

SECTION 15880 - SPLIT-SYSTEM AIR-CONDITIONERS

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS
 - A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 01 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.
 - 1.2 CLOSEOUT SUBMITTALS
 - A. OPERATION AND MAINTENANCE DATA: FOR SPLIT-SYSTEM AIR-CONDITIONING UNITS TO INCLUDE IN EMERGENCY, OPERATION, AND MAINTENANCE MANUALS.
 - 1.3 QUALITY ASSURANCE
 - A. ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES: LISTED AND LABELED AS DEFINED IN NFPA 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.
 - B. ASHRAE COMPLIANCE:
 - 1. FABRICATE AND LABEL REFRIGERATION SYSTEM TO COMPLY WITH ASHRAE 15, "SAFETY STANDARD FOR REFRIGERATION SYSTEMS."
 - 2. ASHRAE COMPLIANCE: APPLICABLE REQUIREMENTS IN ASHRAE 62.1, SECTION 4 - "OUTDOOR AIR QUALITY," SECTION 5 - "SYSTEMS AND EQUIPMENT," SECTION 6 - "PROCEDURES," AND SECTION 7 - "CONSTRUCTION AND SYSTEM START-UP."
 - 1.4 COORDINATION
 - A. COORDINATE SIZES AND LOCATIONS OF CONCRETE BASES WITH ACTUAL EQUIPMENT PROVIDED. CAST ANCHOR-BOLT INSERTS INTO BASES.
- PART 2 - PRODUCTS
- 2.1 MANUFACTURERS
 - A. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:
 - 1. ENVIROMASTER
 - 2. LG
 - 3. MITSUBISHI ELECTRIC & ELECTRONICS USA, INC.; HVAC ADVANCED PRODUCTS DIVISION.
 - 4. SANYO NORTH AMERICA CORPORATION; SANYO FISHER COMPANY.
 - 2.2 INDOOR UNITS (5 TONS OR LESS)
 - A. WALL MOUNTED EVAPORATOR-FAN COMPONENTS:
 - 1. REFRIGERANT COIL: COPPER TUBE, WITH MECHANICALLY BONDED ALUMINUM FINS AND THERMAL-EXPANSION VALVE. COMPLY WITH ARI 206/110.
 - 2. ELECTRIC COIL: HELICAL, NICKEL-CHROME, RESISTANCE-WIRE HEATING ELEMENTS; WITH REFRACTORY CERAMIC SUPPORT BUSHINGS, AUTOMATIC-RESET THERMAL CUTOFF, BUILT-IN MAGNETIC CONTACTORS, MANUAL-RESET THERMAL CUTOFF, AIRFLOW PROVING DEVICE, AND ONE-TIME FUSES IN TERMINAL BOX FOR OVERCURRENT PROTECTION.
 - 3. FAN: FORWARD-CURVED, DOUBLE-WIDTH WHEEL OF GALVANIZED STEEL; DIRECTLY CONNECTED TO MOTOR.
 - 4. FAN MOTORS:
 - a. MULTITAPPED, MULTISPEED WITH INTERNAL THERMAL PROTECTION AND PERMANENT LUBRICATION.
 - b. WIRING TERMINATIONS: CONNECT MOTOR TO CHASSIS WIRING WITH PLUG CONNECTION.
 - 5. FILTERS: PERMANENT, WASHABLE.
 - 6. CONDENSATE DRAIN PANS:
 - a. SINGLE-WALL, POLYSTYRENE.
 - b. DRAIN CONNECTION: LOCATED AT LOWEST POINT OF PAN AND SIZED TO PREVENT OVERFLOW. TERMINATE WITH THREADED NIPPLE ON ONE END OF PAN.

