

Cabinet Heater G*Y Series

TECHNICAL CATALOG



A **NIBE** GROUP MEMBER

GHY



GSY



GXY



- Indoor Environment and air Quality
- Design Flexibility
- Performance
- Energy Efficiency
- Serviceability

- Floor or wall mounted for concealed or exposed applications
- Hot water coils, steam coils, or electric heat only options
- Optional colors, valve packages, controls and unit configurations
- Nominal CFM range of 200 to 1200 CFM

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Portfolio

Vertical Hideaway (GHY)

200 CFM to 1200 CFM

The Vertical Hideaway (GHY) cabinet heater is designed for concealed applications. The slender design of the GHY makes this unit ideal for perimeter heating and applications in public buildings, offices, hospitals and hotels. Standard GHY units are 18-gauge galvanized finish steel with the option for a 16ga decorative wall panel.



Vertical Cabinet (GXY)

200 CFM to 1200 CFM

The slender design of the Vertical Cabinet (GXY) cabinet heater makes this unit ideal for perimeter heating and applications in public buildings, offices, hospitals and schools. The GXY cabinet is fabricated of heavy 18-gauge steel. The top panel provides structural rigidity essential for an exposed unit. GXY units have a removable, one-piece, 16ga front panel for easy access to all internal components. Standard GXY units are provided with a durable powder-coated paint finish.

Vertical Sloped Top Cabinet (GSY)

200 CFM to 1200 CFM

The Vertical Sloped Top Cabinet (GSY) cabinet heater is designed for applications in public buildings, offices, schools and hospitals where it is necessary to prevent books and other items from being placed over the discharge grilles on the top panel. The GSY cabinet is fabricated of heavy 18-gauge steel. The 25-degree, sloped, top panel provides structural rigidity essential for an exposed unit. GSY units have a removable, one-piece, 16ga front panel for easy access to all internal components. Standard GSY units are provided with a durable powder-coated paint finish.



Features and Benefits

Application Fit

- Several cabinet types allow for a multitude of room layouts.
 - The vertical flat top cabinet units (GXY) are ideal for perimeter heating, ideally placed under a window to mitigate the effects of heat losses or gains through the glazing.
 - The vertical sloped top cabinet units (GSY) discourages the placement of objects on the supply grille, blocking airflow, which could potentially result in performance issues.
 - The vertical hideaway version of the above units (GHY) is tailored to recess in a wall or continuous cabinetry to meet architectural needs.

Design Flexibility

- Standard hydronic heat coils or electric heat only systems are available to match the space heating loads.
- 85 control board controls offers enhanced controls solutions with capability for connectivity to build BAS
- Optional finishes and colors are available on GXY/GSY models, allowing the unit to blend in with any decor.
- Optional back panel provides an aesthetic cover for units that are visible from the building exterior, which are not completely covered by a wall or other architecture.
- Special cabinetry can be designed for jobs where unique cabinet dimensions are required, most often found on renovation projects.
- Optional airflow configuration (front supply) to enhance performance, given certain design limitations.
- Wide variety of valve package options (hot water coils only) to meet desired controls specifications; factory preassembled and shipped loose for field installation.
- Variety of insulation materials to address IAQ concerns.
- Product integrated into IEC's computer rating

program for quick performance calculations to aid in unit selection & quoting.

Ease of Installation

- Preassembled valve packages are available, to reduce field piping performed at the jobsite.
- Optional unit mounted controls, service switches and fusing minimize on-site electrical work.
- Units are tagged at the factory for ease of identification on the jobsite.
- Custom cabinetry facilitates installations by:
 - Deeper units allow the piping to run along the wall minimizing piping work and providing an insulated plenum that eliminates outside air transitions on renovation jobs.
 - Wider units allow for same end piping and electrical connections to minimize floor penetrations and eliminate the need for filler cabinetry.

Ease of Service

- All commonly serviced components are accessible by simply removing the front panel.
- Filters can be easily replaced without tools or removing the front panels of exposed units.
- Slide-out blower assembly for maintenance convenience.

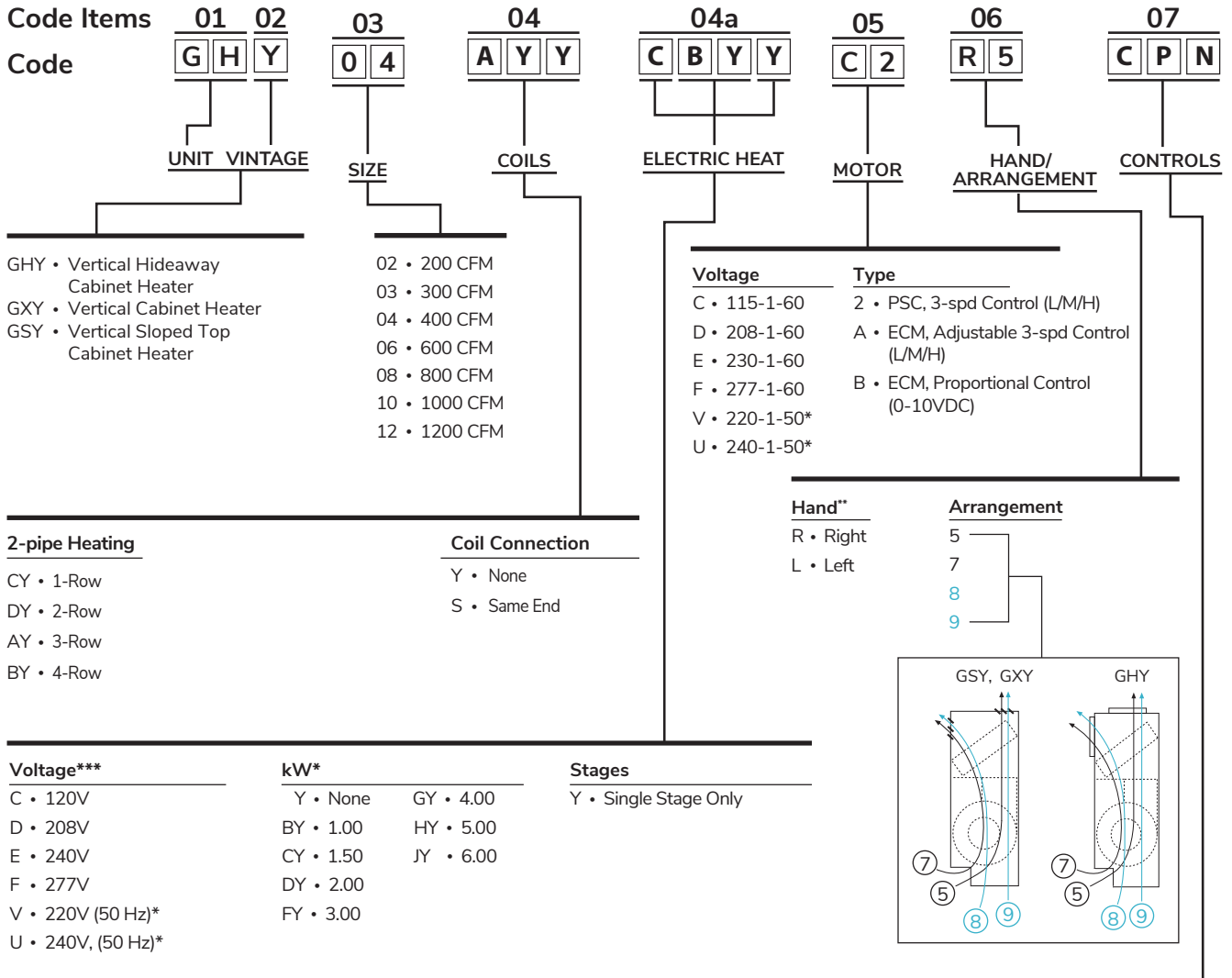
Quality and Safety

- Rigorous multi-point inspection at the factory for trouble-free start-up.
- ETL listed for safety compliance to UL 1995, US & Canada.
- All hydronic coils are pressure tested to 350 psig.

Cabinet Heater G*Y Series

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Unit Model Key



Voltage	System	Thermostat
B • 24V	Manual Fan Operation	A • Basic Electronic Wall Series, 155, Vertical
C • 120V	A1 • Standard Unit Mount (Switch Only)	B • Basic Electronic Wall Series, 155, Horizontal
D • 208V	A2 • Standard Wall Mount (Switch Only)	C • Basic Series, 156, Unit Mounted
E • 240V		P • Basic 24V Digital, 7-Day Programmable
F • 277V	Phase	N • Basic 24V Digital, Non-Programmable
V • 220V (50 Hz)*	1 • 1-Phase	F • Premium 24V Digital, 7-Day Programmable/ BACnet with Proportional Fan/ Valves Option
U • 240V (50 Hz)*		G • Premium 24V Digital BACnet with Proportional Fan/ Valves Option
		W • Venture 24V Wi-Fi Programmable

Rating and Listings

C-ETL-US Listing

IEC's Vertical G*Y Series units are listed by ETL. The C-ETL-US listing signifies that IEC's units have been examined by ETL and are in compliance with both the U.S. and Canadian applicable standards.



Intertek
3061627

HEATING AND COOLING EQUIPMENT

PSC Motor Standard Ratings

Size	Coil Rows	Air Flow Rating (CFM)	Total Cap. (Btuh)	GPM	Water Pressure Drop (ft. water)	Power Input (Watts)
2	1	300	9200	0.6	0.3	95
2	2	295	16500	1.1	1.6	93
2	3	280	20900	1.4	3.6	90
2	4	270	23000	1.5	5.5	85
3	1	330	11100	0.7	0.5	85
3	2	300	18500	1.3	2.3	80
3	3	280	22000	1.5	4.4	80
3	4	255	22900	1.6	6.3	80
4	1	465	15700	1	1	130
4	2	430	26500	1.8	4.6	125
4	3	410	32000	2.2	9.2	120
4	4	390	34000	2.3	13.5	115
6	1	685	23300	1.6	2.2	175
6	2	660	38000	2.6	1.6	170
6	3	610	46000	3.1	3.4	165
6	4	570	49000	3.3	5.0	160
8	1	695	25500	1.7	2.7	160
8	2	665	41600	2.8	2.3	165
8	3	660	51500	3.5	4.6	165
8	4	655	57600	3.9	7.8	175
10	1	940	35400	2.4	5.7	255
10	2	925	58500	4	5	260
10	3	925	70000	4.7	1.5	265
10	4	925	80000	5.3	2.6	270
12	1	1120	42044	2.8	8.3	360
12	2	1140	71500	4.8	7.6	350
12	3	1125	85000	5.7	2.3	335
12	4	1115	96500	6.6	4.1	325

