

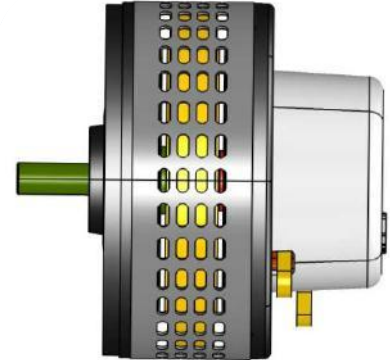
LEM-130

Overview:

The LEM-130 is a 6 Pole Axial Gap D.C. brush motor suitable for light traction and robotics applications.

Example applications include railway service vehicle, scooters, mopeds and small vehicles.

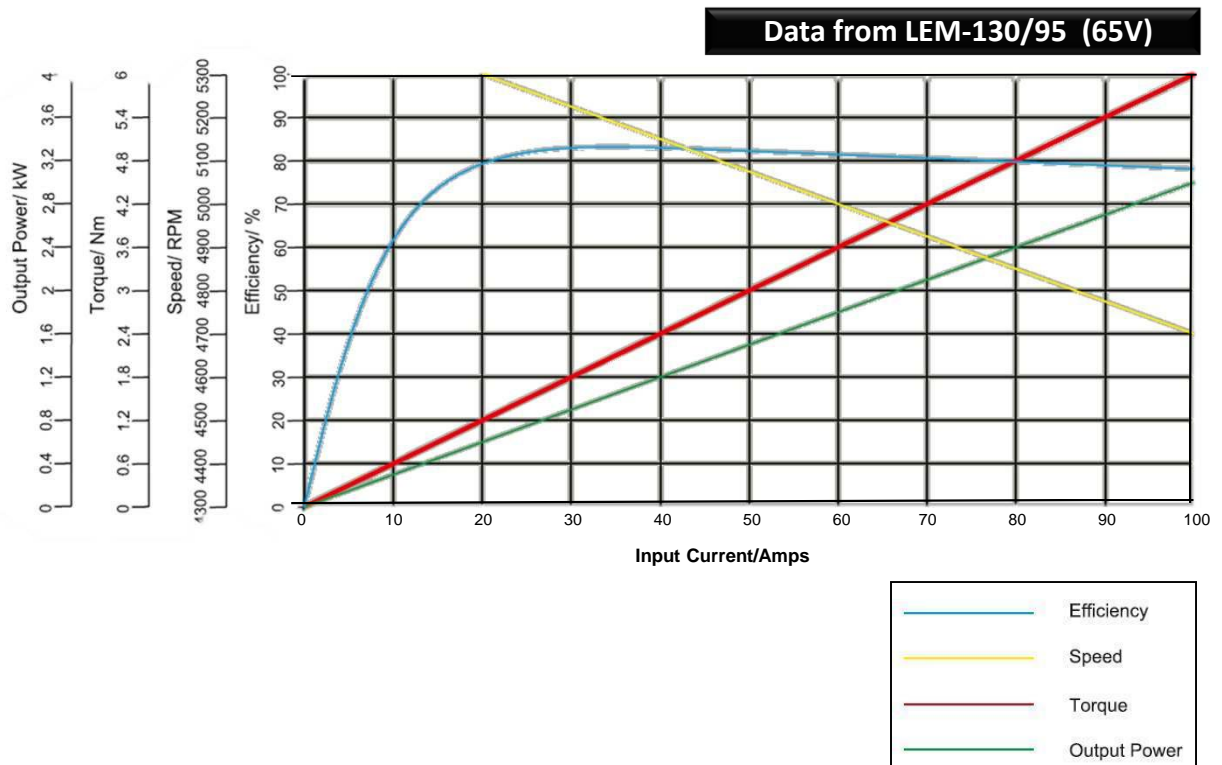
The LEM-130 is available with two options: 95 and 95S

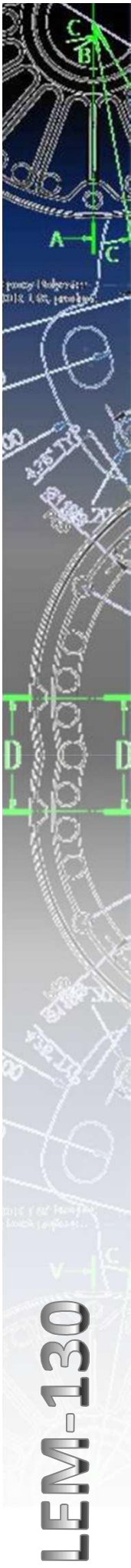


Features:

