



**ELECTRIC DRIVE
ENGINEERING**

MOTENERGY ME1616

Water-cooled brushless motor/generator



Permanent Magnet Synchronous Motor

Water-cooled

Up to 48kW

Available with Motor Controller



TECHNICAL DATA

Nominal Operation (at 100V DC battery)

Torque (Continuous)	51Nm
Torque (Peak)	120Nm
Power (Continuous)	22.5kW
Power (Peak)	48kW (600A), 29kW (250A)
Speed (Peak)	8000RPM
Current (Continuous)	250A
Current (Peak)	600A

Electrical Data

Number of Phases	3
Number of Pole Pairs	5
Maximum Efficiency	92%
Torque Constant	0.22 Nm/A
Voltage Constant	0.026 V/RPM
Internal Phase Resistance	0.0027 Ω (at 25°)

Additional Data

Weight (w/o cables)	25.5 kg
Rotor Moment of Inertia	0.096 kg/m ²
Protection Category	IP65
Max Motor Temperature	160° C
Temperature Sensor	KTY84-130
Encoder	Sin/Cos 5V

Connectors

Phase Cables	3x 35mm ²
Signal Connectors	8-pin Metri-Pack 150 Series (12047937)
Cooling Connectors	2x 19mm (3/4")



TECHNICAL DRAWINGS

8 pin Metri-pack 150 series:
Connector:12047937
Terminal Position Assurance:15324525
Terminal:12084200
Cable Seal:15324973
Seal:12059168-B

