

Voltage readings on ABCD

TABLE 1 Advance Troubleshooting Fan Coil / Furnace / 2-spd. Communication Bus	
FE Control Board HK38EA002 Furnace Control Board HK42FZ022 Two-Speed Control Board HK38EA001	
-Voltage Readings - With board Power applied, and No U.I. connected	
A to B	~3 vdc
A to C	~3 vdc
B to C	~.01 to 0.3 vdc
C to D	24 vac
-Voltage Readings - With board Power applied, and U.I. Applied	
A to B	~2.5 to 3.9 vdc (pulsating)
A to C	~2.5 to 3.9 vdc (pulsating)
B to C	~0.1 to 0.9 vdc (pulsating)
C to D	24 vac

Ohm readings on A & B

ALL readings are with Red lead on A and Black Lead on B.

Resistance chart on next page for terminals A & B:

4/24/2023

Infinity / Evolution Comm Bus Resistance Values	
<small>With power off and ABCD connectors disconnected.</small>	
Component	Resistance Values A-B
User Interface-Version 1	70K-73K
Touch User Interface	73K-76K
Touch User Interface - B (Prior to S/N 0518W002522)	56K-60K
Touch User Interface - B (After S/N 0518W002522)	73K-76K
Touch User Interface - B - (After S/N 2918W005599)	75K-82K
Touch User Interface - B - (After S/N 2219W104324)	90K-100K
Zone Board	70K-73K
Smart Sensor	70K-74K
SAMS & NIM	70K-75K
1 & 2 Speed Outdoor Units	28K-32K
Green Speed Outdoor Units	28K-32K
VS8 & VS9 Before 12-03-14	16K-18K
VS8 & VS9 Post 12-03-14	28.5K-33.5K
5 spd AOC Pre MO740141203	16K-19K
5 spd AOC Post MO740141203	28K-32K
Furn & Fan Coil Early 2008	17K-19K
Furn & Fan Coil Late 2008	28K-32K
Furn & Fan Coil After 2008	28K-34K
Bluetooth Module (Brown & Green)	33.4K-35K
PCM Module (Brown & Green)	33.4K-35K
VFD (Brown & Green)	139Ω-150Ω
PEV	12.6Ω-15Ω
Indoor Blower	
between yellow - blue wire	102K-105K
3/4 HP motor - 006 fan coil	3K - 5K

Unplug A. B. C.D before measuring resistance (OHM)