

LAMINATION STATOR TESTER DAC-LST-3



DAC-LST-3 is designed to test a lamination stator core of motor. A quality is judged by comparing the value of B (Magnetic Flux Density), H (Magnetizing Force), and W (Iron Loss) with that of a stator core which used as a standard.

A source, PWM inverter, for magnetizing the stator core is newly introduced. Thus, compared with a conventional tester provided with a transformer source, DAC-LST-3 is very compact in size and light in weight.

Moreover, output voltages are much stabilized, and there is no need to combine an external stabilizing source.

Testing Frequency is also changeable in range of 50 to 400Hz.

An USB interface is provided as standard, and data acquisition and transmission from a PC is possible.

Test specimen

Lamination Stator-Core of Motor

Features

- Magnetic characteristic (B-H-W) can be judged by easy operation, and management of quality of stator cores is possible.
- The frequency of the exciting power supply in range of 50 Hz to 400 Hz.
- Adjustment of the exciting power supply can be performed smoothly.
- Judgment result with a preset value and a measurement value is displayed intelligibly on a LCD panel.
- Acquisition of measuring data and transmission of preset values from a PC is possible by using USB interface.

Model DAC-LST-3 LAMINATION STATOR TESTER

Specifications

Measuring Range B(Magnetic Flux Density)	:0~2.0T
H(Magnetic Field Strength)	:0~400A/m
W(Core Loss)	:0~15W/kg
Measuring accuracy:$\pm 2.5\%$ by electric calibration	
Measuring Frequency:50Hz-400Hz	
Specimen size	Magnetic Path(LENGTH) :200*~1000mm
	Lamination(THICKNESS) :20~100mm
	Magnetic Width(WIDTH) :5~60mm
	*(Inner diameter of Stator:>50mm)
Input Voltage	AC220V $\pm 10\%$ 50Hz
Consumption	Max 2kVA
Size& weight	W427xD450xH295mm, 35kg
Accessory	Measuring Cable w/probe, 50mm in dia, Checking resistor box, Power Code, Sample software
Option	Test Bench (Air cylinder probe, Stator Palletx3)

Judgment Mode & LCD Display

MAGNETIC FLUX DENSITY (1.00 T) <		*. ** mT
MAGNETIC FIELD STRENGTH (200 A/m) >		AUTO
CORE LESS (7.50 W/kg) >		AUTO
LEVEL: 0% OP TAP: 9V OFF		
FREQUENCY: 50Hz INTERFACE: INT TOOL		
DENSITY 7.85 g/cm ³ <B-MODE>		
THICKNESS 50 mm	B JUDGE 50 %	
WIDTH 50 mm	H U. LIMIT 50 %	
LENGTH 117 mm	W U. LIMIT 50 %	

MODE Selection

B-MODE: measure with fixed flux density value
H-MODE: measure with fixed magnetic force value

Judgment measurement can be performed by comparing test results with the result of one stator saving as a standard.

When judgments (B JUGDE、H U.LIMIT、U.LIMIT) are all good, OK is given to display. When even one is judged as no-good, the correspondent parameter is displayed in yellow and NG is displayed.

Size of Stator

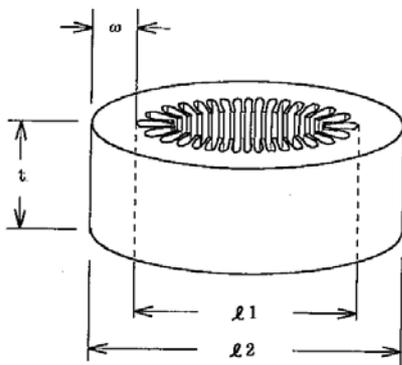


Fig. 1

(l_1 :inside diameter of stator, l_2 : outside diameter of stator)

When measure a stator like Fig 1, Magnetic Path length, Lamination Height and Magnetic width must be set as follows.

$L = (l_1 + l_2) * \pi / 2$:Setting of LENGTH
 $T = t$:Setting of THICKNESS
 $W = \omega$:Setting of WIDTH
 (at the narrowest part)

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