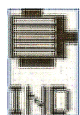


# AT34 Quickstart Guide

**FOR SQUIRREL CAGE ROTOR MOTORS <1000V**

## FUNCTIONS



### IND

Performs the Static, Dynamic, Insulation resistance to ground, DF & capacitance of winding tests.



### DYN

Performs the dynamic test. This test requires manually rotating the shaft of the motor.



### INS

Performs the insulation to ground test.



### SET

Opens the SETUP menu to manage stored test data, set date and time options, or take manual tests/measurements.



### PWR OFF

Turns the AT34 off. The instrument will power off automatically after 5 minutes of inactivity.



## TEST RESULTS GUIDE

Test	WARN	BAD	Detail
Resistance (R)	≥3%	≥5%	Connection/Cable Issue
Dissipation Factor (DF)	≥6%	≥10%	Overheated or Contaminated Windings
TVS Change	≥3%	≥5%	Windings or Rotor Issue
Dynamic Test - Stator	≥1.1%	≥3%	Stator Winding Issue
Dynamic Test - Rotor	≥10%	≥15%	Rotor Issue
Insulation Resistance	< 20 MΩ	< 5 MΩ	Poor Insulation to Ground / Ground fault

*\*For more information on test results, please refer to the User Manual.*



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New Motor from Junction Box Uncoupled TVS Reference #1	Newly Installed Motor from Load Side of Starter TVS Reference #2	Routine Testing from Load Side of Starter after TVS Reference #2 has been obtained	Installed Motor from Load Side of Starter with no TVS Reference #1 or #2 stored
<p>Select IND icon</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> </ul> <p>Connect Blue to phase 2 and Yellow to ground</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> </ul> <p>DF/C Test?</p> <ul style="list-style-type: none"> <li>▶ Highlight YES</li> <li>▶ Press OK</li> </ul> <p>Insulation Test?</p> <ul style="list-style-type: none"> <li>▶ Highlight YES</li> <li>▶ Press OK</li> <li>▶ Hold TEST Until Stable Value Obtained (&gt;5G max)</li> <li>▶ Press OK</li> </ul> <p>Connect Black to Phase 1 and Red to Phase 3</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> </ul> <p>Dynamic Test?</p> <ul style="list-style-type: none"> <li>▶ Right Arrow</li> <li>▶ Highlight YES</li> </ul> <p>Follow the Instructions</p> <p>Highlight SAVE/REF</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> <li>▶ Press Down Arrow to "Save as Ref"</li> <li>▶ Enter Unique Motor ID</li> <li>▶ Highlight NEXT</li> <li>▶ Press OK</li> </ul>	<p>Select IND icon</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> </ul> <p>Connect Blue to phase 2 and Yellow to ground</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> </ul> <p>DF/C Test?</p> <ul style="list-style-type: none"> <li>▶ Highlight NO</li> <li>▶ Press OK</li> </ul> <p>Insulation Test?</p> <ul style="list-style-type: none"> <li>▶ Highlight YES</li> <li>▶ Press OK</li> <li>▶ Hold TEST Until Stable Value Obtained (&gt;5G max)</li> <li>▶ Press OK</li> </ul> <p>Connect Black to Phase 1 and Red to Phase 3</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> </ul> <p>Dynamic Test?</p> <ul style="list-style-type: none"> <li>▶ Highlight NO</li> </ul> <p>Follow the Instructions</p> <p>Highlight SAVE/REF</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> <li>▶ Press Down Arrow to "Save as Ref"</li> <li>▶ Enter Unique Motor ID</li> <li>▶ Highlight NEXT</li> <li>▶ Press OK</li> </ul>	<p>Select IND icon</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> </ul> <p>Connect Blue to phase 2 and Yellow to ground</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> </ul> <p>DF/C Test?</p> <ul style="list-style-type: none"> <li>▶ Highlight NO</li> <li>▶ Press OK</li> </ul> <p>Insulation Test?</p> <ul style="list-style-type: none"> <li>▶ Highlight YES</li> <li>▶ Press OK</li> <li>▶ Hold TEST Until Stable Value Obtained (&gt;5G max)</li> <li>▶ Press OK</li> </ul> <p>Connect Black to Phase 1 and Red to Phase 3</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> </ul> <p>Dynamic Test?</p> <ul style="list-style-type: none"> <li>▶ Highlight NO</li> </ul> <p>Follow the Instructions</p> <p>Highlight SAVE/REF</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> <li>▶ Press Down Arrow to "Save as Ref"</li> <li>▶ Enter Unique Motor ID</li> <li>▶ Highlight NEXT</li> <li>▶ Press OK</li> </ul> <p><i>*Compare new TVS to TVS Reference #2 in instrument</i> <i>*If TVS change is &gt;3%, test again at motor junction</i></p>	<p>Select IND icon</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> </ul> <p>Connect Blue to phase 2 and Yellow to ground</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> </ul> <p>DF/C Test?</p> <ul style="list-style-type: none"> <li>▶ Highlight NO</li> <li>▶ Press OK</li> </ul> <p>Insulation Test?</p> <ul style="list-style-type: none"> <li>▶ Highlight YES</li> <li>▶ Press OK</li> <li>▶ Hold TEST Until Stable Value Obtained (&gt;5G max)</li> <li>▶ Press OK</li> </ul> <p>Connect Black to Phase 1 and Red to Phase 3</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> </ul> <p>Dynamic Test?</p> <ul style="list-style-type: none"> <li>▶ Highlight NO</li> </ul> <p>Follow the Instructions</p> <p>Highlight SAVE/REF</p> <ul style="list-style-type: none"> <li>▶ Press OK</li> <li>▶ Press Down Arrow to "Save as Ref"</li> <li>▶ Enter Unique Motor ID</li> <li>▶ Highlight NEXT</li> <li>▶ Press OK</li> </ul>

*\*To test specific parameters in Manual Mode, please refer to the User Manual.*

