

SUBMITTAL DATA SHEET



Heating and Air Conditioning

SPLIT-SYSTEM EVAPORATOR BLOWERS

7.5, 10, 15, 20 & 25 TONS

MODELS: NC090 thru 300, 2-PIPE
ND120 thru 240, 4-PIPE

| | | | | | |
|-------------------|--|------|--------------|-----------|---------------|
| JOB NAME: | | | LOCATION: | | |
| PURCHASER: | | | ORDER NO: | | |
| ENGINEER: | | | | | |
| SUBMITTED TO: | | FOR: | REF: | APPROVAL: | CONSTRUCTION: |
| SUBMITTED BY: | | | DATE: | | |
| UNIT DESIGNATION: | | | SCHEDULE NO. | MODEL NO. | |

PRODUCT DATA

Cooling Performance

Total Capacity MBH
Sensible Capacity MBH
Evaporator Pressure at Saturation..... PSIG
Evaporator Temperature at Saturation..... °F
Total Supply Air CFM
Temp. of air Entering Evaporator Coil / °F DB/WB

Heating Performance

Refer to field-installed accessories on reverse side.

Supply Air Blower Performance

Total Supply Air CFM
Total Resistance External To Unit IWG
Blower Speed RPM
Blower Output Requirement... BHP
Motor Rating HP
Power Input Requirement..... KW

Electrical Data

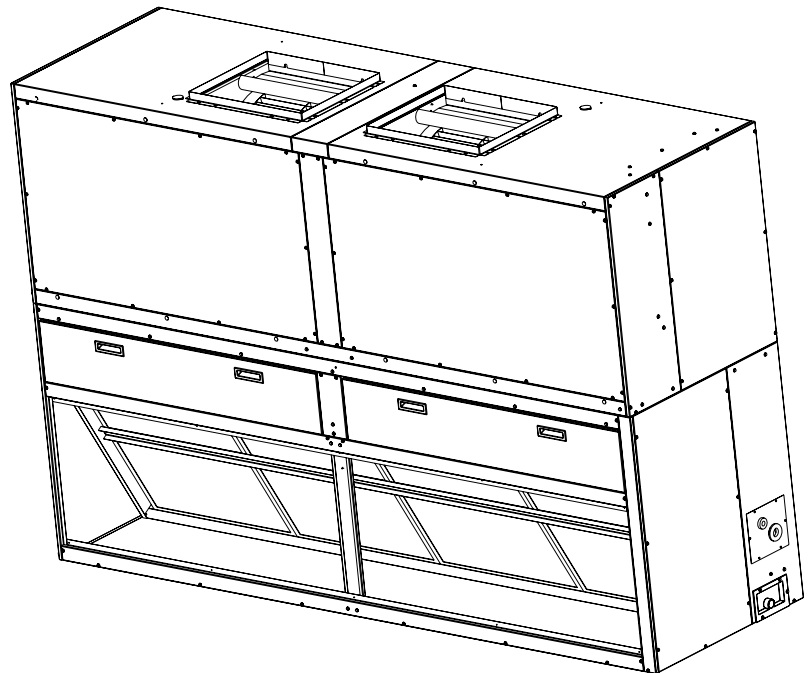
Power Supply / /
Total Unit Ampacity AMPS
Minimum Wire Size AWG (Copper Conductors)
Maximum Fuse Size Dual Element AMPS

Unit Weight

Total Operating Weight LBS (Including field-installed accessories)

FEATURES

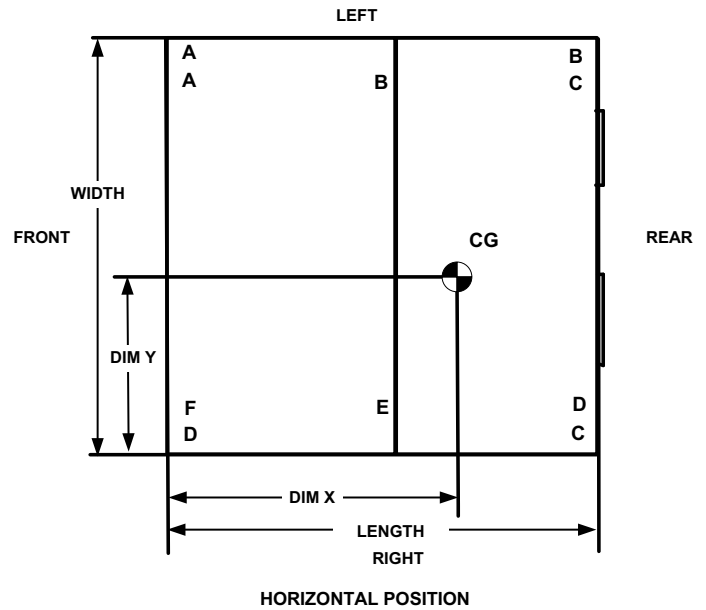
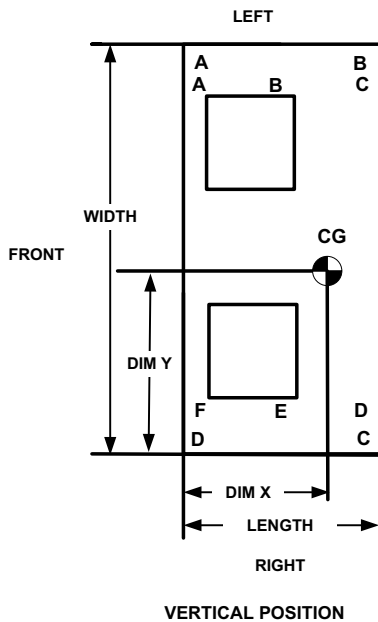
- R-410A REFRIGERANT
- POWDER PAINT FOR DURABILITY
- INHERENTLY PROTECTED FAN MOTORS 7.5-20 TON
- SINGLE AND DUAL REFRIGERATION CIRCUITS (SINGLE ON NC AND DUAL ON ND MODELS)
- PROVISIONS FOR HOT GAS BYPASS
- CSA APPROVAL
- 2" AND 4" FILTER RACK (4" FILTERS FIELD SUPPLIED) 7.5-20 TON
- ELECTRIC HEAT (FIELD INSTALLED) 7.5-20 TON
- HOT WATER HEATING COILS (FIELD INSTALLED)
- STEAM HEATING COILS (FIELD INSTALLED)
- FACTORY SELECTABLE MOTOR AND DRIVE OPTIONS 7.5-20 TON
- ADJUSTABLE TXV'S
- CAN BE APPLIED VERTICALLY OR HORIZONTALLY
- SINGLE POINT POWER CONNECTION
- ONE YEAR LIMITED PARTS WARRANTY ON COMPLETE UNIT
- 5 YEAR LIMITED WARRANTY ON ELECTRIC HEATING ELEMENTS 7.5-20 TON
- DESIGNED TO OPERATE WITH COOLING ONLY UNITS OR HEAT PUMPS 7.5-20 TON



