

# Technical Specifications

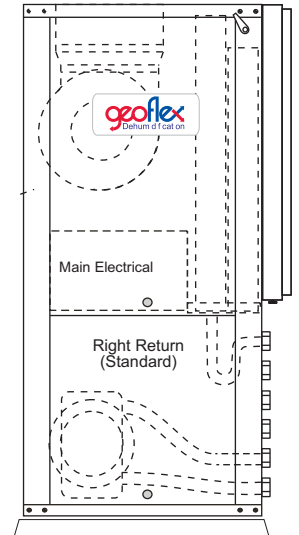
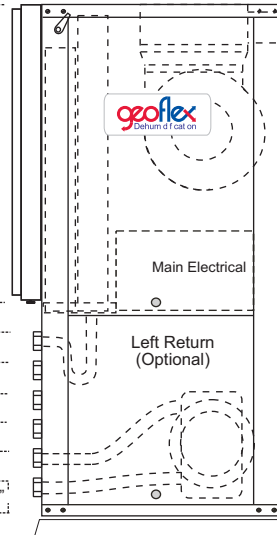
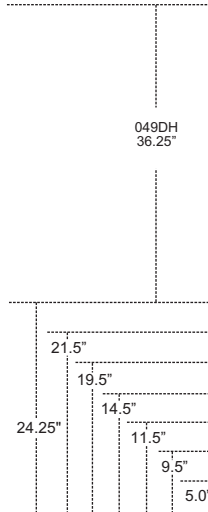
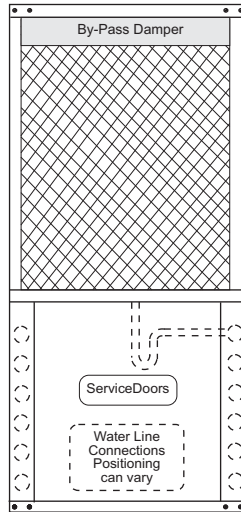
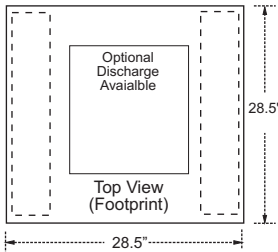
## Geoflex Two Stage Dehumidification System

### Model 049 - 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 Refrigerant Charge	10° F Superheat on Base Unit
Compressor	Scroll
Blower	Direct Drive
Air Coil Coating	Baked Acrylic Process
Condensate Pan	SuperGard 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, offering 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 Separator Plate is used between the Air and Refrigeration Section
Service & Maintenance	Service Doors Surround System
Refrigeration Section	An Internal Negative Pressure Port is incorporated to Reduce Heat or Condensation Build-up.
Service Switches	Independent, 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 Dehumidification 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
Field 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
049	PSC	Full	80	13.3	28,309	42,517	14.6	27,079	44,634	17.5	26,676	44,634	1,470	2,058
	PSC	Part	80	9.5	20,285	30,335	10.4	19,293	30,674	12.5	18,968	31,731		
	PSC	Full	82	13.8	27,485	41,538	16.6	26,476	42,356	18.1	25,685	43,338		
	PSC	Part	82	9.9	19,620	29,584	11.8	18,807	30,097	12.9	18,170	30,738		
	PSC	Full	84	16.9	26,676	40,577	20.3	25,783	41,491	22.1	24,907	42,321		
	PSC	Part	84	12.0	18,968	28,847	14.4	18,249	29,435	15.7	17,546	29,960		

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)	
049	A	208-230/60/1	197/254	21.2	104.0	36.5	0.75	4.6	25.8	30.9	50	8	106 (32.3)	
	C	208-230/60/3	197/254	14.0	83.1	-	0.75	3.0	17.0	20.4	35	8	187 (57.0)	
	D	460/60/3	414/506	6.4	41.0	-	0.75	1.5	7.9	9.5	15	14	208 (63.4)	
	E	575/60/3	518/633	6.4	41.0	-	0.75	1.3	7.7	9.2	15	14	268 (81.7)	

