

# Technical Specifications

## Geoflex Two Stage Dehumidification System

### Model 049 - 410A - Top Discharge

#### Blower High Speed CFM & SP

ESP	0.3	0.5	.75	1.0
CFM	1,728	1,600	1,522	1,468

#### Standard Pool Heat Recovery Option

Model	GPM	FOH	PSIG	MBH	EWT
DWV-1.0	2	2.1	0.9	12	80
DWV-1.5	3	5.3	2.3	18	80

#### Available Cabinet Types

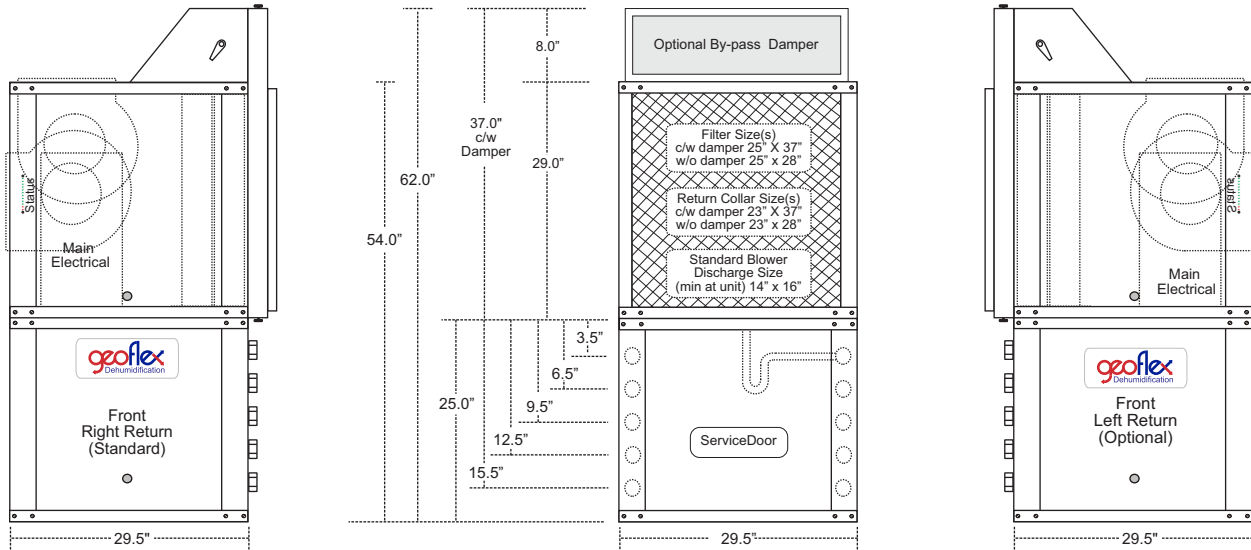
Model	Cabinet Types	Footprint		Height without Damper	Height c/w 8" Damper
		Width	Depth		
049	Standard Vertical	29.5"	29.5"	54.0"	62.0"
049	*Larger Vertical	29.5"	44.25"	54.0"	62.0"
049	Standard Horizontal	29.5"	59.0"	29.0"	37.0"
049	**Compact Horizontal	29.5"	44.25"	29.0"	37.0"

\* Larger cabinets are used to accommodate much higher than standard CFM  
 \*\* Units with some features, eg., the geothermal option, demand a larger footprint

NOTE: Weights and measures can vary, depending on selected configuration and options!

Elements	
Description	Type
Refrigerant	R410A
Refrigerant Charge (Superheat Supercedes)	Min 10 F Superheat
Base Unit	4.7 lbs. (est)
Base Unit c/w Ext. DX Condenser	7.4 lbs. (est)
Internal 100% Air Reheat Condenser	DX (Direct Expansion)
Compressor	Scroll
Standard Blower	Direct Drive (PSC or ECM)
Air Coil Coating	Baked Acrylic 3 Stage Process
Condensate Pan	SuperGard Coated
Optional Pool Reheat Condenser	Co-axial (DWV, C/N)
Optional Water Condenser	Co-axial or Brazed Plate
Base Weight	452 lbs. (est)
Ship Weight	482 lbs. (est)
Crated Weight	542 lbs. (est)

