	0.28	0.033	650				
235	675							875	3325	970	0.93	0.19	0.022	550			05	
361		1040						1350	3315	970	0.93	0.19	0.022	550				
379			1090					1420	3321	970	0.93	0.19	0.022	550				
397				1150				1490	3297	970	0.93	0.19	0.022	550				
419					1200			1560	3335	970	0.94	0.19	0.022	550				
456						1300		1700	3350	970	0.94	0.19	0.022	550				
269	770							1040	3336	1100	0.94	0.15	0.015	500	06	1		
414		1180						1600	3351	1100	0.94	0.15	0.015	500				
434			1240					1680	3343	1100	0.94	0.15	0.015	500				
455				1300				1760	3343	1100	0.94	0.15	0.015	500				
476					1360			1840	3343	1100	0.94	0.15	0.015	500				
517						1480		2000	3336	1100	0.94	0.15	0.015	500				
318	910							1080	3337	1300	0.94	0.155	0.0099	460			07	
489		1400						1670	3336	1300	0.94	0.155	0.0099	460				
513			1470					1750	3333	1300	0.94	0.155	0.0099	460				
538				1540				1830	3336	1300	0.94	0.155	0.0099	460				
562					1610			1920	3334	1300	0.94	0.155	0.0099	460				

1. higher speed ranges by field weakening can be studied according to the application : consult us.

P : Rated power  
M : Rated moment  
I : Permissible current in continuous operation  
 $\eta$  : Efficiency  
L : Motor self-induction coil

R : Armature resistance at 115 °C  
 $U_{\text{max}}$  : Maximum armature voltage

# Open continuous current (DC) motors LSK

## Selection

### Brake option<sup>1</sup>

Separate power supply by continuous or rectified current  
Ambient temperature  $\leq 40^{\circ}\text{C}$   
Manual release - Optional tachometric detector

Normal  
use

Brake <sup>1</sup> Type	Motor frame size	$J_F$ 10-3 m <sup>2</sup> kg	$M_F$ N.m	$n_{s \text{ max}}$ min <sup>-1</sup>	$P_F$ W	$t_1^2$ ms	$t_2^2$ ms	$t_F^2$ ms	$U_F$ V	Weight kg
450	112	0.45	32	3000	40	120	10	40	24	4
450	112 - 132	0.63	60	3000	50	150	15	50	24	5.6
450	112 - 132	1.5	80	3000	55	180	20	70	24	8.4
450	132 - 160	2.9	150	3000	65	300	30	80	24	12.6
450	160	7.3	240	3000	75	400	50	150	24	19.5
450	160	20	360	3000	100	500	70	200	24	31

1. Without adjustment for wear .

2. Data for information only, these times allow not to use the brakes unnecessarily by delaying motor starting. They can increase slightly according to the air-gap. They also take into consideration the voltage at the brake coil terminals .

Intensive  
use

For intensive use, consult us.

$J_F$  : Brake inertia  
 $M_F$  : Brake moment

$n_{s \text{ maxi}}$  : Maximum permissible speed on engagement

$P_F$  : Power of the brake coil

$t_1$  : Response time on release

$t_2$  : Response time on engagement

$t_F$  : Braking time

$U_F$  : Supply voltage (rectified or continuous current)