NC/ND240 INDOOR UNIT

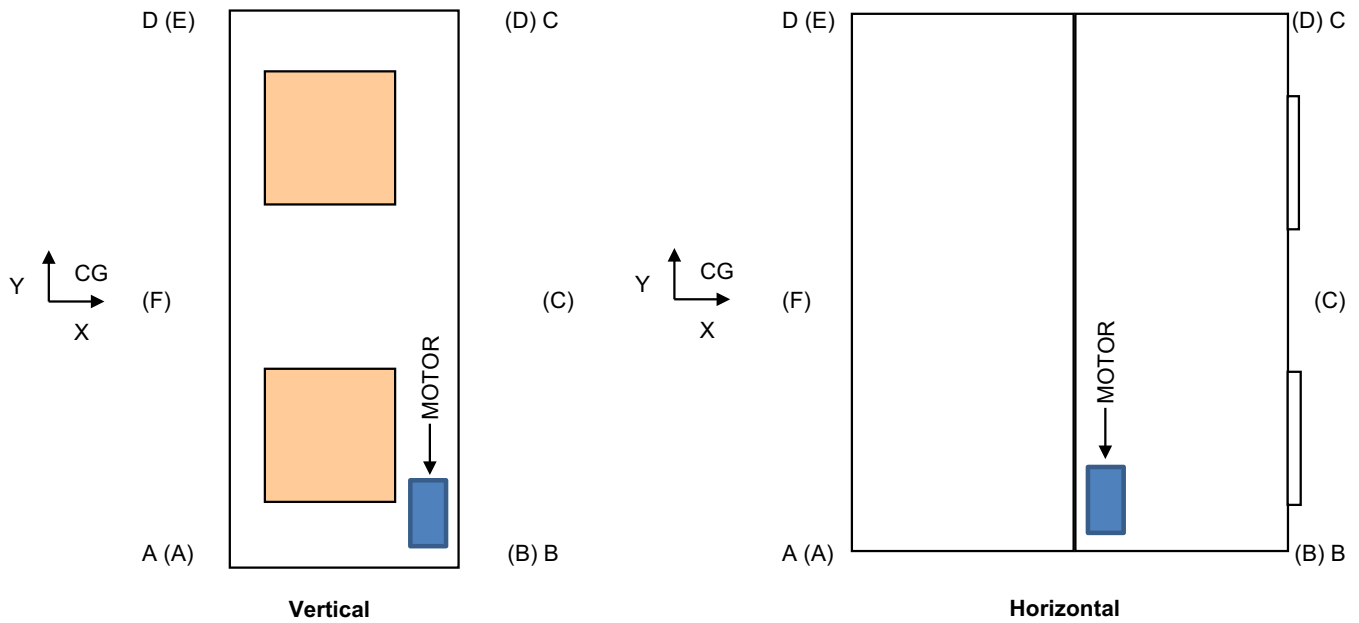
Corner Weights & Center of Gravity NC/ND 090 Thru 240 Units

| Model | Drive Options | Weight (lbs.) | | Center of Gravity (in.) | | 4 Point Load Location (lbs.) | | | | 6 Point Load Location (lbs.) | | | | | |
|---------------------------|---------------------------|---------------|-----------|-------------------------|------|------------------------------|-----|-----|-----|------------------------------|-----|-----|-----|-----|-----|
| | | Shipping | Operating | X | Y | A | B | C | D | A | B | C | D | E | F |
| Vertical Airflow | | | | | | | | | | | | | | | |
| NC090 | Std. Mtr. and Drv. | 524 | 498 | 16.2 | 26.7 | 109 | 128 | 141 | 120 | 71 | 79 | 88 | 97 | 86 | 78 |
| | High Static Mtr. and Drv. | 526 | 500 | 16.2 | 26.7 | 110 | 129 | 142 | 120 | 71 | 79 | 88 | 97 | 87 | 78 |
| NC120 | Std. Mtr. and Drv. | 562 | 539 | 15.5 | 26.8 | 125 | 134 | 146 | 136 | 82 | 86 | 90 | 98 | 94 | 89 |
| | High Static Mtr. and Drv. | 573 | 550 | 15.5 | 26.7 | 127 | 136 | 148 | 139 | 84 | 87 | 91 | 100 | 96 | 91 |
| ND120 | Std. Mtr. and Drv. | 564 | 541 | 15.5 | 26.9 | 126 | 135 | 145 | 136 | 83 | 87 | 91 | 98 | 94 | 89 |
| | High Static Mtr. and Drv. | 575 | 552 | 15.5 | 26.9 | 128 | 137 | 148 | 138 | 84 | 88 | 92 | 100 | 95 | 91 |
| NC180 | Std. Mtr. and Drv. | 796 | 764 | 18.2 | 35.8 | 164 | 203 | 219 | 178 | 106 | 121 | 140 | 151 | 131 | 114 |
| | High Static Mtr. and Drv. | 824 | 792 | 18.2 | 35.8 | 170 | 210 | 227 | 184 | 110 | 126 | 145 | 157 | 136 | 118 |
| ND180 | Std. Mtr. and Drv. | 796 | 764 | 18.2 | 35.8 | 164 | 203 | 219 | 178 | 106 | 121 | 140 | 151 | 131 | 114 |
| | High Static Mtr. and Drv. | 824 | 792 | 18.2 | 35.8 | 170 | 210 | 227 | 184 | 110 | 126 | 145 | 157 | 136 | 118 |
| NC240 | Std. Mtr. and Drv. | 908 | 873 | 15.8 | 42.6 | 179 | 198 | 260 | 235 | 118 | 125 | 134 | 176 | 165 | 154 |
| | High Static Mtr. and Drv. | 938 | 903 | 15.7 | 42.4 | 185 | 204 | 269 | 245 | 122 | 129 | 138 | 182 | 171 | 161 |
| ND240 | Std. Mtr. and Drv. | 908 | 873 | 15.8 | 42.6 | 179 | 198 | 260 | 235 | 118 | 125 | 134 | 176 | 165 | 154 |
| | High Static Mtr. and Drv. | 938 | 903 | 15.7 | 42.4 | 185 | 204 | 269 | 245 | 122 | 129 | 138 | 182 | 171 | 161 |
| Horizontal Airflow | | | | | | | | | | | | | | | |
| NC090 | Std. Mtr. and Drv. | 524 | 498 | 30.1 | 26.7 | 118 | 119 | 131 | 130 | 79 | 79 | 79 | 87 | 87 | 87 |
| | High Static Mtr. and Drv. | 526 | 500 | 30.1 | 26.7 | 119 | 120 | 132 | 130 | 79 | 79 | 80 | 88 | 87 | 87 |
| NC120 | Std. Mtr. and Drv. | 562 | 539 | 29.9 | 26.8 | 129 | 129 | 140 | 141 | 86 | 86 | 86 | 94 | 94 | 94 |
| | High Static Mtr. and Drv. | 573 | 550 | 30.2 | 26.7 | 130 | 132 | 145 | 142 | 87 | 87 | 88 | 97 | 96 | 95 |
| ND120 | Std. Mtr. and Drv. | 564 | 541 | 29.9 | 26.9 | 131 | 130 | 140 | 141 | 87 | 87 | 86 | 93 | 94 | 94 |
| | High Static Mtr. and Drv. | 575 | 552 | 30.2 | 26.9 | 132 | 133 | 144 | 142 | 88 | 88 | 89 | 96 | 96 | 95 |
| NC180 | Std. Mtr. and Drv. | 796 | 764 | 33.7 | 35.8 | 179 | 187 | 203 | 194 | 119 | 122 | 126 | 136 | 132 | 128 |
| | High Static Mtr. and Drv. | 824 | 792 | 34.4 | 35.8 | 182 | 198 | 214 | 197 | 120 | 127 | 134 | 145 | 137 | 130 |
| ND180 | Std. Mtr. and Drv. | 796 | 764 | 33.7 | 35.8 | 179 | 187 | 203 | 194 | 119 | 122 | 126 | 136 | 132 | 128 |
| | High Static Mtr. and Drv. | 824 | 792 | 34.4 | 35.8 | 182 | 198 | 214 | 197 | 120 | 127 | 134 | 145 | 137 | 130 |
| NC240 | Std. Mtr. and Drv. | 908 | 873 | 30.1 | 42.6 | 188 | 189 | 249 | 247 | 125 | 126 | 126 | 166 | 165 | 164 |
| | High Static Mtr. and Drv. | 938 | 903 | 30.6 | 42.4 | 191 | 198 | 262 | 252 | 126 | 130 | 133 | 176 | 171 | 167 |
| ND240 | Std. Mtr. and Drv. | 908 | 873 | 30.1 | 42.6 | 188 | 189 | 249 | 247 | 125 | 126 | 126 | 166 | 165 | 164 |
| | High Static Mtr. and Drv. | 938 | 903 | 30.6 | 42.4 | 191 | 198 | 262 | 252 | 126 | 130 | 133 | 176 | 171 | 167 |



