MotorLab®
ML-3
Inertial Dynamometer for Three Phase Induction Motors
Electric Motor Performance Testing,
R&D, Quality Assurance,
Receiving Inspection

5600 Series - Inertial Dynamometer for Three Phase Motors, up to 1kW
5610 Series - Inertial Dynamometer for Three Phase Motors, up to 7kW
5620 Series - Inertial Dynamometer for Three Phase Motors, up to 50kW

Features and Benefits

- Provides motor performance data, from stall up to no-load, within seconds, including: torque, speed, current, voltage, input power, output power, time, efficiency, and direction of rotation.
- Gives RMS, AVG, and real-time results.
- Provides dynamic performance tests data, including: speed and torque spectrum, speed and torque oscillations, friction torque, friction spectrum, back EMF, and cogging torque level.
- Motor performance data can be recorded in the system database for comparison and statistical analysis.
- Motor power switching is done automatically by the system.
- Tests results are provided graphically and tabulated.
- Test reports in PDF and Excel format.
- Motors can be tested inside their applications.
MotorLab® ML-3

New Motor Standard
(Conforms to CE, in accordance with IEEE 112 and 60034-2-1 @ IEC:2007)

General Input Specifications
- Voltage: 110-230 V ± 10%
- Frequency: 50/60 Hz

Performance Test Mode
- Supported Tests: Torque, speed, current, input power, output power, power factor, efficiency, frequency, direction of rotation
- Additional Tests: Speed and torque spectrum, speed and torque oscillations, friction torque, back EMF, cogging level
- System Accuracy: ± 0.2%
- Torque Range: Not limited
- Sensor: Type 1 with speed range up to 4800 rpm. Industry standard. Accuracy: ± 0.3°.

Power Analyzer & Power Switching

Electronic Input
- Voltage: 110-230 V ± 10%
- Frequency: 50/60 Hz

Motor Input
- Voltage Range: 50-530/660 V
- Current Range: See Power Analyzer table below.
- Frequency: 47-63 Hz
- Accuracy: ± 0.2%

Industrial computer includes
- Computer: - 4U Rack Mounted Chassis
- - Intel Pentium 4 Processor
- 3 GHz or higher
- - DDR 1 GB
- - Ethernet controller
- - HDD 160 GB
- - USB (2 ports on the front)
- - CDRW
- - Microsoft Windows XP Pro

Screen:
- 19” LCD

General Specifications
- Mobile Cabinet
  - Dimensions: 74 x 92 x 74 cm (W x H x D)
  - Weight: 70 kg

- Motor Holding Device
  - Dimensions: 20 x 46 X 30 cm (W x H x D)
  - Weight: 7 kg

- We manufacture customized / individual holding devices, depending on particular customer requirements.

Calibration
- Calibration is controlled by software. Adjustments are made through software calibration interface. Calibration information is stored in the system database.

Power Analyzer & Power Switching (some models for reference)

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<tbody>
<tr>
<td>Current</td>
<td>0.06-10 A</td>
<td>0.08-25 A</td>
<td>0.1 – 50 A</td>
<td>1-90 A</td>
<td>5-200 A</td>
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- Speed (RPM): Torque (Nm) | Power (kW) | Efficiency (%) | Power Factor | Power (kW) | Current (A) | Current (A) | Current (A) |
- 1250 | 2500 | 178 | 40 | 0.34 | 155 | 25 | 155 |
- 1500 | 3000 | 178 | 40 | 0.34 | 155 | 25 | 155 |
- 1800 | 3600 | 178 | 40 | 0.34 | 155 | 25 | 155 |
- 2100 | 4200 | 178 | 40 | 0.34 | 155 | 25 | 155 |
- 2500 | 5000 | 178 | 40 | 0.34 | 155 | 25 | 155 |
- 3000 | 6000 | 178 | 40 | 0.34 | 155 | 25 | 155 |

- Customized solutions
- Customer support
- Technical services
- 1-Year warranty
- Optional extended warranty program
- Local sales offices throughout the world

M.E.A. Testing Systems Ltd.
www.meateesting.com

MFG. NO.
- 5600/PAS3PH
- 5601/PAS3PH
- 5610/PAS3PH
- 5612/PAS3PH
- 5640/PAS3PH

4c Hagayish St., P.O.B. 8745, Poleg Industrial Zone, Netanya 42504, Israel
- Tel: +972-9-8858989
- Fax: +972-9-8858985
- sales@mea.co.il

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