- High efficiency (up to 88%)
- Lightweight design
- Simple electronic control
- Long brush Life
- Rugged Construction
- CE Marked
- Ip20 rating
- Voltage 12 to 48v

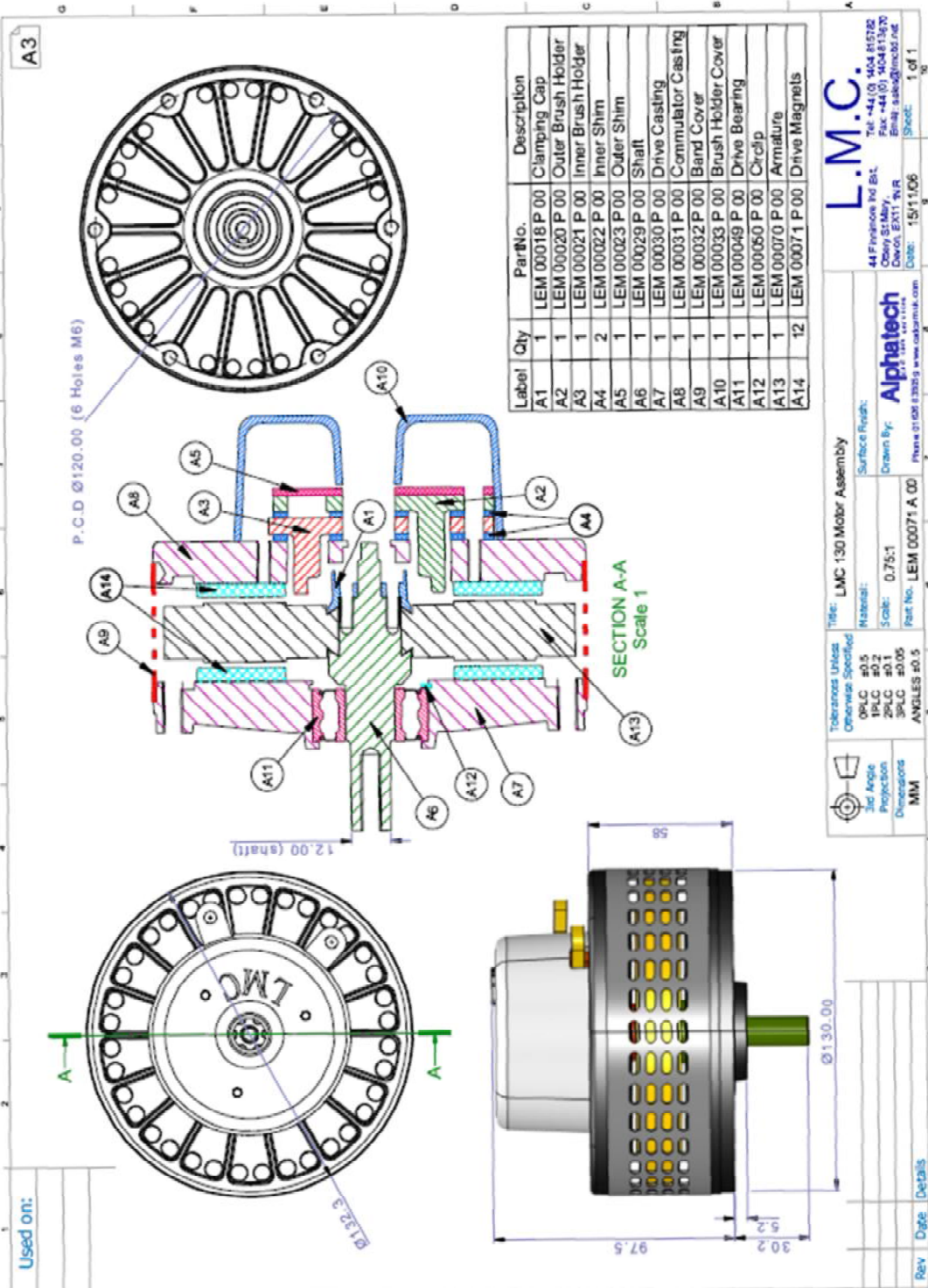
Typical Technical Data Curve :





