# Technical Specifications

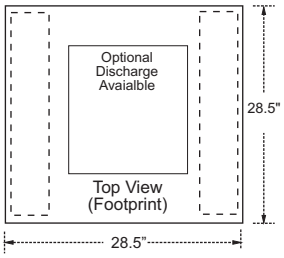
## Geoflex Two Stage Dehumidification System

## Model 072 - 410A - Top Discharge

| Available Options |
|---|
| Straight Thru Air Discharge, Bottom Discharge |
| Pumps can be Built-in, pre-wired, pre-fused & pre-controlled |
| Partial Hot Water(s) c/w Internal Pump & High Limit Switch |
| Demand Hot Water(s) c/w Internal Pump, if required |
| 10, 15, 20K Back-up/emergency heater available |
| Web Based Monitoring System |
| Flexible Orientation, air discharge, water connections |
| Diagnostic LED Function Light Array |
| K-Type ThermoProbes for simpler in field diagnostics |
| External DX Condensor |
| 100% Internal Water Condensor |
| Proportional or 100% Water Reheat Systems |
| Cupronickel and Double Wall Vented Coils for specialized apps. |

| Elements | |
|---|---|
| Description | Type |
| Refrigerant | R410A |
| Base Unit Refrigreant Charge | 10° F Superheat on Base Unit |
| Compressor | Scroll |
| Blower | Direct Drive |
| Air Coil Coating | Baked Acrylic Process |
| Condensate Pan | SuperGaurd Coated |
| Internal Air Reheat Condensor | DX |
| Optional Pool Reheat Condensor | Co-axial |
| Optional Water Condensor | Co-Axial |
| Base Unit Weight | |
| Base Unit Shipping Weight | |

| Standard Two Stage Features | |
|---|---|
| Highest Efficiency | Two Stage systems automatically adjust capacity based on occupied and unoccupied loads, offerring highest operating efficiency |
| Internal Piping | All Internal Refrigeration Piping is Insulated to Reduce Noise and Potential Pipe Degradation |
| Air Coils | Air Coils and internal components are coated and baked with an Acrylic Coating |
| Low Noise Package | 1" acoustical insulation & all internal refrigeration lines are fully insulated to reduce noise potential. |
| Electronic Diagnostics | On board fault Diagnostics |
| Cabinet | A Seperator Plate is used between the Air and Refrigeration Section |
| Service & Maintenance | Service Doors Surround System |
| Refrigeration Section | An Internal Negative Pressure Port is incoprorated to Reduce Heat or Condensation Build-up. |
| Service Switches | Independant, Low & High Pressure & Low Flow c/w HP & LP Memory |
| Freon Service | Bi-flow Filter/Drier & Moisture Indicating Sight Glass |
| Condensate Sensor | Electronic Condensate Pan Overflow Sensor is included in all Dehumification Systems. |
| Condensate Line Position | Systems come with a condensation line that can be adapted to any corner of the system, in the field! |
| Evaporator Construction | All Evaporator Coils are Insulated to avoid Condensation Rusting |
| Feild Adaption | All Systems are designed to offer maximum field adaptability |




Geoflex Advanced, Two Step Dehumidification Systems

- Are designed within a modularized format to offer optimal configuration capabilities with consideration to efficiency, functionality, service & field adaption opportunities.
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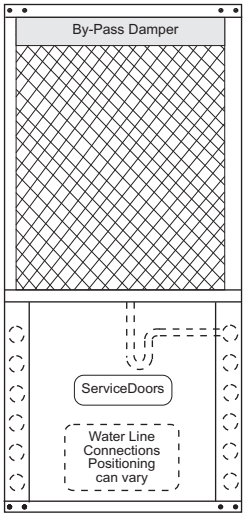


