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| <u>Unit level options</u> | | Module Position: | 0 |
| Actual airflow | 25850 cfm | Side, bottom, or top discharge - 8K Hz | 62 dB |
| Unit elevation | 0.00 ft | Inlet and casing - 63 Hz | 103 dB |
| Unit size | 57 | Inlet and casing - 125 Hz | 98 dB |
| Integral base frame | 8in. integral base frame | Inlet and casing - 250 Hz | 87 dB |
| Calculate unit base height | Yes | Inlet and casing - 500 Hz | 87 dB |
| UL listed unit | UL listed unit | Inlet and casing - 1K Hz | 83 dB |
| High voltage location | Right | Inlet and casing - 2K Hz | 82 dB |
| Length | 399.500 in | Inlet and casing - 4K Hz | 81 dB |
| Width | 125.500 in | Inlet and casing - 8K Hz | 75 dB |
| Installed weight | 11135.3 lb | Ducted inlet - 63 Hz | 98 dB |
| Rigging weight | 10867.3 lb | Ducted inlet - 125 Hz | 97 dB |
| Single or front discharge - 63 Hz | 87 dB | Ducted inlet - 250 Hz | 82 dB |
| Single or front discharge - 125 Hz | 83 dB | Ducted inlet - 500 Hz | 80 dB |
| Single or front discharge - 250 Hz | 78 dB | Ducted inlet - 1K Hz | 78 dB |
| Single or front discharge - 500 Hz | 74 dB | Ducted inlet - 2K Hz | 76 dB |
| Single or front discharge - 1K Hz | 71 dB | Ducted inlet - 4K Hz | 73 dB |
| Single or front discharge - 2K Hz | 73 dB | Ducted inlet - 8K Hz | 68 dB |
| Single or front discharge - 4K Hz | 72 dB | Casing - 63 Hz | 102 dB |
| Single or front discharge - 8K Hz | 63 dB | Casing - 125 Hz | 88 dB |
| Side, bottom, or top discharge - 63 Hz | 89 dB | Casing - 250 Hz | 82 dB |
| Side, bottom, or top discharge - 125 Hz | 82 dB | Casing - 500 Hz | 92 dB |
| Side, bottom, or top discharge - 250 Hz | 79 dB | Casing - 1K Hz | 86 dB |
| Side, bottom, or top discharge - 500 Hz | 72 dB | Casing - 2K Hz | 66 dB |
| Side, bottom, or top discharge - 1K Hz | 70 dB | Casing - 4K Hz | 55 dB |
| Side, bottom, or top discharge - 2K Hz | 72 dB | Casing - 8K Hz | 55 dB |
| Side, bottom, or top discharge - 4K Hz | 71 dB | | |

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| <u>Controls and VFD/starter</u> | | Module Position: | 0 |
| Factory controls package | Variable volume | Averaging temperature sensor material | 1k Pt 385 |
| Automatic Selection | Validation Only | Design Sequence | A |
| Controller mounting | Unit mounted | Number of transformers | 1 - Transformer |
| Unit mounting controller location | Left | Prepackaged solution option used | MP common configuration not used |
| Controller type | MP580 | Prepackaged solution valid unit | MB-FLT-CW-SF-FLT-VAV |
| MP580 Expansion modules | 2 Expansion cards | Total number of control points | 16 control points |
| LCD screen and keypad | Unit | | |

