* 1. ECM Fan Array
     1. General specifications
        1. The fan system will be arranged with high performance direct drive, single inlet, plenum fans with backward curved blades and efficiency optimized circumferential diffusor.
        2. The fans are driven by energy saving EC (electronically commutated) motor. Motor includes maintenance free ball bearings, closed on both sides with long-term lubrication.
        3. Motor is made of die casted aluminum with protection class IP54 and insulation class F.
        4. The motorized impeller is statically and dynamically balanced according to DIN ISO 21940-11, with quality at least level G6.3.
        5. Fan systems having more than one (1) fan shall be provided with one blank-off plate, which may be used in the case of failure of a single fan to replace the fan and prevent backflow through that location.
        6. [OPTIONAL] Backdraft dampers shall be provided only when requested as a system component and shall replace the included blank-off plate.
     2. Electrical and control requirements
        1. The factory mounted and wired single point power panel shall include an external disconnect. The panel shall be UL listed.
        2. Control panel contains a Hand/Off/Auto (HOA) switch and potentiometer for optional manual speed control. The panel accepts a 0-10VDC signal when in Auto mode.
        3. Control panel shall be configured with a kiloampere Interrupting Capacity of 100 kAIC.
        4. Control panel shall be configurable as NEMA 1 for indoor environments or NEMA 4 for outdoor environments.
        5. Separate MSP (motor service panel) shall be provided to include MMP (manual motor protectors) for overcurrent protection and individual fan isolation.
        6. Control Panel shall contain a BACnet-compatible controller capable of monitoring the system’s airflow, power consumption, and individual fan status.
        7. Controller shall be configurable for fan speed control via BACnet interface (MS/TP & IP), 0-10 VDC, constant airflow, or duct static pressure control.