Ducted Systems Technical Services: YS Letter

Letter: YSR-001-25

Date: April 18, 2025 **Expiration Date:** September 19, 2026

To: S1 HVAC Branch and Distributor Principal, Sales Manager, Service Manager, Parts Manager,

Warranty Manager, Training Manager, Delegated Administrator. Ducted Systems Technical Services, DS Parts/S1, ES Americas, ADTI Channel, Account Representatives, Marketing,

Sales, Warranty teams

Subject: JHET, JMET, JME, JHE & JSE Standard ECM Blower Motor Speed – Undesired

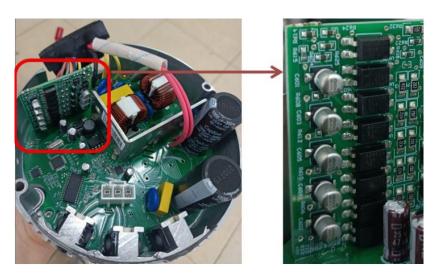
Operation (YSR-004-24, 9/19/2024 Updated)

Product: JHET, JMET, JME, JHE & JSE (JME, JHE & JSE added)

Dear valued customer:

There have been few cases involving the JHET, JMET, JME, JHE & JSE air handler with the Broad Ocean DM3 Standard ECM blower motor. On rare occasions the blower motor will run on higher than desired speed continuously. These air handlers do not have control boards and direct 24V signals controls the motor speeds, heat kit relay(s) or contactor(s).

DM3 motors have a sub-board inside the module. The purpose of the sub-board is to enable nine tap speed operation for the R454B standard ECM AHU models.



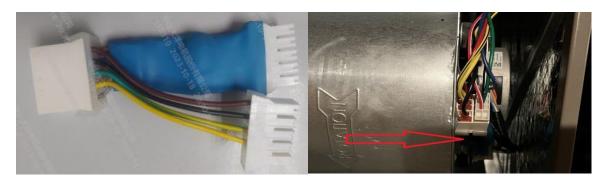
ECM Sub Board

During our investigation along with the motor manufacturer it has determined some sub-boards may have been damaged during motor programming that can create a path to ground through the heat kit blower speed conductor if a heat kit installed. An example is if the heat kit blower speed conductor is on speed tap 5 and not energized but a lower blower speed such as tap 3, the blower runs on the higher speed tap. The path to ground is through the heat kit relay/contactor windings back to the common on the motor.

To confirm this has occurred on your product:

• Ensure a lower speed taps energized, and the motor is running at a higher speed (confirmed via amperage), simply disconnect the wire connected to the higher blower speed tap to see if the motor slows down.

Once confirmed the field repair is adding S1-03103899000 BOARD, CIRCUIT, EXTERNAL CONVERSION in series with the LINE and LOW voltage going to the motor by simply disconnecting AHU wires to the motor, connecting the harness to motor, and connecting AHU wires to the harness.



S1-03103899000

Field installed S1-03103899000

This failure mode is a <u>rare occurrence</u>, and the motor vendor is in process of re-designing the sub-board.

- If the motor runs correctly at AHU startup, it will not fail in this manner later.
- Do NOT replace the motor if this failure is met at startup.
- Keep in mind the motor program has a fixed 60s off delay so removing all 24V signals from the motor, it will not shut down at once.

Use this service letter for a "fix-on-fail" basis. It will allow the above-mentioned part as needed and one hour labor toward the addition of the part. File a warranty claim using the service letter number.

If you have any questions or concerns on this, please contact Ducted Systems Residential Distributor Support Team at, 877-874-7378, BE-AMS-Be-DuctedSystemsResidentialDistributorSupport@jci.com or submit a JCI Connect Case.

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