# Open continuous current (DC) motors LSK

## Availability according to the construction

Type	Construction characteristics
LSK 1124 LSK 1324 LSK 1604 LSK 1804 LSK 2004 LSK 2254 LSK 2504 LSK 2804	<ul style="list-style-type: none"> <li>• IP 23S protection, IP 55R protection (connection to ventilation ducting)</li> <li>• Forced ventilation in position A, B or D</li> <li>• Foot, flange, or foot and flange mounting (up to LSK 1604)</li> <li>• Foot mounting (from LSK 1804 upwards)</li> <li>• Terminal box in position B</li> <li>• Terminal box in position A &amp; D (up to LSK 1804)</li> <li>• Standard main shaft end</li> <li>• Standard ball bearings</li> <li>• Roller bearings</li> <li>• Balancing normal class N</li> <li>• Stopped air flow detector</li> <li>• Axial ventilation option (up to LSK 1604)</li> <li>• Support and coupling for tachometric dynamo mounting (DT REO or standard encoder)</li> <li>• Provision and mounting of standard TD or standard encoder 1024 points</li> <li>• Filter</li> <li>• Dual voltage standard excitation 180-360V (parallel series coupling)</li> <li>• Other excitation voltages* (example : 310V)</li> <li>• Detection of the brush wear limit</li> </ul>