**Notes:** LRA\* estimated with optional "Secure Start" installed (208-230/60/1) Wire length based on higher if 2 voltages, one way 2.0% voltage drop  
 HACR circuit breaker in USA only All fuses Class RK-5 Wire size based on 60°C copper conductor & minimum 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

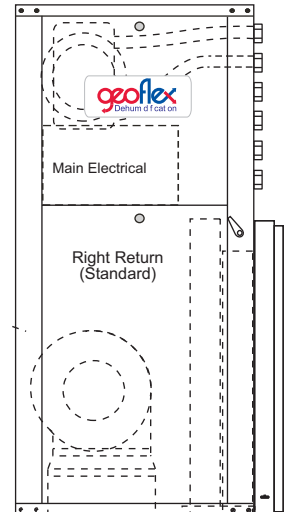
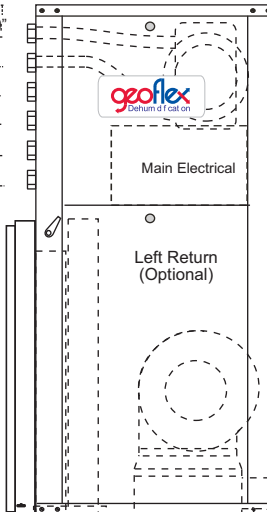
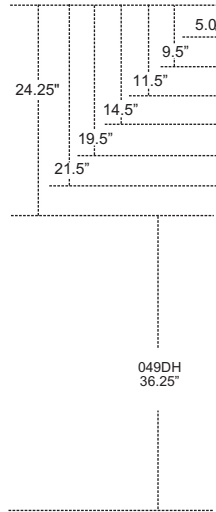
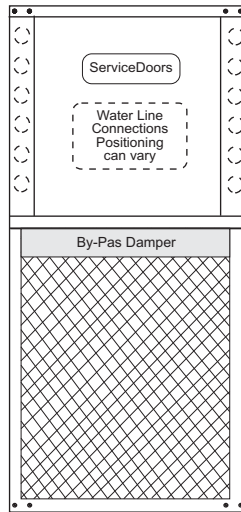
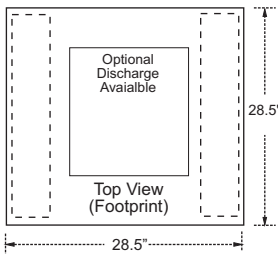
## Geoflex Two Stage Dehumidification System

### Model 049 - 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 Refrigerant Charge	10° F Superheat on Base Unit
Compressor	Scroll
Blower	Direct Drive
Air Coil Coating	Baked Acrylic Process
Condensate Pan	SuperGard 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, offering 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 Separator Plate is used between the Air and Refrigeration Section
Service & Maintenance	Service Doors Surround System
Refrigeration Section	An Internal Negative Pressure Port is incorporated to Reduce Heat or Condensation Build-up.
Service Switches	Independent, 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 Dehumidification 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
Field Adaption	All Systems are designed to offer maximum field adaptability



- Geoflex Advanced, Two Step Dehumidification Systems
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  - 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
049	PSC	Full	80	13.3	28,309	42,517	14.6	27,079	44,634	17.5	26,676	44,634	1,470	2,058
	PSC	Part	80	9.5	20,285	30,335	10.4	19,293	30,674	12.5	18,968	31,731		
	PSC	Full	82	13.8	27,485	41,538	16.6	26,476	42,356	18.1	25,685	43,338		
	PSC	Part	82	9.9	19,620	29,584	11.8	18,807	30,097	12.9	18,170	30,738		
	PSC	Full	84	16.9	26,676	40,577	20.3	25,783	41,491	22.1	24,907	42,321		
	PSC	Part	84	12.0	18,968	28,847	14.4	18,249	29,435	15.7	17,546	29,960		