Technical Data:

Motor	No Load Current	Torque Constant	Speed Constant	Armature Resistance DC	Armature Inductance @ 15kHz	Armature Inertia	Peak Power	Peak Efficiency	Peak Current	Rated Power	Rated Speed	Rated Voltage	Rated Current	Rated Torque
	A	Nm/A	Rpm/V	mΩ	μH	Kgm ²	kW	%	A	kW	Rpm	V	A	Nm
95	6	0.0631	138	32.5	14	0.0116	3	82	100	2.27	4968	36	75	4.35
95S	6	0.0631	138	32.5	14	0.0117	4	88	100	3.02	6624	48	75	4.35



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Sheet: 1 of 1

Alphatech
Material: 075-1
Scale: 0.75:1
Part No. LEM 00071 A 00
Name of the drawing: www.lmc.com

LMCLtd
Generating Movement Efficiently
ACES 3
190-4101

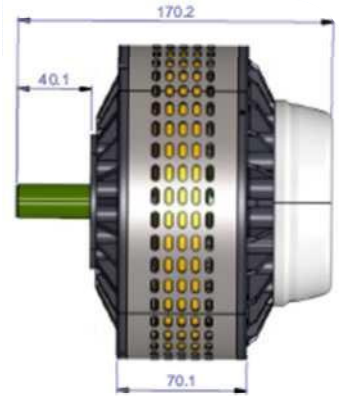
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LEM-170

Overview:

The LEM-170 is an axial gap DC brushed motor suitable for traction and industrial applications such as compressors, sweepers, mopeds, golf carts and pumps.

The LEM-170 is available in 126 and 127 strip armatures with magnet grade selection dependant on application.

