

BACnet Errata Additions IX
ANSI/ASHRAE STANDARD 135.1-2019
A Data Communication Protocol for Building Automation and Control Networks

February 1, 2020

This document lists *errata additions* to ANSI/ASHRAE Standard 135.1-2019 as of the above date. Each entry is cited first by clause, then page number, except where an erratum covers more than one clause. The back page marking identifying the electronic publication of Standard 135.1-2019 is “Product code: D-86437 9/19”.

Changes are indicated by using ~~strikeout~~ for text to be removed and *italics* for text to be added, unless noted otherwise. Grey highlighting is used for marking small changes.

Erratum 1) 12.1.3.9 – Frame Type explicitly stated

12.1.3.9 Verify $T_{\text{usage_timeout}}$ w/ Serial Analyzer

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Test Steps:

1. MAKE (Power on both devices.)
2. WAIT (several seconds)
3. VERIFY (Has Token passing been established between the devices?)
4. MAKE (Power off the other master device, but not the IUT.)
5. WAIT (10 seconds)
6. MAKE (Stop the data capture.)
7. CHECK (Did the IUT send a ~~type-0~~ *Token* frame to the other master, and, when the other master did not use the *Token* (because it was powered off), did the IUT follow the ~~type-0~~ *Token* frame with one ~~type-0~~ *Token* frame (*Token* retry) followed by a series of ~~type-1~~ *Poll For Master* frames?)
8. CHECK (Is the time difference between the last octet of the ~~type-0~~ *Token* frame sent by the IUT and the first octet of the immediately following ~~type-1~~ *Poll For Master* frame transmitted by the IUT greater than 20 milliseconds - $T_{\text{neg_err}}$ and less than 100 milliseconds + $T_{\text{pos_err}}$?)
9. CHECK (Is the time gap (last character to first character) between any two ~~type-1~~ *Poll For Master* frames (~~Poll For Master~~) sent by the IUT greater than 20 milliseconds - $T_{\text{neg_err}}$, but less than 100 milliseconds + $T_{\text{pos_err}}$?)

Erratum 2) 12.1.3.3 – Should not require a Data Frame

12.1.3.3 Verify $T_{\text{frame_gap}}$

Purpose: Verify that the maximum idle time between ~~data~~ octets when transmitting a frame is 20 bit times or less.

Test Steps:

1. Elicit the transmission of any ~~data~~ frame from the IUT.
2. Measure the longest EIA-485 idle time that appears between octets within the ~~data~~ frame transmitted by the IUT. If there is no idle time between octets, pass the IUT.
3. Fail the IUT if the time measured in step 2 is greater than the time intervals shown below for each baud rate.

9600 baud:	fail if interval is greater than 2,083 microseconds
19200 baud:	fail if interval is greater than 1,042 microseconds
38400 baud:	fail if interval is greater than 521 microseconds
57600 baud:	fail if interval is greater than 347 microseconds
76800 baud:	fail if interval is greater than 261 microseconds
115200 baud:	fail if interval is greater than 173 microseconds
x baud:	fail if interval is greater than (20/x) seconds