Carrier is making it easier to install the 39M Aero® air handler by offering the option to have the TXV (thermal expansion valve) factory-installed and piped to the outside of the cabinet.

By selecting this option in AHUBuilder, the TXV and nozzle will be factory-installed with the liquid and suction pairings side-by-side to avoid confusion about which circuits go together. The TXV bulb is routed through the panel for the contractor to locate on their field-installed suction line.
A customized pipe connection label is affixed to the coil section showing the condensing unit circuit and coil connection pairing. This information is also provided in the submittal.

In the example shown here, the suction connections are designated S1, S2, S3 and S4. Their respective liquid lines are labeled L1, L2, L3 and L4. To the right of each liquid line label is the factory-installed TXV size (in tons), nozzle size and condensing unit circuit designation.

This option provides peace of mind to the specifying engineer because the expansion valves and nozzles are sized to the conditions which they specify in AHUBuilder. Factory installation means that the cabinet penetrations are precisely located and sealed from the factory.

For the contractor, this option saves time because there is no need to source or coordinate the installation of the valves. The arrangement of the piping and labeling on the outside of the cabinet simplifies the installation by clarifying which evaporator connections pipe to each condensing unit circuit.