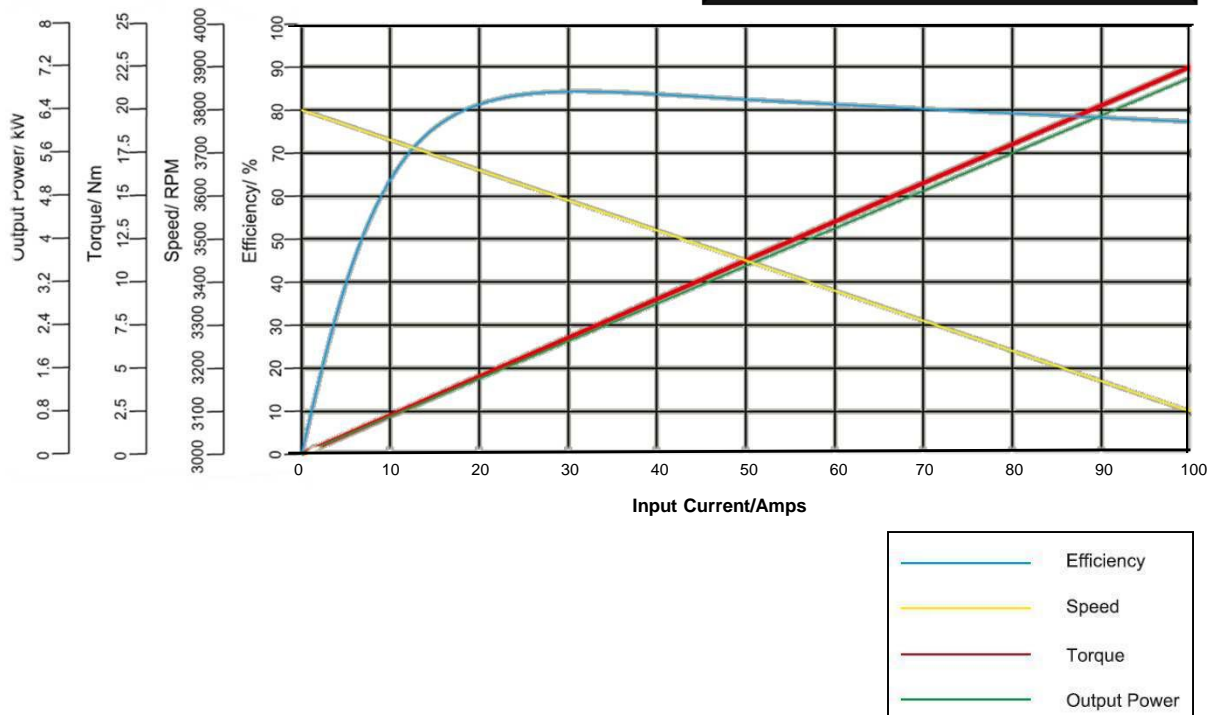


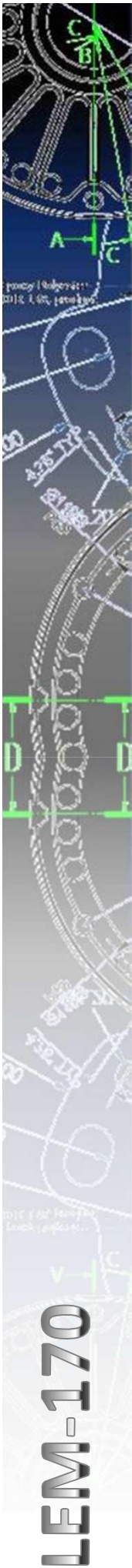
Features:

- High efficiency (up to 90%)
- Lightweight design (8.5kg)
- Simple electronic control
- Long brush Life
- Interchangeable Shaft
- Rugged Construction
- CE Marked
- Ip20 rating
- Available from 12 to 60v
- Speed proportional to voltage

Typical Technical Data Curve :

Data from LEM-170/127 (48V)