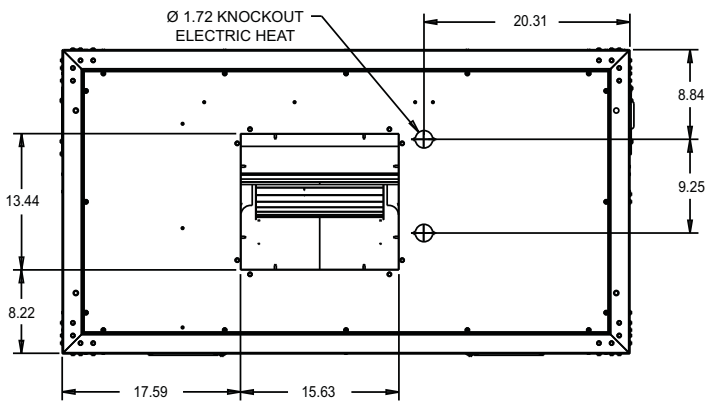
Corner Weights & Center of Gravity NC300 Units

| Model | Drive HP | Evaporator Section | Blower Section | Drive Section | Weight (lbs.) | | Center of Gravity | | 4 Point Load Location (lbs.) | | | | 6 Point Load Location (lbs.) | | | | | |
|---------------------------|----------|--------------------|-----------------|-----------------|---------------|-----------|-------------------|------|------------------------------|-----|-----|-----|------------------------------|-----|-----|-----|-----|-----|
| | | Cabinet Wt (lb) | Cabinet Wt (lb) | Cabinet Wt (lb) | Shipping | Operating | CG X | CG Y | A | B | C | D | A | B | C | D | E | F |
| Vertical Airflow | | | | | | | | | | | | | | | | | | |
| NC300 | 5 | 539 | 463 | 111 | 1067 | 1130 | 19.0 | 45.5 | 296 | 321 | 267 | 247 | 204 | 220 | 194 | 172 | 159 | 180 |
| | 7.5 | 539 | 463 | 138 | 1067 | 1157 | 19.3 | 45.1 | 301 | 335 | 274 | 246 | 206 | 229 | 202 | 179 | 161 | 181 |
| Horizontal Airflow | | | | | | | | | | | | | | | | | | |
| NC300 | 5 | 539 | 463 | 111 | 1067 | 1130 | 35.2 | 45.5 | 320 | 297 | 247 | 266 | 220 | 204 | 180 | 160 | 172 | 194 |
| | 7.5 | 539 | 463 | 137.8 | 1067 | 1157 | 35.4 | 45.1 | 329 | 307 | 252 | 269 | 225 | 210 | 185 | 164 | 176 | 198 |