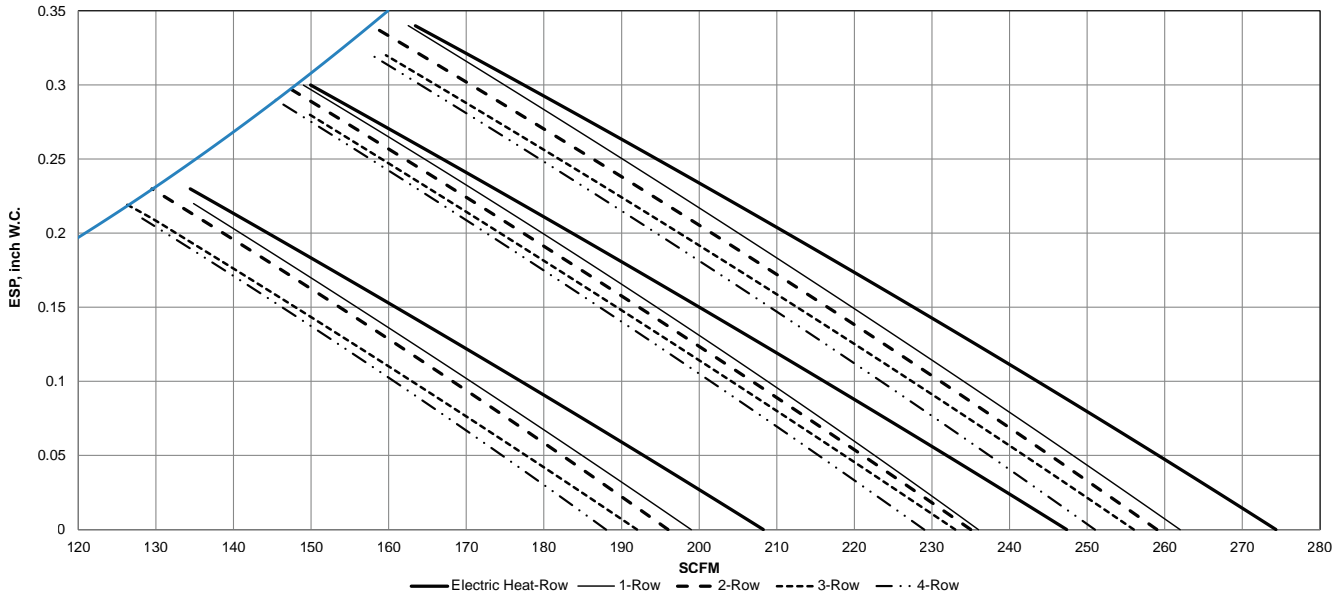
EC Motor Standard Ratings

Size	Coil Rows	Air Flow Rating (CFM)	Total Cap. (Btuh)	GPM	Water Pressure Drop (ft. water)	Power Input (Watts)
2	1	300	9200	0.6	0.3	80
2	2	290	16600	1.1	1.6	80
2	3	280	20600	1.4	3.5	80
2	4	270	22700	1.5	5.5	80
3	1	320	10900	0.7	0.5	62
3	2	310	19000	1.3	2.3	62
3	3	290	22700	1.5	4.6	62
3	4	275	24300	1.6	6.9	62
4	1	460	15500	1	0.9	105
4	2	445	27000	1.8	4.7	105
4	3	430	32900	2.2	9.6	105
4	4	410	35700	2.4	14.7	105
6	1	670	23000	1.6	2.2	133
6	2	650	37800	2.6	1.6	133
6	3	625	46600	3.2	3.4	133
6	4	600	51100	3.5	5.3	133
8	1	745	26600	1.8	2.9	225
8	2	735	44700	3.0	2.6	220
8	3	725	55300	3.8	5.2	210
8	4	715	61900	4.2	8.7	195
10	1	1010	37000	2.5	6.1	265
10	2	1000	62000	4.2	5.4	260
10	3	990	74000	5	1.7	250
10	4	980	83600	5.7	2.9	240
12	1	1270	45400	3.1	9.4	380
12	2	1250	76000	5.2	8.3	375
12	3	1210	90000	6.1	2.6	370
12	4	1170	100000	6.8	4.3	370

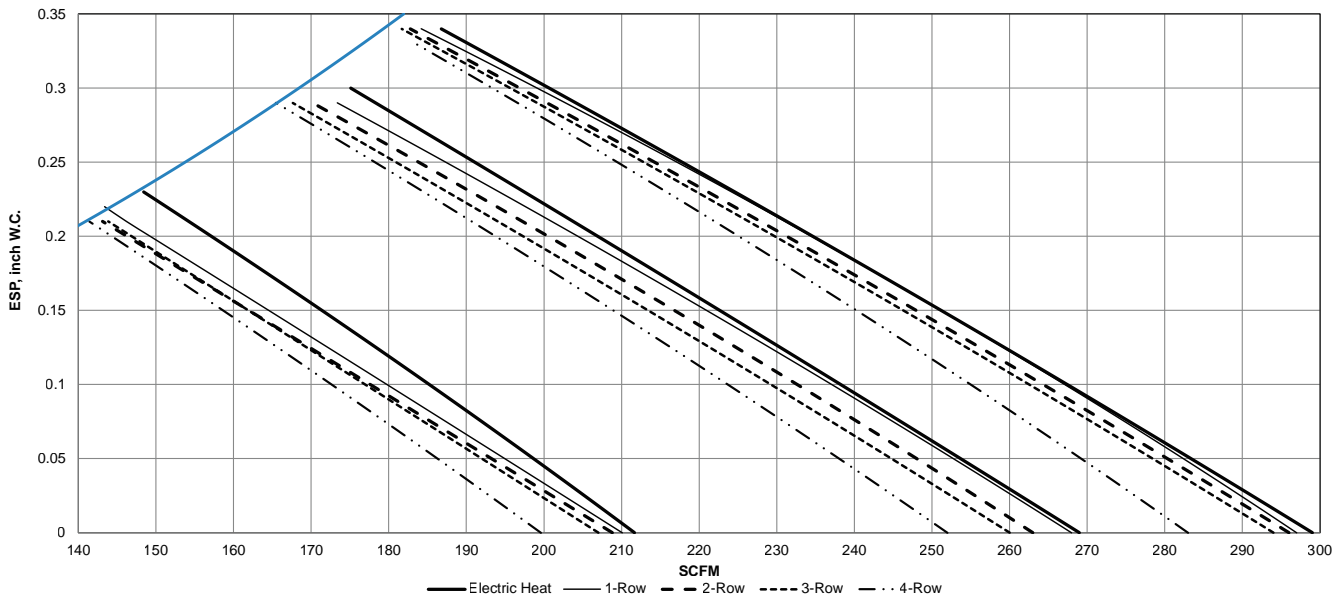
- NOTES: 1. Ratings are based on 70° F DB, 180° F EWT, 30° F water temperature rise, high fan speed, motor voltage 115/1/60, and airflow under dry coil conditions.
 2. For all application ratings, use IEC's computer selection program, the quick-selection ratings provided in this catalog, or contact your local IEC representative.
 3. Ratings are based on the Standard Coil Circuit and FPI option.

