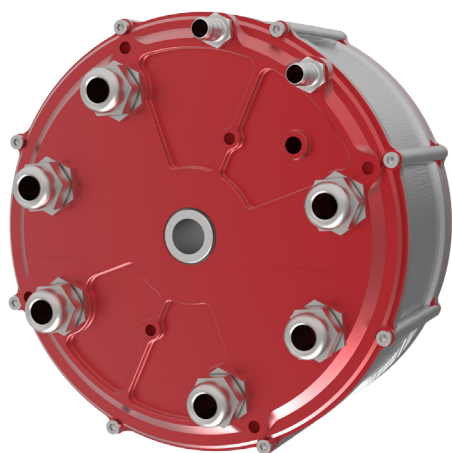


ELECTRICAL MOTOR LVMX30



POWER IN MOTION

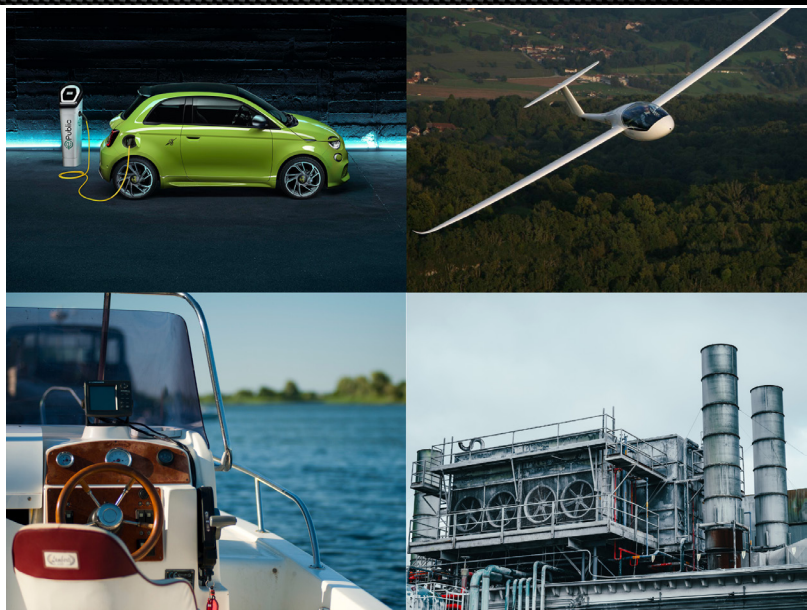
XAP designs and manufactures custom electric motors and magnetic systems, turning the most demanding constraints into reliable, high-performance products.

The LVMX30 motor embodies this expertise, forged in top-level motorsport. Compact (15 kg), it delivers 30 kW of continuous power, up to 120 Nm of torque, and an outstanding 95% efficiency. Its low-voltage design (45–65 V) ensures easy integration, while liquid cooling guarantees flawless thermal stability even under extreme conditions.

Versatile and robust, equipped with dual windings and Hall effect sensors, it is compatible with most inverters and achieves its full potential when paired with our XAP LVC30 inverter.

From motorsport to off-road, on-road, marine, and industrial applications, our technologies carry a clear promise: performance and reliability.

With XAP, precision and durability are at the heart of your electric and hybrid mobility projects.



REAL VERSATILE MOTOR

TWO IN ONE:

A unique architecture, controllable by one or two inverters, ensuring redundancy and safety.

PROVEN RELIABILITY:

Performance validated under extreme conditions, with high-efficiency permanent magnets.

COMPACT POWER:

30 kW in just 15 kg (2 kW/kg), with variants available from 10 to 60 kW.

ALWAYS UNDER CONTROL:

Optimized liquid cooling for flawless thermal stability.

ABSOLUTE PRECISION:

Best-in-class digital encoder for uncompromised control.

CONSTANT AND INSTANT TORQUE:

60 Nm available from 1 to 5000 rpm, with minimal torque ripple.

SAFE VOLTAGE RANGE (45–65 V):

Easier integration, simplified compliance, safe operation without heavy regulations.