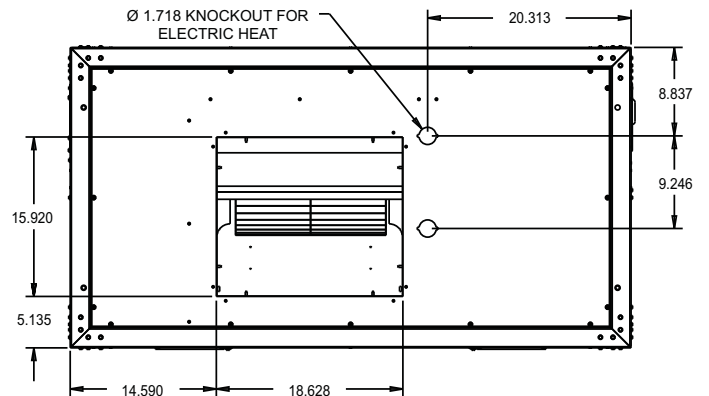


UNIT DIMENSIONS NC090/120 & ND120

TOP VIEW

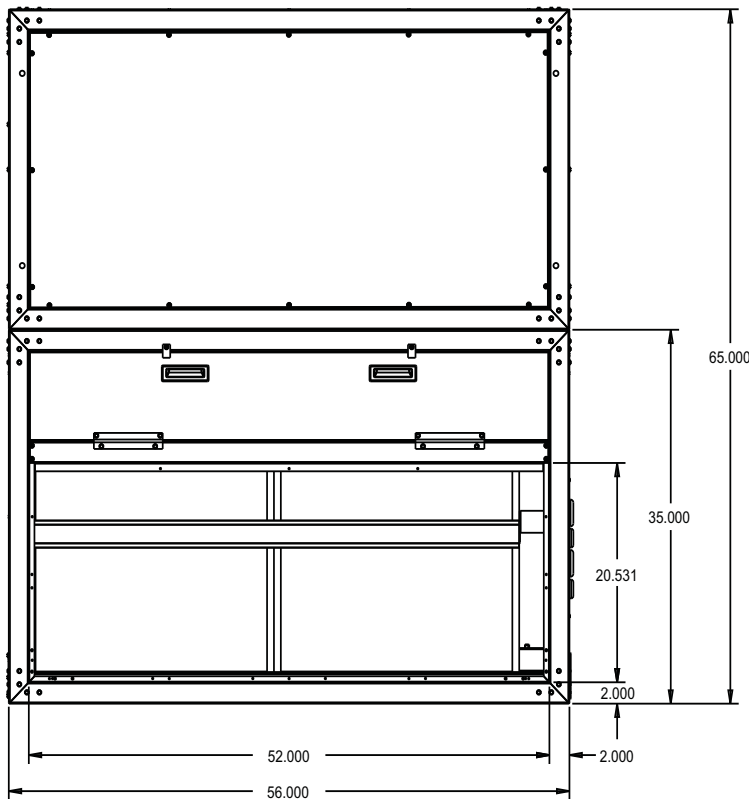


TOP VIEW - BLOWER OUTLET
NC090 INDOOR

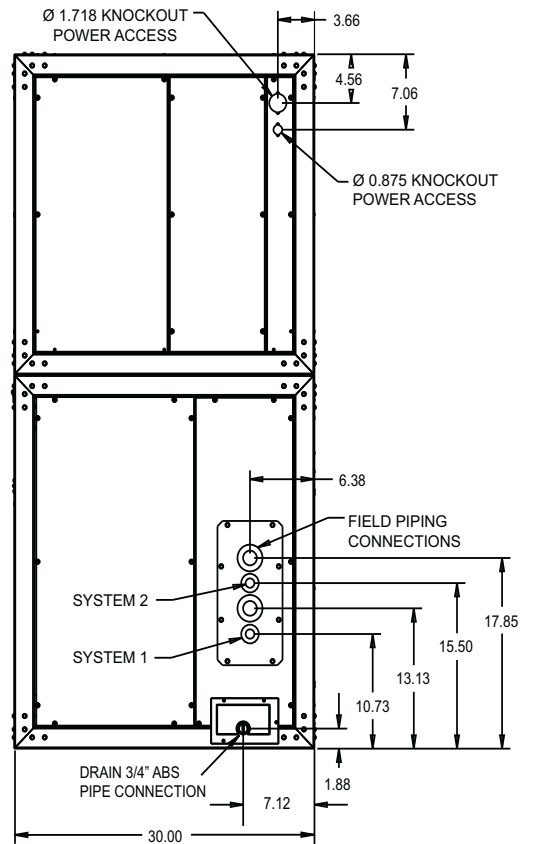


TOP VIEW - BLOWER OUTLET
NC/ND120 INDOOR

FRONT AND SIDE VIEW



FRONT VIEW - RETURN AIR
NC090 / NC/ND120 INDOOR