Fan Performance Curves – PSC

G*Y02-115V, PSC

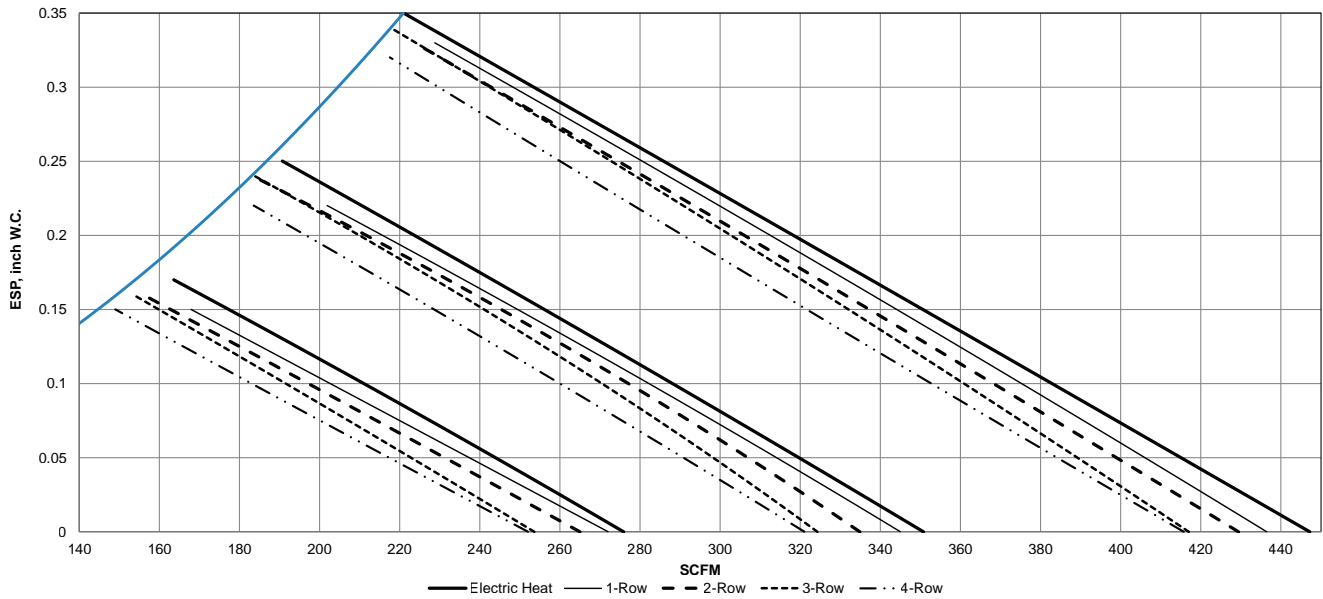


G*Y03-115V, PSC

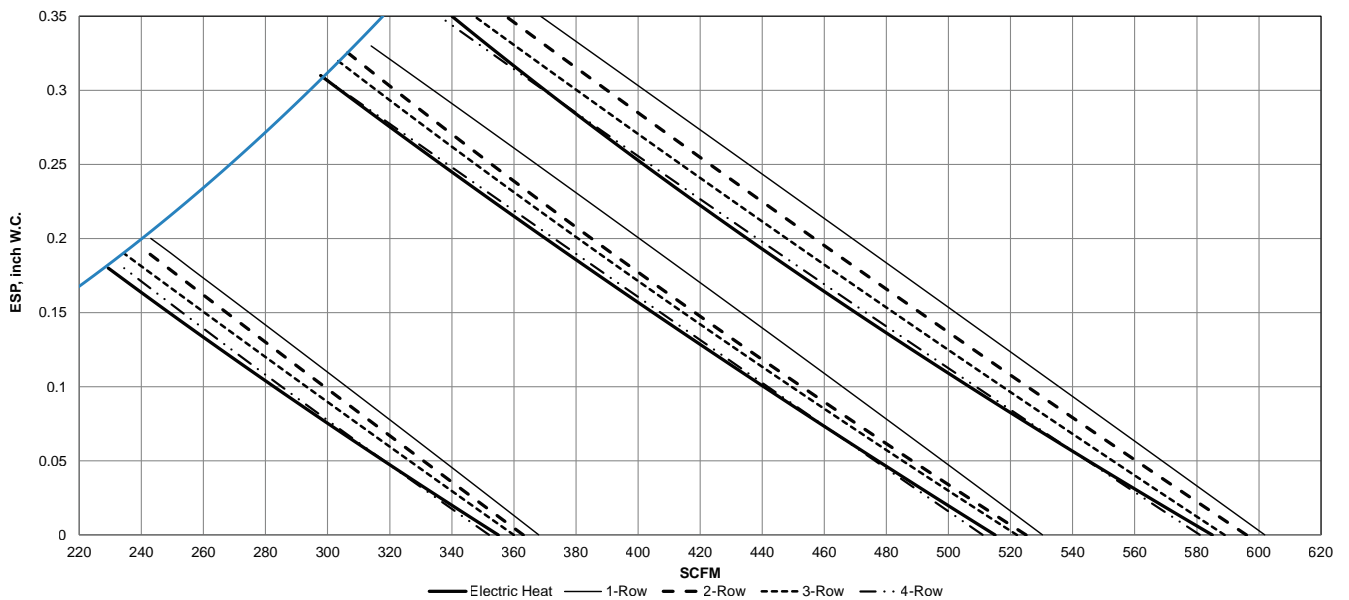


Fan Performance Curves – PSC

G*Y04-115V, PSC

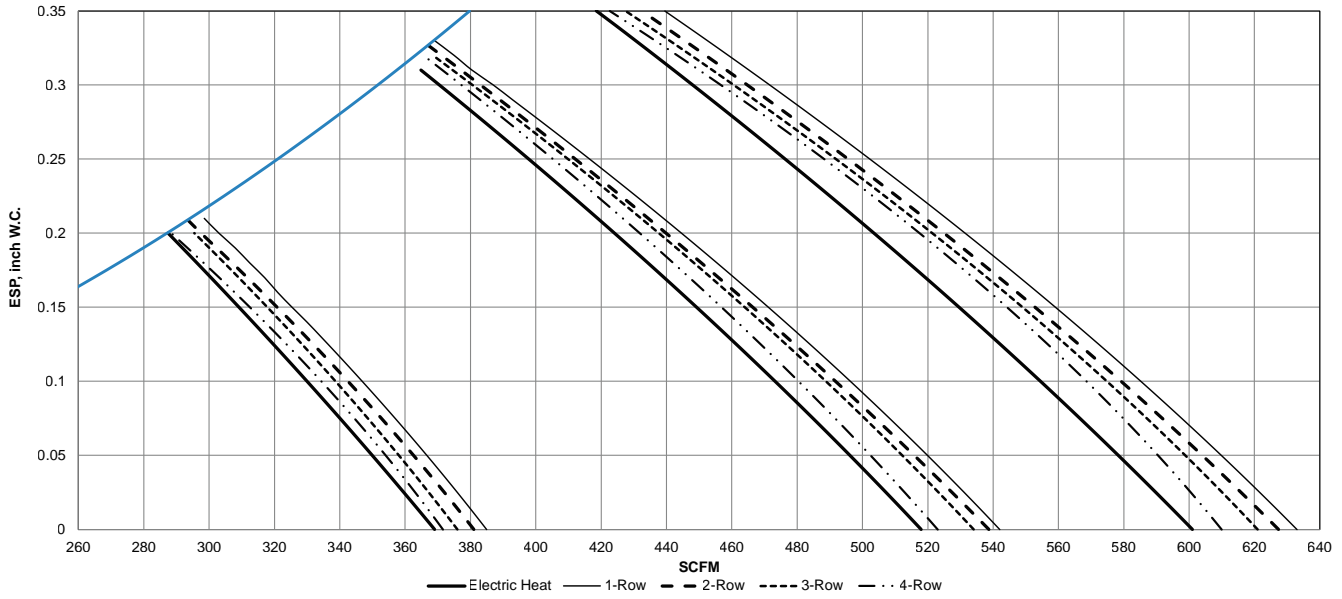


G*Y06-115V, PSC

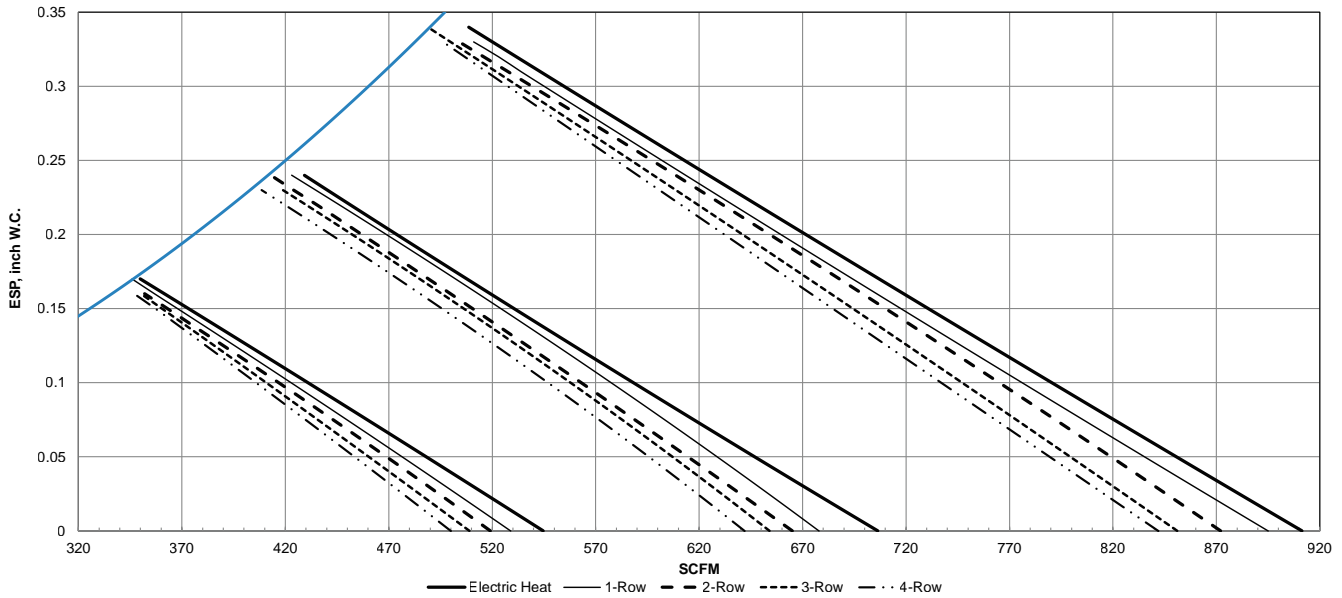


Fan Performance Curves – PSC

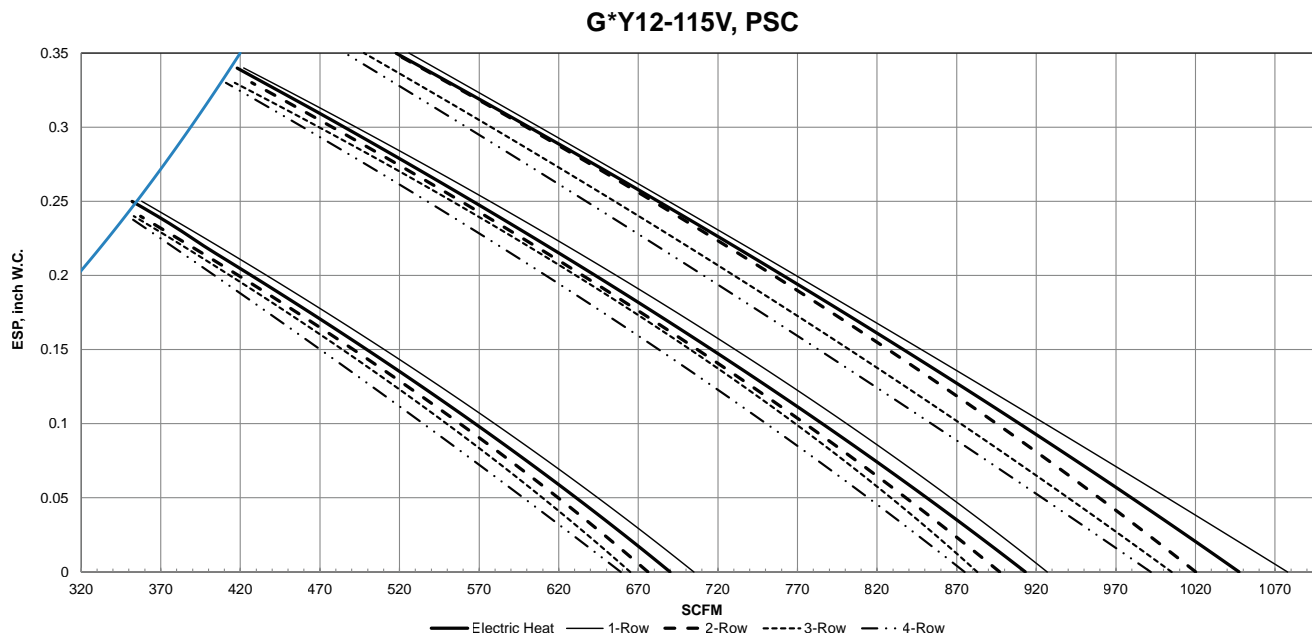
G*Y08-115V, PSC



G*Y10-115V, PSC

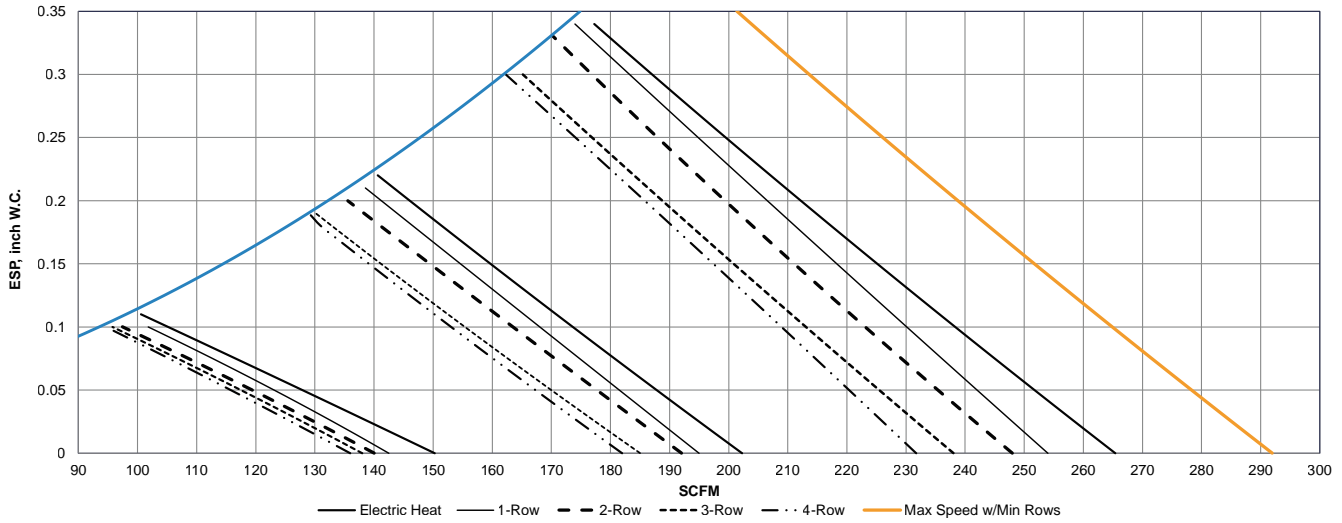


Fan Performance Curves – PSC

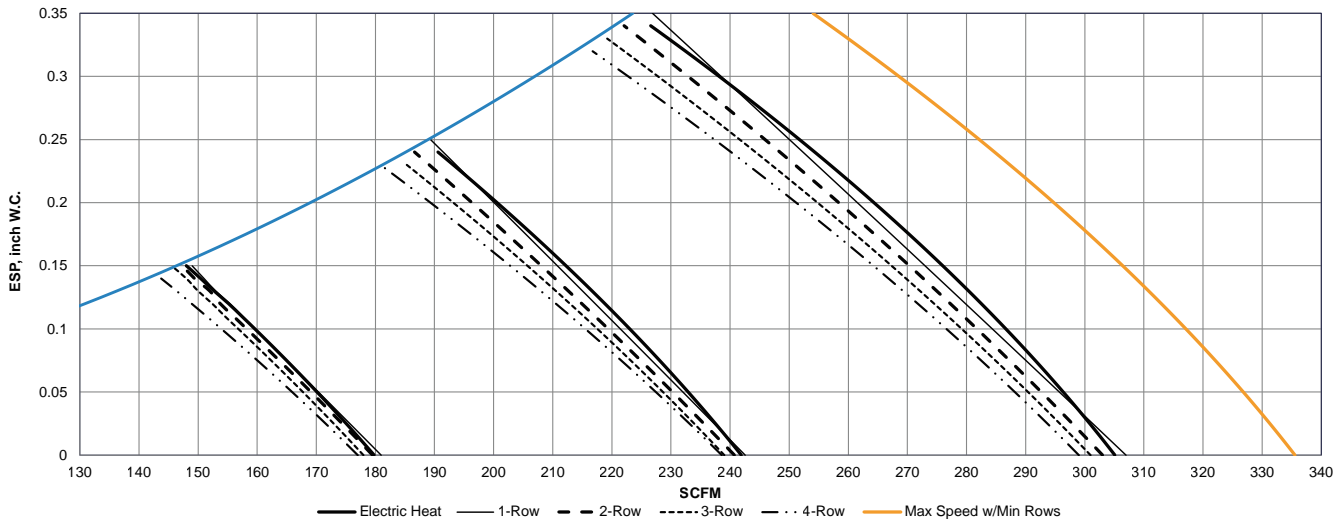


Fan Performance Curves – ECM

G*Y02-115V, ECM

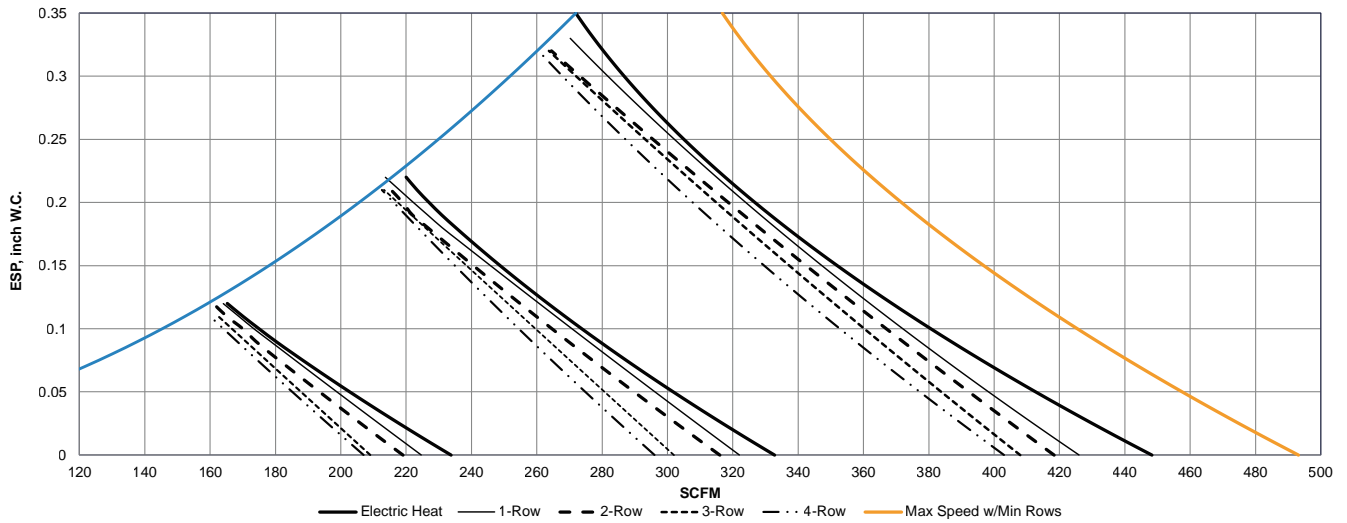


G*Y03-115V, ECM

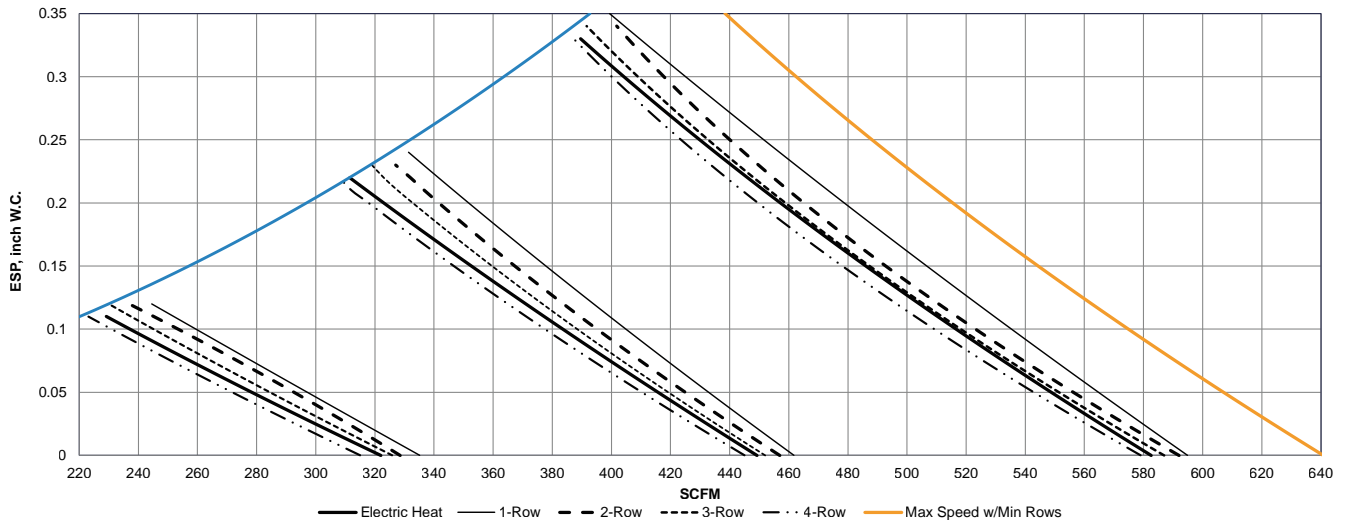


Fan Performance Curves – ECM

