TECHNICAL INFORMATION COMMUNICATION

Quality and Continuous Improvement

Number: TIC2025-0036 **Date:** 12/03/2025

Title: Modulating Furnace Limit Switch Change

Product Category: Residential Gas Furnaces

Products Affected:

Modulating Gas Furnaces – (F,G)CMN Major Series B

Situation:

Carrier has received increased reporting of nuisance limit trips and limit lockouts with our Major Series “B” modulating furnaces.

Solution:

Carrier Engineering has previously updated intermediate Airflow values to reduce the likelihood of nuisance limit trips (see TIC 2025-0012 Modulating Furnace Airflow Updates). To further increase operational robustness, and further reduce the likelihood of nuisance limit trips, Carrier Engineering has retested and certified new limit switch values for the modulating furnaces. These updated switches will be introduced into production of the subject model furnaces, serial # 2547A and later. Subject model furnaces, produced prior to the manufacturing change date may be fitted with the newer, higher rated limit switches. The new limit switch part numbers **MAY NOT** be used to replace limit switches in the previous Major Series A modulating furnaces.

New limit switch part numbers and setpoints are listed below:

Model	Existing Limit switch	Replacement Limit Switch Assy
(F,G) 97CMN0601714B-	165° (Part# 1184423)	180° (Part# 1184421)
(F,G) 97CMN0602120B-	160° (Part# 1184424)	160° (Part# 1184424)
(F,G) 97CMN0801714B-	165° (Part# 1203435)	175° (Part# 1191125)
(F,G) 97CMN0802120B-	185° (Part# 1191124)	190° (Part# 1193439)
(F,G) 97CMN1002122B-	170° (Part# 1184422)	175° (Part# 1191125)
(F,G) 97CMN1202422B-	150° (Part# 1185909)	155° (Part# 1184809)

Table 1

TECHNICAL INFORMATION COMMUNICATION

Field Required Actions:

For furnaces experiencing nuisance limit trips in the field, all standard startup settings should be evaluated and adjusted as necessary, including:

1. Properly measure and adjust gas input rate
2. Assure return air temperatures are within the allowable range as outlined in the installation manual
3. Adjust airflow setting to achieve proper temp-rise through furnace
4. Load updated furnace control recipe version (if applicable) as outlined in TIC 2025-0012-Modulating Furnace Airflow Updates
5. Assure that bypass humidifier (if applicable) does not increase return air temperatures above the allowable range as specified in the installation manual
6. Increase the blower off delay if limit switch opens after completion of a heat call
7. Replace the limit switch with the newly certified, higher temp limit switch assembly indicated in Table 1