LSK 1124 LSK 1324 LSK 1604 LSK 1804 LSK 2004 LSK 2254 LSK 2504 LSK 2804	<ul style="list-style-type: none"> <li>• Bearings with grease nipples (up to LSK 2004)</li> <li>• Balancing class R (reduced)</li> <li>• Thermal detections PTO or PTF...</li> <li>• Sound muffler on ventilation in position A (from LSK 1604 upwards)</li> </ul>
LSK 1124 LSK 1324 LSK 1604 LSK 1804 LSK 2004 LSK 2254 LSK 2504 LSK 2804	<ul style="list-style-type: none"> <li>• Special shaft end on estimate</li> <li>• IC 416 - IP 55* motors</li> <li>• 2<sup>nd</sup> shaft</li> <li>• Optional brake</li> <li>• Optional brake with tacho. dynamo or pulse generator</li> <li>• Special flange</li> <li>• air / air or air / water exchanger</li> <li>• Execution other than IEC</li> </ul>



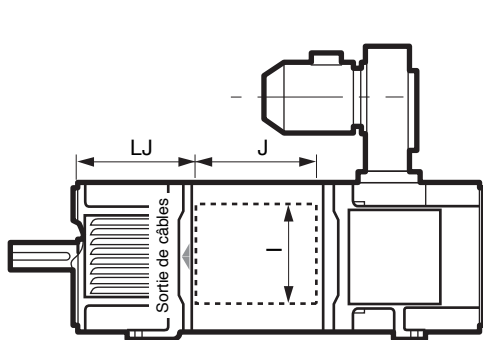
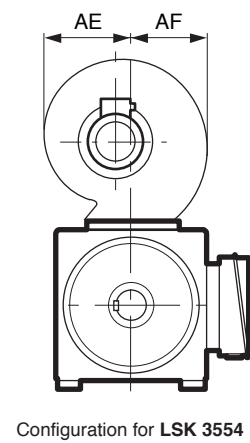
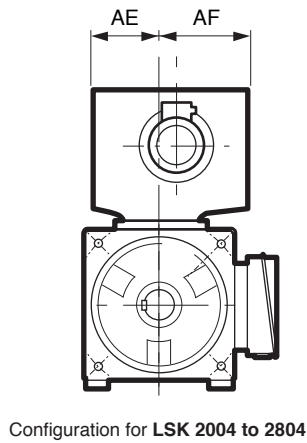
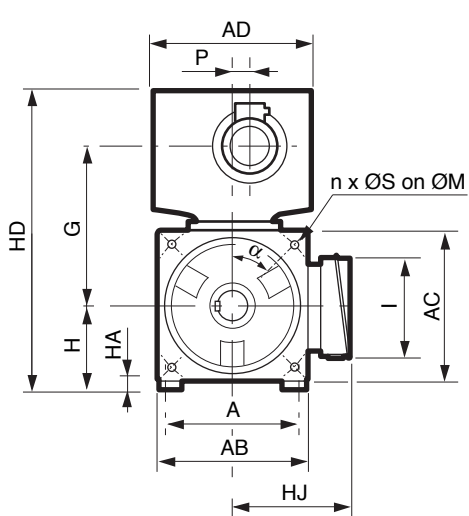
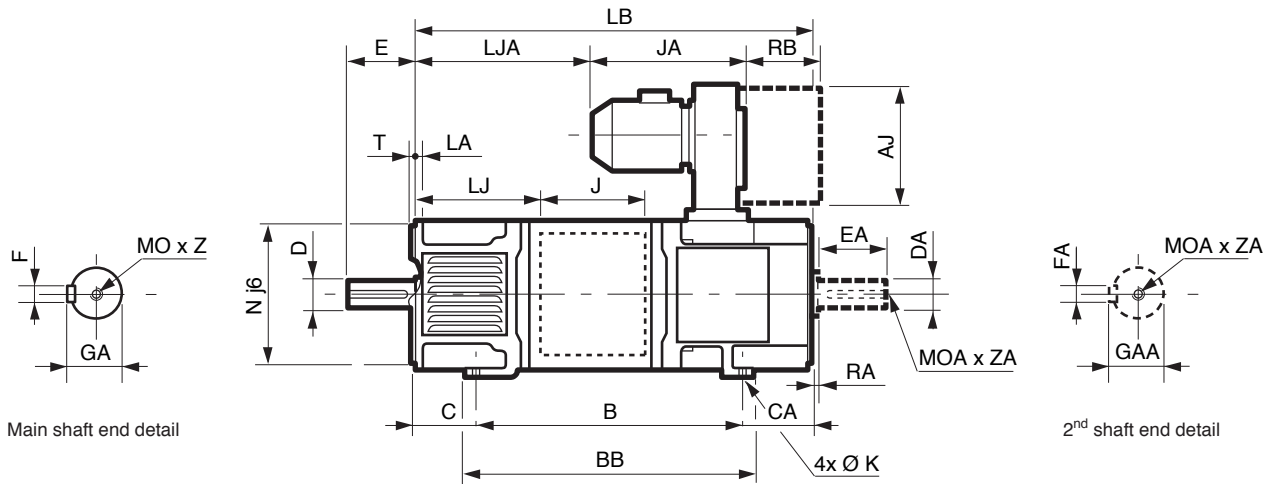
# Open continuous current (DC) motors LSK

