



## DATASHEET MG 250

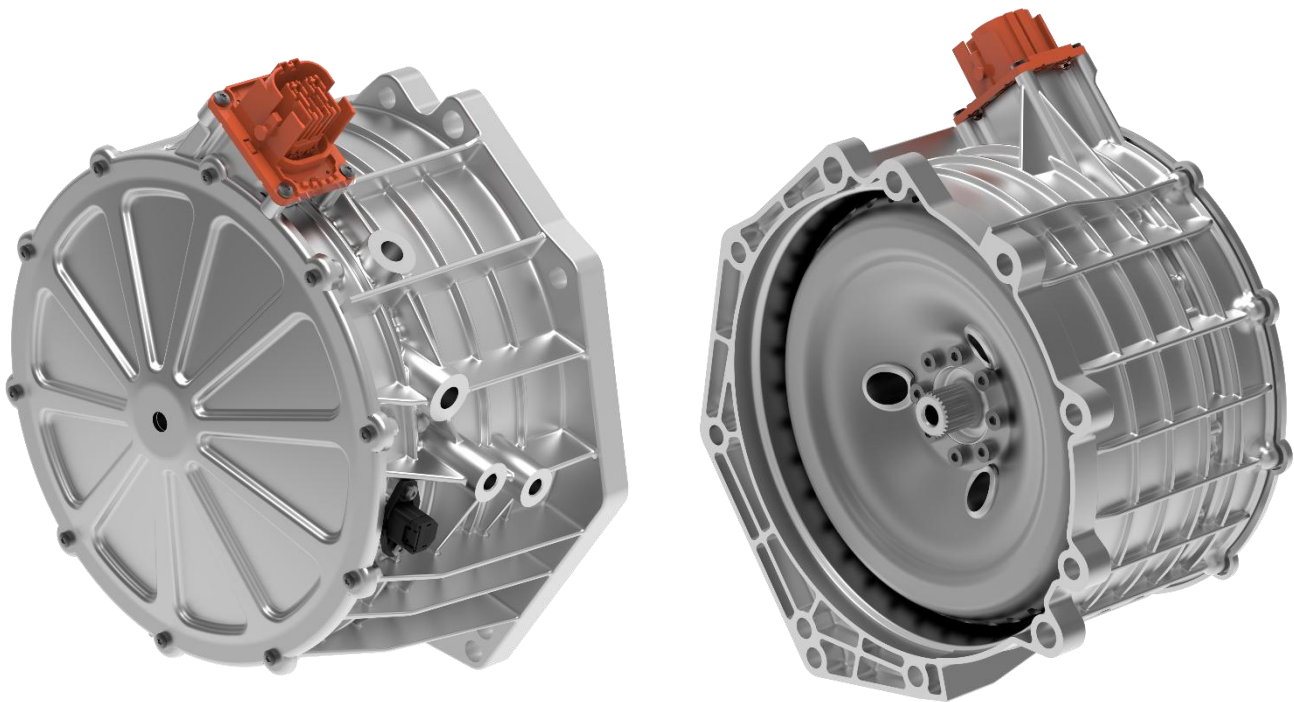
The DeepDrive MG 250 range extender generator delivers unmatched power density and efficiency in an ultra-compact form.

With its fully integrated SiC inverter, minimal material usage, and advanced control software, the MG 250 sets new standards for electrified propulsion and hybrid architectures.

Its low acoustic emissions, outstanding torque density, and exceptional functional integration make it the ideal choice for applications where space, weight, and efficiency are critical.

### KEY FEATURES

- 250 Nm peak torque
- 120 kW peak power
- 190 Nm continuous torque
- 100 kW continuous power
- Fully integrated SiC inverter
- Outstanding efficiency
- Ultra-low noise emissions
- Class 5 EMC Filter
- Prepared for operation without dual-mass flywheel
- Compact & lightweight design with <26.5 kg system weight