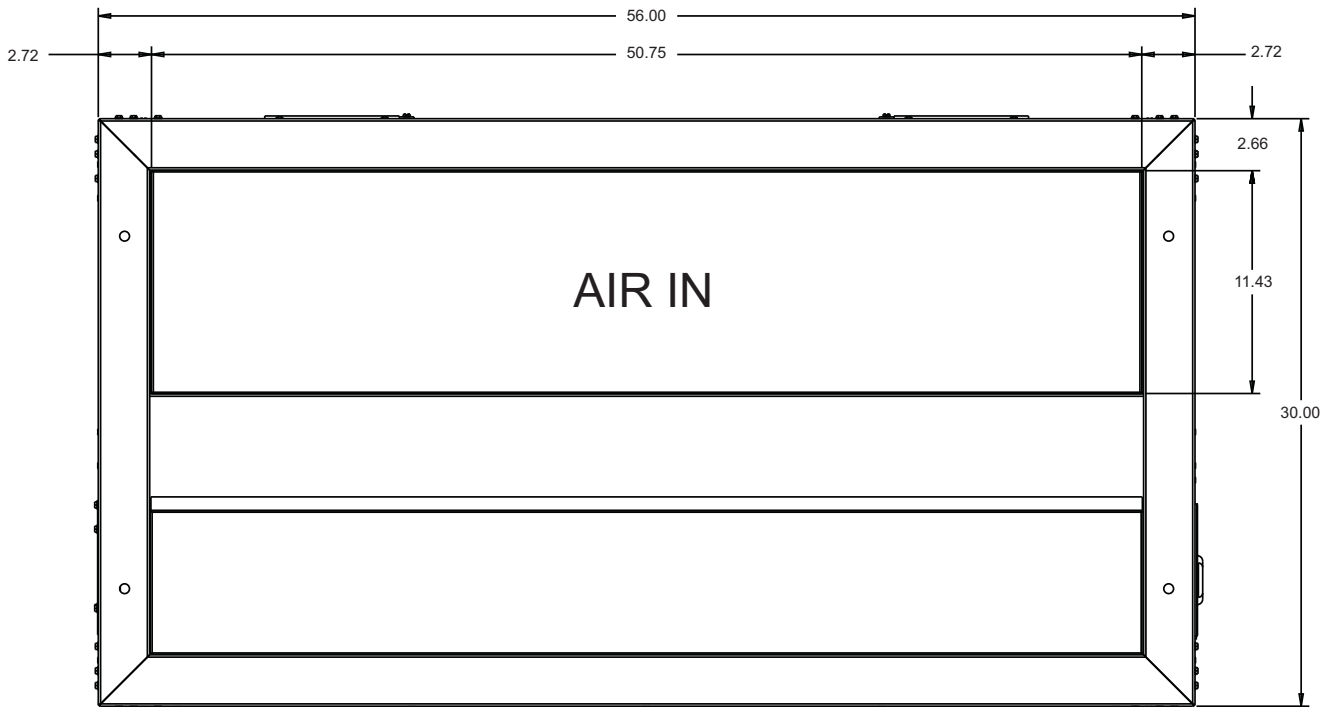


RIGHT SIDE VIEW - DRAIN PIPING/CONTROLS

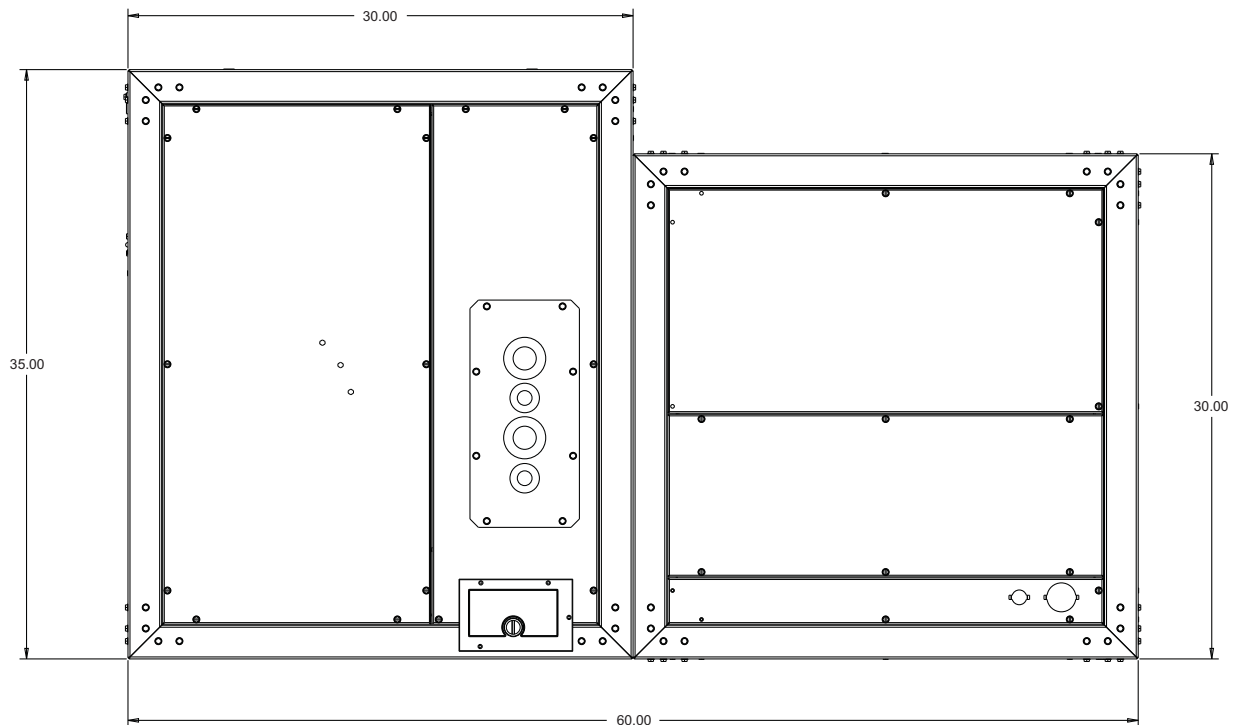
***SEE UNITS PHYSICAL DATA TABLE FOR PIPING AND ELECTRICAL SIZE CONNECTIONS**

UNIT DIMENSIONS (CONT.)
NC090/120 & ND120

BOTTOM VIEW



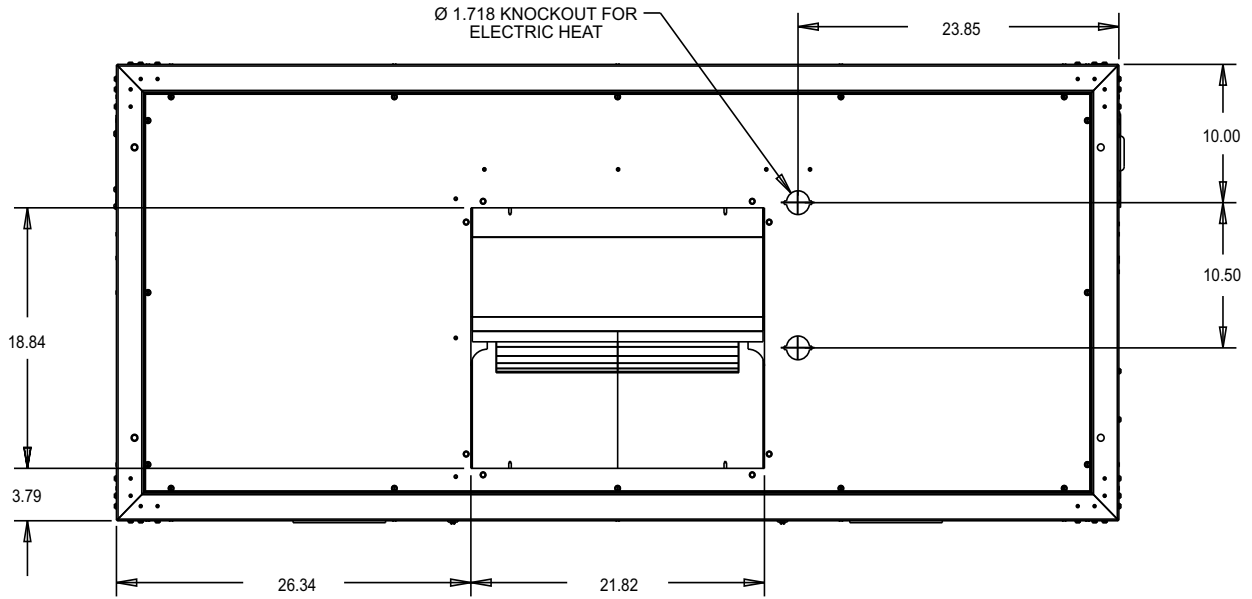
HORIZONTAL CONFIGURATION



UNIT DIMENSIONS (CONT.)