## Dimensions

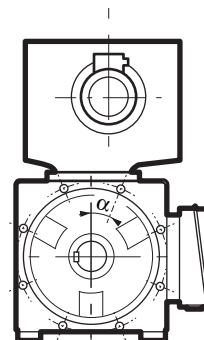
### Dimensions of the LSK open continuous current (dc) motors

Dimensions in millimetres

#### Dimensions of the LSK continuous current (dc) motors IP 23S - IC 06



Terminals box detail : LSK 1804 to 2804C



Flange configuration for LSK 2254 to 3554

# Open continuous current (DC) motors LSK

## Dimensions

### Dimensions of the LSK open continuous current (dc) motors

Dimensions in millimetres

#### Dimensions of the LSK continuous current (dc) motors IP 23S - IC 06

Type	Main dimensions																						
	A	AB	AC	AD	AE	AF	B	BB	C	CA	G	H	HA	HD	HJ	I	J	JA	K	LB	LJ	LJA	P
LSK 1124 M	190	220	220	220	-	-	380	404	70	96	248	112	10	472	202	168	182	297	12	546	183	199	17
LSK 1124 L	190	220	220	220	-	-	450	474	70	96	248	112	10	472	202	168	182	297	12	616	253	269	17
LSK 1124 VL	190	220	220	220	-	-	520	544	70	96	248	112	10	472	202	168	182	297	12	686	323	339	17
LSK 1324 S	216	245	260	260	-	-	432	462	89	69	290	132	12	552	248	200	178	315	12	590	165	205	18
LSK 1324 M	216	245	260	260	-	-	482	512	89	69	290	132	12	552	248	200	178	315	12	640	215	255	18
LSK 1324 VL	216	245	260	260	-	-	582	612	89	69	290	132	12	552	248	200	178	315	12	740	315	355	18
LSK 1324 XVL	216	245	260	260	-	-	652	682	89	69	290	132	12	552	248	200	178	315	12	810	385	425	18
LSK 1604 S	254	300	316	318	-	-	425	469	103	222	361	160	15	678	313	250	217	353	14	750	271	293	20
LSK 1604 M	254	300	316	318	-	-	505	549	103	222	361	160	15	678	313	250	217	353	14	830	351	373	20
LSK 1604 L	254	300	316	318	-	-	565	609	103	222	361	160	15	678	313	250	217	353	14	890	411	433	20
LSK 1604 VL	254	300	316	318	-	-	665	709	103	222	361	160	15	678	313	250	217	353	14	990	511	533	20
LSK 1804 M	279	356	356	318	-	-	653	738	121	115	396	180	15	735	317	230	270	353	14	889	340	434	20
LSK 1804 L	279	356	356	318	-	-	698	783	121	115	396	180	15	735	317	230	270	353	14	934	385	481	20
LSK 1804 VL	279	356	358	356	-	-	883	968	121	95	405	180	15	760	317	230	270	415	14	1099	505	554	23
LSK 1804C M	279	356	356	318	-	-	653	738	121	115	396	180	15	735	317	230	270	353	14	889	340	434	20
LSK 1804C L	279	356	356	318	-	-	698	783	121	115	396	180	15	735	317	230	270	353	14	934	385	481	20
LSK 2004 M	318	396	396	-	197	298	737	830	133	130	471	200	18	921	335	230	270	410	18	1000	420	489	73
LSK 2004 L	318	396	396	-	197	298	802	895	133	130	471	200	18	921	335	230	270	410	18	1065	485	554	73
LSK 2254 M	356	445	445	-	207	341	793.5	888	149	147.5	491	225	21	993	360	262	320	427	18	1090	452	515	92
LSK 2254 L	356	445	445	-	207	341	863.5	958	149	147.5	491	225	21	993	360	262	320	427	18	1160	522	585	92
LSK 2254 VL	356	445	445	-	207	341	913.5	1008	149	147.5	491	225	21	993	360	262	320	427	18	1210	572	635	92
LSK 2504C M	406	494	494	-	240	360	1018	1216	168	174	624	250	22	1180	495	470	340	416	22	1360	400	776	90
LSK 2504C L	406	494	494	-	240	360	1078	1276	168	174	624	250	22	1180	495	470	340	416	22	1420	460	836	90
LSK 2804C SM	457	550	550	-	275	380	1106	1248	190	182	660	280	29	1300	530	470	340	485	22	1477	655	871	62
LSK 2804C M	457	550	550	-	275	380	1106	1315	190	249	660	280	29	1300	530	470	340	485	22	1544	655	836	62
LSK 2804C SL	457	550	550	-	275	380	1216	1358	190	182	660	280	29	1300	530	470	340	485	22	1587	765	981	62
LSK 2804C L	457	550	550	-	275	380	1216	1425	190	249	660	280	29	1300	530	470	340	485	22	1654	765	946	62
LSK 3554C VS	610	700	700	-	374	331	700	1536	254 <sup>1</sup>	617	815	355	22.5	1521	680	434	520	621	27	1580 <sup>1</sup>	336 <sup>1</sup>	680 <sup>1</sup>	72
LSK 3554C S	610	700	700	-	374	331	800	1636	254 <sup>1</sup>	617	815	355	22.5	1521	680	434	520	621	27	1680 <sup>1</sup>	436 <sup>1</sup>	785 <sup>1</sup>	72
LSK 3554C M	610	700	700	-	374	331	850	1686	254 <sup>1</sup>	617	815	355	22.5	1521	680	434	520	621	27	1780 <sup>1</sup>	486 <sup>1</sup>	835 <sup>1</sup>	72
LSK 3554C L	610	700	700	-	374	331	950	1786	254 <sup>1</sup>	617	815	355	22.5	1521	680	434	520	621	27	1880 <sup>1</sup>	586 <sup>1</sup>	935 <sup>1</sup>	72
LSK 3554C VL	610	700	700	-	374	331	1100	1936	254 <sup>1</sup>	617	815	355	22.5	1521	680	434	520	621	27	1980 <sup>1</sup>	736 <sup>1</sup>	1085 <sup>1</sup>	72

