

Drive train packages from 33 to 440 kW VECTOMOTOR + VECTOPOWER



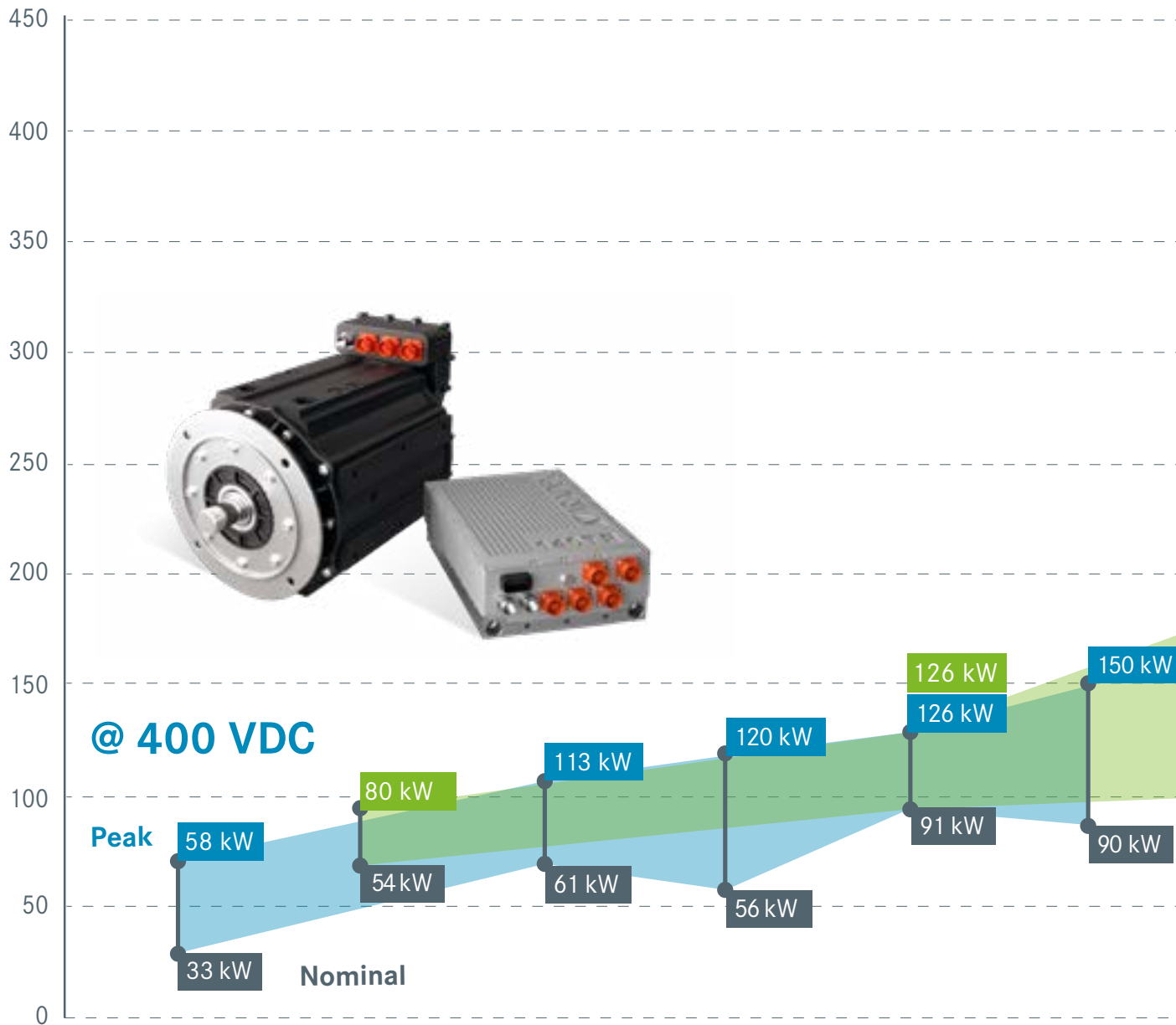
Optimally matched
for your traction application

efficient. robust. durable.