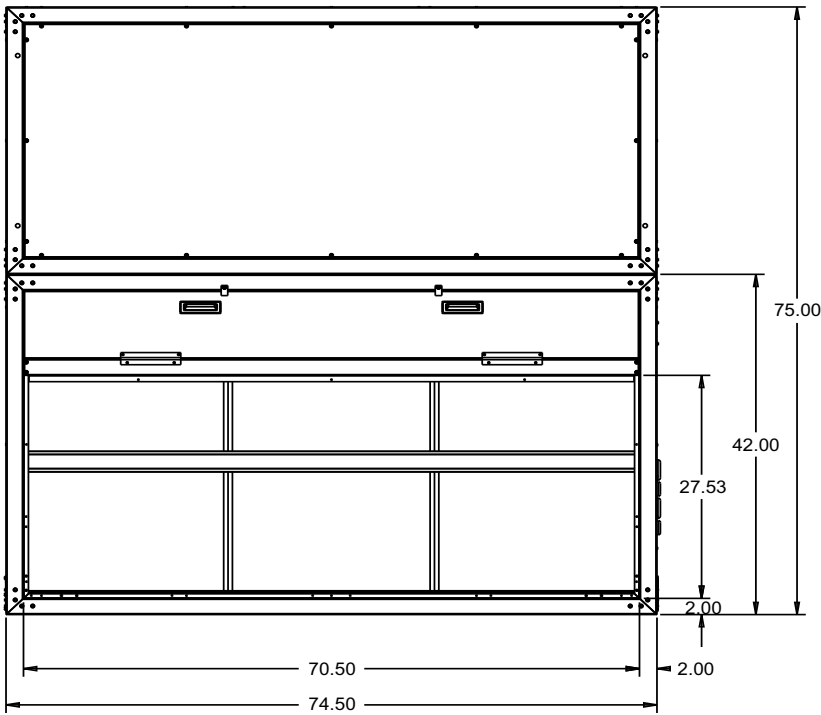
NC/ND180

TOP VIEW

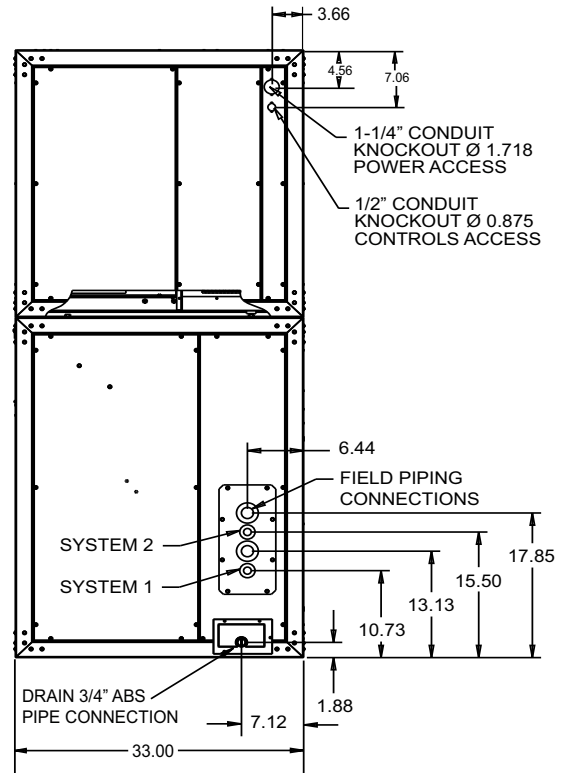


TOP VIEW - BLOWER OUTLET

FRONT AND SIDE VIEW



FRONT VIEW - RETURN AIR
NC/ND180 INDOOR



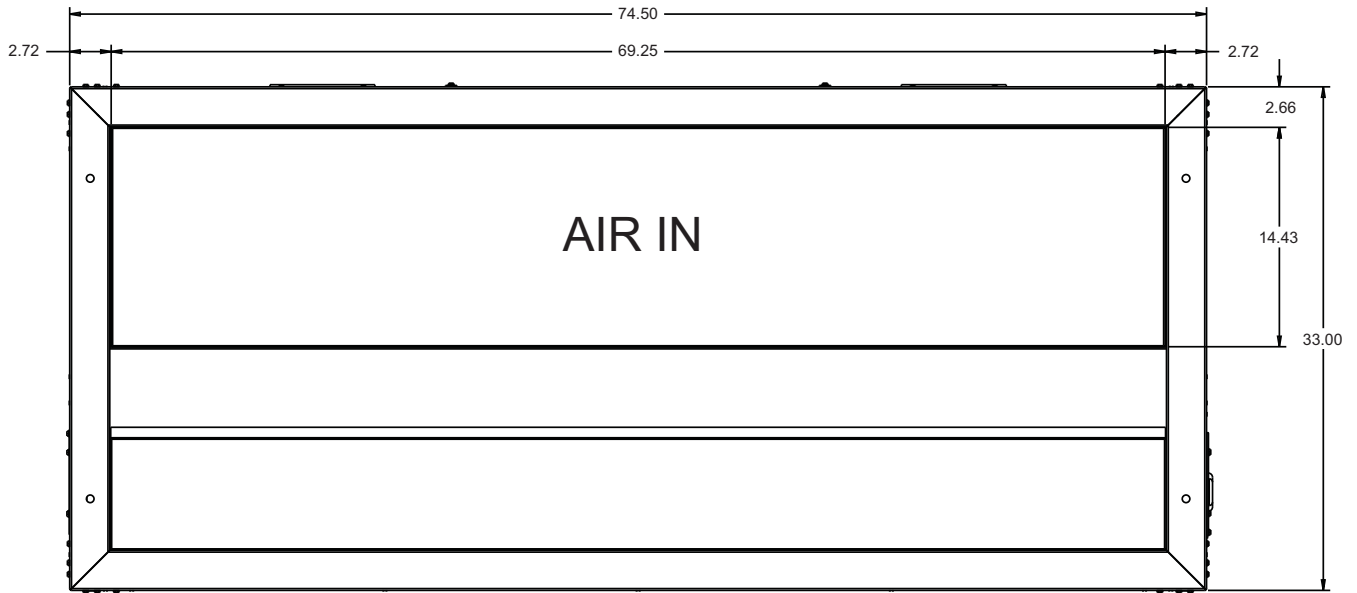
RIGHT SIDE VIEW - DRAIN PIPING/CONTROLS

***SEE UNITS PHYSICAL DATA TABLE FOR PIPING AND ELECTRICAL SIZE CONNECTIONS**

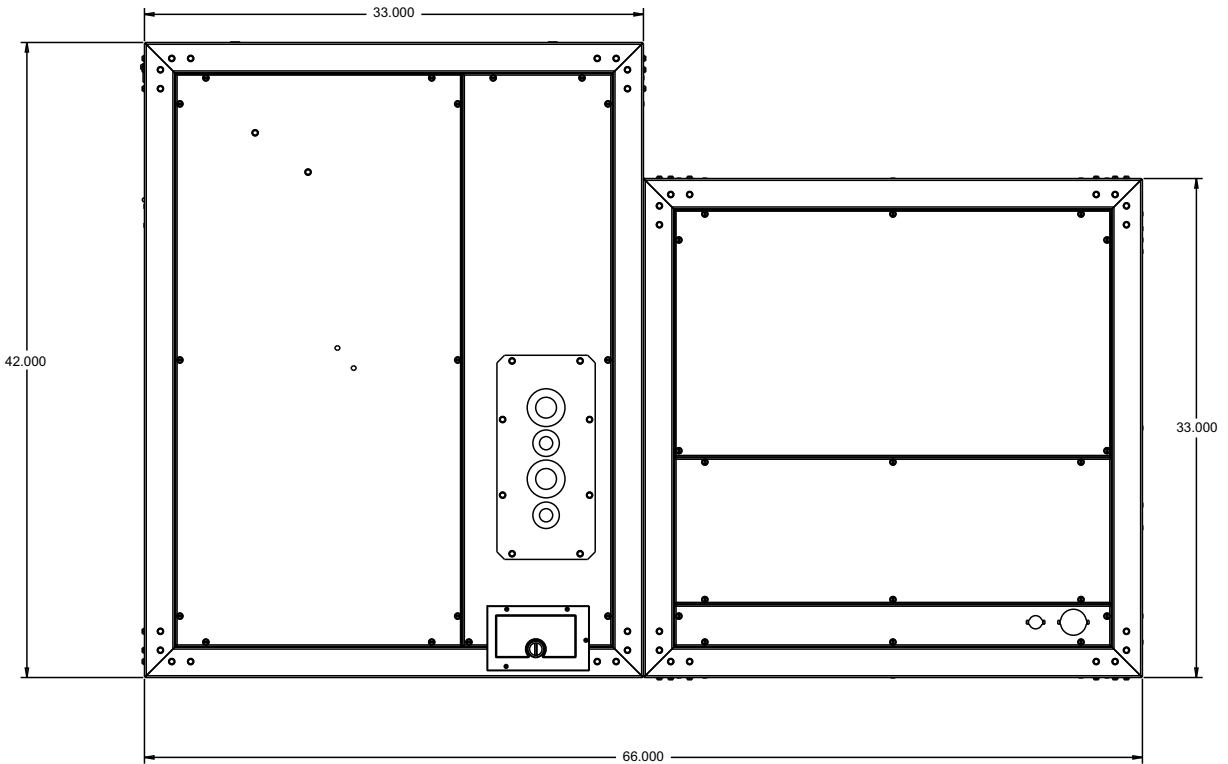
UNIT DIMENSIONS (CONT.)