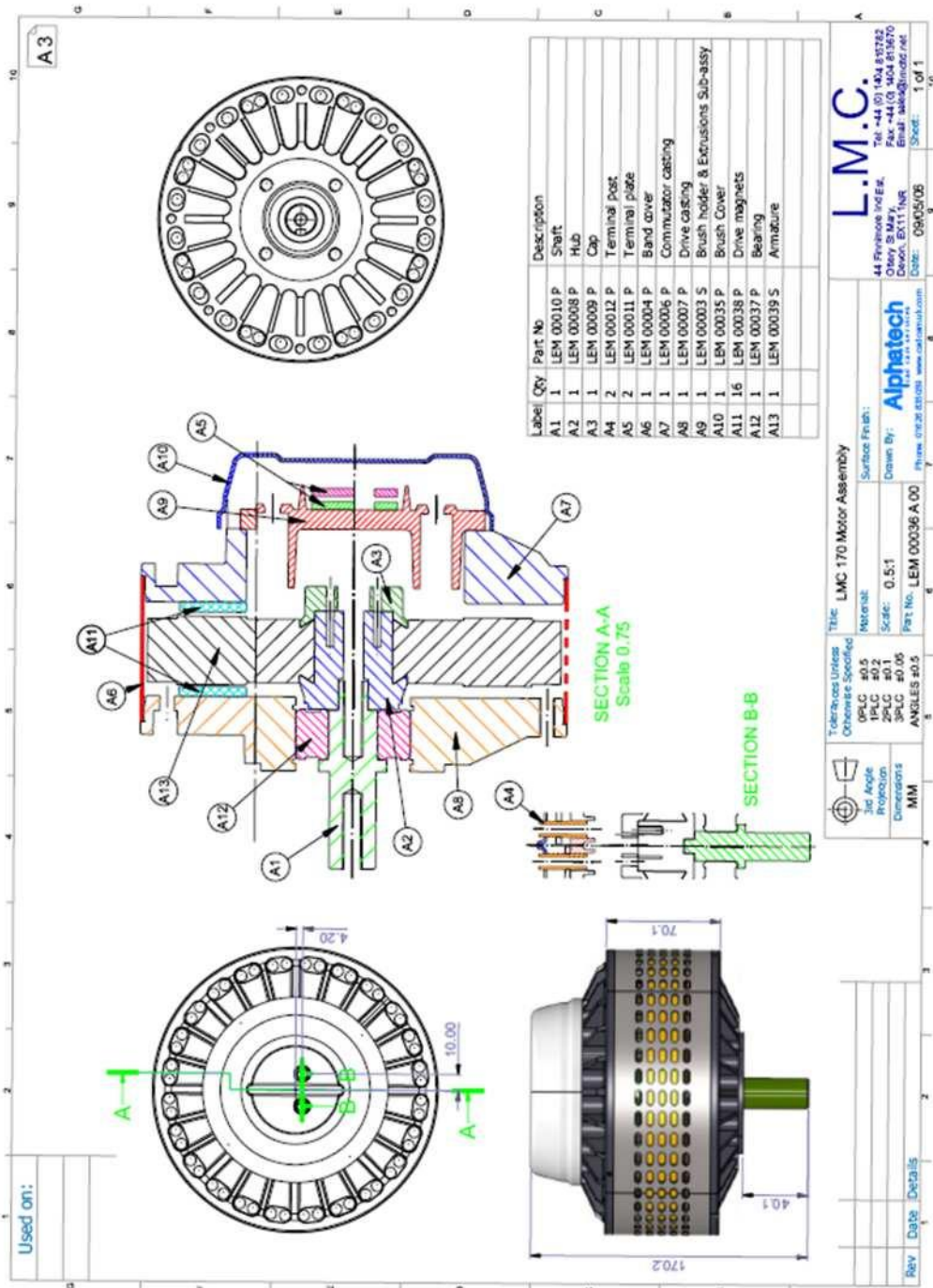




LEM-170

Technical Data:

Motor	No Load Current	Torque Constant	Speed Constant	Armature Resistance DC	Armature Inductance @ 15kHz	Armature Inertia	Peak Power	Peak Efficiency	Peak Current	Rated Power	Rated Speed	Rated Voltage	Rated Current	Rated Torque
	A	Nm/A	Rpm/V	mΩ	μH	Kgm ²	kW	%	A	kW	Rpm	V	A	Nm
126	18	0.055	140	185	8	0.0234	7	76	400	4.30	3360	24	240	12.2
127	5	0.12	68	24	23	0.0236	16	89	400	5.54	3264	48	140	16.2
D127	4	0.134	62	21	15	0.0236	21	90	400	7.10	3720	60	140	18.2



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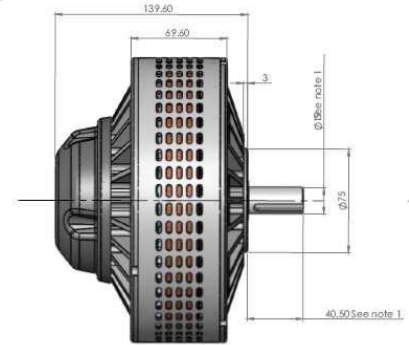


LEM-200

Overview:

The LEM-200 is an axial gap DC brushed motor suitable for traction and industrial applications such as grass cutters, Go-Karts, motorcycles, golf carts, scissor lifts, lightweight vehicles, boats and generators.

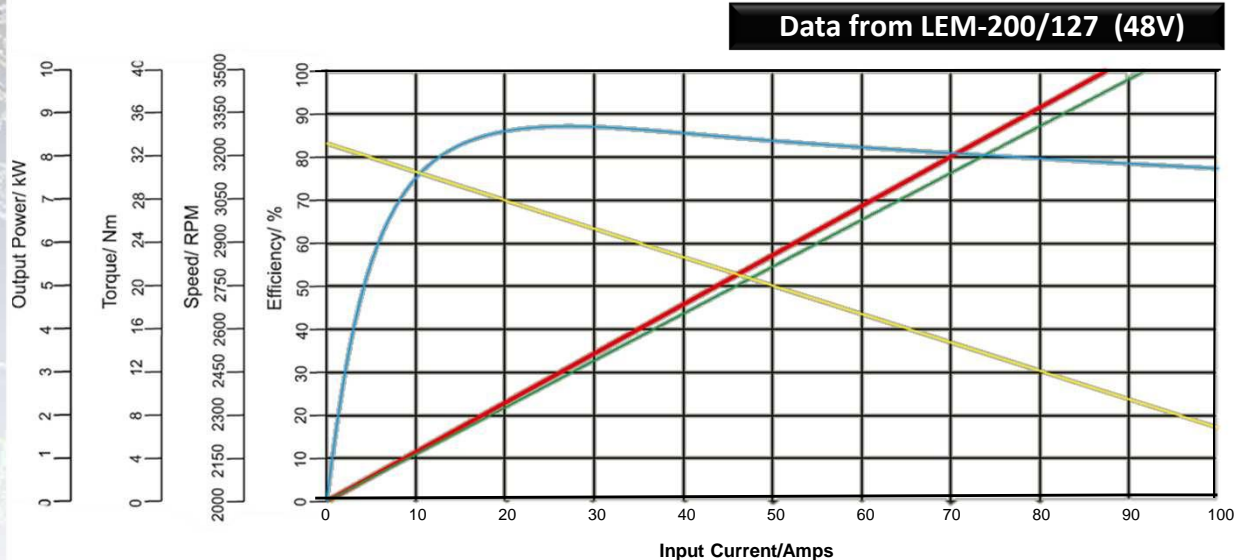
The LEM-200 is available in 126, 127 and 135 strip armatures with magnet grade selection dependant on application.