G*Y04-115V, ECM

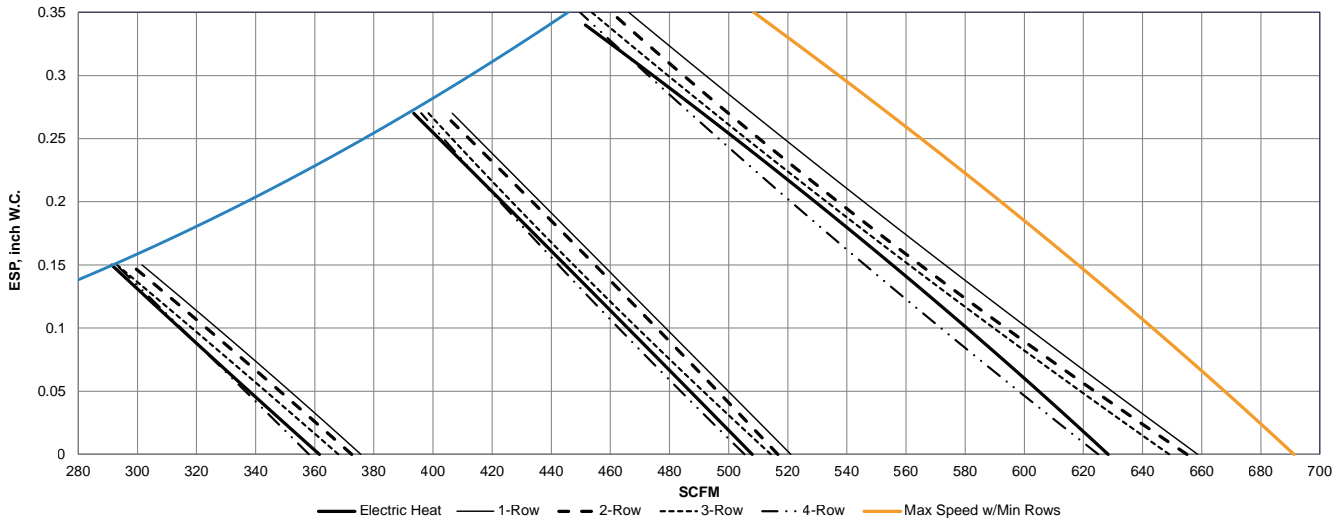


G*Y06-115V, ECM

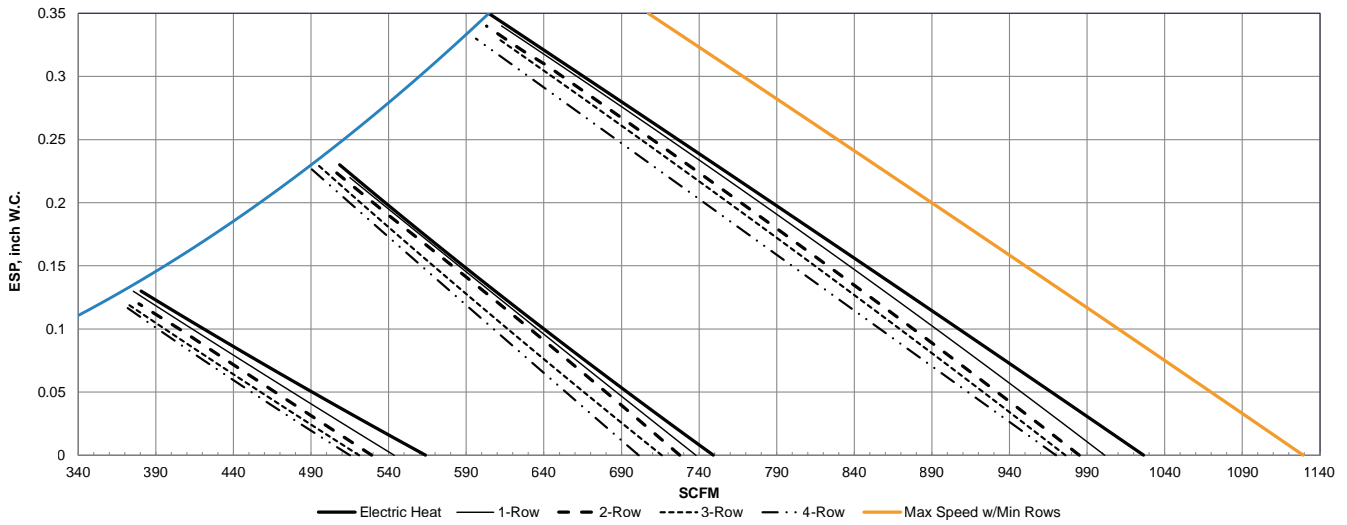


Fan Performance Curves – ECM

G*Y08-115V, ECM

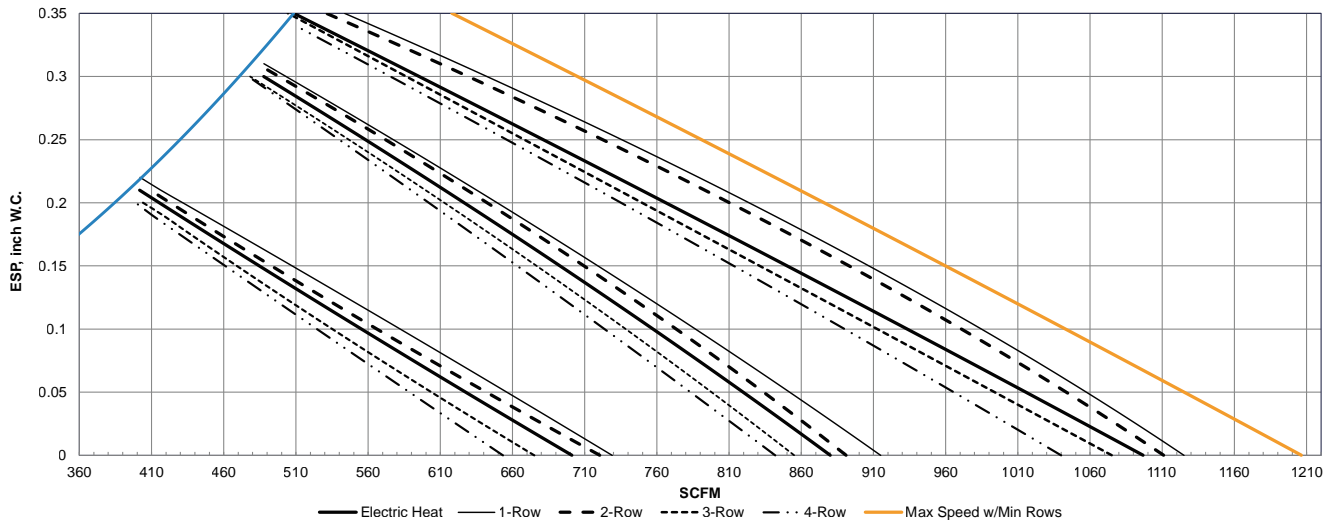


G*Y10-115V, ECM



Fan Performance Curves – ECM

G*Y12-115V, ECM



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Motor Performance Data

Thermal Overload Protection

All split-capacitor motors furnished by IEC contain internal thermal-overload protection. The overload automatically resets when the temperature returns to a safe limit. Electronics Testing Laboratories, Inc. (ETL) approves the motor and thermal overload combination at locked rotor conditions only.