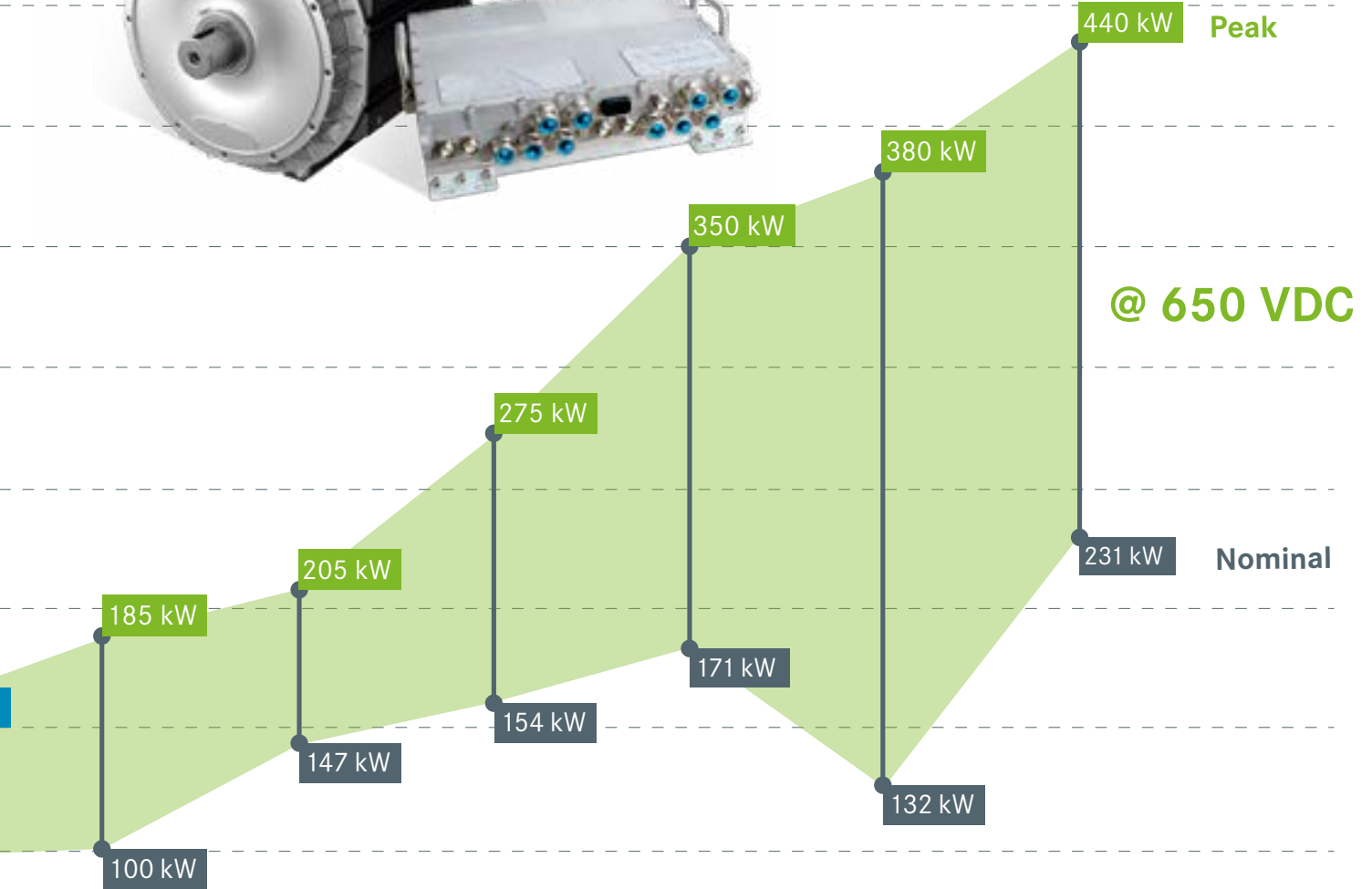
Performance overview

Motor-inverter combinations

Power [kW]