NC/ND180

BOTTOM VIEW

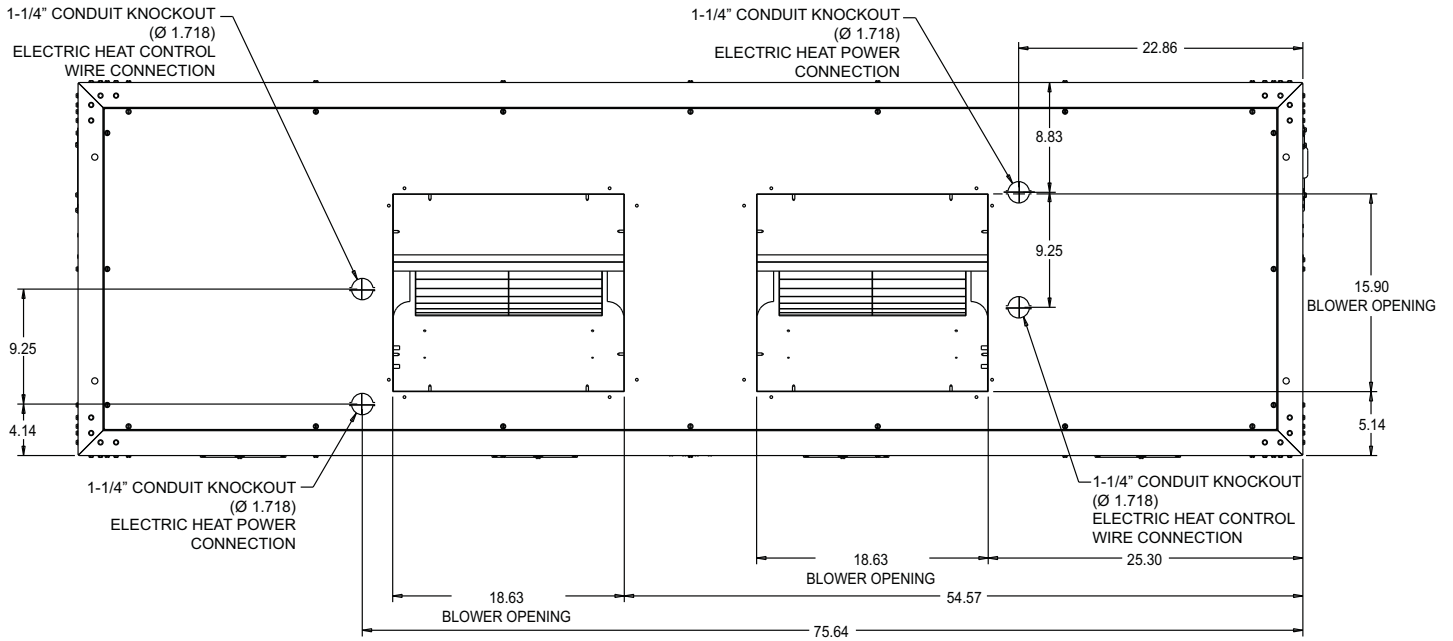


HORIZONTAL CONFIGURATION



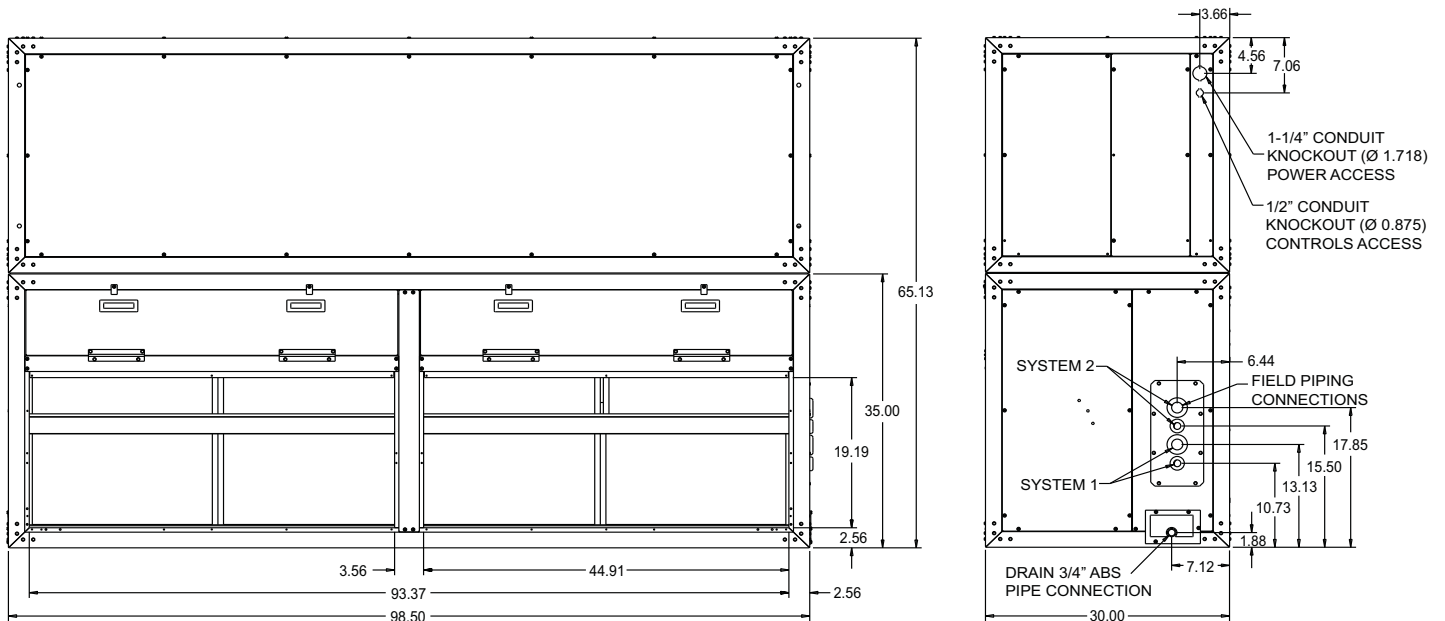
UNIT DIMENSIONS (CONT.) NC/ND240

TOP VIEW



TOP VIEW BLOWER OUTLET
NC/ND240 INDOOR

FRONT AND SIDE VIEW



FRONT VIEW - RETURN AIR
NC/ND240 INDOOR

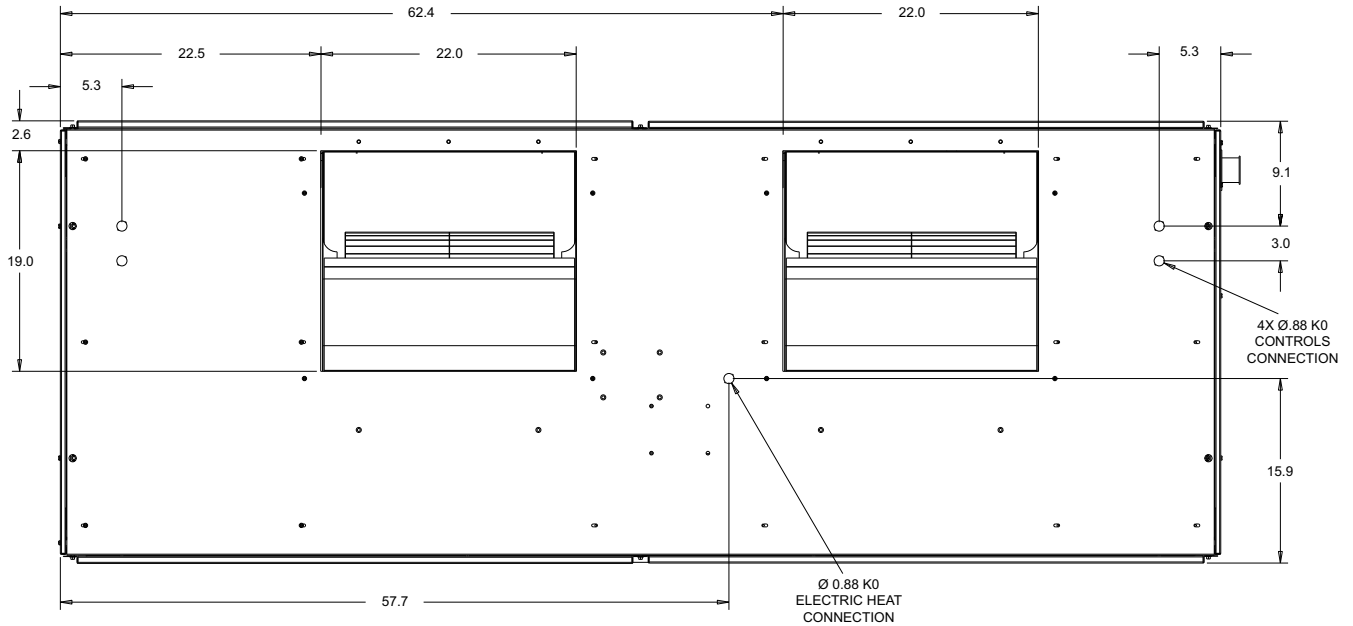
RIGHT SIDE VIEW - DRAIN PIPING/CONTROLS

***SEE UNITS PHYSICAL DATA TABLE FOR PIPING AND ELECTRICAL SIZE CONNECTIONS**

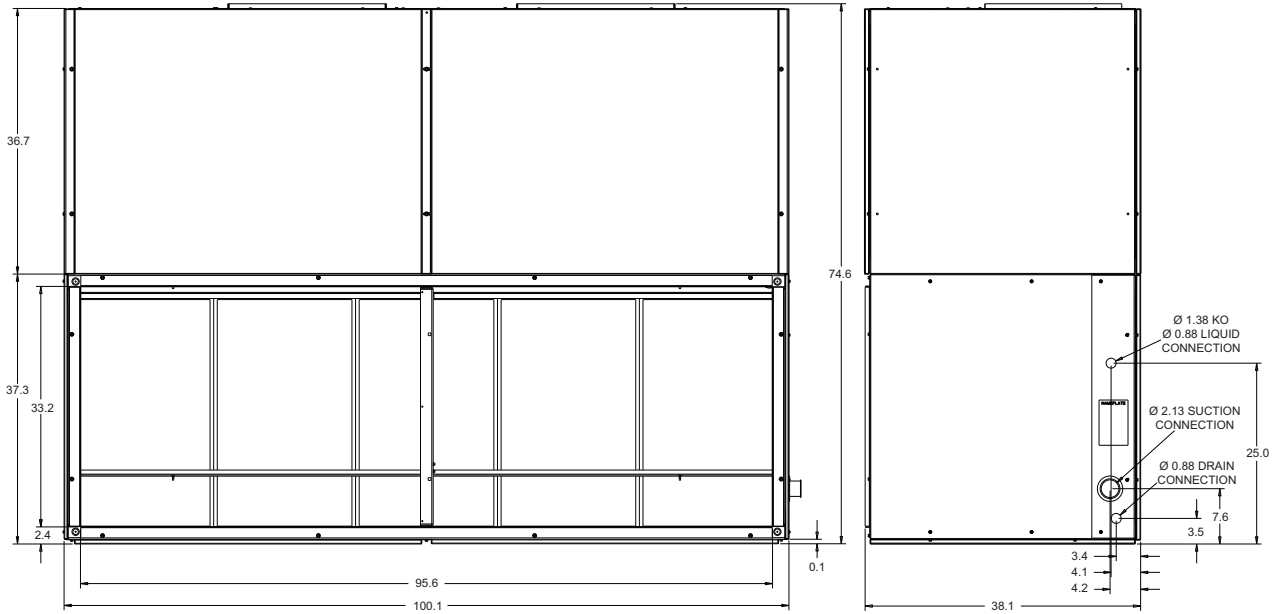
UNIT DIMENSIONS (CONT.)

