Innovair Duotec Wiring Guide

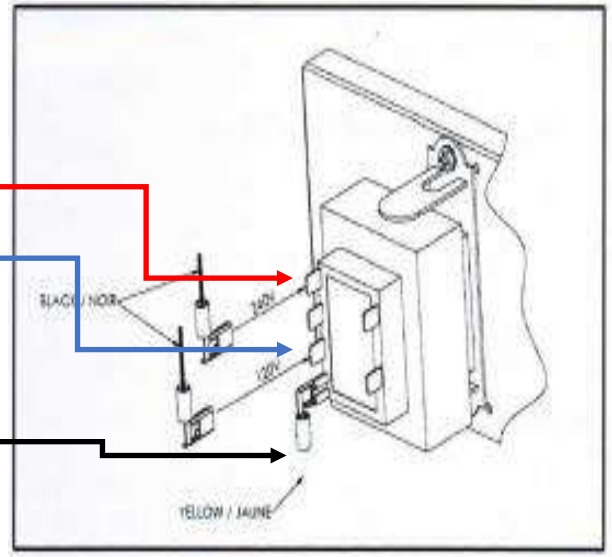
Scenario	Voltage	Indoor unit	24V Step down Transformer Wiring	5 Pin Motor Connector
Scenario 1	230V	Innovair AHU	Yellow – COM / Black – 240 (No need to do anything) Factory Default.	No need to do anything
Scenario 2	115V	Innovair AHU	Yellow – COM / Black - 120	Install in position 1 and 2 the provided red jumper cable.

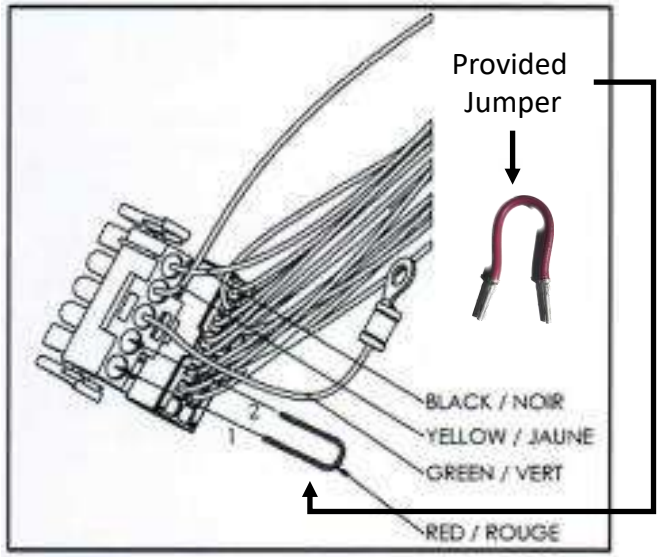
Black Wire

230V

115V

Yellow Wire stays in place





Ver.:1.0

Innovair Duotec Initial Setup Guide

Indoor PCB

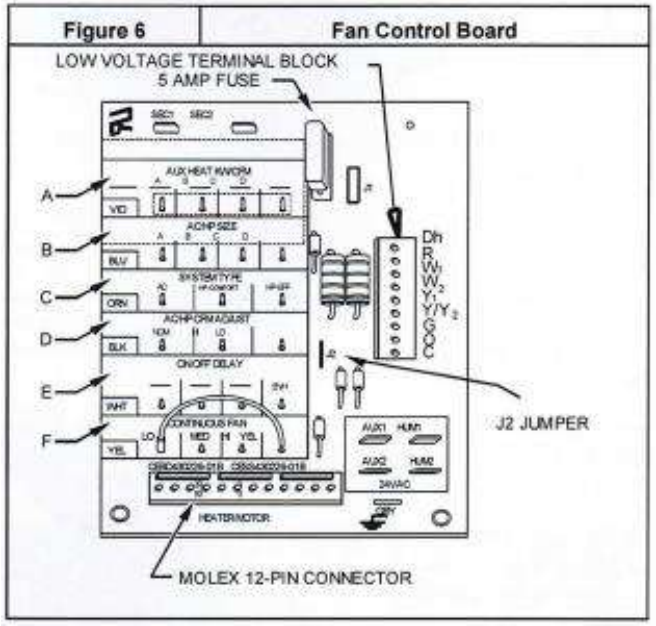


Table 1	Airflow Adjust Table			
Model #	AUX HEAT RANGE (Kw/CFM)			
	A	B	C	D
AHV08	15Kw	---	10Kw	5Kw
AHV12	---	15 thru 20Kw	10Kw	5Kw
AHV16	---	25Kw	---	5 thru 20Kw
AHV20	---	---	25Kw	5 thru 20Kw

Table 2	Outdoor Unit Size			
Model #	Outdoor Unit Size (BTU)			
	A	B	C	D
AHV08	36000	30000	24000	18000
AHV12	48000	36000	30000	24000
AHV16	60000	48000	42000	36000
AHV20	60000	48000	42000	36000

Table 3	System Type
AC	Air Conditioner selectionprovides aprox. 400 CFM / Ton. for greater efficiency and humidity control with the AC/HP CFM Adjust set to the NOM tap. (To achive aprox. 460 CFM / Ton. Move tap to (HI) position. Refer to appropriate airflow tables for exact CFM settings)
HP-COMFORT	Heat Pump Comfort selection provides aprox. 350 CFM / Ton. For higher than normal heating air delivery temperature. Provides aprox. 350 CFM / Ton. Cooling airflow for good humidity removal with the AC/HP CFM ADJUST set to the nominal (NOM) tap.
HP-EFF	Heat Pump Efficiency selection provides same airflow for heating and cooling modes to increase overall HP efficiency; aprox. 400 CFM / Ton. With the AC/HP CFM ADJUST set to nominal (NOM) tap.

A: Auxiliary Heat Kw/CFM (Violet Wire)
Select the capacity size of the electric heat strip is you are going to be installing one following the model of your air handler. Use: (Table 1)

B: Outdoor Unit Size (Blue Wire)
Select the outdoor unit size that the indoor air handler will be working with following the model of your air handler. Use: (Table 2)

C: System Type – AC/HP (Orange Wire)
Select one from the three types of systems. Use: (Table 3)

D: AC/HP CFM Adjust (Black Wire)
This selection basically selects: Medium, Low, or High Airflow.

E: ON/OFF Delay (White Wire)
This selection basically selects the desired time delay. **Note:** Delay selections are active in cooling and heat pump heating modes only. Auxiliary heating modes have a one (1) minute off delay and zero (0) on delay programmed into the ECM motor that cannot be overridden.

F: Continuous Fan (Yellow Wire)
Select the desired continuous fan speed when thermostat is set on continuous fan operation by using the yellow jumper wire. **Note:** If installed with a two-stage outdoor unit, do not select HI speed continuous fan. If HI is selected, low stage compression (low-speed cooling) will also run HI fan speed possibly resulting in insufficient dehumidification.