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| <u>Fan section</u> | | Module Position: | 1 |
| Section type | Fan | Single or front discharge - 250 Hz | 71 dB |
| Fan application | Return fan | Single or front discharge - 500 Hz | 69 dB |
| Unit size | 57 | Single or front discharge - 1K Hz | 67 dB |
| Inlet location | Bottom inlet | Single or front discharge - 2K Hz | 71 dB |
| Fan orientation | Front-top discharge | Single or front discharge - 4K Hz | 62 dB |
| Fan discharge | Front top | Single or front discharge - 8K Hz | 54 dB |
| Access door location | Right | Side, bottom, or top discharge - 63 Hz | 88 dB |
| Drive location | Right side drive | Side, bottom, or top discharge - 125 Hz | 76 dB |
| Design sequence | A | Side, bottom, or top discharge - 250 Hz | 75 dB |
| Motor horsepower per fan | 30 hp | Side, bottom, or top discharge - 500 Hz | 68 dB |
| Motor class | NEMA premium compliant ODP | Side, bottom, or top discharge - 1K Hz | 66 dB |
| Motor voltage | 460/3 | Side, bottom, or top discharge - 2K Hz | 69 dB |
| Cycle | 60 cycles/sec | Side, bottom, or top discharge - 4K Hz | 62 dB |
| Drive service factor | 1.5 fixed drive | Side, bottom, or top discharge - 8K Hz | 52 dB |
| Motor RPM | 1800 | Inlet and casing - 63 Hz | 103 dB |
| Fan airflow | 25850 cfm | Inlet and casing - 125 Hz | 90 dB |
| Overall ESP | 2.400 in H2O | Inlet and casing - 250 Hz | 87 dB |
| Unit entering ESP | 0.400 in H2O | Inlet and casing - 500 Hz | 87 dB |
| Unit discharge ESP | 2.000 in H2O | Inlet and casing - 1K Hz | 83 dB |
| Elevation | 0.00 ft | Inlet and casing - 2K Hz | 81 dB |
| Minimum temperature | 10.00 F | Inlet and casing - 4K Hz | 79 dB |
| Design temperature | 70.00 F | Inlet and casing - 8K Hz | 74 dB |
| Fan size and type | 25in. diameter FC, class 2 | Ducted inlet - 63 Hz | 98 dB |
| Total brake horsepower | 28.633 hp | Ducted inlet - 125 Hz | 79 dB |
| Total brake horsepower at min temp | 32.292 hp | Ducted inlet - 250 Hz | 80 dB |
| Total static pressure | 2.617 in H2O | Ducted inlet - 500 Hz | 80 dB |
| Speed | 747 rpm | Ducted inlet - 1K Hz | 75 dB |
| Outlet area | 6.95 sq ft | Ducted inlet - 2K Hz | 71 dB |
| Fan outlet velocity | 3722 ft/min | Ducted inlet - 4K Hz | 68 dB |
| Fan module pressure drop | 2.400 in H2O | Ducted inlet - 8K Hz | 64 dB |
| Fan discharge loss pressure drop | 0.000 in H2O | Casing - 63 Hz | 102 dB |
| Section height | 91.000 in | Casing - 125 Hz | 86 dB |
| Section length | 68.500 in | Casing - 250 Hz | 82 dB |
| Section width | 125.500 in | Casing - 500 Hz | 92 dB |
| Section weight | 2433.0 lb | Casing - 1K Hz | 86 dB |
| Static pressure origin | User defined | Casing - 2K Hz | 65 dB |
| Single or front discharge - 63 Hz | 86 dB | Casing - 4K Hz | 47 dB |
| Single or front discharge - 125 Hz | 74 dB | Casing - 8K Hz | 52 dB |

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| <u>Air mixing section</u> | | Module Position: | 2 |
| Section type | Air mixing section | Left side opening type | No opening |
| Unit size | 57 | Design sequence | A |
| Mixing section type | without filter | Actuator | Electronic actuator |
| Access door location | Right | Opening 1 back - airflow | 25850 cfm |
| Back opening type | Full face opening | Opening 1 front - airflow | 25850 cfm |
| Back air path | Entering | Opening 1 top - airflow | 25850 cfm |
| Front opening type | Full face opening | Opening 1 top total pressure drop | 0.217 in H2O |
| Front air path | Leaving | Greatest entry PD | 0.217 in H2O |
| Top opening type | Opposed blade damper | Opening 1 back - area | 66.66 sq ft |
| Top air path | Leaving | Opening 1 front - area | 66.66 sq ft |
| Top air path type | Exhaust | Opening 1 top - area | 22.79 sq ft |
| Top inlet type | Unducted | Opening 1 top - face velocity | 1134 ft/min |
| Bottom opening type | No opening | Opening 1 top - pressure drop | 0.217 in H2O |
| Right side opening type | No opening | | |

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| <u>Air mixing section</u> | | Module Position: | 3 |
| Section type | Air mixing section | Actuator | Electronic actuator |
| Unit size | 57 | Opening 1 left - airflow | 25850 cfm |
| Mixing section type | without filter | Filter condition | Mid-life |
| Access door location | Right | Filter airflow | 0 cfm |
| Back opening type | Opposed blade damper | Opening 1 back - airflow | 25850 cfm |
| Back air path | Entering | Opening 1 front - airflow | 25850 cfm |
| Back air path type | Return | Opening 1 top - airflow | 25850 cfm |
| Back inlet type | Unducted | Opening 1 back total pressure drop | 0.217 in H2O |
| Front opening type | Full face opening | Opening 1 left - face velocity | 1441 ft/min |
| Front air path | Leaving | Opening 1 left - pressure drop | 0.000 in H2O |
| Top opening type | No opening | Opening 1 left side total pressure drop | 0.000 in H2O |
| Bottom opening type | No opening | Greatest entry PD | 0.217 in H2O |
| Right side opening type | No opening | Opening 1 back - area | 22.79 sq ft |
| Left side opening type | 38x68 damper | Opening 1 back - face velocity | 1134 ft/min |
| Left side air path | Entering | Opening 1 back - pressure drop | 0.217 in H2O |
| Left side air path type | Outside | Opening 1 front - area | 66.66 sq ft |
| Left side inlet type | Ducted | Opening 1 left - area | 17.94 sq ft |