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



Two Step Dehumidification Performance Data																
Model	Fan Motor Type	Cap	Air Temp °F	50% RH				55% RH				60% RH				Flow Indoor Air CFM
				Mositure Removal lbs/hr	Sensible Cooling Btuh	Total Capacity Btuh	Heat of Rejection Btuh	Mositure Removal lbs/hr	Sensible Cooling Btuh	Total Capacity Btuh	Heat of Rejection Btuh	Mositure Removal lbs/hr	Sensible Cooling Btuh	Total Capacity Btuh	Heat of Rejection Btuh	
049	PSC	Full	80	13.0	27,485	41,538	50,743	14.3	27,079	44,634	53,830	17.1	26,676	44,634	53,830	1,600
	PSC	Part	80	9.2	19,620	29,584	36,087	10.2	19,293	30,674	37,192	12.2	18,968	31,731	38,264	1,300
	PSC	Full	82	13.8	27,249	41,504	50,952	16.6	26,245	42,326	51,762	18.1	25,458	43,311	52,737	1,600
	PSC	Part	82	9.8	19,426	29,549	36,246	11.8	18,617	30,066	36,800	12.9	17,983	30,709	37,471	1,300
	PSC	Full	84	16.9	26,206	40,516	50,203	20.3	25,322	41,437	51,113	22.1	24,455	42,275	51,938	1,600
	PSC	Part	84	12.0	18,580	28,782	35,707	14.4	17,867	29,376	36,334	15.7	17,170	29,907	36,896	1,300

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	6	106	(32.3)
	C	208-230/60/3	197/254	14.0	83.1	-	0.75	3.0	17.0	20.4	40	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 caeses local & national electrical codes will superceed fuse & wire size information as supplied herein, which must take precedent.



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www.geoflexsystems.com

Plant Office:  
 3 - 10 Tecumseh Ave., West, London, Ont. N6J 1K6  
 Phone: 519.488.1653 Fax: 519.913.1259  
 Email: plant@geoflexsystems.com