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)	
049	A	208-230/60/1	197/254	21.2	104.0	36.5	0.75	4.6	25.8	30.9	50	8	106 (32.3)	
	C	208-230/60/3	197/254	14.0	83.1	-	0.75	3.0	17.0	20.4	35	8	187 (57.0)	
	D	460/60/3	414/506	6.4	41.0	-	0.75	1.5	7.9	9.5	15	14	208 (63.4)	
	E	575/60/3	518/633	6.4	41.0	-	0.75	1.3	7.7	9.2	15	14	268 (81.7)	

**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 & minimum circuit ampacity  
 In some cases local & national electrical codes will supercede fuse & wire size information as supplied herein, which must take precedent.



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# Technical Specifications

## Geoflex Two Stage Dehumidification System

### Model 049 - 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
Diagnostic LED Function Light Array
K-Type ThermoProbes for simpler in field diagnostics
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Elements	
Description	Type
Refrigerant	R410A
Base Unit Refrigerant Charge	10° F Superheat on Base Unit
Compressor	Scroll
Blower	Direct Drive
Air Coil Coating	Baked Acrylic Process
Condensate Pan	SuperGard Coated
Internal Air Reheat Condensor	DX
Optional Pool Reheat Condensor	Co-axial
Optional Water Condensor	Co-Axial
Base Unit Weight	
Base Unit Shipping Weight	

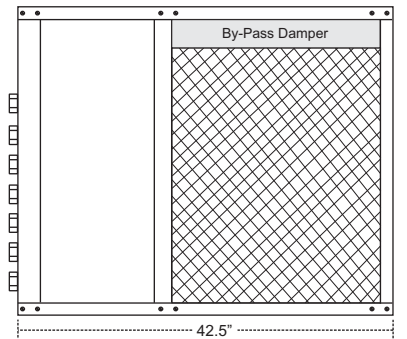
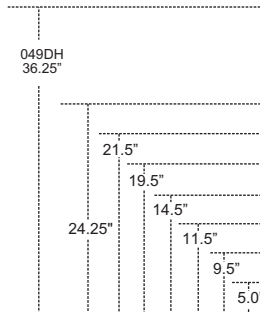
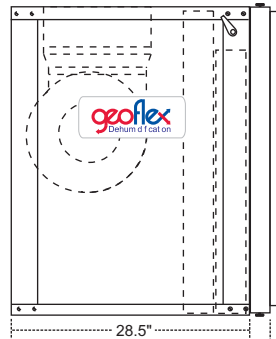
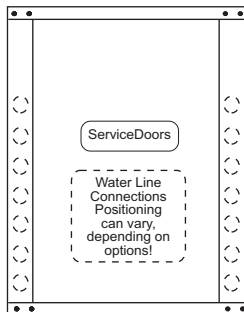
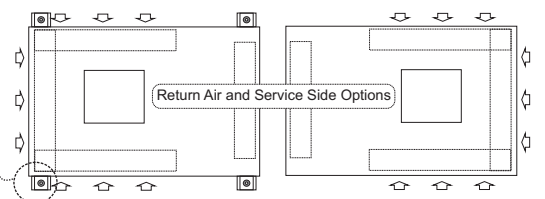
Standard Two Stage Features	
Highest Efficiency	Two Stage systems automatically adjust capacity based on occupied and unoccupied loads, offering highest operating efficiency
Internal Piping	All Internal Refrigeration Piping is Insulated to Reduce Noise and Potential Pipe Degradation
Air Coils	Air Coils 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 Separator Plate is used between the Air and Refrigeration Section
Service & Maintenance	Service Doors Surround System
Refrigeration Section	An Internal Negative Pressure Port is incorporated to Reduce Heat or Condensation Build-up.
Service Switches	Independent, 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 Dehumidification 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
Field Adaption	All Systems are designed to offer maximum field adaptability

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- 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.

#### 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.



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
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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 & minimum circuit ampacity  
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