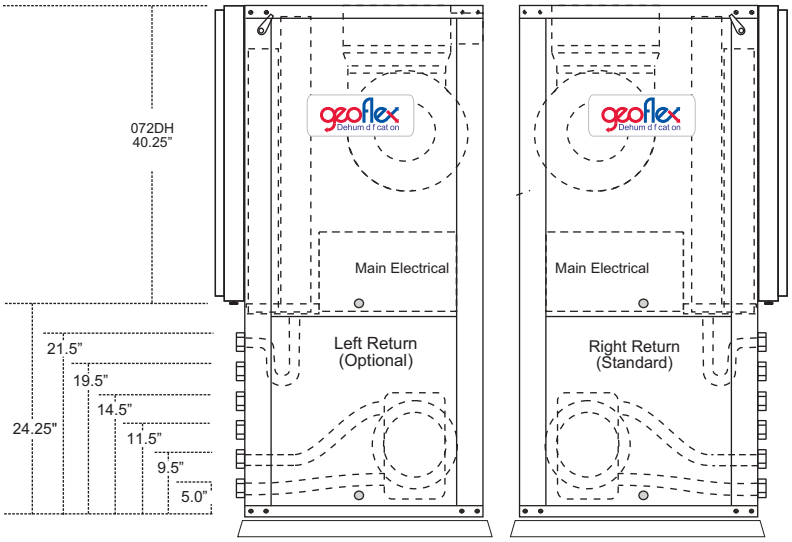


| Two Step Dehumidification Performance Data | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | Fan Motor Type | Spd | Air Temp °F | 50% RH | | | 55% RH | | | 60% RH | | | Flow | |
| | | | | Mositure Removal lbs/hr | Sensible Cooling Btuh | Total Capacity Btuh | Mositure Removal lbs/hr | Sensible Cooling Btuh | Total Capacity Btuh | Mositure Removal lbs/hr | Sensible Cooling Btuh | Total Capacity Btuh | Indoor Air CFM | Damper * Added CFM |
| 072 | PSC | Full | 80 | 19.6 | 41,413 | 62,630 | 21.5 | 39,647 | 63,549 | 25.8 | 39,070 | 65,817 | 2,160 | 3,024 |
| | PSC | Part | 80 | 14.6 | 31,086 | 46,607 | 16.0 | 29,535 | 47,092 | 19.2 | 29,027 | 48,701 | | |
| | PSC | Full | 82 | 20.4 | 40,230 | 61,218 | 24.5 | 38,784 | 62,467 | 26.7 | 37,654 | 63,957 | | |
| | PSC | Part | 82 | 15.1 | 30,048 | 45,431 | 18.2 | 28,775 | 46,187 | 19.8 | 27,776 | 47,141 | | |
| | PSC | Full | 84 | 24.9 | 39,070 | 59,834 | 29.9 | 37,794 | 61,225 | 32.6 | 36,546 | 62,502 | | |
| | PSC | Part | 84 | 18.4 | 29,027 | 44,274 | 22.1 | 27,900 | 45,146 | 24.1 | 26,794 | 45,916 | | |

| Single Step, 410A Electrical Data | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | Voltage Code | Voltage | Min/Max Voltage | Compressor | | | Blower Hp | Blower FLA | | Total Unit FLA | Min Circuit Amps | Max Fuse/ HACR | Supply Wire | |
| | | | | RLA | LRA | LRA* | | | | | | | Min AWG 60°C | Max Ft (M) |
| 072 | A | 208-230/60/1 | 197/254 | 29.7 | 179.2 | 62.9 | 1 | 5.3 | | 35.0 | 42.0 | 70 | 6 | 123 (37.5) |
| | C | 208-230/60/3 | 197/254 | 19.7 | 136.0 | - | 1 | 4.4 | | 24.1 | 28.9 | 50 | 8 | 132 (40.3) |
| | D | 460/60/3 | 414/506 | 8.5 | 66.1 | - | 1 | 2.0 | | 10.5 | 12.6 | 20 | 12 | 240 (73.2) |
| | E | 575/60/3 | 518/633 | 8.5 | 66.1 | - | 1 | 1.6 | | 10.1 | 12.1 | 20 | 12 | 315 (96.1) |

**Notes:** LRA* estimated with optional "Secure Start" installed (208-230/60/1)
HACR circuit breaker in USA only
All fuses Class RK-5
Wire length based on higher if 2 voltages, one way 2.0% voltage drop
Wire size based on 60°C copper conductor & minumum circuit ampacity
In some caeses local & national electrical codes will superceed fuse & wire size information as supplied herein, which must take precedent.