PSC Motor Performance Data

Voltage	Fan Speed	Unit Size	02	03	04	06	08	10	12
		Nominal HP	1/30	1/30	1/12	1/6	1/6	(2) 1/12	(2) 1/6
115V 60 Hz 1-Phase	High	Amps	0.53	0.83	1.40	2.50	2.50	2.80	5.00
		Watts	85	81	139	178	183	265	364
	Medium	Amps	0.31	0.48	0.70	1.30	1.30	1.30	2.50
		Watts	59	59	78	134	141	175	282
	Low	Amps	0.27	0.33	0.47	0.57	0.61	0.40	1.25
		Watts	45	46	52	77	72	131	174
208V 60 Hz 1-Phase	High	Amps	0.48	0.48	0.69	1.00	1.30	1.38	2.60
		Watts	89	89	111	141	145	240	287
	Medium	Amps	0.29	0.29	0.40	0.59	0.69	0.80	1.15
		Watts	67	67	83	92	95	182	201
	Low	Amps	0.14	0.14	0.22	0.47	0.47	0.45	0.84
		Watts	43	44	47	52	51	115	127
230V 60 Hz 1-Phase	High	Amps	0.48	0.48	0.69	1.00	1.30	1.38	2.60
		Watts	102	104	127	149	159	269	316
	Medium	Amps	0.31	0.31	0.43	0.71	0.71	0.85	1.40
		Watts	77	78	96	102	108	212	226
	Low	Amps	0.15	0.15	0.24	0.50	0.50	0.50	1.00
		Watts	50	50	56	62	64	137	150
277V 60 Hz 1-Phase	High	Amps	0.35	0.35	0.69	0.91	0.91	1.38	1.82
		Watts	91	90	126	170	176	286	374
	Medium	Amps	0.26	0.26	0.44	0.57	0.58	0.82	1.10
		Watts	71	88	115	121	213	273	374
	Low	Amps	0.16	0.17	0.25	0.34	0.35	0.45	0.65
		Watts	41	42	58	96	100	153	232

NOTES: 1. Total unit motor Amps and Watts are shown.
2. Consult factory for 50 Hz applications.

EC Motor Performance Data — Vertical G*Y, Standard Performance

Voltage	Unit Size	G**02	G**03	G**04	G**06	G**08	G**10	G**12
	Nominal HP	1/7	1/7	1/6	1/6	1/6	(2) 1/6	(2) 1/6
120V	Rated Motor FLA	2.3	2.3	2.4	2.4	2.4	2.4, 2.4	2.4, 2.4
	Max Program Current	1.2	1.4	1.5	2.2	2.4	2.0, 2.0	2.4, 2.4
208-240V	Rated Motor FLA	1.4	1.4	1.6	1.6	1.6	1.6, 1.6	1.6, 1.6
	Max Program Current	0.7	0.9	21.0	1.4	1.6	1.3, 1.3	1.6, 1.6
277V	Rated Motor FLA	1.2	1.2	1.3	1.3	1.3	1.3, 1.3	1.3, 1.3
	Max Program Current	0.6	0.7	0.8	1.2	1.3	1.1, 1.1	1.3, 1.3

Sound Power Data

GHY, GXY, GSY Sound Power Data

UNIT SIZE	RATING	FAN SPEED	CFM	SOUND POWER LEVEL, L _w (dB reference one picowatt)							A-wgt (dBA)
				125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz	8K Hz	
2	CASING RADIATED	H	280	62	64	59	55	47	44	37	60
		M	255	61	62	57	52	44	40	34	58
		L	205	55	57	52	46	38	33	31	53
3	CASING RADIATED	H	300	65	64	59	55	47	44	38	61
		M	270	63	62	57	52	45	41	35	58
		L	215	59	56	51	45	37	33	31	52
4	CASING RADIATED	H	485	65	70	62	57	50	46	39	65
		M	370	60	63	56	50	42	37	32	58
		L	290	58	56	49	43	36	28	30	51
6	CASING RADIATED	H	660	66	69	63	59	52	48	41	65
		M	595	65	67	61	56	50	45	41	63
		L	380	58	56	51	46	39	30	31	53
8	CASING RADIATED	H	655	67	70	64	61	52	49	43	66
		M	585	66	67	61	58	49	45	39	63
		L	370	57	56	52	44	35	29	31	52
10	CASING RADIATED	H	865	69	72	66	60	54	50	43	67
		M	695	64	66	59	53	46	41	34	61
		L	560	61	60	53	47	39	32	31	55
12	CASING RADIATED	H	1080	71	74	68	65	56	53	46	70
		M	1020	71	72	66	62	54	50	43	68
		L	715	65	63	58	50	43	37	32	59

- NOTES: 1. Unit Test Configuration: Front Return/ Bottom Return/ Stamped Louver Top Supply, 3-Row 1/2-inch 10 FPI Coil, 115VAC PSC Motor, 1/2-inch dual-density fiberglass insulation.
 2. Casing Radiated Testing per AHRI 350-2008: 4.2.2.3 Casing radiated with free inlet, Sound Rating of Ducted Air Moving and Conditioning Equipment.
 3. Sound power data is expressed in decibels, dB RE: 1 x 10⁻¹² w (picowatts).

Electric Heating

Electric heaters are available for the following applications.

Total Electric Heat

Total electric heat eliminates the requirement for a boiler. Individual room controls can be supplied for either manual or automatic changeover.

Construction

The heater coils of high-grade resistance wire are supported by ceramic insulators on plated steel brackets. These heat elements are suspended directly in front of the fan outlet. An internal heat shield protects the internal heater from any debris that might fall through the top supply. High limit thermal cutouts protect the heater in the event of air failure. There are many special applications and control sequences for electric heat. For special applications, please consult the factory.

Electric Heater Selection

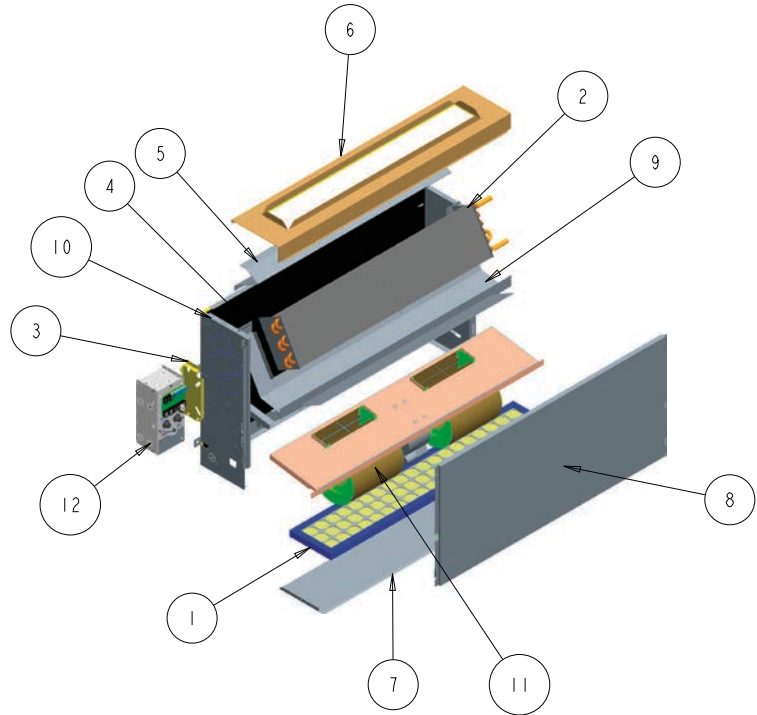
Voltage	kW	Unit Size						
		02	03	04	06	08	10	12
120V	1.0	•	•	•	•	-	-	-
	1.5	-	•	•	•	-	-	-
	2.0	-	-	•	•	•	-	-
	3.0	-	-	-	•	•	•	•
208V 240V 220/240V 50Hz	1.0	•	•	•	•	-	-	-
	1.5	-	•	•	•	-	-	-
	2.0	-	-	•	•	•	-	-
	3.0	-	-	-	•	•	•	•
277V	1.0	•	•	•	•	-	-	-
	1.5	-	•	•	•	-	-	-
	2.0	-	-	•	•	•	-	-
	3.0	-	-	-	•	•	•	•
	4.0	-	-	-	-	•	•	•
	5.0	-	-	-	-	-	•	•
6.0	-	-	-	-	-	-	•	

- NOTES: 1. All heaters are single stage and single phase.
 2. Electric heater available with top or front discharge.
 3. Electric Heating Capacities (BTUH) = Heater kW x 3413.
 4. Electric Heater Amperage = (Heater kW x 1000)/Applied Voltage.

CUH Exploded View – GHY

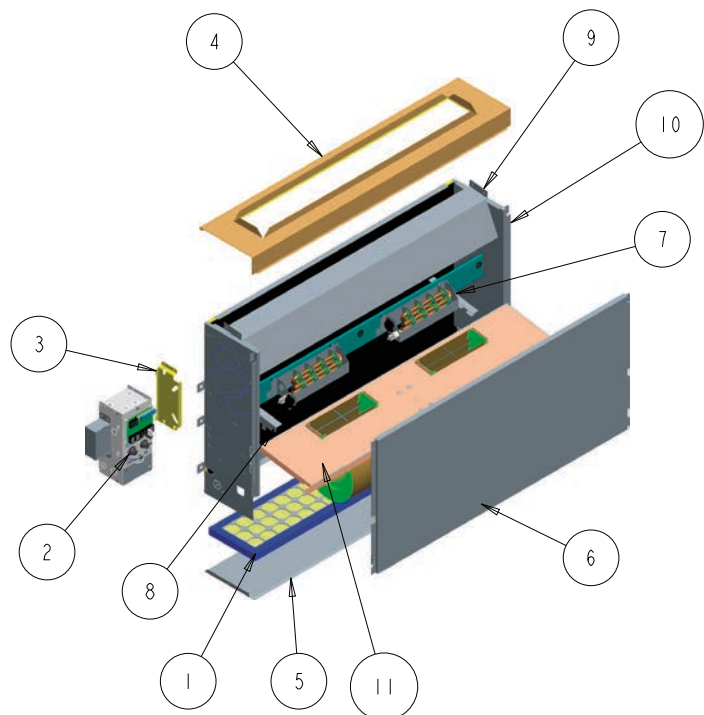
Vertical Hideaway Cabinet Heater, Hydronic Heat, with Top Supply