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MG 250

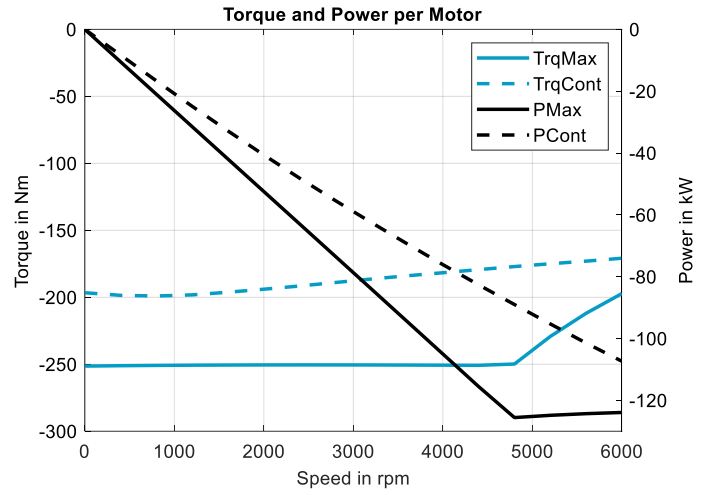
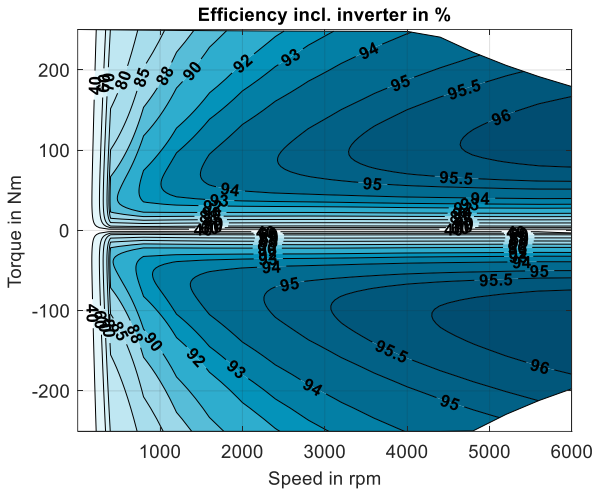
PRODUCT DATA

| NAME                           | SYM.               | Value                 | CONDITIONS / COMMENTS   |
|--------------------------------|--------------------|-----------------------|---|
| DC-voltage                     | $U_{DC}$           | 300 ... 900 Vdc       | Nominal voltage $U_{DC}=650$ V                                |
| LV-Supply voltage              | $U_{LV}$           | 8.5 ... 16.5 Vdc      | Nominal voltage $U_{LV}=12$ V                                 |
| LV-Supply current              | $I_{LV}$           | 0.8 A                 | in operation, $U_{LV}=12$ V                                   |
| Peak torque (30s)              | $M_{30s}$          | 250 Nm                | $T_{Mag}=65^{\circ}C$   |
| Cont. Torque                   | $M_{Cont}$         | 190 Nm                | $T_c=65^{\circ}C$ , $Q_c=8$ l/min                             |
| Peak el. power (30s)           | $P_{30s}$          | 120 kW                | $T_{Mag}=65^{\circ}C$ , $U_{DC}=650$ V                        |
| Cont. el. power                | $P_{Cont}$         | 100 kW                | $T_c=65^{\circ}C$ , $Q_c=8$ l/min, $U_{DC}=650$ V             |
| DC-current (30s)               | $I_{DC,30s}$       | 200 A                 | $T_{Mag}=65^{\circ}C$ , $U_{DC}=650$ V                        |
| DC-current cont.               | $I_{DC,cont.}$     | 180 A                 | $T_c=65^{\circ}C$ , $Q_c=8$ l/min, $U_{DC}=650$ V             |
| Coolant temperature            | $T_c$              | -40 ... 75°C          | derating of cont. $>65^{\circ}C$                              |
| Coolant flow rate              | $Q_c$              | 8 l/min               | derating may occur at $<8$ l/min                              |
| Coolant type                   | water-glycol 50/50 |                       |   |
| Pressure drop                  | $\Delta p$         | 250 mBar              | $Q_c=8$ l/min, $T_c=65^{\circ}C$                              |
| Speed                          | $n_{max}$          | 6,500 1/min           | $U_{DC}=650$ V  |
| System weight                  | $m$                | 26.5 kg               | dry, no coolant   |
| Rotor inertia                  | $J$                | 0.12 kgm <sup>2</sup> | Ready to use w/o DMF  |
| Diameter                       | $D_{max}$          | 290 mm                | excl. customizable mounting flange, see drawing               |
| Length                         | $l_{max}$          | 165 mm                | incl. inverter  |
| EMC class                      | Class 5            |                       | unshielded Harness  |
| Peak efficiency incl. inverter | $\eta_{max}$       | 96.3%                 | $T_{Mag}=65^{\circ}C$ , $T_{Cu}=65^{\circ}C$ , $U_{DC}=650$ V |



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EFFICIENCY MAP AND OPERATING LIMITS



Conditions:  $T_{Mag}=65^{\circ}C$ ,  $T_{Cu}=65^{\circ}C$ ,  $T_c=65^{\circ}C$ ,  $U_{DC}=650$  V

DRAWING & CAD ENVELOPE-MODEL

[on request]