Geoflex Systems are CSA approved

www.geoflexsystems.com

GF-DH-TS-TD-072-R410A-11-07-11



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# Technical Specifications

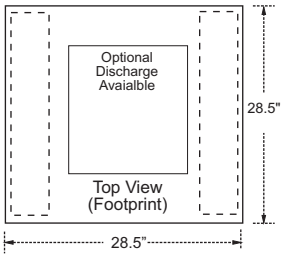
## Geoflex Two Stage Dehumidification System

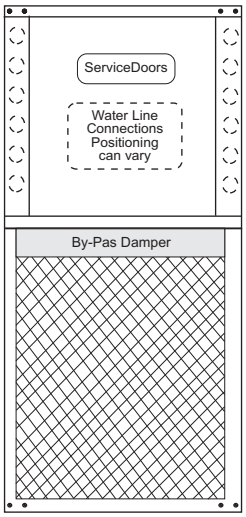
## Model 072 - 410A - Bottom Discharge

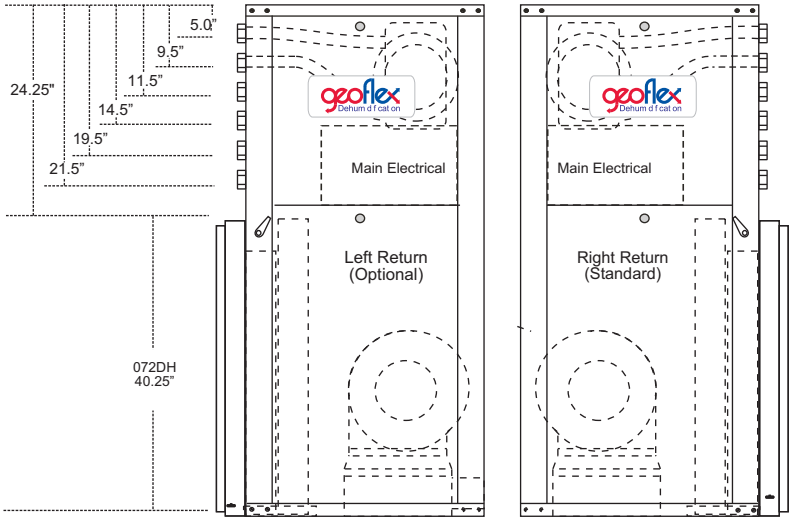
| Available Options |
|---|
| Straight Thru Air Discharge, Bottom Discharge |
| Pumps can be Built-in, pre-wired, pre-fused & pre-controlled |
| Partial Hot Water(s) c/w Internal Pump & High Limit Switch |
| Demand Hot Water(s) c/w Internal Pump, if required |
| 10, 15, 20K Back-up/emergency heater available |
| Web Based Monitoring System |
| Flexible Orientation, air discharge, water connections |
| Diagnostic LED Function Light Array |
| K-Type ThermoProbes for simpler in field diagnostics |
| External DX Condensor |
| 100% Internal Water Condensor |
| Proportional or 100% Water Reheat Systems |
| Cupronickel and Double Wall Vented Coils for specialized apps. |

| Elements | |
|---|---|
| Description | Type |
| Refrigerant | R410A |
| Base Unit Refrigreant Charge | 10° F Superheat on Base Unit |
| Compressor | Scroll |
| Blower | Direct Drive |
| Air Coil Coating | Baked Acrylic Process |
| Condensate Pan | SuperGaurd Coated |
| Internal Air Reheat Condensor | DX |
| Optional Pool Reheat Condensor | Co-axial |
| Optional Water Condensor | Co-Axial |
| Base Unit Weight | |
| Base Unit Shipping Weight | |