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| Design sequence | | A | | |
| Filter section | Module Position: | | 4 | |
| Section type | Filter | Filter condition | Mid-life | |
| Unit size | 57 | Filter area | 100.00 sq ft | |
| Filter type | Angled filter | Filter face velocity | 259 ft/min | |
| Filter frame | 2in. filter frame | Filter pressure drop | 0.558 in H2O | |
| Access door location | Right | Filter section pressure drop | 0.558 in H2O | |
| Primary filter type 1 | Pleated media - MERV 8 | | Section length | 27.500 in |
| Prefilter filter type | No prefilter | Section width | 125.500 in | |
| Design sequence | A | Section height | 91.000 in | |
| Dirty filter status | Dirty filter switch | Section weight | 658.0 lb | |
| Filter airflow | 25850 cfm | | | |

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| <u>Coil section</u> | | Module Position: | 5 |
| Section type | Horizontal coil | Coil fluid percentage | 100.00 % |
| Unit size | 57 | Target valve pressure drop | 4.00 psig |
| Section size | Large | Coil type | W |
| Coil application | Cooling coil | Rows | 4 rows |
| Changeover coil | No | Fin type | Prima flo H |
| System type | Chilled water | Fin material | Aluminum fins |
| Coil supply/cabinet side | Right | Tube diameter | 5/8in. tube diameter |
| Coil casing | Galvanized | Tube matl/wall thickness | .020" copper tubes |
| Coil height | Unit coil height | Corrosion resistant coating | None |
| Drain pan | Galvanized | Coil face velocity | 458 ft/min |
| Drain connection location | Right | Air pressure drop | 0.495 in H2O |
| Design sequence | A | J trap dimension | 1.856 in |
| Apply AHRI ranges | Yes | H trap dimension | 3.712 in |
| Coil performance airflow | 25850 cfm | Leaving fluid temperature | 55.00 F |
| Coil elevation | 0.00 ft | Fluid pressure drop | 9.78 ft H2O |
| Entering dry bulb | 80.00 F | Fluid volume | 32.04 gal |
| Entering wet bulb | 67.00 F | Fluid velocity | 4.57 ft/s |
| Leaving dry bulb | 55.00 F | Total cap coil #1 | 498.11 MBh |
| Leaving wet bulb | 54.54 F | Total cap coil #2 | 498.11 MBh |
| Sensible capacity | 712.37 MBh | Coil face area | 56.50 sq ft |
| Total capacity | 996.23 MBh | Coil rigging weight | 921.3 lb |
| Fin spacing | 141 Per Foot | Coil installed weight | 1189.3 lb |
| Entering fluid temperature | 45.00 F | Coil section pressure drop | 0.495 in H2O |
| Fluid temperature rise | 10.00 F | Section length | 48.000 in |
| Standard fluid flow rate | 198.56 gpm | Section height | 91.000 in |
| Coil fouling factor | 0.00000 hr-sq ft-deg F/Btu | Section width | 125.500 in |
| Fluid type | Water | Section weight | 1725.3 lb |