Type	Shaft end													Filter		Standard flange <sup>2</sup>					
	D	DA	E	EA	F	FA	GA	GAA	O	OA	RA	Z	ZA	AJ	RB	LA	M	N j6	n ∅	S	T
LSK 1124	38 k6	38 k6	80	80	10	10	41	41	12	12	3	28	28	220	135	20	265	230	4	14	4
LSK 1324	48 k6	48 k6	110	110	14	14	51.5	51.5	16	16	3	36	36	260	135	22	300	250	4	18	5
LSK 1604	55 m6	55 m6	110	110	16	16	59	59	20	20	3	42	42	318	185	24	350	300	4	18	5
LSK 1804 M-L	60 m6	60 m6	140	140	18	18	64	64	20	20	6	42	42	318	185	20	350	300	4	18	5
LSK 1804 VL	60 m6	60 m6	140	140	18	18	64	64	20	20	6	42	42	356	200	20	350	300	4	18	5
LSK 1804C	60 m6	60 m6	140	140	18	18	64	64	20	20	6	42	42	318	185	20	350	300	4	18	5
LSK 2004	65 m6	65 m6	140	140	18	18	69	69	20	20	3	42	42	490	189	20	400	350	4	18	5
LSK 2254	80 m6	80 m6	170	170	22	22	85	85	20	20	1.5	36	36	500	230	31	400	350	8	18	5
LSK 2504C	100 m6	100 m6	170	170	28	28	106	106	24	24	1.5	50	50	460	356	35	400	350	8	18	5
LSK 2804C	110 m6	110 m6	170	170	28	28	116	116	24	24	1.5	50	50	620	180	46	500	450	8	26	6
LSK 3554C	125 m6	110 m6	210 <sup>1</sup>	210	32	28	132	116	24	24	-	50	50	600	400	28	940	880	8	25	6

1 : The forward dimensions (D.E.) are established at the level of the shaft shoulder  
2 : Other possibilities : see page B3.48

P: a = 45 degrees for n=4, a = 22 degrees 30 for n=8.

# Open continuous current (DC) motors LSK

## Dimensions

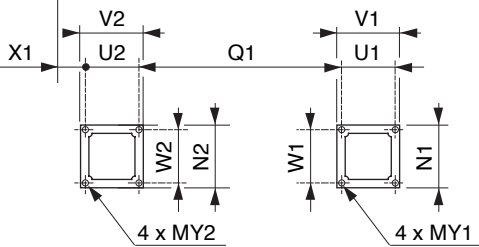
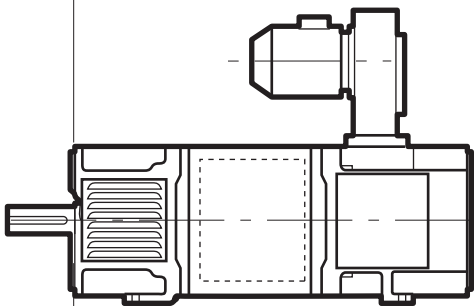
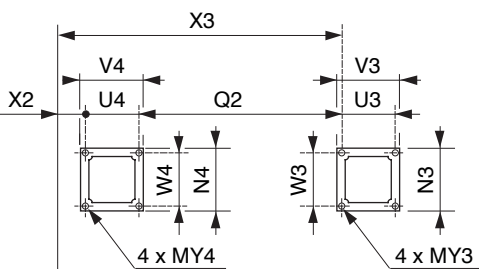
### Dimensions of the inspection doors or connection of air pipes - IC 37 ventilation

Dimensions in millimetres

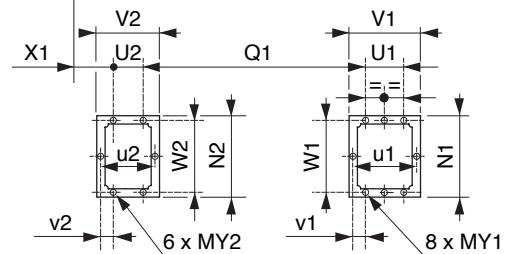
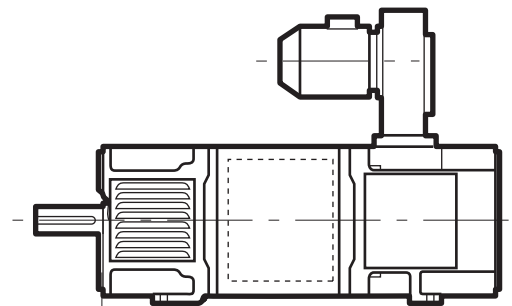
LSK 1124 to 2254  
and LSK 3554C

