

# 1000KVA AC/DC MOTOR TEST SYSTEM



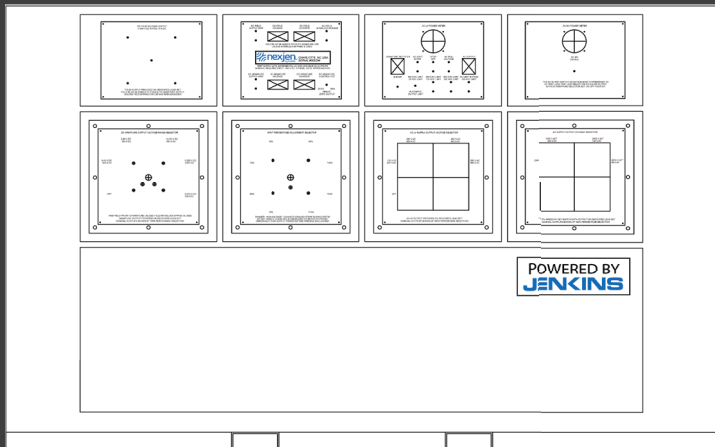
Nexjen Electric Motor Test Systems are built on the principle of safe, simple operation and dependable service. The same Jenkins test transformer design we have used for the past fifty years sits at the core of a power supply engineered to perform continuously at full ratings for 8 hours. With heavy duty components and very few moving parts, the Nexjen Electric Motor Test System is designed to operate for decades without maintenance.

While the power circuit in our electric motor test systems has remained unchanged, the control and management capabilities of the system, incorporated the latest in industrial software technology. A PLC handles the control logic in each system, reducing the number of components and increasing both the reliability and flexibility of the system. Our PC based test documentation system records and displays power, vibration, temperature and dynamometer information during motor tests.

MOTOR TEST SYSTEM SPECIFICATIONS	
MODEL	1000KVA AC/DC
MODEL #	S1000MV480ACDC
SYSTEM REQUIREMENTS	
PHYSICAL SPACE REQUIRED	78H X 120W X 72D
ELECTRICAL INPUT (60HZ)	480V 1250A
PLC-BASED SYSTEM CONTROL	
RELIABLE, REPEATABLE SYSTEM CONTROL	
SIMPLE, PROGRAMMATIC CONTROL ADJUSTMENTS	
REAL-TIME SYSTEM STATUS TO TDS SOFTWARE	
REMOTE/ETHERNET ACCESS FOR SYSTEM TROUBLESHOOTING	
AC SUPPLY	
MAX AC CURRENT OUTPUT	120V 1200A
MAX AC VOLTAGE OUTPUT	4200V 137A
STANDARD AC VOLTAGE TAPS	120,240,480,600,1200,2400,4200
OPTIONAL AC VOLTAGE TAP	7200V
PERCENTAGE ADJUSTMENTS FOR EACH VOLTAGE TAP	50%, 60%, 70%, 80%, 90%, 110%, 115%
SOFT STARTING	STANDARD
FULL VOLTAGE STARTING	STANDARD
CURRENT LIMIT PROTECTION	4 LEVELS
AUXILIARY AC SUPPLY	
(3 PHASE, VARIABLE FROM 0 TO MAX OUTPUT)	
MAX AUXILIARY AC OUTPUT	560V 35A
CURRENT LIMIT PROTECTION	1 LEVEL
DC FIELD SUPPLY	
(VARIABLE FROM 0 TO MAX OUTPUT)	
MAX FIELD OUTPUT	500V 35A
FIELD LOSS PROTECTION	1 LEVEL
TEMPORARY BYPASS	STANDARD
CURRENT LIMIT PROTECTION	STANDARD
DC ARMATURE SUPPLY	
(VARIABLE FROM 0 TO TAP SETTING)	
MAX ARMATURE OUTPUT CURRENT	450A
STANDARD DC ARMATURE VOLTAGE RANGES	40, 80, 160, 320, 585
CURRENT LIMIT PROTECTION	4 LEVELS
OPTIONAL SYNCHRONOUS DC ARMATURE SUPPLY	
SIZING AND PRICE DETERMINED BY CUSTOMER TEST REQUIREMENTS	
TEST DOCUMENTATION SPECIFICATIONS	
SOFTWARE	HARDWARE
BASE PACKAGE (STANDARD)	
AC/DC METER DISPLAY	PC AND MONITOR
NAMEPLATE DATA ENTRY	REPORT PRINTER
REPORT GENERATION	SIDE MOUNTING
TEST HISTORY LOOKUP	
TEMPERATURE & VIBRATION MODULE (OPTIONAL)	
NOMINAL METER DISPLAY	TEMP AND VIBE MODULE
TEMP VS. TIME CURVES	4 THERMOCOUPLE INPUTS
VIBRATION FFT GRAPHS	4 RTD INPUTS
CHANNEL CONFIGURATION	6 ACCELEROMETER INPUTS
TEMP AND VIBE REPORTS	ACCELEROMETERS INCLUDED
DYNAMOMETER INTERFACE (STANDARD)	
HORSEPOWER / KW	USB OR SERIAL INTERFACE
% EFFICIENCY / TORQUE (ft/lb.)	CONFIGURED FOR AW DYNOS
RPM AND % LOAD	USE EXISTING DYNO