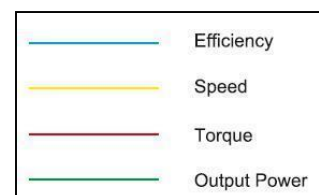
Features:

- High efficiency (up to 90%)
- Lightweight design (11kg)
- Simple electronic control
- Long brush Life
- Interchangeable Shaft
- Rugged Construction
- CE Marked
- Ip20 rating
- Available from 12 to 110v
- Speed proportional to voltage

Typical Technical Data Curve :



IMPORTANT: Any model of the LEM-200 can be made up into the **2X2 version**. This is 2 motors married together on a single shaft see 2X2 installation drawing for details on our [website](#)

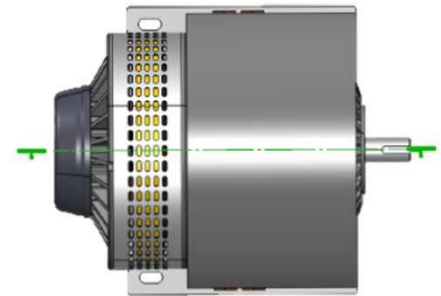


LEM-2X2

Overview:

The LMC-2X2 is a matched pair of axial gap DC brushed motor in a single frame suitable for traction and industrial applications .

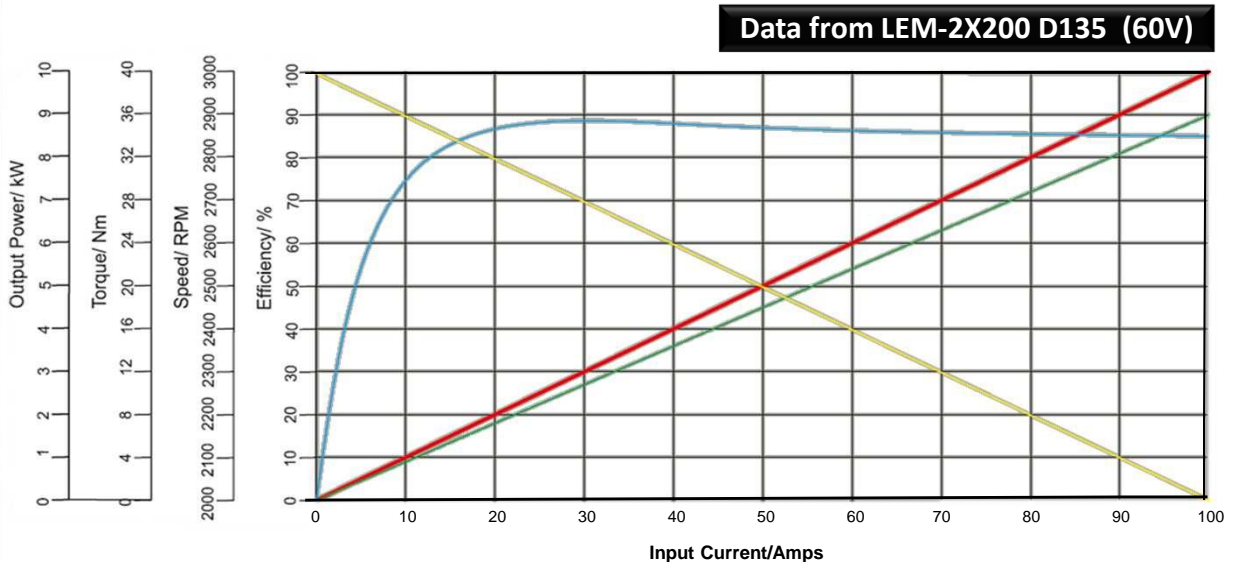
The LMC-2X2 is available in 95, 127 and 135 strip armatures with magnet grade selection dependant on application.