# Technical Specifications

## Geoflex Two Stage Dehumidification System

### Model 049 - 410A - Bottom Discharge

#### Blower High Speed CFM & SP

ESP	0.3	0.5	.75	1.0
CFM	1,728	1,600	1,522	1,468

#### Standard Pool Heat Recovery Option

Model	GPM	FOH	PSIG	MBH	EWT
DWV-1.0	2	2.1	0.9	12	80
DWV-1.5	3	5.3	2.3	18	80

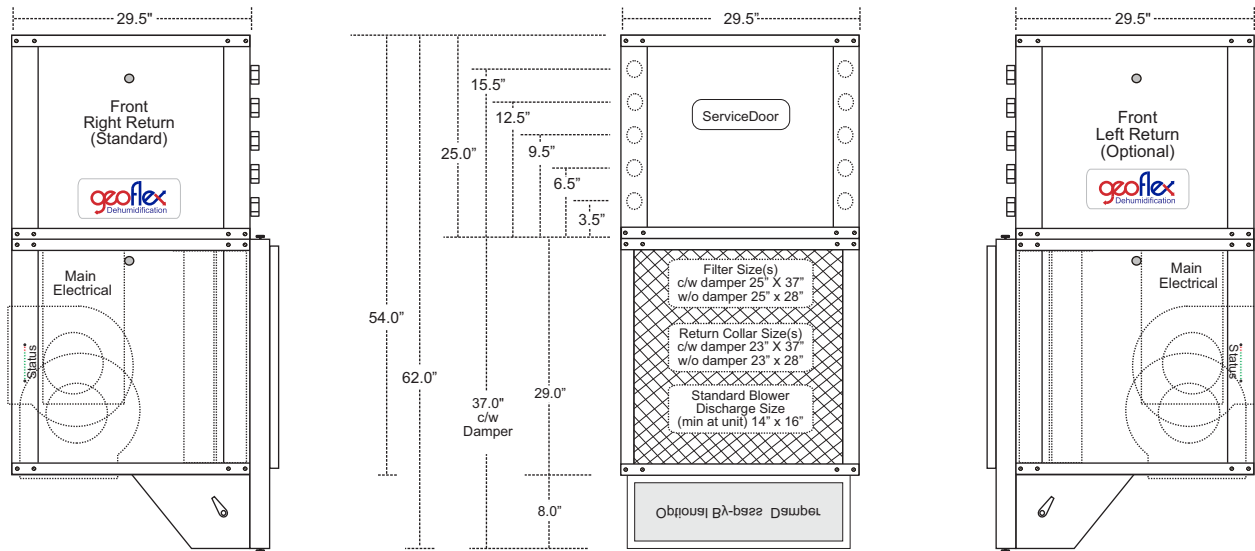
#### Available Cabinet Types

Model	Cabinet Types	Footprint		Height without Damper	Height c/w 8" Damper
		Width	Depth		
049	Standard Vertical	29.5"	29.5"	54.0"	62.0"
049	*Larger Vertical	29.5"	44.25"	54.0"	62.0"
049	Standard Horizontal	29.5"	59.0"	29.0"	37.0"
049	**Compact Horizontal	29.5"	44.25"	29.0"	37.0"

\* Larger cabinets are used to accommodate much higher than standard CFM  
 \*\* Units with some features, eg., the geothermal option, demand a larger footprint  
 NOTE: Weights and measures can vary, depending on selected configuration and options!

Elements	
Description	Type
Refrigerant	R410A
Refrigerant Charge (Superheat Supercedes)	Min 10 F Superheat
Base Unit c/w Ext. DX Condenser	4.7 lbs. (est)
Internal 100% Air Reheat Condenser	7.4 lbs. (est)
Compressor	DX (Direct Expansion)
Standard Blower	Scroll
Air Coil Coating	Direct Drive (PSC or ECM)
Condensate Pan	Baked Acrylic 3 Stage Process
Optional Pool Reheat Condenser	SuperGaurd Coated
Optional Water Condenser	Co-axial (DWV, C/N)
Base Weight	Co-axial or Brazed Plate
Ship Weight	452 lbs. (est)
Crated Weight	482 lbs. (est)
	542 lbs. (est)

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



Two Step Dehumidification Performance Data																
Model	Fan Motor Type	Cap	Air Temp °F	50% RH				55% RH				60% RH				Flow Air CFM
				Mositure Removal lbs/hr	Sensible Cooling Btuh	Total Capacity Btuh	Heat of Rejection Btuh	Mositure Removal lbs/hr	Sensible Cooling Btuh	Total Capacity Btuh	Heat of Rejection Btuh	Mositure Removal lbs/hr	Sensible Cooling Btuh	Total Capacity Btuh	Heat of Rejection Btuh	
049	PSC	Full	80	13.0	27,485	41,538	50,743	14.3	27,079	44,634	53,830	17.1	26,676	44,634	53,830	1,600
	PSC	Part	80	9.2	19,620	29,584	36,087	10.2	19,293	30,674	37,192	12.2	18,968	31,731	38,264	1,300
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	PSC	Part	82	9.8	19,426	29,549	36,246	11.8	18,617	30,066	36,800	12.9	17,983	30,709	37,471	1,300
	PSC	Full	84	16.9	26,206	40,516	50,203	20.3	25,322	41,437	51,113	22.1	24,455	42,275	51,938	1,600
	PSC	Part	84	12.0	18,580	28,782	35,707	14.4	17,867	29,376	36,334	15.7	17,170	29,907	36,896	1,300

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	6	106	(32.3)
	C	208-230/60/3	197/254	14.0	83.1	-	0.75	3.0	17.0	20.4	40	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 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 - Horizontal