LSK 2504C & 2804C

Bottom inspection doors for brush  
or bottom connections  
to air pipes



Top and side connexions  
to air pipes



Connections to air pipes :  
top, side and bottom

# Open continuous current (DC) motors LSK

## Dimensions

### Dimensions of the LSK open continuous current (dc) motors

Dimensions in millimetres

Dimensions of the inspection doors or connection of the air pipes :  
IC 17 - IC 26 - IC 27 - IC 37

Type	Main dimensions																						
	N1/N2	N3/N4	Q1	Q2	U1	U2	U3	U4	V1	V2	V3	V4	W1	W2	W3	W4	X1	X2	X3	Y1	Y2	Y3	Y4
LSK 1124 M	130	130/-	225	-	114	114	114	-	130	130	130	-	114	114	114	-	30	30	369	6	6	6	-
LSK 1124 L	130	130/-	296	-	114	114	114	-	130	130	130	-	114	114	114	-	30	30	440	6	6	6	-
LSK 1124 VL	130	130/-	366	-	114	114	114	-	130	130	130	-	114	114	114	-	30	30	510	6	6	6	-
LSK 1324 S	160	130/-	216	-	140	140	114	-	160	160	130	-	140	140	114	-	22	22	378	8	8	8	-
LSK 1324 M	160	130/-	266	-	140	140	114	-	160	160	130	-	140	140	114	-	22	22	428	8	8	8	-
LSK 1324 VL	160	130/-	366	-	140	140	114	-	160	160	130	-	140	140	114	-	22	22	528	8	8	8	-
LSK 1324 XVL	160	130/-	436	-	140	140	114	-	160	160	130	-	140	140	114	-	22	22	611	8	8	8	-
LSK 1604 S	190	190/-	346	-	135	135	135	-	150	150	150	-	175	175	175	-	23	23	504	8	8	8	-
LSK 1604 M	190	190/-	426	-	135	135	135	-	150	150	150	-	175	175	175	-	23	23	584	8	8	8	-
LSK 1604 L	190	190/-	486	-	135	135	135	-	150	150	150	-	175	175	175	-	23	23	644	8	8	8	-
LSK 1604 VL	190	190/-	586	-	135	135	135	-	150	150	150	-	175	175	175	-	23	23	744	8	8	8	-
LSK 1804 M	215	215	479	479	140	140	140	140	180	180	180	180	200	200	200	200	25	25	644	6	6	6	6
LSK 1804 L	215	215	524	524	140	140	140	140	180	180	180	180	200	200	200	200	25	25	689	6	6	6	6
LSK 1804 VL	215	215	659	659	140	140	140	140	180	180	180	180	200	200	200	200	25	25	824	6	6	6	6
LSK 1804C M	215	215	479	479	140	140	140	140	180	180	180	180	200	200	200	200	25	25	644	6	6	6	6
LSK 1804C L	215	215	524	524	140	140	140	140	180	180	180	180	200	200	200	200	25	25	689	6	6	6	6
LSK 2004 M	225	225	539	539	165	165	165	165	205	205	205	205	205	205	205	205	24	24	728	6	6	6	6
LSK 2004 L	225	225	604	604	165	165	165	165	205	205	205	205	205	205	205	205	24	24	793	6	6	6	6
LSK 2254 M	250	250	572	572	170	170	170	170	210	210	210	210	230	230	230	230	31	31	773	6	6	6	6
LSK 2254 L	250	250	642	642	170	170	170	170	210	210	210	210	230	230	230	230	31	31	843	6	6	6	6
LSK 2254 VL	250	250	692	692	170	170	170	170	210	210	210	210	230	230	230	230	31	31	893	6	6	6	6
LSK 3554C VS	396	396	649	649	326	326	326	326	356	356	356	356	366	366	366	366	391	39 <sup>1</sup>	1014 <sup>1</sup>	8	8	8	8
LSK 3554C S	396	396	749	749	326	326	326	326	356	356	356	356	366	366	366	366	391	39 <sup>1</sup>	1114 <sup>1</sup>	8	8	8	8
LSK 3554C M	396	396	799	799	326	326	326	326	356	356	356	356	366	366	366	366	391	39 <sup>1</sup>	1164 <sup>1</sup>	8	8	8	8
LSK 3554C L	396	396	899	899	326	326	326	326	356	356	356	356	366	366	366	366	391	39 <sup>1</sup>	1264 <sup>1</sup>	8	8	8	8
LSK 3554C VL	396	396	1049	1049	326	326	326	326	356	356	356	356	366	366	366	366	391	39 <sup>1</sup>	1414 <sup>1</sup>	8	8	8	8