Features:

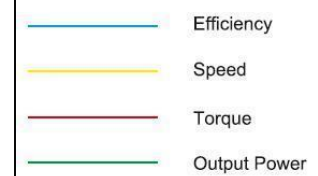
- High efficiency (up to 93%)
- Lightweight design (25kg)
- Simple electronic control
- Long brush Life
- Interchangeable Shaft
- Rugged Construction
- CE Marked
- Ip20 rating
- Available from 24 to 110v
- Speed proportional to voltage

Typical Technical Data Curve :



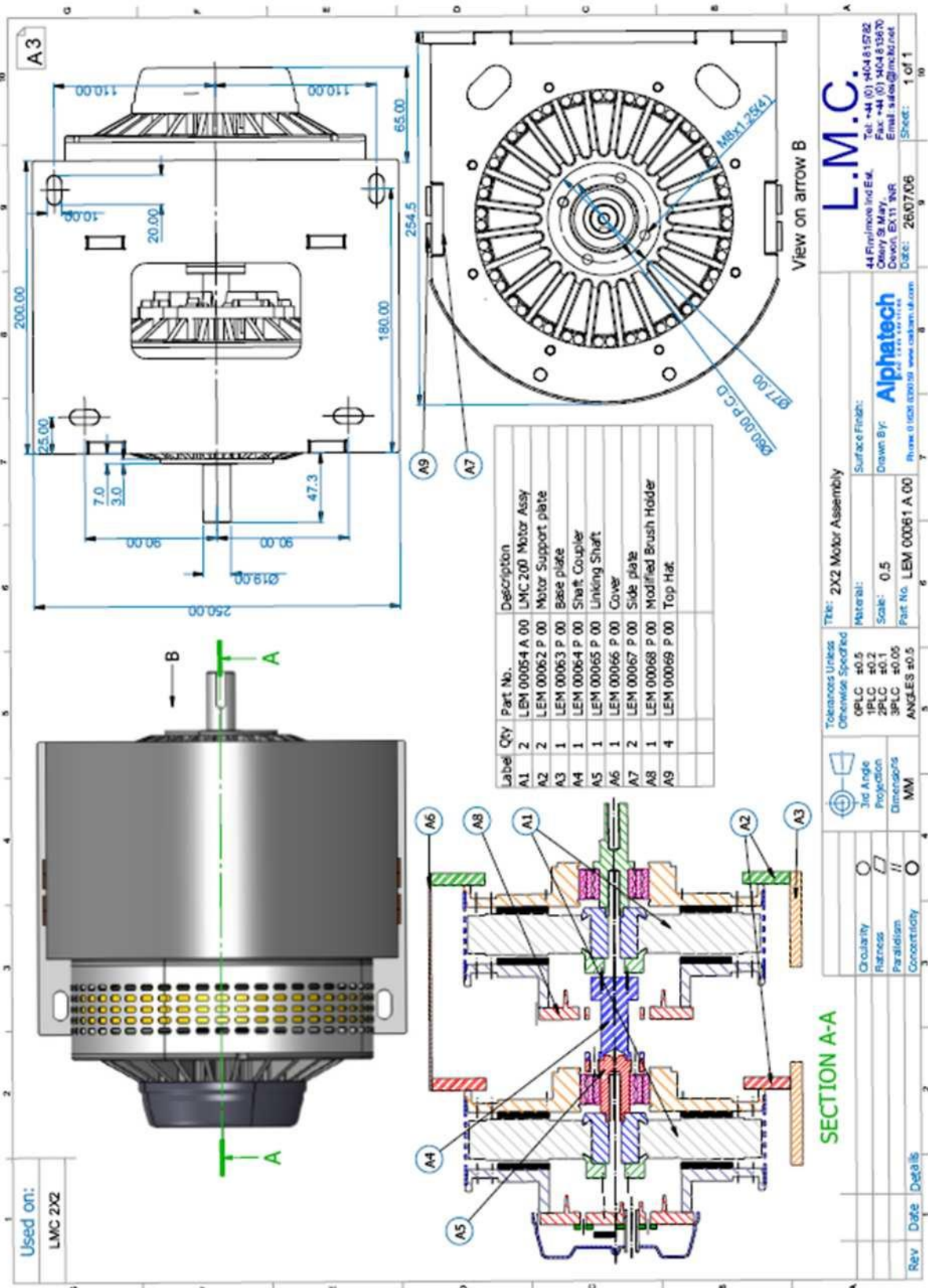
IMPORTANT:

Any model of the LEM-200 can be made up into the **2X2 version**. This is 2 motors married together on a single shaft see 2X2 installation drawing for details on our [website](#). This can also be supplied in a **V-Twin layout** which gives the same performance.





Technical Data:



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Performance Overview

There are three sizes of LMC motors: LEM-130, LEM-170 and LEM-200. Each of these has a series of variants. Below is the performance data for our main production motors:

LEM-130:

	No Load Current	Torque Constant	Speed Constant	Armature Resistance DC	Armature Inductance @ 15kHz	Armature Inertia	Peak Power	Peak Efficiency	Peak Current	Rated Power	Rated Speed	Rated Voltage	Rated Current	Rated Torque
Motor	A	Nm/A	Rpm/V	mΩ	μH	Kgm ²	kW	%	A	kW	Rpm	V	A	Nm
95	6	0.0631	138	32.5	14	0.0116	3	82	100	2.27	4968	36	75	4.35
95S	6	0.0631	138	32.5	14	0.0117	4	88	100	3.02	6624	48	75	4.35

LEM-170:

	No Load Current	Torque Constant	Speed Constant	Armature Resistance DC	Armature Inductance @ 15kHz	Armature Inertia	Peak Power	Peak Efficiency	Peak Current	Rated Power	Rated Speed	Rated Voltage	Rated Current	Rated Torque
Motor	A	Nm/A	Rpm/V	mΩ	μH	Kgm ²	kW	%	A	kW	Rpm	V	A	Nm
126	18	0.055	140	185	8	0.0234	7	76	400	4.30	3360	24	240	12.2
127	5	0.12	68	24	23	0.0236	16	89	400	5.54	3264	48	140	16.2
D127	4	0.134	62	21	15	0.0236	21	90	400	7.10	3720	60	140	18.2

LEM-200:

	No Load Current	Torque Constant	Speed Constant	Armature Resistance DC	Armature Inductance @ 15kHz	Armature Inertia	Peak Power	Peak Efficiency	Peak Current	Rated Power	Rated Speed	Rated Voltage	Rated Current	Rated Torque
Motor	A	Nm/A	Rpm/V	mΩ	μH	Kgm ²	kW	%	A	kW	Rpm	V	A	Nm
95	6	0.113	81	21.5	22	0.0238	18	92	400	6	3888	48	175	19
126	10	0.0737	105	175	6	0.0234	7.59	83	400	5.06	2520	24	270	19.2
127	5	0.15	54	22.5	23	0.0236	16.08	89	400	8.55	2592	48	215	31.5
D95B	6	0.14	76	20.5	11	0.0238	28.50	92	400	15.00	6000	72	200	30.0
D126	5	0.0748	100	138	5	0.0234	11.14	81	400	6.91	3600	36	250	18.3
D127	4	0.17	50	17.5	13	0.0236	25.38	92	400	12.56	3600	72	200	33.3
D135	3.5	0.185	45	16.75	16	0.0236	29.04	93	400	14.39	3780	84	200	36.4
D135 RAG	7.36	0.207	42	16.95	16	0.0238	34.32	93	400	16.84	4032	96	200	39.9
D135 RAGS	7.45	0.21	40	16.95	16	0.0238	36.00	93	400	18.00	4400	110	200	42.0



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