



BCE13 Digital Tachometer Tester



TRIPLE TACHOMETER TESTER

The DMA BCE13 is a laboratory computer-driven tachometer test system. It is designed for simultaneous testing of multiple tachometers.

It provides an accurate and stable means of testing and calibrating tachometer generators and indicators used with turbine engines.

The BCE13 tachometer test system uses precision controlled DC motors with coaxial optical encoders, precision controlled by a dedicated micro-processor.

A quartz timing circuit provides maximum accuracy and stability.

Two models are available to cover all test requirements: the BCE12 equipped with two independent drive heads, and the BCE13 with three drive heads for helicopter instrument applications.

3 backlit LCD graphic displays show all test data simultaneously.

FEATURES

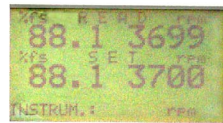
- **Reading accuracy: ± 1 RPM**
- **Speed control stability better than 0.1%**
- **Speed rotation displayed in RPM and percentage of full scale**
- **Speed values, rotation sense and transmission ratio independently selectable for each drive motor**
- **RPM values for 100% RPM reading independently selectable for each drive motor**
- **Selectable limits for safe operations**
- **Generators test under resistive “Y” or “ Δ ” loads; results are compared with selectable limits**
- **Printer for test results, settings etc.**
- **Universal power supply: 120 to 240 VAC**

CALIBRATION

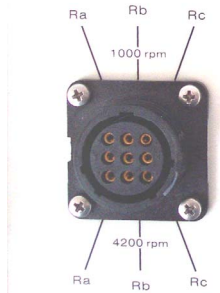
Due to the quartz time base high stability, the only calibration required is for the internal generator voltage reading system; it is performed via software by comparison with an accurate true RMS digital voltmeter.



DISPLAY and KEYBOARD



Pov



STANDARD SPECIFICATIONS

PERFORMANCES

Warm-up & autotest:
less than 1 minute

Range:
0 - 6000 rpm

Accuracy:
 $\pm 1 \text{ rpm} \pm 0.1\%$ of reading

Resolution:
 $\pm 1 \text{ rpm}$

CONTROLS

Speed
Acceleration
Input readings of units under test

SETTINGS

Limits
100% RPM
Transmission ratio
Step increments

GENERATOR TEST

Automatic, resistive load can be changed

PRINTER

Standard paper roll for printing test results

CALIBRATION:

Voltage of generator, performed using software

DISPLAY AND KEYPAD

Graphic LCD backlit display, keypad with numeric entry, dedicated function keys etc.

PHYSICAL SPECIFICATIONS

Weight: 33 lb (15 kg)
Dimensions: 17" x 14" x 14"
(430 x 360 x 360 mm)

POWER SUPPLY

110 to 240 VAC

Note: --- Specifications subject to change without notice ---



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