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| <u>Fan section</u> | | Module Position: | 6 |
| Section type | Fan | Single or front discharge - 1K Hz | 70 dB |
| Fan application | Supply fan | Single or front discharge - 2K Hz | 70 dB |
| Unit size | 57 | Single or front discharge - 4K Hz | 72 dB |
| Inlet location | Back inlet | Single or front discharge - 8K Hz | 63 dB |
| Fan orientation | Plenum fan | Side, bottom, or top discharge - 63 Hz | 83 dB |
| Fan discharge | Front top | Side, bottom, or top discharge - 125 Hz | 82 dB |
| Access door location | Right | Side, bottom, or top discharge - 250 Hz | 77 dB |
| Drive location | Right side drive | Side, bottom, or top discharge - 500 Hz | 71 dB |
| Design sequence | A | Side, bottom, or top discharge - 1K Hz | 69 dB |
| Motor horsepower per fan | 30 hp | Side, bottom, or top discharge - 2K Hz | 69 dB |
| Motor class | NEMA premium compliant ODP | Side, bottom, or top discharge - 4K Hz | 71 dB |
| Motor voltage | 460/3 | Side, bottom, or top discharge - 8K Hz | 62 dB |
| Cycle | 60 cycles/sec | Inlet and casing - 63 Hz | 94 dB |
| Drive service factor | 1.5 fixed drive | Inlet and casing - 125 Hz | 98 dB |
| Motor RPM | 1800 | Inlet and casing - 250 Hz | 80 dB |
| Fan airflow | 25850 cfm | Inlet and casing - 500 Hz | 77 dB |
| Overall ESP | 2.000 in H2O | Inlet and casing - 1K Hz | 76 dB |
| Unit entering ESP | 1.000 in H2O | Inlet and casing - 2K Hz | 77 dB |
| Unit discharge ESP | 1.000 in H2O | Inlet and casing - 4K Hz | 78 dB |
| Elevation | 0.00 ft | Inlet and casing - 8K Hz | 71 dB |
| Minimum temperature | 10.00 F | Ducted inlet - 63 Hz | 85 dB |
| Design temperature | 70.00 F | Ducted inlet - 125 Hz | 97 dB |
| Fan size and type | 44in. belt-drive plenum, class 1 | Ducted inlet - 250 Hz | 78 dB |
| Total brake horsepower | 25.158 hp | Ducted inlet - 500 Hz | 73 dB |
| Total brake horsepower at min temp | 28.373 hp | Ducted inlet - 1K Hz | 75 dB |
| Total static pressure | 3.503 in H2O | Ducted inlet - 2K Hz | 75 dB |
| Speed | 797 rpm | Ducted inlet - 4K Hz | 72 dB |
| Fan module pressure drop | 2.023 in H2O | Ducted inlet - 8K Hz | 67 dB |
| Section height | 91.000 in | Casing - 63 Hz | 88 dB |
| Section length | 59.500 in | Casing - 125 Hz | 84 dB |
| Section width | 125.500 in | Casing - 250 Hz | 72 dB |
| Section weight | 2903.0 lb | Casing - 500 Hz | 80 dB |
| Static pressure origin | Program calculated | Casing - 1K Hz | 75 dB |
| Single or front discharge - 63 Hz | 83 dB | Casing - 2K Hz | 61 dB |
| Single or front discharge - 125 Hz | 83 dB | Casing - 4K Hz | 55 dB |
| Single or front discharge - 250 Hz | 78 dB | Casing - 8K Hz | 52 dB |
| Single or front discharge - 500 Hz | 73 dB | | |

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| <u>Access section</u> | | Module Position: | 7 |
| Section type | Access/blank/turning | Back opening | Back opening |
| Unit size | 57 | Design sequence | A |
| Section size | Medium large | Section length | 24.500 in |
| Access door location | Right | Section width | 125.500 in |
| Door swing direction | Inward swing | Section height | 91.000 in |
| Front opening | Front opening | Section weight | 402.0 lb |

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| <u>Filter section</u> | | Module Position: | 8 |
| Section type | Filter | Filter condition | Clean |
| Unit size | 57 | Filter area | 100.00 sq ft |
| Filter type | Angled filter | Filter face velocity | 259 ft/min |
| Filter frame | 4in. filter frame | Filter pressure drop | 0.209 in H2O |
| Access door location | Right | Filter section pressure drop | 0.209 in H2O |
| Primary filter type 1 | 4in. cartridge - 95% eff - MERV 14 | Section length | 27.500 in |
| Prefilter filter type | No prefilter | Section width | 125.500 in |
| Design sequence | A | Section height | 91.000 in |
| Dirty filter status | Dirty filter switch | Section weight | 1005.0 lb |
| Filter airflow | 25850 cfm | | |

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| <u>Discharge plenum</u> | | Module Position: | 9 |
| Section type | Open face no plenum | Discharge 1 front - airflow | 25850 cfm |
| Unit size | 57 | | |



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| PROJECT TITLE REPAIR & RENOVATE MEDICAL CLINIC PH V LITTLE ROCK AIR FORCE BASE JACKSONVILLE, ARKANSAS CHANGE ORDER TO PHASE V - 100% SUBMITTAL | MECHANICAL SCHEDULES | |
| | LEAD DESIGNER | GMT |
| | PROJECT NUMBER | NKAK#06-8006-5 |

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| DESIGNED BY GMT | SHEET M-404 |
| DATE DEC. 3, 2010 | |
| SCALE AS SHOWN | |

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