33 to 440 kW



*Matched and ideal for your application.
Choose your drive package!*

Highest efficiency for your application

Optimized for high torque

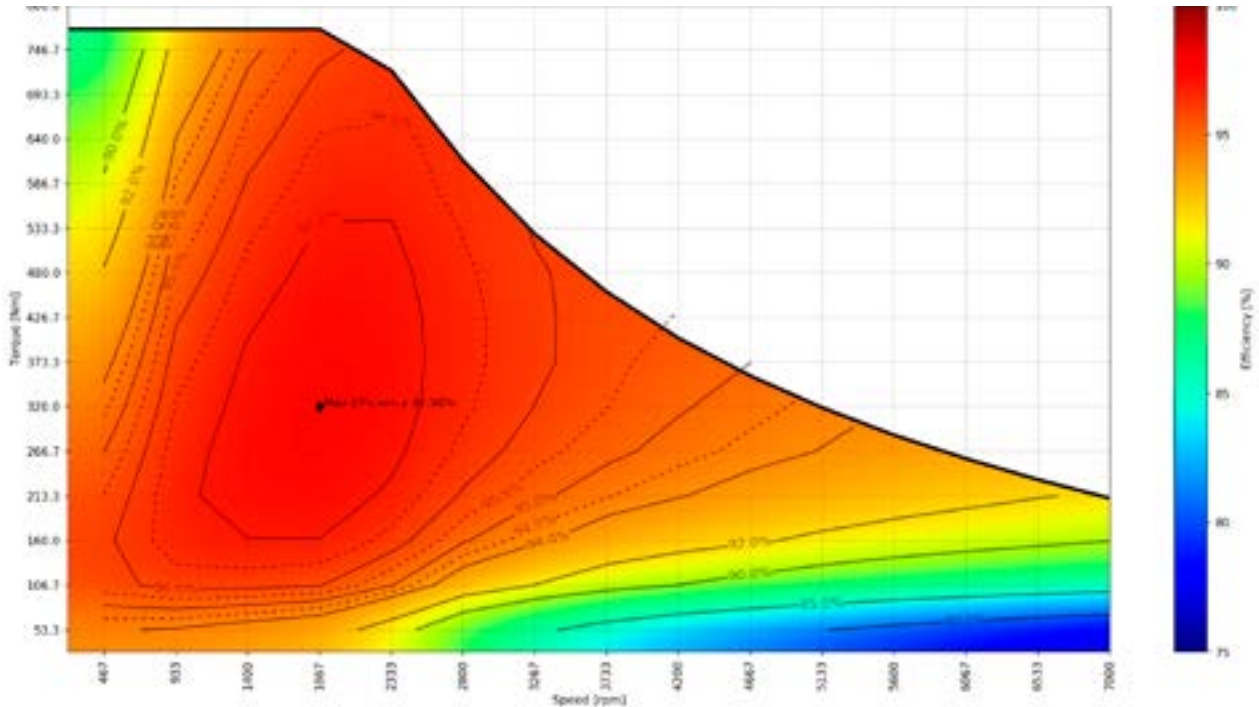


Fig. : Motor field, optimized for load spectrum with a focus on high torques and low to medium speeds.

We deliver the optimal drive

From 33 to 440 kW, ARADEX offers coordinated combinations of the tried-and-tested product families VECTOPOWER and VECTOMOTOR.

VECTOMOTOR

The electric motors allow high efficiency at various operating points and are available in different power classes and topologies (synchronous and asynchronous).

VECTOPOWER

The inverters impress with their extremely precise current regulation as well as their high flexibility and robustness.

Our engineering tools assist you in the design of the drive train support and robust calculations e.g. to the required battery capacity and / or to design a range extender. Your benefit is therefore a reliable target achievement from the initial application on. In addition, we can compare alternative solutions, so you have an overview of costs and size of the required battery capacity.