| Standard Two Stage Features | |
|---|---|
| Highest Efficiency | Two Stage systems automatically adjust capacity based on occupied and unoccupied loads, offerring highest operating efficiency |
| Internal Piping | All Internal Refrigeration Piping is Insulated to Reduce Noise and Potential Pipe Degradation |
| Air Coils | Air Coils and internal components are coated and baked with an Acrylic Coating |
| Low Noise Package | 1" acoustical insulation & all internal refrigeration lines are fully insulated to reduce noise potential. |
| Electronic Diagnostics | On board fault Diagnostics |
| Cabinet | A Seperator Plate is used between the Air and Refrigeration Section |
| Service & Maintenance | Service Doors Surround System |
| Refrigeration Section | An Internal Negative Pressure Port is incoprorated to Reduce Heat or Condensation Build-up. |
| Service Switches | Independant, Low & High Pressure & Low Flow c/w HP & LP Memory |
| Freon Service | Bi-flow Filter/Drier & Moisture Indicating Sight Glass |
| Condensate Sensor | Electronic Condensate Pan Overflow Sensor is included in all Dehumification Systems. |
| Condensate Line Position | Systems come with a condensation line that can be adapted to any corner of the system, in the field! |
| Evaporator Construction | All Evaporator Coils are Insulated to avoid Condensation Rusting |
| Feild Adaption | All Systems are designed to offer maximum field adaptability |




Geoflex Advanced, Two Step Dehumidification Systems

- Are designed within a modularized format to offer optimal configuration capabilities with consideration to efficiency, functionality, service & field adaption opportunities.
- Can be ordered in virtually any configuration, vertical, horizontal, top, bottom or straight thru discharge, etc.
- Can be ordered/designed to exact project retrofit or new design match with a myriad of options.

| Two Step Dehumidification Performance Data | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | Fan Motor Type | Spd | Air Temp °F | 50% RH | | | 55% RH | | | 60% RH | | | Flow | |
| | | | | Mositure Removal lbs/hr | Sensible Cooling Btuh | Total Capacity Btuh | Mositure Removal lbs/hr | Sensible Cooling Btuh | Total Capacity Btuh | Mositure Removal lbs/hr | Sensible Cooling Btuh | Total Capacity Btuh | Indoor Air CFM | Damper * Added CFM |
| 072 | PSC | Full | 80 | 19.6 | 41,413 | 62,630 | 21.5 | 39,647 | 63,549 | 25.8 | 39,070 | 65,817 | 2,160 | 3,024 |
| | PSC | Part | 80 | 14.6 | 31,086 | 46,607 | 16.0 | 29,535 | 47,092 | 19.2 | 29,027 | 48,701 | | |
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| | PSC | Part | 84 | 18.4 | 29,027 | 44,274 | 22.1 | 27,900 | 45,146 | 24.1 | 26,794 | 45,916 | | |

| Single Step, 410A Electrical Data | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | Voltage Code | Voltage | Min/Max Voltage | Compressor | | | Blower Hp | Blower FLA | | Total Unit FLA | Min Circuit Amps | Max Fuse/ HACR | Supply Wire | |
| | | | | RLA | LRA | LRA* | | | | | | | Min AWG 60°C | Max Ft (M) |
| 072 | A | 208-230/60/1 | 197/254 | 29.7 | 179.2 | 62.9 | 1 | 5.3 | | 35.0 | 42.0 | 70 | 6 | 123 (37.5) |
| | C | 208-230/60/3 | 197/254 | 19.7 | 136.0 | - | 1 | 4.4 | | 24.1 | 28.9 | 50 | 8 | 132 (40.3) |
| | D | 460/60/3 | 414/506 | 8.5 | 66.1 | - | 1 | 2.0 | | 10.5 | 12.6 | 20 | 12 | 240 (73.2) |
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**Notes:** LRA* estimated with optional "Secure Start" installed (208-230/60/1)
HACR circuit breaker in USA only
All fuses Class RK-5
Wire length based on higher if 2 voltages, one way 2.0% voltage drop
Wire size based on 60°C copper conductor & minumum circuit ampacity
In some caeses local & national electrical codes will superceed fuse & wire size information as supplied herein, which must take precedent.