#### Blower High Speed CFM & SP

ESP	0.3	0.5	.75	1.0
CFM	1,728	1,600	1,522	1,468

#### Standard Pool Heat Recovery Option

Model	GPM	FOH	PSIG	MBH	EWT
DWV-1.0	2	2.1	0.9	12	80
DWV-1.5	3	5.3	2.3	18	80

#### Available Cabinet Types

Model	Cabinet Types	Footprint		Height without Damper	Height c/w 8" Damper
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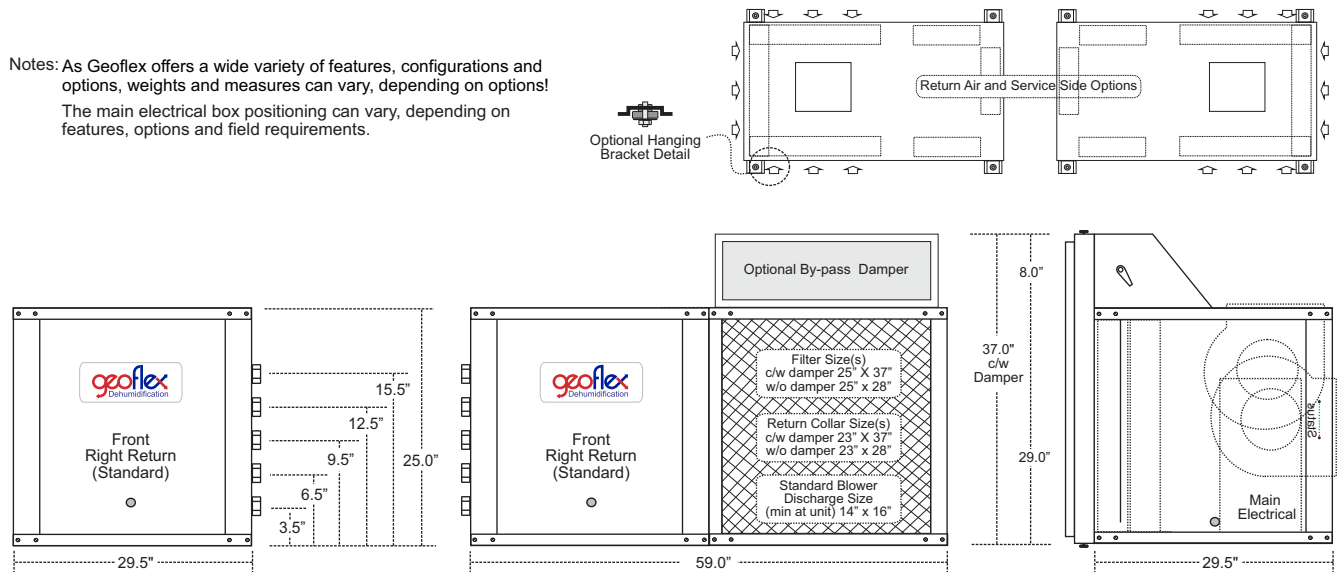
\* Larger cabinets are used to accommodate much higher than standard CFM  
 \*\* Units with some features, e.g., the geothermal option, demand a larger footprint

NOTE: Weights and measures can vary, depending on selected configuration and options!

Notes: As Geoflex offers a wide variety of features, configurations and options, weights and measures can vary, depending on options!  
 The main electrical box positioning can vary, depending on features, options and field requirements.

Elements	
Description	Type
Refrigerant	R410A
Refrigerant Charge (Superheat Supercooled)	Min 10 F Superheat
Base Unit	4.7 lbs. (est)
Base Unit c/w Ext. DX Condenser	7.4 lbs. (est)
Internal 100% Air Reheat Condenser	DX (Direct Expansion)
Compressor	Scroll
Standard Blower	Direct Drive (PSC or ECM)
Air Coil Coating	Baked Acrylic 3 Stage Process
Condensate Pan	SuperGard Coated
Optional Pool Reheat Condenser	Co-axial (DWV, C/N)
Optional Water Condenser	Co-axial or Brazed Plate
Base Weight	452 lbs. (est)
Ship Weight	482 lbs. (est)
Crated Weight	542 lbs. (est)

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



Two Step Dehumidification Performance Data																
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