



Custom Motor Fixture for frameless motor TM 300 Series Torque Sensor Encoder Encoder Base frame

COMPLETE TEST BENCH FOR FRAMELESS MOTORS

AS A SPECIALIST IN CUSTOMIZED MOTOR TEST SYSTEMS (CMTS), MAGTROL HAS DEVELOPED A CUSTOMIZED MOUNTING SYSTEM TO FACILITATE TESTING OF OPEN-FRAME MOTORS. ALSO KNOWN AS «FRAMELESS MOTORS».

FEATURES:

- Load test system designed specifically for frameless motor testing
- Adjustable fixture for fast, precise alignment
- Modular mounting system adaptable to the various motor models to be tested

The uniqueness of this test bench lies in the type of motors tested, namely open-frame (or frameless) electric motors. This type of motor, consisting of a stator and a rotor without bearings or shafts, is mainly used in compressors for heat exchangers or in robotics. Although they have many qualities, frameless motors are difficult to test when not mounted in their final configuration. In the absence of its classic mounting frame, the motor must nevertheless be able to be placed in a physical configuration that will enable it to be tested.

Magtrol now offers a modular solution which not only allows the motor to be positioned, but also, to make the alignment adjustments required for perfect testing. By the means of a slide system, the motor can be moved precisely in all 3 directions. These high-quality slides enable precise manual adjustment, and their mechanical strength ensures the rigidity required for proper testing.

The motor mounting system allows a variety of models to be fitted by means of an adapter ring. This ring can be quickly interchanged and is upgradeable. The entire mounting system is ergonomically designed for rapid motor model changeover.

The mechanical part of the test bench is completed by a WB Series - Eddy-Current dynamometer and a TM 300 Series - Torque Sensor; these two components are essential for closed-loop test sequences. The whole unit is secured by protection doors with safety switches that keep personnel safe from harm and safeguarding process.

- Integrated dynamometer controller and power analyzer
- Dedicated M-TEST software for measurement and analysis
- Turnkey, compact and mobile solution

An electronic control system, built into a standard 19» cabinet, controls the test bench. The integrated electronics, which include a **DSP7000 Dynamometer Controller** and a Yokogawa power analyzer, offer a wide range of measurement options.

Magtrol's easy-to-use M-TEST Software centralizes system management, enabling the user to quickly define test parameters and sequences (torque, speed, curve, closed/open loop). Generated data can be stored, displayed and printed as tables, graphs or universal data reports, and can easily be imported into a spreadsheet. This enables clear, professional reporting.



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