

E-Motor Emulator

M2000-MS Series

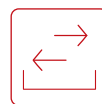


The M2000-MS Series E-Motor Emulator (EME) is a new power electronic product integrating static motor + load simulation. Based on the third-generation wide bandgap SiC power semiconductor devices, the series is highly modularized and standardized. It enjoys widespread application in the development and testing of drive motor controllers and general-purpose inverters.



900Vrms L-L

Ultra-high Voltage



1μs

Rapid Model Iteration



180000rpm/pole pair

High Speed



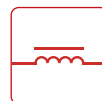
High Current Frequency

3kHz @fundamental wave



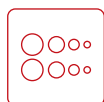
Fast Response

Short-circuit, 2000A/ms(0%-100%)



50uH-3000uH

Motor Inductance



176kVA/m³

Ultra-high Power Density



$\eta_{\max} \geq 94\%$

High Efficiency

KEWELL TECHNOLOGY CO., LTD.

<https://www.kewelltest.com/>

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(QR code) >>>



Product Features



Motor
Simulation



Non-linear
Simulation (LUT)



Temperature
Simulation



Position
Signal Simulation



Fault
Injection



Vehicle
Model

		M2000-MS Series
Power Supply Parameters	Voltage Range	0-900Vrms (L-L) @ Back EMF
	Power / Current	100kVA/167A
		200kVA/334A
		300kVA/500A
		400kVA/668A
		500kVA/835A
		600kVA/1000A
	Grid Phases	3φ3W + PE
	Grid Voltage	400V±10%
	Voltage Frequency	50Hz±5Hz
	Power Factor	≥0.99
	iTHD	≤3%
EME parameters	Motor Type	Permanent magnet synchronous motor / AC asynchronous motor
	Number of Phases Simulated	3 phases (optional: dual three-phase)
	Max. Current Response Rate	1500A/ms (optional: 2000A/ms)
	Current Frequency	0Hz-2kHz (optional: 0Hz-2.5kHz / 0Hz-3kHz)
	Rated Speed	120000rpm/pole pair (optional: 150000 / 180000 rpm/pole pair)
	Polar Pairs	1~20
	Resolver Excitation	3kHz~20kHz
	Motor Leakage Inductance	50uH~2650uH (optional: 50uH~3000uH)
	Model Iteration	1μs
	Position Sensor	Resolver / Encoder / Hall (Eddy current / displacement transducer as optionals)
	Stator Resistance	0Ω~5Ω
	Rotor Dynamic Speed	dω/dt>10×106 rpm/ms
	Temperature Sensors	4 sensors/channel, NTC or PTC
	Comm. Interface	CAN/LAN/RS485
Safety and Environment	Cooling Mode	Forced air cooling
	Ambient Temperature	-10~40℃
	Relative Humidity	0-90%RH (25℃ non-condensing)
	Altitude	≤2000m
General parameters	Dimensions	See product portfolio for details

