

TECHNICAL INFORMATION COMMUNICATION



Quality and Continuous Improvement

Number: TIC2020-0017

Date: 6/26/2021 Revised 11/09/2020

Title: 80% 110K BTU (21" cabinet) Furnace Nuisance Limit Trip

Product Category: Residential Furnaces

Products Affected:

ICP – N

N80ES(L/N)1102120A

Watsco

WFER110C060A
WFEL110C060B

Marathern

R80ES(L/N)1102120A

Situation:

To reduce the occurrence of the nuisance limit tripping, we have tested and certified a new right side limit switch, to be introduced into all subject model furnaces produced, serial #A2123 and later. The subject furnaces serial #A2123 or later will not require the previously recommended actions from the solutions section, or the spacer requirements specified in the installation manual. Literature revisions have been completed, and all subject furnaces produced serial #A2123 or later will be shipped with literature reflecting the removal of this restriction. Refer to SB2103 for additional information concerning the limit switch change.

Field reports and Engineering testing have identified a potential operating issue when the affected furnaces (mentioned above) are installed in an up-flow application with a "N" style evaporative coil. The nuisance limit trip condition happens when the furnace is installed with a "left side return", "left side and bottom return" or "bottom return" and a N-coil is installed directly on the furnace. Poor duct work and high static systems also add to this nuisance operating situation.

Solution:

Refer to SB2103 or below:

One of the following suggestions are required to eliminate the nuisance limit tripping condition:

- 1.) Install a NAHB00101CA coil adapter (4.75" spacer *or* equivalent field-fabricated spacer) between the furnace and "N" style furnace coil when a left-side return, left side *and* bottom combination return or bottom return is needed for the installation.
- 2.) Use a right-side return with "N" Style furnace coil directly installed on furnace.
- 3.) Use an "A" style furnace coil installed directly on furnace.

Only trained and qualified personnel should design, install, repair and service HVAC systems and equipment. All national standards and safety codes must be followed when designing, installing, repairing and servicing HVAC systems and equipment. It is the responsibility of the Dealer to ensure local codes, standards, and ordinances are met.