With our many years of project experience and support extensive simulation tools we can also support you in designing the optimal powertrain for your series application.

Optimized for high speeds

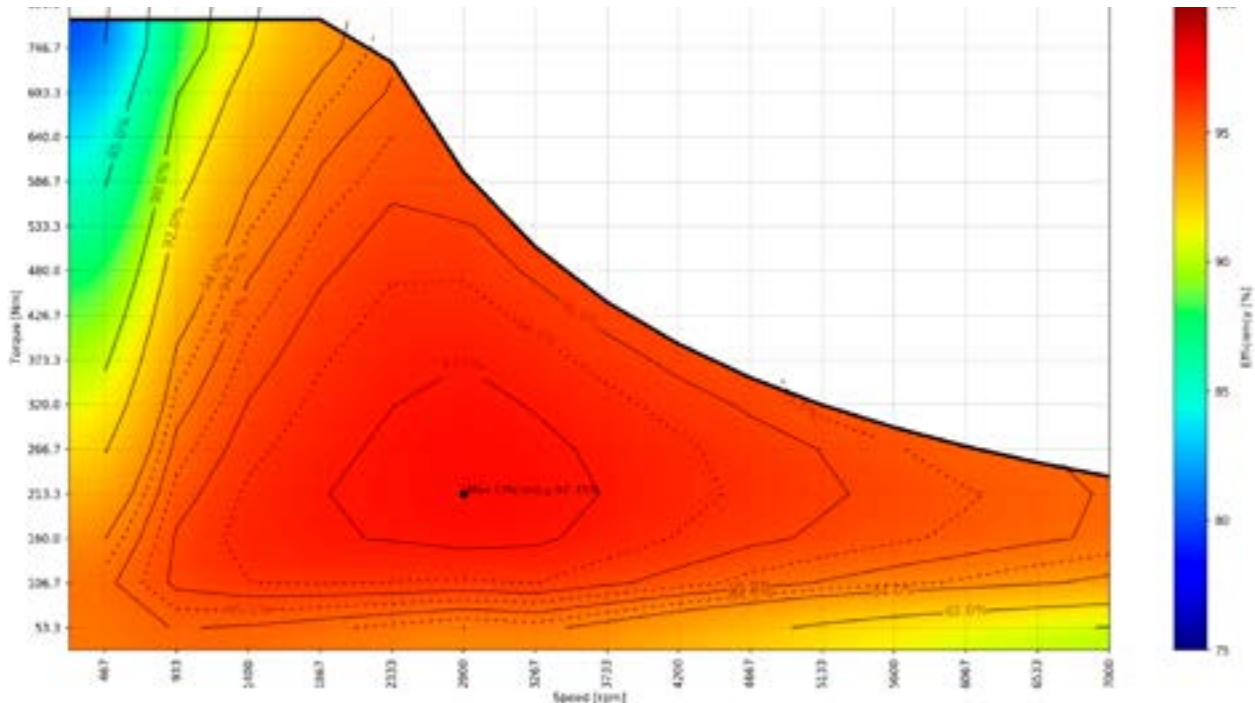


Fig. : Motor field, optimized for load spectra with predominantly higher speeds and lower torques.

Your advantages

- + More efficiency:
In combination, VECTOMOTOR and VECTOPOWER achieve excellent efficiencies of more than 95% in a wide speed range
- + Complete portfolio:
Integrated solutions from 33 to 440 kW for different nominal voltages
- + Motors with and without magnets, depending on your requirements
- + Uniform tools for fast training: compatible with the ARADEX portfolio for auxiliary drives, power supply or energy connection
- + Innovative engineering tools provide accurate calculations for every drive design. Comparison of alternative drive designs are thus possible.
- + Proven solutions:
Shortens the time-to-market. Successfully used in numerous applications.

