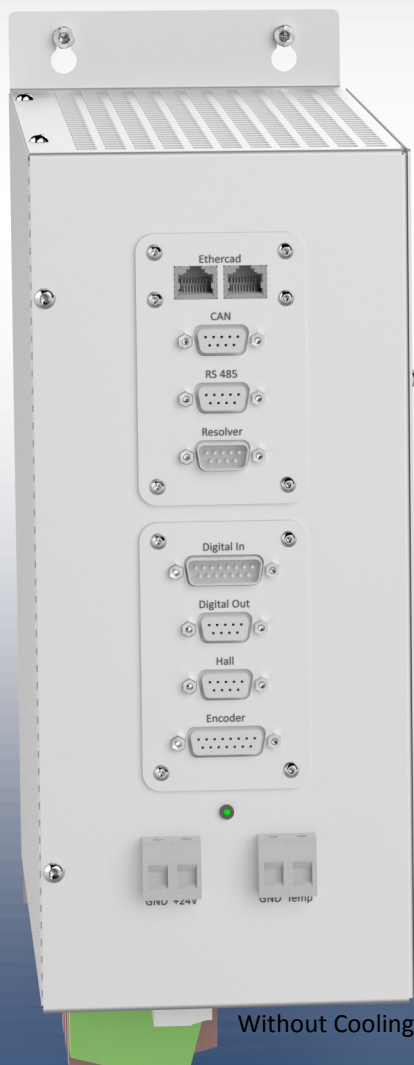# Test Inverter PWR-100

NEW!

Modell: PWR-100

The Test Inverter PWR100 has been developed for the testing of PMSM, BLDC, Asynchronous, DC, 1-phase AC and 3-phase Reluctance electrical motors.

This model includes a software package for parameterizing, commissioning and evaluation of the motors to be tested. Current and voltage values of the motors to be tested can be determined and evaluated. Optionally, the parameter identification of the motors (winding resistance, leakage inductance, EMF) and harmonic generation are also available.

Without Cooling

With Cooling

Test Inverter PWR-100

NEW!

Technical Data	
Supply Voltage	15…36 VDC
Intermediate Circuit Voltage (U_{ZK})	2…100 VDC, with a maximum of ±60 V with respect to ground (PE)
Output Voltage	to 3 x 65 V eff (depending on the DC link voltage)
Output Current	at UZK 14 VDC 150 A eff at UZK 42 VDC 60 A eff at UZK 100 VDC 20 A eff
Overload	1,5 fold up to 10 sec
Output Frequency	0…2000 Hz
PWM-Frequency	10 kHz up to 50 kHz, Space Vector Control
Commutation	Sine, Block (optional), Trapez (optional)
Modes of Operation	Inductors: Current control Electric motors: FOC, V / f control, sensorless (optional) Torque Control
Efficiency	> 90%, at 100V DC, 20 A, 20 kHz PWM Frequency
Current Measurement	all phases + DC, 16 bit resolution, ± 1%
Voltage Measurement	all phases + DC, 16 bit resolution, ± 1%
Monitoring Functions	Short circuit, overcurrent, overvoltage (intermediate circuit, gate driver), Undervoltage (intermediate circuit, gate driver), over temperature
Controllable Electric. Machinery	PSM, BLDC, ASM, GM, 1-phase AC machines, 3-phase reluctance motors
Position Encoder Interfaces	Absolute and Incremental, Resolver, Hall-Sensor, MR-Sensor, Sin/Cos-Encoder, SSI, Endat, ABZ
Communication Interfaces	CAN, USB, RS485, CANopen (planned)
Motor Temperature Sensores	PTC, NTC, PT100
Additional Interfaces	Supply voltage, DC link voltage Digital IOs for release, reset, status, etc. Analog IOs (±10 V)
Cooling	Forced air cooling, no additional cooling measures required
Protection Class	IP20
Operation Temperation Range	0…40 °C
Relative Humidity	Up to 90 %, without condensation
Working Height (without Derating)	Up to 1000 m NN
Test Functions	Currents Iq and Id adjustable (parameter or analog input) Parameter identification (resistance, inductance, EMF, etc.) Integrated oscilloscope Generation of harmonic currents and voltages
Dimensions (W x H x D)	300 x 360 x 215 mm
Weight	approx. 8 kg (15 kg with forced air cooling)