TOTAL VERSATILITY:

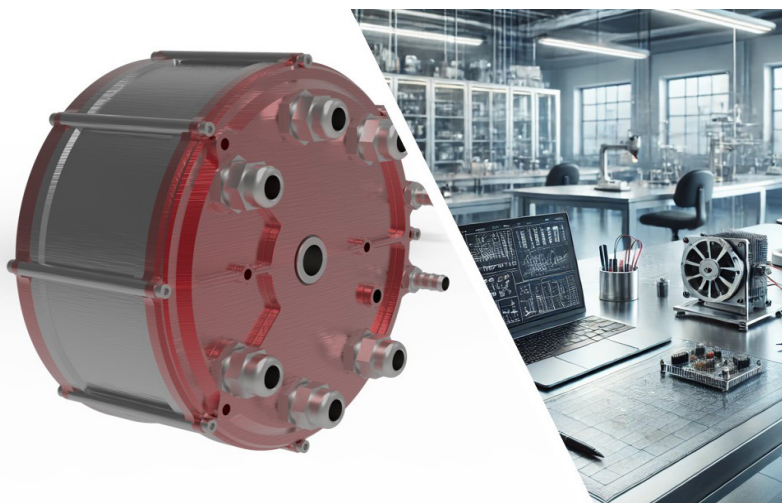
Total versatility: automotive, light aviation, marine, industrial, one motor for multiple worlds.

BUILT-IN RELIABILITY:

Triple winding = higher efficiency, fault tolerance, and service continuity.

MART PLUG & PLAY:

Compatible with most inverters, optimal with the XAP LVC30.





► ELECTRICAL SOLUTIONS & POWERTRAIN: **LVMX-30**

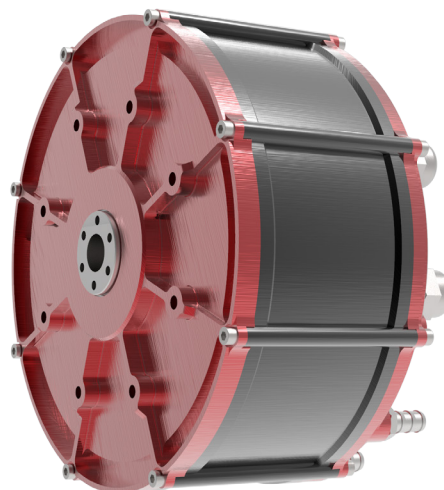
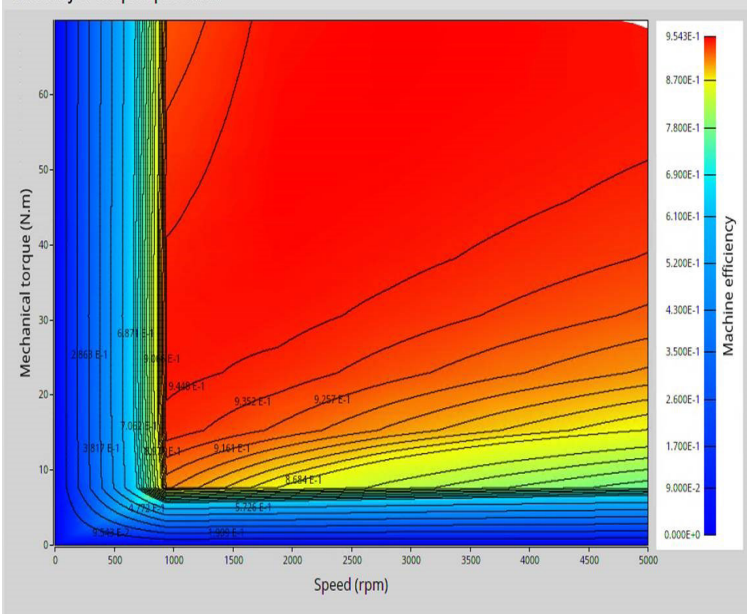
ELECTRICAL SPECIFICATIONS

Nominal Voltage	60 V DC
Voltage range	45 – 65 V DC (Peak 80 V DC)
Nominal power	30 kW at 5000 rpm
Peak power	To be determined (ongoing tests)
Continuous torque	60 – 65 Nm at 25°C
Peak torque	Up to 120 Nm (design target, never verified in test yet)
Max speed	5000 rpm
Efficiency	95%
Number of pole pairs	11
Winding configuration	Star; 2 x 3 phases (redundant windings)
Phase inductance	To be measured (spec placeholder)
Phase resistance	To be measured (spec placeholder)
Magnetic flux	To be specified after validation

MECHANICAL SPECIFICATIONS

Outer dimensions	Ø 214 mm × 150 mm (length)
Shaft Diameter	30 mm
Encoder	Digital encoder + Hall-effect sensors
Insulation class	H
Nominal frequency	850 Hz
Cooling	Liquid cooled
Weight	15 Kg
Protection	IP67

Efficiency in torque-speed area



REFERENCES

PF0840	MOTOR - 60V - 30KW
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