## Baker DT05

Digital Impulse Tester For electric motor quality assurance



## Simple, effective motor quality control testing

Manufacturers and rebuilders of coils, stators, rotors, transformers and other types of windings need dependable test equipment to ensure they meet or exceed the quality expectations of their customers.

The Baker DT05 Digital Impulse Tester from SKF is a standalone instrument that performs impulse tests of up to 5000 volts on motor insulation. It compares impulse test results to a master reference waveform created and stored by the user to discern any insulation weaknesses or faults.

A high-voltage impulse test is used in manufacturing or rebuilding operations to detect any weak insulation between turns, layers or phases of a newly-built or rebuilt winding. The Baker DT05 works by rapidly discharging voltage into a winding from a capacitor, then monitoring the exponetional decay of the sinusoidal resonant response generated. If the response (the resonant frequency and Q factor of the resulting waveform) differs from the master reference waveform for the winding being tested, it confirms that an insulation fault exists.

### Features

- Economical, yet technically advaned solid-state design
- Easily-programmable with test parameters of more than 550 models
- Digital storage of reference waveforms
- Three waveform analysis methods to detect insulation failures
- Performs quality tests on coils, rotors, transformers and stators in motors ranging from fractional horsepower sizes on up to 200 horsepower units







## **Product Specifications**

Baker DT05/Baker DT05-3	
Number of test leads	Baker DT05: One high-voltage terminal plus ground
	Baker DT05-3: Three high-voltage terminals plus ground
Programmable voltage	500V to 5000V (in 100V increments)
Voltage control modes	Normal, with auto-compensation for load
Impulse energy	0.02 F capacitor, 250 mJ maximum
Inductance range	20 μH minimum
Waveform A/D resolution	8 bit
Number of waveform samples	960 points at 156 KHz, 312 KHz, 625 KHz, 1.25 MHz, 5
	MHz, 10 MHz, or 20 MHz
Pulse repetition rate	Waveform display on: 3 pulse/sec
	Waveform display off: 5 pulse/sec
Number of pulses per test	1 to 30, programmable
Waveform memory	60 waveforms, internally
	500 waveforms with USB flash memory
Pass/fail waveform analysis method	Area comparison
	Differential area comparison
	Differential phase comparison
Failure alarms	Fail display on LCD, buzzer
Parts counter	Total, number of passed, number of failures
Display	320 x 420 pixel resolution, monochrome LCD
Trigger modes	Front panel, external switch, interface bus
Hardware interface controls	Outputs: test complete, analysis complete, pass, fail,
	Inputs: start, stop
RS-232C interface connection	Allows complete programming and operational control of
	the tester. Transfers test result data (including waveforms)
Peripherals and accessories included	Power cord, footswitch, high-voltage test clip lead(s)
Power requirements	115V or 230V AC, 50 or 60 Hz, 60 VA
Dimensions	390mm wide, 165mm high, 450mm long
	(15.5"×6.5"×17.8")
Weight	8 kg (18lbs)
Warranty	One year parts and labor limited warranty

# CE

For additional information on SKF Condition Monitoring products, contact:

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### Web Site: www.bakerinst.com

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