Item	Description
1	1-inch Filter
2	Coil Package 2/0 RH
3	Control Box 85 Bracket CP*/HP*
4	Coil Bracket Supply Assembly, Galvanized
5	Top Coil Baffle, Galvanized
6	Top Panel Duct GHY06
7	Base Panel
8	Front Panel Assembly
9	Blower Deck Rail CUH
10	Chassis G*Y Assembly
11	Motor Block Deck Assembly
12	Control Package



Vertical Hideaway Cabinet Heater, Electric Heat, with Top Supply

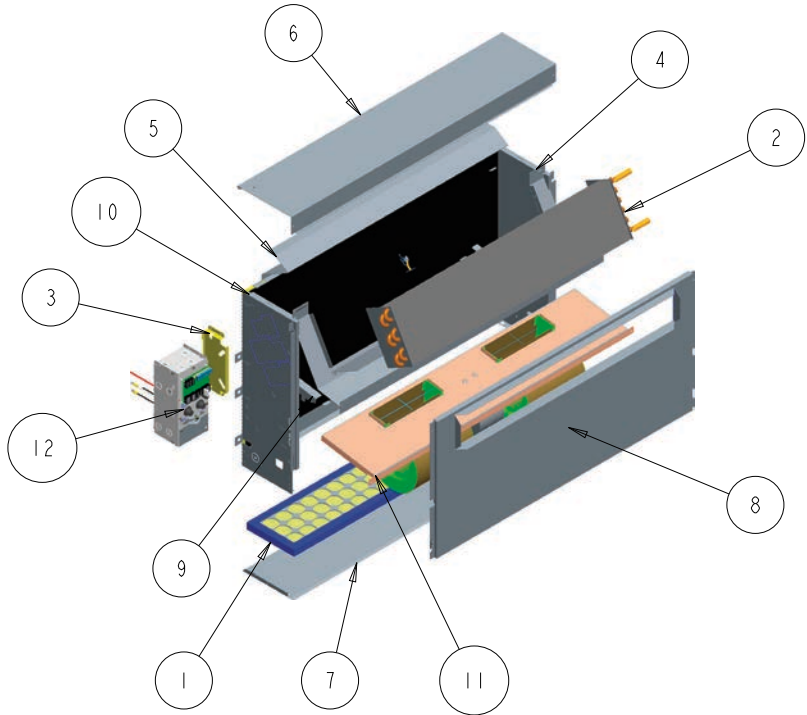
Item	Description
1	1-inch Filter
2	Control Package
3	Control Box 85 Bracket CP*/HP*
4	Top Panel Duct
5	Base Panel
6	Front Panel Assembly
7	Heater Assembly
8	Blower Deck Rail CUH
9	Heat Shield Perforated
10	Chassis G*Y Assembly
11	Motor Block Deck Assembly



CUH Exploded View – GHY

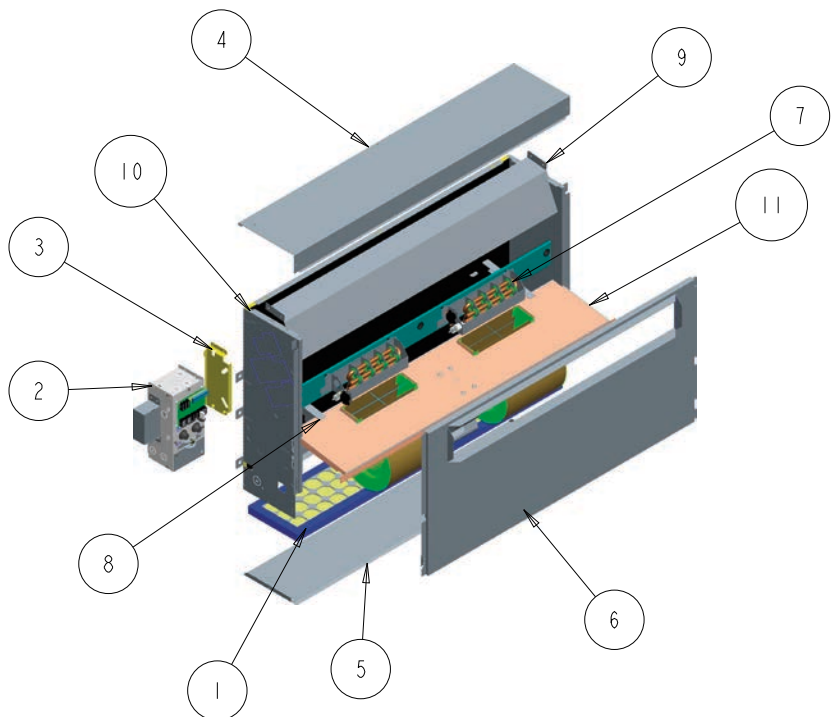
Vertical Hideaway Cabinet Heater, Hydronic Heat, with Front Supply

Item	Description
1	1-inch Filter
2	Coil Package 2/0 RH
3	Control Box 85 Bracket CP*/HP*
4	Coil Bracket Supply Assembly, Galvanized
5	Top Coil Baffle, Galvanized
6	Top Panel Duct GHY06
7	Base Panel
8	Front Panel Assembly GHY06 Duct
9	Blower Deck Rail CUH
10	Chassis G*Y Assembly
11	Motor Block Deck Assembly
12	Control Package



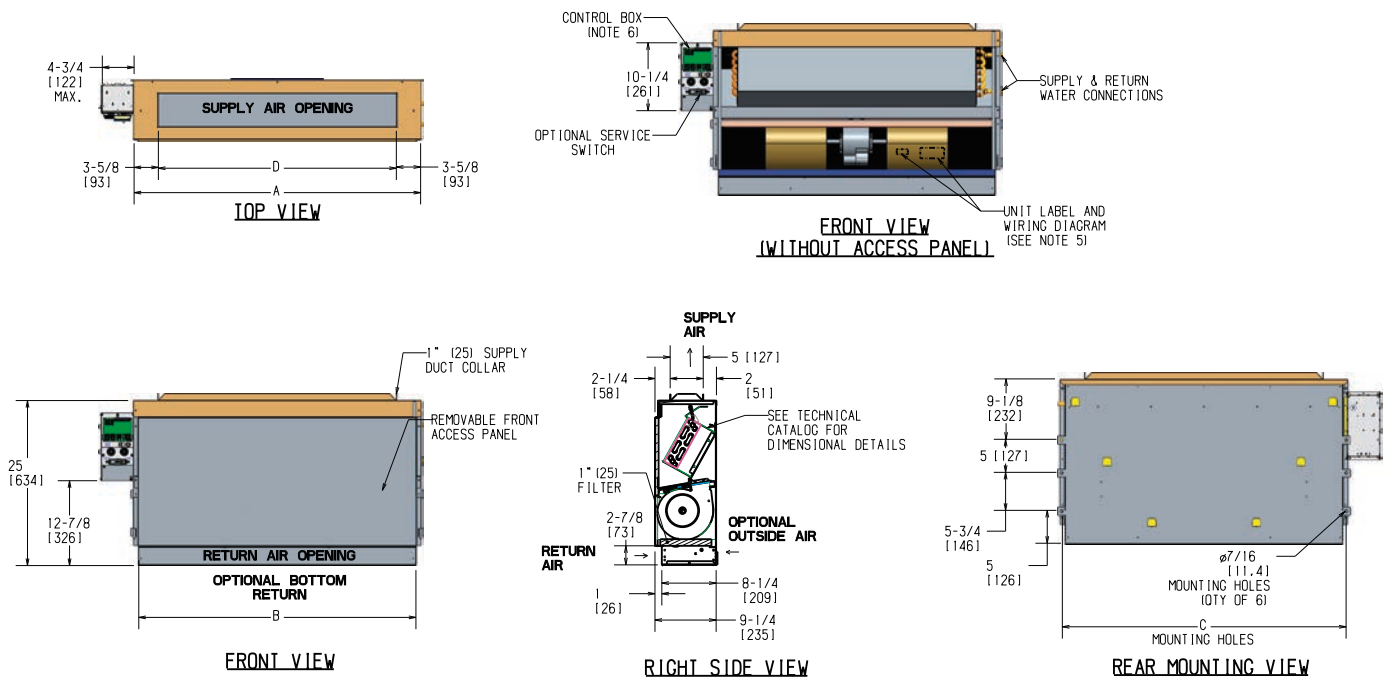
Vertical Hideaway Cabinet Heater, Electric Heat, with Front Supply

Item	Description
1	1-inch Filter
2	Control Package
3	Control Box 85 Bracket CP*/HP*
4	Top Panel Duct
5	Base Panel
6	Front Panel Assembly Duct
7	Heater Assembly
8	Blower Deck Rail CUH
9	Heat Shield Perforated
10	Chassis G*Y Assembly
11	Motor Block Deck Assembly



Physical Data – GHY

GHY – Vertical Hideaway Cabinet Heater, Hydronic Heat, with Top Supply



Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight
	A	B	C	D	Blower	Motor	
GHY 02	23-1/2 (597)	22 (559)	23 (584)	16 (406)	1	1	42
GHY 03	27-1/2 (699)	26 (660)	27 (686)	20 (508)	1	1	47
GHY 04	33-1/2 (851)	32 (813)	33 (838)	26 (660)	2	1	57
GHY 06	43-1/2 (1105)	42 (1067)	43 (1092)	36 (914)	2	1	77
GHY 08	45-1/2 (1156)	44 (1118)	45 (1143)	38 (965)	2	1	79
GHY 10	59-1/2 (1511)	58 (1473)	59 (1499)	52 (1321)	4	2	108
GHY 12	67-1/2 (1715)	66 (1676)	67 (1702)	60 (1524)	4	2	127

- NOTES:
1. RH coil shown, LH opposite.
 2. All dimensions are +/- 1/4 inch (6). Drawing not to scale.
 3. Product specifications are subject to changes without notice.
 4. Control box size and position may vary (consult factory).
 5. Position may vary.
 6. Service access is located on the front of the control box.
 7. Knockouts on the bottom and side of the control box for incoming power connections.