<sup>1</sup> : The forward dimensions (D.E.) are established at the level of the shaft shoulder

Type	Main dimensions															
	N1	N2	Q1	U1	U2	u1	u2	V1	V2	v1	v2	W1	W2	X1	Y1	Y2
LSK 2504C M	300	300	730	180	190	292	240	320	260	56	25	280	280	44	6	6
LSK 2504C L	300	300	790	180	190	292	240	320	260	56	25	280	280	44	6	6
LSK 2804C SM	350	350	895	187	187	247	247	277	277	30	30	320	320	50	8	8
LSK 2804C M	350	350	860	289	187	349	247	380	277	30	30	320	320	50	8	8
LSK 2804C SL	350	350	1005	187	187	247	247	277	277	30	30	320	320	50	8	8
LSK 2804C L	350	350	970	289	187	349	247	380	277	30	30	320	320	50	8	8

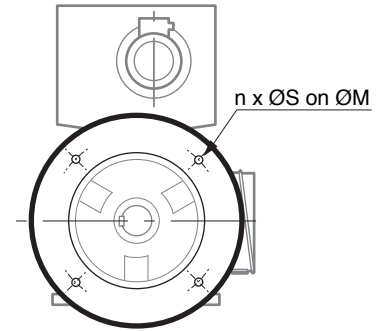
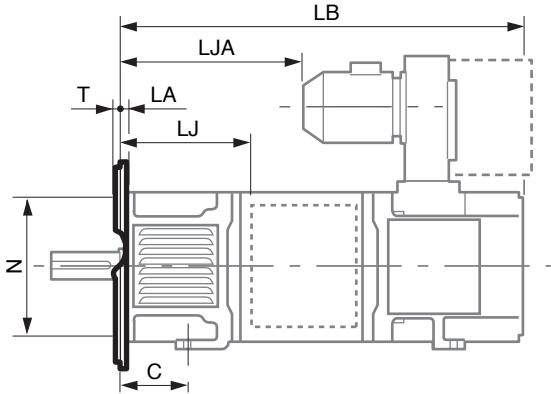
# Open continuous current (DC) motors LSK

## Dimensions

### Dimensions of the options for LSK open continuous current (dc) motors

Dimensions in millimetres

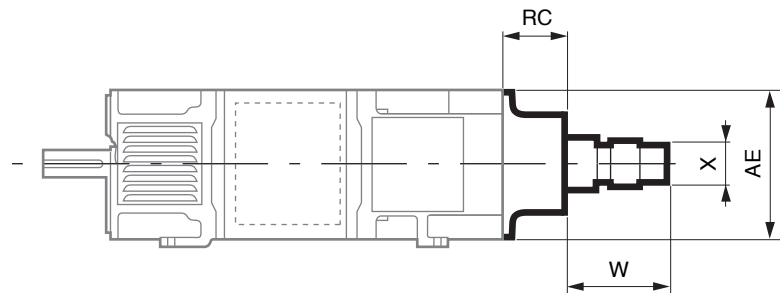
#### Dimensions of the (FF) plain holes flange adaptor



LSK motor Size	IEC symbol	Flange dimensions					
		LA	M	N	n	S	T
1124	FF 215	55	215	180	4	14	4
1324	FF 215	54	215	180	4	14	4
1324	FF 400	54	400	350	4	14	4
1604	FF 265	64	265	230	4	14	4
1604	FF 300	64	300	250	4	18	5