## 1000KVA MOTOR TEST SUPPLY

The 1000KVA Motor Test Supply will run most 1000HP AC motors at full load and most 3500HP motors at no load. (AC motors typically draw 25-35% of full load amps with no load). The DC supply will run most 1000HP DC motors at full load, and will start and run most DC motors at no load.



- Engineered for full-capacity AC and DC outputs at rated current for 8 hours.
- Motor starting by current limited Soft starter or with full-voltage tap adjustments.
- Independent, variable-voltage adjustment on DC Field and Armature Supplies.
- Simple, push-button operation with intuitive controls, clear indicators and LED meters.
- Industrial PLC provides reliable control, real-time system status, simple logic adjustments and remote troubleshooting.
- Operator and System Safeties; E-stop, overload protection, trips and electrical interlocks.
- Transformer Powered by Jenkins Electric Company.

POWERED BY  
**JENKINS**



## SOFTWARE

### STANDARD TEST DOCUMENTATION PACKAGE

The standard Test Documentation Package ships with a PC and Printer, displays real-time AC and DC meter data during tests, records data to a searchable test database and prints a test report to be kept on file and/or provided to the client. (Test reports can be directly saved to ACS job folders).



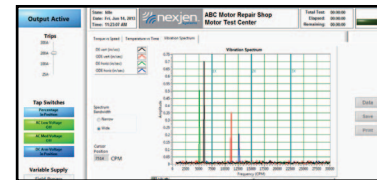
Item	Value	Unit	Pass/Fail
AC Voltage	240	V	Pass
AC Current	480	A	Pass
DC Voltage	180	V	Pass
DC Current	100	A	Pass

## UPGRADES & ACCESSORIES

- Auxiliary AC Supply
- Synchronous Motor Start
- Higher Voltage up to 7200
- Fields up to 70 Amps

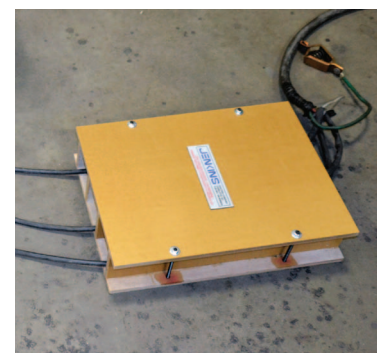
### TEMP AND VIBE MODULE

The Temp and Vibe Module is a portable data acquisition system that connects to the Test Documentation PC via a USB cable. It includes ports for 6 Accelerometers (sensors included), 4 Thermocouples and 4 RTDs. The software upgrade includes the display of Temperature and Vibration data on the meter screen, and graphical display of temperature vs. time curves and vibration fft's. (Optional)



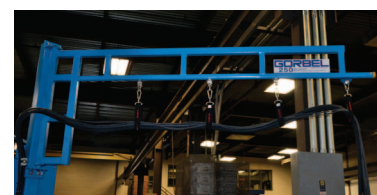
### LEAD ISOLATOR BOX

The Lead Isolator Box provides a safe method for isolating the connections between motor leads and test system leads. Fabricated from non-conductive material, the Lead Isolator Box keeps test operators safe from arcing between lead connections. (Standard)



### BOOM MOUNTED TEST LEADS

The boom mounted test leads provides a safe method for keeping leads out of the way while motors are being tested. (Optional)



### DYNAMOMETER INPUT

With a simple connection to an AW Dynamometer Controller the Test Documentation Software displays and records mechanical test data including output power, RPM, % efficiency, and % load and torque. Configuration for non-AW Dynamometers is available and quoted separately. (Standard)