

MAGNET-MOTOR

A RENK GROUP COMPANY

ELECTRIFICATION

Silent Move Kit

/ Hybridisation for Military Wheeled Vehicles



Integrated Starter Generator



Power Electronic



Charge Converter



High Voltage Distribution



Export Power Unit *

Magnet-Motor's Silent Move Kit is the comprehensive core solution for energy and mobility requirements in a wide range of modern protected vehicles.

With its modular approach, the system delivers distinct military advantages such as suppressing the audible signature and increasing stealth capabilities. The hybrid electric drive system offers improved mobility and performance boost and provides sustainability benefits by reducing the reliance on fossil fuels.

In conjunction with a high voltage battery, it delivers highly reliable prolonged onboard electric power for silent watch capabilities when the engine is switched off.

As an extension to Magnet-Motor's Silent Move Kit, a DC Stabiliser provides export power functionality, thereby eliminating the need for external generators.

Features

- Drive by wire
- Modular system
- Designed to MIL Std
- Ruggedized
- Industry standard communications protocols
- Scalable
- Silent move and silent watch
- Reduced fuel consumption
- Improved mobility
- Performance boost
- Enables enhanced onboard and export power
- Maintenance-free

* optional for Export Power

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Technical Information

(typical application in light-to medium-weight wheeled vehicles)

COMPONENT		SPECIFICATIONS	MEASURE
Integrated Starter Generator		Cold cranking torque	660 Nm
		Peak torque @ 0-2000 rpm	600 Nm
		Cont. torque @ 0-1500/2000 rpm	450 Nm
		Peak power @ 2000-4300 rpm	150 kW
		Cont. power @ 1500-4300 rpm	80 kW
		Dimensions	SAE 3 x 216 mm ³
		Weight	105 kg
Power Electronic		Max power	300 kW
		Continuous power	130 kW
		Input voltage range	500 to 800 VDC
		Phase current (peak)	450 A
		Dimensions	441 x 314 x 111 mm ³
		Weight	14 kg
		Charge Converter	
Input voltage	500 to 800 VDC		
Output voltage	28 VDC		
Dimensions	410 x 260 x 90 mm ³		
Weight	14 kg		
High Voltage Distribution		No of In / Out connections	6-12
		Fuses / disconnect switches	included
		Iso-Monitor	included
		Hybrid system controller	included
		Dimensions tailored to customer requirements	
Export Power Unit		Continuous power	30 kW
		Input voltage	500 to 800 VDC
		Output voltage	600 VDC
		Voltage quality	MIL PRF 600
		Dimensions	410 x 260 x 90 mm ³
		Weight	12 kg
General specifications		Protection type	IP 66/67
		Cooling temperature	75°C up tp 105°C water glycol de-rated
		Ambient temperature	-32 to 63°C
		Communication	CAN J1939
		Schock / vibration	MIL 810 G
		EMI	MIL 461 F
		Voltage quality	MIL Std 1275

Trusted Partner.

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