Excerpt from the technical data

650VDC

synchronous

Peak power / continuous power	80 kW / 54 kW *	126 kW / 91 kW	185 kW / 100 kW	205 kW / 147 kW
Article no. VECTOPOWER	VP600-18W130-61.1.21.14.00	VP600-18W140-6C.1.20.11.00	VP600-18W140-6C.1.20.11.00	VP600-18W160-61.1.22.14.00
Article no. VECTOMOTOR	VM600M-18W0048-RH20070-0110	VM600M-18W0115-RH20032-0110	VM600M-18W0115-RH20029-0110	VM600M-18W0115-RH20029-0110
Motor topology	PM reluctance	PM reluctance	PM reluctance	PM reluctance
Continuous torque	205 Nm	600 Nm	390 Nm	600 Nm
Peak torque	345 Nm	1150 Nm	980 Nm	1150 Nm
Max. speed	7000 rpm	3200 rpm	3200 rpm	3200 rpm
Range of best efficiency	1800 - 5000 rpm	1450 - 2400 rpm	1500 - 2800 rpm	1500 - 2800 rpm

synchronous

asynchronous

Peak power / continuous power	350 kW / 171 kW	440 kW / 231 kW	380 kW / 132 kW	275 kW / 145 kW
Article no. VECTOPOWER	VP600-18W268-6A.1.21.14.00	VP600-18W268-6A.1.21.14.00	VP600-18W268-6A.1.21.14.00	VP600-18W160-61.1.21.14.00
Article no. VECTOMOTOR	VM600M-28W0115-RH20060-0610	VM600M-28W0350-RH30035-0110	VM600M-28W0270-RH30048-0110	VM600M-18W0134-RH30048-0110
Motor topology	PM reluctance	PM reluctance	ACIM	ACIM
Continuous torque	450 Nm	1700 Nm	840 Nm bei 1500	580 Nm bei 1950 368 Nm bei 3760
Peak torque	1150 Nm	3500 Nm	2700 Nm	1340 Nm
Max. speed	6500 rpm	3500 rpm	4800 rpm	5000 rpm
Range of best efficiency	1780 - 5500 rpm	480 - 2500 rpm	700 - 4000 rpm	1400 - 4500 rpm

* This package is also suitable as a generator for 55kW range extender with a diesel engine; Rated power at 2500 rpm.

400VDC

synchronous

Peak power / continuous power	58 kW / 33 kW	113 kW / 61 kW	120 kW / 56 kW	126 kW / 91 kW
Article no. VECTOPOWER	VP600-18W140-6C.1.20.11.00	VP600-18W140-6C.1.20.11.00	VP600-18W140-6C.1.20.11.00	VP600-18W160-61.1.22.14.00
Article no. VECTOMOTOR	VM600M-18W0048-RH20070-0110	VM600M-18W0115-RH20029-0110	VM600M-18W0073-RH20070-0110	VM600M-18W0115-RH20029-0110
Motor topology	PM reluctance	PM reluctance	PM reluctance	PM reluctance
Continuous torque	210 Nm	390 Nm	290 Nm	600 Nm
Peak torque	480 Nm	980 Nm	720 Nm	1150 Nm
Max. speed	4800 rpm	3200 rpm	7000 rpm	3200 rpm
Range of best efficiency	1300 - 3000 rpm	1000 - 4000 rpm	1500 - 5500 rpm	980 - 4000 rpm

asynchronous

Peak power / continuous power	150 kW / 90 kW
Article no. VECTOPOWER	VP600-18W160-61.1.22.14.00
Article no. VECTOMOTOR	VM600M-18W0134-RH30048-0110
Motor topology	ACIM
Continuous torque	600 Nm bei 1200 372 Nm bei 2315
Peak torque	1340 Nm
Max. speed	5000 rpm
Range of best efficiency	900 - 4000 rpm



We look forward to your project request



With our many years of project experience and precise simulation and calculation tools we gladly support you with the optimal drive train design for your application!

Interested?
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