

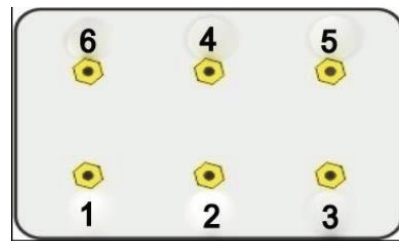
## Testing WYE Start DELTA Run Motors with MCA Instruments

Testing At The Motor Junction Box: As with many motors a simple way to test the six lead motor involves going directly to the motor junction box. After confirming that all Lock Out / Tag Out requirements have been complied with and the motor leads have been checked for the presence of voltage, the motor junction box can safely be opened.

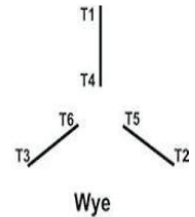
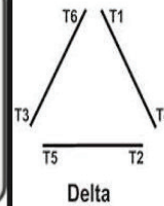
If the motor leads from the controller and the internal motor wires are labeled, make note of that connection. If they are not marked then mark them with colored tape or other identification so that they can be properly reconnected when testing is complete.

Disconnect the motor leads from the starter from the internal motor wires, or from the terminals in the box.

The internal motor wires or terminals should be numbered, one through six. As a check, you should be able to test for electrical continuity between terminals/wires 1-4, 2-5, and 3-6. These are your phase wires (A, B, C, or 1, 2, 3).



Motor J Box Terminal Numbering



General Connection Schematics

To test the motor in the WYE configuration you must short together terminals/wires number 4, 5, and 6. The wires can either be bolted together or significantly sized shorting jumpers used. The tester(s) can then be connected to terminals/wire numbers 1, 2, and 3. Only one INS to ground test is necessary in this configuration.

The 4, 5, and 6 leads need to be shorted together. This can either be done with jumpers at the bottom of the DELTA or WYE contactors or the WYE contactor can be somehow forced. With this shorting accomplished the instrument can be connected to cables 1, 2, and 3 at the the instrument can be connected to cables 1, 2, and 3 at the bottom of the RUN contactor.