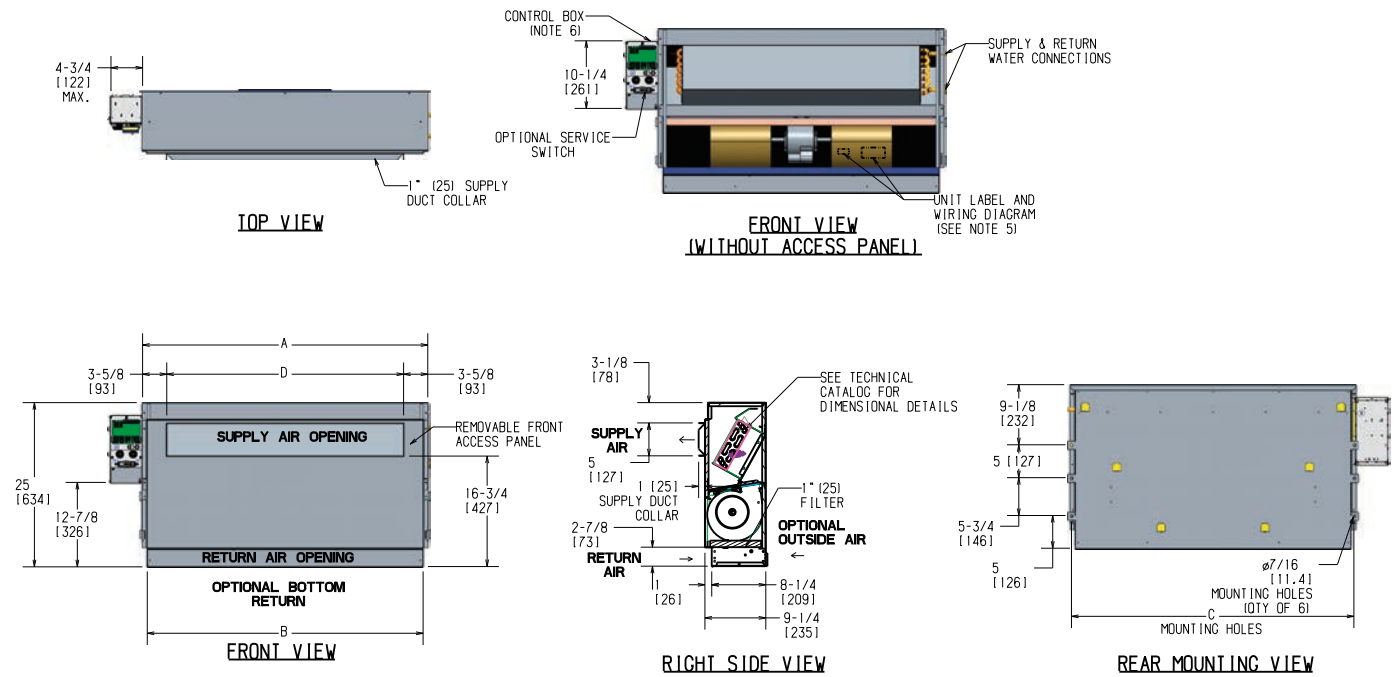
Drawing is provided for reference only.
Dimensions may vary with options ordered.
Consult IEC website for submittal drawings.

Cabinet Heater G*Y Series

TECHNICAL CATALOG

Physical Data – GHY

GHY – Vertical Hideaway Cabinet Heater, Hydronic Heat, with Front Supply



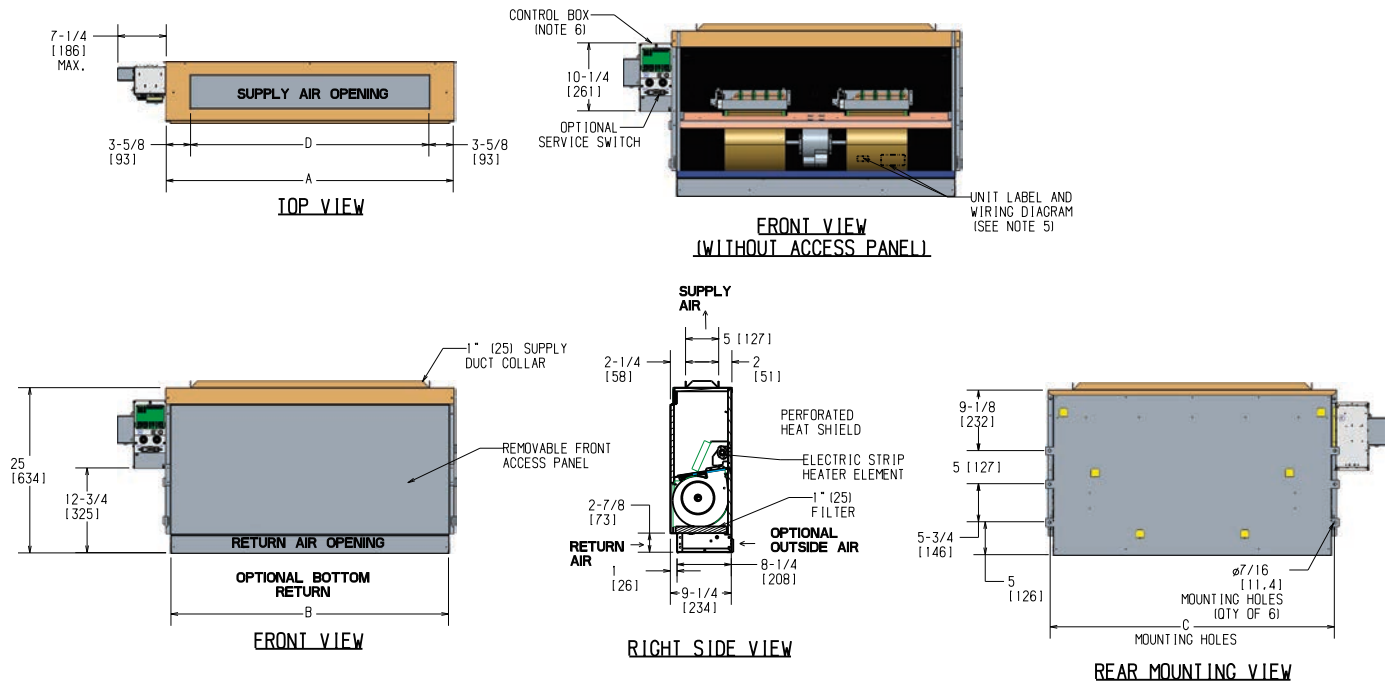
Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight
	A	B	C	D	Blower	Motor	
GHY 02	23-1/2 (597)	22 (559)	23 (584)	16 (406)	1	1	42
GHY 03	27-1/2 (699)	26 (660)	27 (686)	20 (508)	1	1	47
GHY 04	33-1/2 (851)	32 (813)	33 (838)	26 (660)	2	1	57
GHY 06	43-1/2 (1105)	42 (1067)	43 (1092)	36 (914)	2	1	77
GHY 08	45-1/2 (1156)	44 (1118)	45 (1143)	38 (965)	2	1	79
GHY 10	59-1/2 (1511)	58 (1473)	59 (1499)	52 (1321)	4	2	108
GHY 12	67-1/2 (1715)	66 (1676)	67 (1702)	60 (1524)	4	2	127

- NOTES:
1. RH coil shown, LH opposite.
 2. All dimensions are +/- 1/4 inch (6). Drawing not to scale.
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 5. Position may vary.
 6. Service access is located on the front of the control box.
 7. Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is provided for reference only.
 Dimensions may vary with options ordered.
 Consult IEC website for submittal drawings.

Physical Data – GHY

GHY – Vertical Hideaway Cabinet Heater, Electric Heat, with Top Supply



Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight
	A	B	C	D	Blower	Motor	
GHY 02	23-1/2 (597)	22 (559)	23 (584)	16 (406)	1	1	42
GHY 03	27-1/2 (699)	26 (660)	27 (686)	20 (508)	1	1	47
GHY 04	33-1/2 (851)	32 (813)	33 (838)	26 (660)	2	1	57
GHY 06	43-1/2 (1105)	42 (1067)	43 (1092)	36 (914)	2	1	77
GHY 08	45-1/2 (1156)	44 (1118)	45 (1143)	38 (965)	2	1	79
GHY 10	59-1/2 (1511)	58 (1473)	59 (1499)	52 (1321)	4	2	108
GHY 12	67-1/2 (1715)	66 (1676)	67 (1702)	60 (1524)	4	2	127

- NOTES:
- LH controls shown, RH opposite.
 - All dimensions are +/- 1/4 inch (6). Drawing not to scale.
 - Product specifications are subject to changes without notice.
 - Control box size and position may vary (consult factory).
 - Position may vary.
 - Service access is located on the front of the control box.
 - Knockouts on the bottom and side of the control box for incoming power connections.

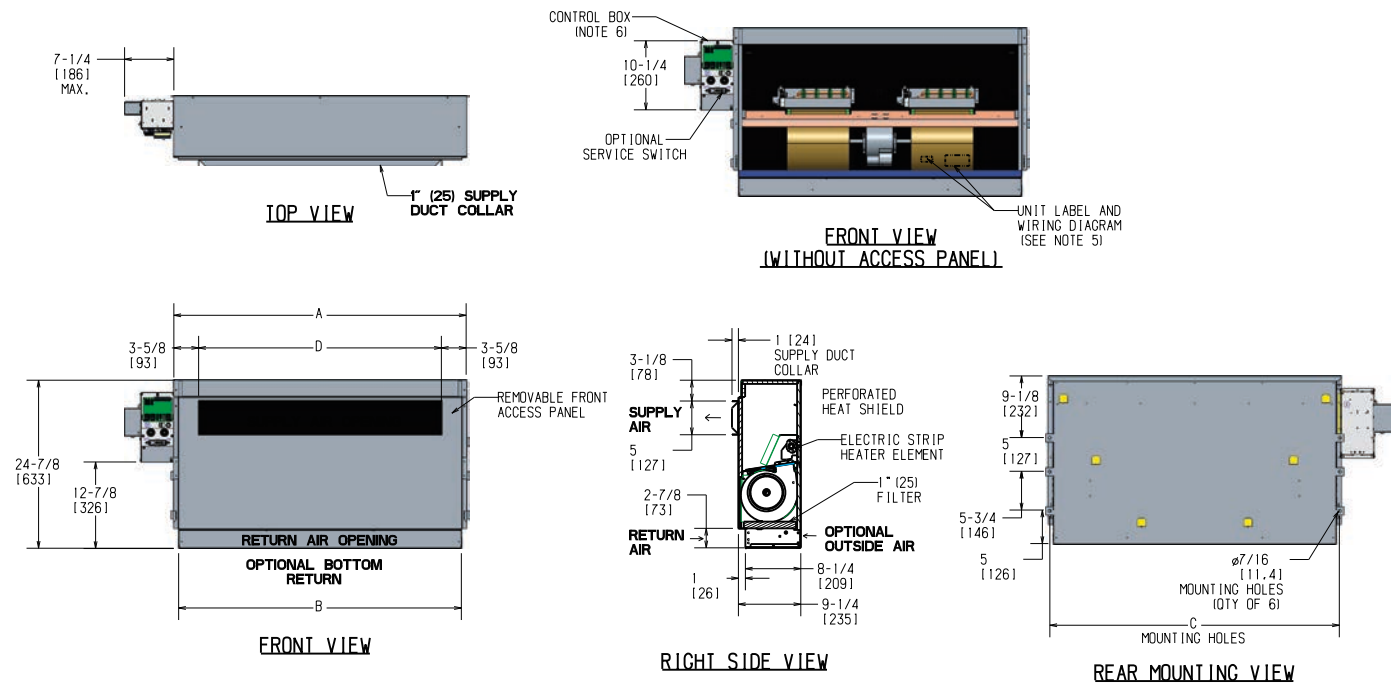
Drawing is provided for reference only.
Dimensions may vary with options ordered.
Consult IEC website for submittal drawings.

