

Ducted Systems Technical Services Service Tips Letter

Letter: **ST-005-2019**

Date: March 26, 2019

To: Ducted Systems (Factory Direct) S1 HVAC Branch Service, Sales, Warranty Managers

Ducted Systems (UPG/Applied) Distribution Service, Sales, Warranty Managers

Subject: Incorrect Low Voltage Outdoor ECM Fan Motor Module Wiring.

Product: Residential Heat Pump Product Models: YHE, and RHP14L 3 Ton models only

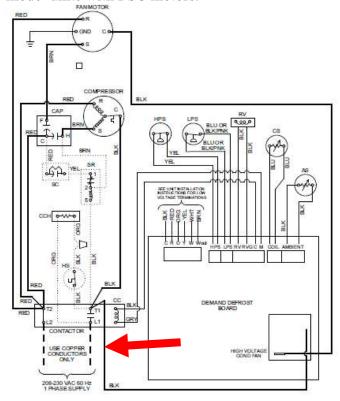
Summary: This letter provides information about a possible mis-wire of the Gen 2. Modeled

Outdoor ECM fan motor module low voltage wiring to the contactor, on residential

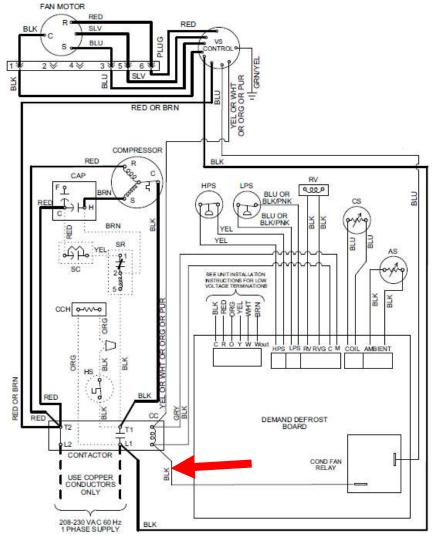
model equipment listed above.

The introduction of the Gen 2-3 ton units included the use of an ECM outdoor fan motor. The Gen 1 unit was produced with a PSC outdoor fan motor.

We have received a small amount of calls concerning the outdoor ECM fan motor module low voltage wiring, being wired incorrectly to the high voltage leg of the contactor. When wired this way, the contactor will send 120 VAC to the 24 VAC input of the ECM module. Below you will find the wiring schematic showing the Generation 1 model units with PSC motors.



Implemented in August 2018, only the generation 2 YHE and RHP14L models were built with a true ECM motor, module, and wiring. Below is a wiring schematic showing where the ECM module's low voltage black wire is to be connected to the contactor 24 VAC coil.



If you have any questions on this issue please feel free to call Ducted Systems Residential Technical Services at 1-877-874-7378 and speak with a technical support representative.

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Ducted Systems Technical Support/Salesforce Super User

Johnson Controls Inc.