LSK motor Size	Flange dimensions			
	C	LB	LJ	LJA
1124 M	95	571	208	224
1124 L	95	641	278	294
1124 VL	95	711	348	364
1324 S	121	622	197	237
1324 M	121	672	247	287
1324 VL	121	772	347	387
1324 XVL	121	842	417	457
1604 S	143	790	311	333
1604 M	143	870	391	413
1604 L	143	930	451	473
1604 VL	143	1030	551	573

#### Brake dimensions



LSK motor Size	Type 458			
	AE	RC	X <sub>(1)</sub>	W <sub>(1)</sub>
1124	215	88	*	R-36
1324	254	100	*	R-34
1604	305	127	*	R-44
1804 & 1804C	-	-	-	-
2004	-	-	-	-
2254	-	-	-	-
2504C	-	-	-	-
2804C	-	-	-	-
3554C	-	-	-	-



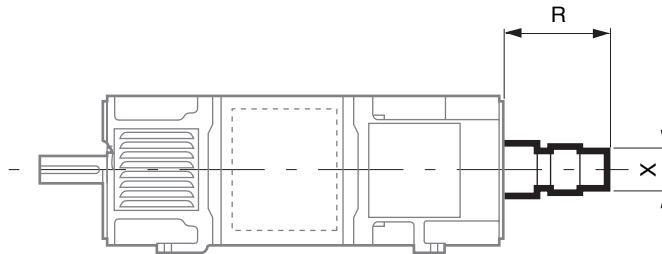
# Open continuous current (DC) motors LSK

## Dimensions

### Dimensions of the options for LSK open continuous current (dc) motors

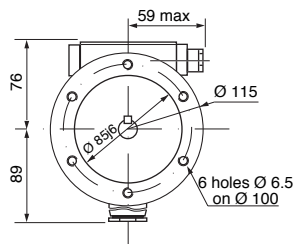
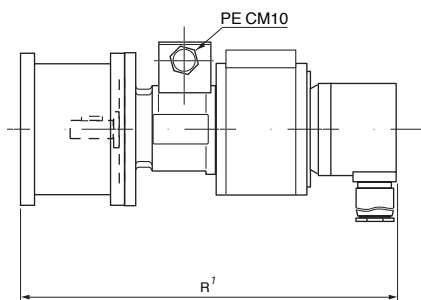
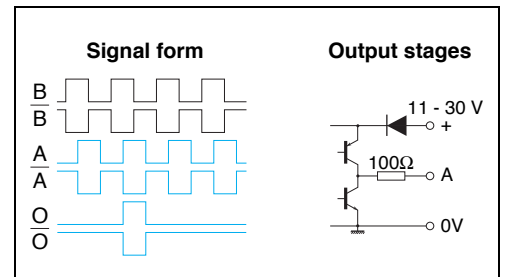
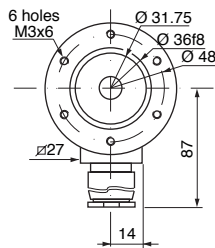
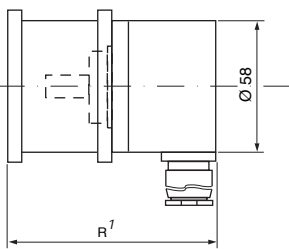
Dimensions in millimetres

#### Tachometric dynamo



LSK motor Size	REO 444				REO 444R				REO 444 L1		RDC 15	
	1 Commutator		2 Commutators		1 Commutator		2 Commutators		1 Commutator		1 Commutator	
	R	X	R	X	R	X	R	X	R	X	R	X
1124	192	75	208	75	200	94	219	94	135.5	88	66	98
1324	192	75	208	75	200	94	219	94	135.5	88	66	98
1604	192	75	208	75	200	94	219	94	135.5	88	66	98
1804	180	75	196	75	188	94	207	94	123.5	88	75	98
2004	180	75	196	75	188	94	207	94	123.5	88	71	98
2254	180	75	196	75	188	94	207	94	123.5	88	71	98
2504C	182	75	198	75	190	94	209	94	125.5	88	71	98
2804C	182	75	198	75	190	94	209	94	125.5	88	71	98
3554C	185	75	201	75	190	94	209	94				

#### GHM5 10 59 6R pulse generator



#### Shaft end detail