NC300

TOP VIEW



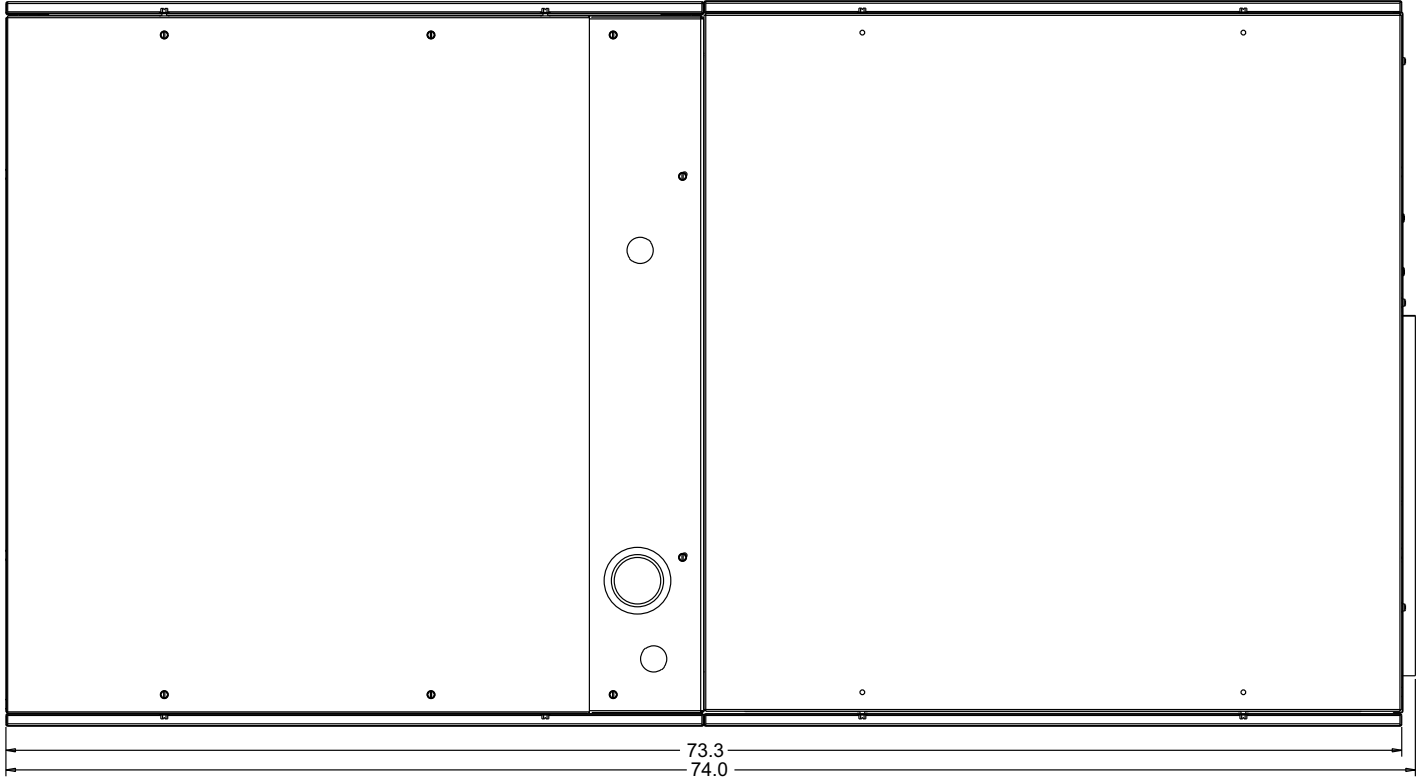
FRONT AND SIDE VIEW



***SEE UNITS PHYSICAL DATA TABLE FOR PIPING AND ELECTRICAL SIZE CONNECTIONS**

UNIT DIMENSIONS (CONT.)
NC300

HORIZONTAL CONFIGURATION



PHYSICAL DATA

| MODEL | NC090 | NC120 | ND120 | NC180 | ND180 | NC240 | ND240 | NC300 |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|------------------|
| DIMENSIONS (inches) | | | | | | | | |
| Length | 56.0 | 56.0 | 56.0 | 74.5 | 74.5 | 98.5 | 98.5 | 100.1 |
| Width | 30.0 | 30.0 | 30.0 | 33.0 | 33.0 | 30.0 | 30.0 | 38.1 |
| Height | 65.0 | 65.0 | 65.0 | 75.0 | 75.0 | 65.1 | 65.1 | 74.6 |
| SYSTEM DATA | | | | | | | | |
| No. Refrigeration Circuits | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| Suction Line OD (in.) | 1 1/8 | 1 3/8 | 1 1/8 | 1 5/8 | 1 3/8 | 1 5/8 | 1 3/8 | 2 1/8 |
| Liquid Line OD (in.) | 5/8 | 7/8 | 5/8 | 7/8 | 5/8 | 7/8 | 7/8 | 7/8 |
| Power Wiring Knockout | 1 3/4 | 1 3/4 | 1 3/4 | 1 3/4 | 1 3/4 | 1 3/4 | 1 3/4 | 7/8 |
| Control Wiring Knockout | 7/8 | 7/8 | 7/8 | 7/8 | 7/8 | 7/8 | 7/8 | 7/8 |
| Electric Heat Wiring Knockout | 1 3/4 | 1 3/4 | 1 3/4 | 1 3/4 | 1 3/4 | 1 3/4 | 1 3/4 | 7/8 |
| Drain Line Fitting PVC Stub | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 3/4 | 7/8 ¹ |
| BLOWER OUTLET | | | | | | | | |
| Number | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| Width | 13.4 | 15.9 | 15.9 | 18.9 | 18.9 | 15.9 | 15.9 | 22 |
| Length | 15.6 | 18.6 | 18.6 | 21.6 | 21.6 | 18.6 | 18.6 | 22 |
| RETURN AIR INLET | | | | | | | | |
| Width | 20.5 | 20.5 | 20.5 | 27.3 | 27.3 | 19.2 | 19.2 | 33.2 |
| Length | 52.0 | 52.0 | 52.0 | 71.9 | 71.9 | 93.4 | 93.4 | 95.6 |

1. 7/8 in Steel Pipe

Minimum Clearances

| | |
|--|-----|
| Top with Supply Air Opening ¹ | 24" |
| Front with Return Air Opening | 24" |
| Right Side with access for Piping, Power & Control Wiring Connections ² | 24" |
| Left Side | 24" |
| Rear ³ | N/A |
| Bottom ⁴ | N/A |

- This dimension will vary if an electric heater, a supply air plenum or a base is used.
- This dimension is required for normal installation and service.
- Although no clearance is required for service and operation, some clearance may be required for routing the power and control wiring.
- Allow enough clearance to trap the condensate drain line.
Note: If the coil has to be removed, the blower section can be unbolted and set aside and the coil can be lifted out the top of the evaporator section.

FIELD-INSTALLED ACCESSORIES

| | |
|---|--------------------------|
| STEAM COIL MODEL | <input type="checkbox"/> |
| Steam Pressure | _____ PSIG |
| Capacity | _____ MBH |
| Steam Rate | _____ LBS/HR |
| Entering Air Temperature | _____ °F |
| ELECTRIC HEAT | _____ KW |
| HOT WATER COIL | <input type="checkbox"/> |
| Capacity | _____ MBH |
| Entering Water Temperature | _____ °F |
| Water Flow Rate | _____ GPM |
| Entering Air Temperature | _____ °F |
| Water Pressure Drop | _____ PSI |
| BASE ACCESSORY | <input type="checkbox"/> |
| BOTTOM RETURN ACCESSORY | <input type="checkbox"/> |
| SUSPENSION MOUNTING ACCESSORIES | |
| (25 TON) | <input type="checkbox"/> |
| SUPPLY AIR PLENUM | <input type="checkbox"/> |
| RETURN AIR GRILLE | <input type="checkbox"/> |
| * Units with electric heat have a single source power supply. Refer to PRODUCT DATA on front side for electrical data. | |

FACTORY-INSTALLED OPTIONS

| | |
|-------------------------|--------------------------|
| TECHNICOATED COIL | <input type="checkbox"/> |
| E-COAT COIL | <input type="checkbox"/> |

NOTES:

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506414-YSD-G-1114
 Supersedes: 506414-YSD-F-0611