2.3 OUTDOOR UNITS (5 TONS OR LESS)

- A. AIR-COOLED, COMPRESSOR-CONDENSER COMPONENTS:
 - 1. CASING: STEEL, FINISHED WITH BAKED ENAMEL IN COLOR SELECTED BY ARCHITECT, WITH REMOVABLE PANELS FOR ACCESS TO CONTROLS, WEEP HOLES FOR WATER DRAINAGE, AND MOUNTING HOLES IN BASE. PROVIDE BRASS SERVICE VALVES, FITTINGS, AND GAGE PORTS ON EXTERIOR OF CASING.
 - 2. COMPRESSOR: HERMETICALLY SEALED WITH CRANKCASE HEATER AND MOUNTED ON VIBRATION ISOLATION DEVICE. COMPRESSOR MOTOR SHALL HAVE THERMAL- AND CURRENT-SENSITIVE OVERLOAD DEVICES, START CAPACITOR, RELAY, AND CONTACTOR.
 - a. COMPRESSOR TYPE: SCROLL.
 - b. REFRIGERANT CHARGE: R-410A.
 - c. REFRIGERANT COIL: COPPER TUBE, WITH MECHANICALLY BONDED ALUMINUM FINS AND LIQUID SUBCOOLER. COMPLY WITH ARI 206/110.
 - 3. HEAT-PUMP COMPONENTS: REVERSING VALVE AND LOW-TEMPERATURE-AIR CUTOFF THERMOSTAT.
 - 4. FAN: ALUMINUM-PROPELLER TYPE, DIRECTLY CONNECTED TO MOTOR.
 - 5. MOTOR: PERMANENTLY LUBRICATED, WITH INTEGRAL THERMAL-OVERLOAD PROTECTION.
 - 6. LOW AMBIENT KIT: PERMITS OPERATION DOWN TO 0 DEG F.
 - 2.4 ACCESSORIES
 - A. THERMOSTAT: LOW VOLTAGE WITH SUBBASE TO CONTROL COMPRESSOR AND EVAPORATOR FAN.
 - B. AUTOMATIC-RESET TIMER TO PREVENT RAPID CYCLING OF COMPRESSOR.
 - C. REFRIGERANT LINE KITS: SOFT-ANNEALED COPPER SUCTION AND LIQUID LINES FACTORY CLEANED, DRIED, PRESSURIZED, AND SEALED; FACTORY-INSULATED SUCTION LINE WITH FLARED FITTINGS AT BOTH ENDS.
 - D. DRAIN HOSE: FOR CONDENSATE.
 - E. WIND BAFFLE FOR LOW AMBIENT OPERATION.
- PART 3 - EXECUTION
- 3.1 INSTALLATION
 - A. INSTALL UNITS LEVEL AND PLUMB.
 - B. INSTALL EVAPORATOR-FAN COMPONENTS USING MANUFACTURER'S STANDARD MOUNTING DEVICES SECURELY FASTENED TO BUILDING STRUCTURE.
 - C. EQUIPMENT MOUNTING:
 - 1. INSTALL GROUND-MOUNTED, COMPRESSOR-CONDENSER COMPONENTS ON CAST-IN-PLACE CONCRETE EQUIPMENT BASE(S).
 - D. INSTALL AND CONNECT PRECHARGED REFRIGERANT TUBING TO COMPONENT'S QUICK-CONNECT FITTINGS. INSTALL TUBING TO ALLOW ACCESS TO UNIT.
 - 3.2 FIELD QUALITY CONTROL
 - A. MANUFACTURER'S FIELD SERVICE: ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO INSPECT, TEST, AND ADJUST COMPONENTS, ASSEMBLIES, AND EQUIPMENT INSTALLATIONS, INCLUDING CONNECTIONS.
 - 3.3 STARTUP SERVICE
 - A. PERFORM STARTUP SERVICE.
 - 1. COMPLETE INSTALLATION AND STARTUP CHECKS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
- END OF SECTION 15880

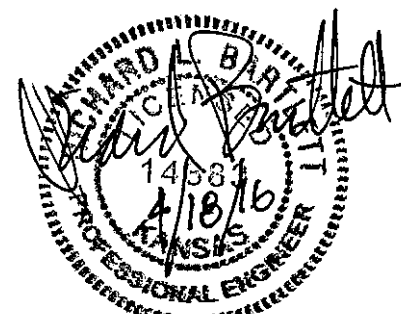


CITY OF WICHITA, KANSAS
RE-USE WATER PUMP STATION
TO SERVE SPIRT AEROSYSTEMS

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MECHANICAL SPECIFICATIONS

PROJECT NO.	468-85112	
DATE	04/18/16	
SCALE	AS NOTED	
DESIGNED	DRAWN	CHECKED
RLB	CJK	RLB



0	ISSUED FOR CONSTRUCTION	04/18/16
NO.	REVISION	DATE

SHEET NO.
M4.1