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# Technical Specifications

## Geoflex Two Stage Dehumidification System
## Model 072 - 410A - Horizontal

| Available Options |
|---|
| Straight Thru Air Discharge, Bottom Discharge |
| Pumps can be Built-in, pre-wired, pre-fused & pre-controlled |
| Partial Hot Water(s) c/w Internal Pump & High Limit Switch |
| Demand Hot Water(s) c/w Internal Pump, if required |
| 10, 15, 20K Back-up/emergency heater available |
| Web Based Monitoring System |
| Flexible Orientation, air discharge, water connections |
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| Description | Type |
| Refrigerant | R410A |
| Base Unit Refrigreant Charge | 10° F Superheat on Base Unit |
| Compressor | Scroll |
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| Condensate Pan | SuperGaurd Coated |
| Internal Air Reheat Condensor | DX |
| Optional Pool Reheat Condensor | Co-axial |
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| Base Unit Weight | |
| Base Unit Shipping Weight | |

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| Highest Efficiency | Two Stage systems automatically adjust capacity based on occupied and unoccupied loads, offerring highest operating efficiency |
| Internal Piping | All Internal Refrigeration Piping is Insulated to Reduce Noise and Potential Pipe Degradation |
| Air Coils | Air Coils and internal components are coated and baked with an Acrylic Coating |
| Low Noise Package | 1" acoustical insulation & all internal refrigeration lines are fully insulated to reduce noise potential. |
| Electronic Diagnostics | On board fault Diagnostics |
| Cabinet | A Seperator Plate is used between the Air and Refrigeration Section |
| Service & Maintenance | Service Doors Surround System |
| Refrigeration Section | An Internal Negative Pressure Port is incoprorated to Reduce Heat or Condensation Build-up. |
| Service Switches | Independant, Low & High Pressure & Low Flow c/w HP & LP Memory |
| Freon Service | Bi-flow Filter/Drier & Moisture Indicating Sight Glass |
| Condensate Sensor | Electronic Condensate Pan Overflow Sensor is included in all Dehumification Systems. |
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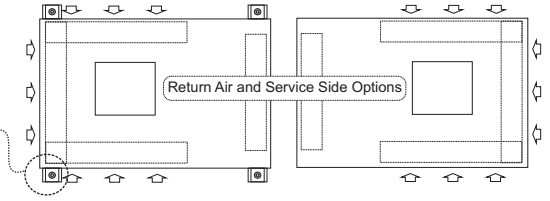
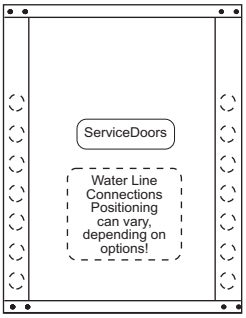
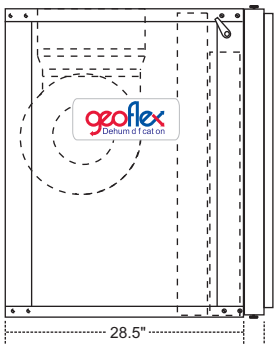
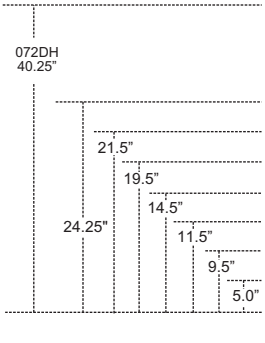
Notes:

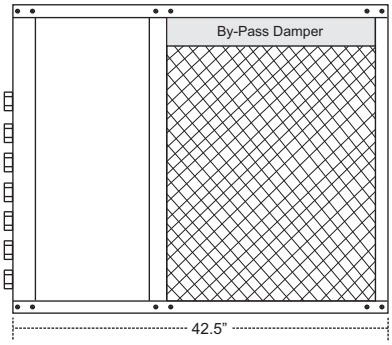
- A 6" Space must be left under the system to allow for a condensate drain trap.
- Much consideration must be given to noise, as horizontal units are commonly hung above drop ceilings in office spaces
- Back-up/Emergency Plenum Heaters can be built in with top and bottom discharge, all other discharge options would be built on.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| | | | | RLA | LRA | LRA* | | | | | | | Min AWG 60°C | Max Ft (M) |
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Wire size based on 60°C copper conductor & minumum circuit ampacity
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