Cabinet Heater G*Y Series

TECHNICAL CATALOG

Physical Data – GHY

GHY – Vertical Hideaway Cabinet Heater, Electric Heat, with Front Supply



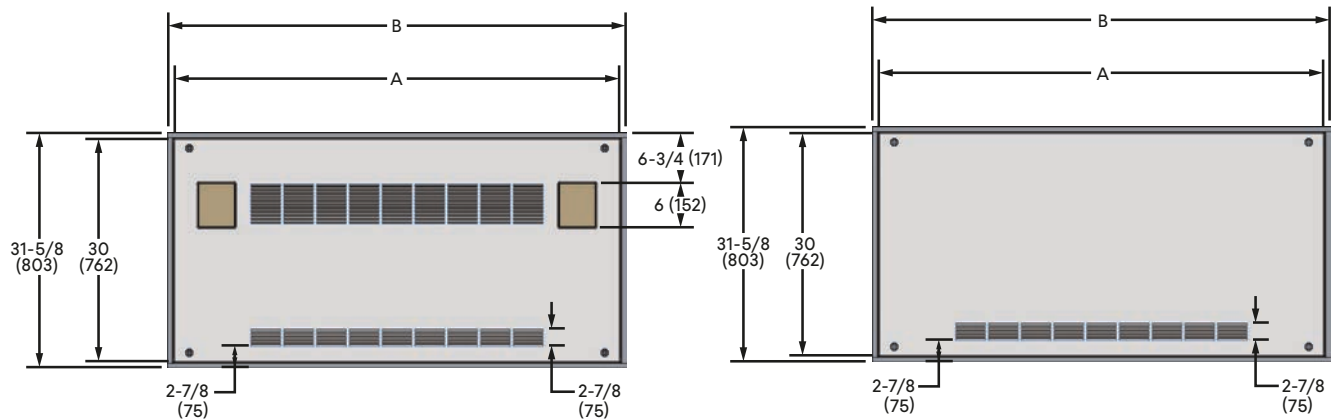
Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight
	A	B	C	D	Blower	Motor	
GHY 02	23-1/2 (597)	22 (559)	23 (584)	16 (406)	1	1	42
GHY 03	27-1/2 (699)	26 (660)	27 (686)	20 (508)	1	1	47
GHY 04	33-1/2 (851)	32 (813)	33 (838)	26 (660)	2	1	57
GHY 06	43-1/2 (1105)	42 (1067)	43 (1092)	36 (914)	2	1	77
GHY 08	45-1/2 (1156)	44 (1118)	45 (1143)	38 (965)	2	1	79
GHY 10	59-1/2 (1511)	58 (1473)	59 (1499)	52 (1321)	4	2	108
GHY 12	67-1/2 (1715)	66 (1676)	67 (1702)	60 (1524)	4	2	127

- NOTES:
1. LH controls shown, RH opposite.
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 6. Service access is located on the front of the control box.
 7. Knockouts on the bottom and side of the control box for incoming power connections.

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Physical Data – GHY

GHY – Wall Mount Panel



Nominal CFM	Dimensions – Inches (Millimeters)			
	Panel Width	Frame Width	Wall Opening	
	A	B	Width	Height
02	40 (1016)	41-3/4 (1061)	40-3/8 (1026)	30-1/4 (768)
03	44 (1118)	45-3/4 (1163)	44-3/8 (1128)	30-1/4 (768)
04	50 (1270)	51-3/4 (1315)	50-3/8 (1280)	30-1/4 (768)
06	60 (1524)	61-3/4 (1569)	60-3/8 (1534)	30-1/4 (768)
08	62 (1575)	63-3/4 (1619)	62-3/8 (1585)	30-1/4 (768)
10	76 (1930)	77-3/4 (1975)	76-3/8 (1940)	30-1/4 (768)
12	84 (2134)	85-3/4 (2178)	84-3/8 (2143)	30-1/4 (768)

Drawing is provided for reference only.
 Dimensions may vary with options ordered.
 Consult IEC website for submittal drawings.

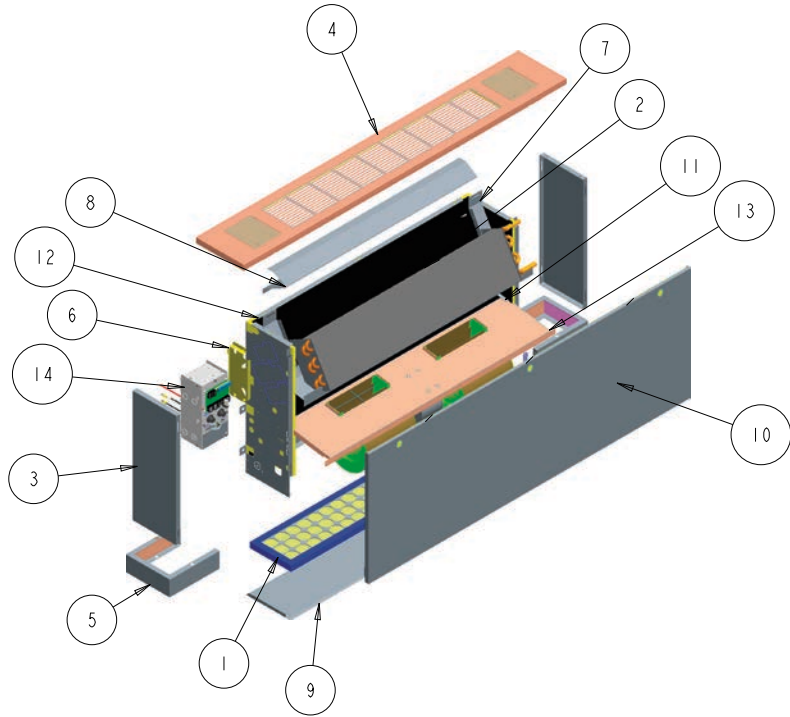
Cabinet Heater G*Y Series

TECHNICAL CATALOG

CUH Exploded View – GXY

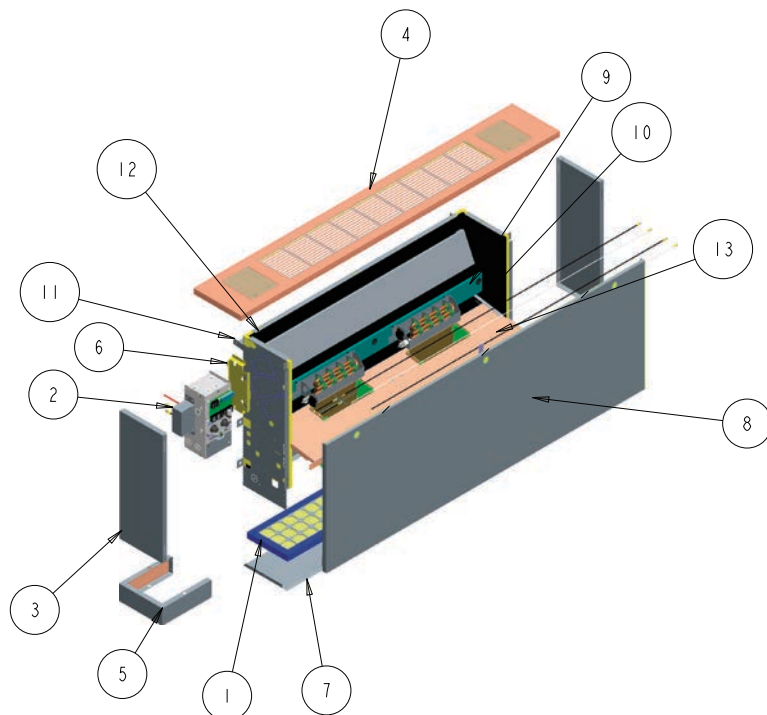
Vertical Cabinet Heater, Hydronic Heat, with Top Supply

Item	Description
1	1-inch Filter
2	Coil Package 2/0 RH
3	Outer Case Leg FXC/FVC, Painted Bright White
4	Top Panel Assembly Louver
5	Subbase F*C RH, Painted Bright White
6	Control Box 85 Bracket CP*/HP*
7	Coil Bracket Supply Assembly, Galvanized
8	Top Coil Baffle G*Y06, Galvanized
9	Base Panel
10	Front Panel Assembly
11	Blower Deck Rail CUH
12	Chassis G*Y Assembly
13	Motor Block Deck Assembly
14	Control Package



Vertical Cabinet Heater, Electric Heat, with Top Supply

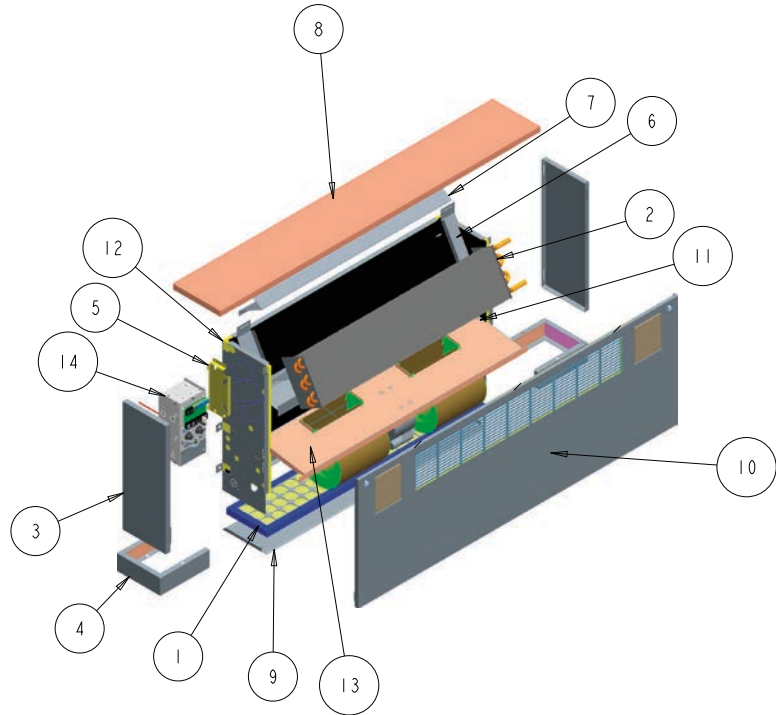
Item	Description
1	1-inch Filter
2	Control Package
3	Outer Case Leg FXC/FVC, Painted Bright White
4	Top Panel Assembly Louver
5	Subbase F*C RH, Painted Bright White
6	Control Box 85 Bracket CP*/HP*
7	Base Panel
8	Front Panel Assembly
9	Heater Assembly F*C
10	Blower Deck Rail CUH
11	Heat Shield Perforated
12	Chassis G*Y Assembly
13	Motor Block Deck Assembly



CUH Exploded View – GXY

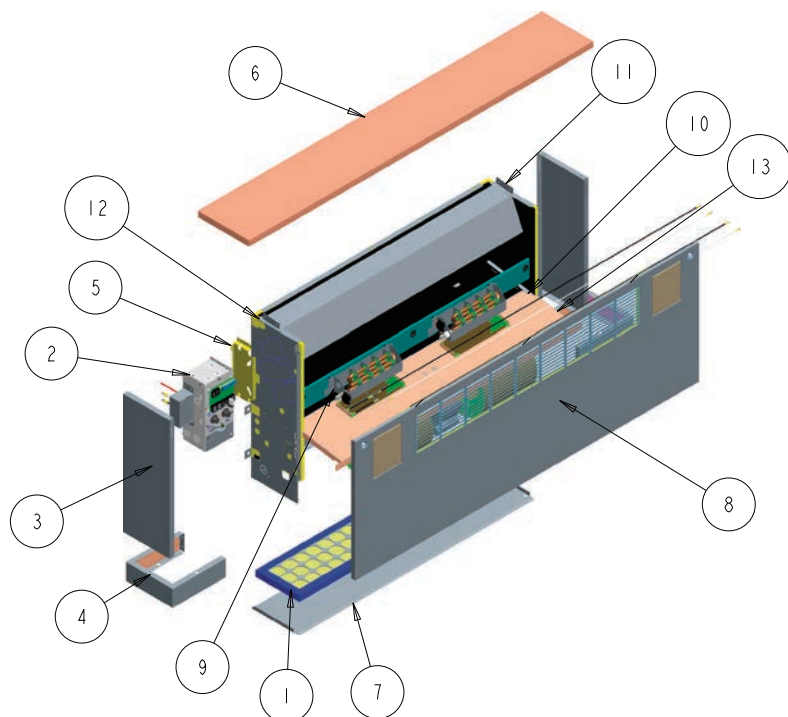
Vertical Cabinet Heater, Hydronic Heat, with Front Supply

Item	Description
1	1-inch Filter
2	Coil Package 2/0 RH
3	Outer Case Leg FXC/FVC, Painted Bright White
4	Subbase F*C RH, Painted Bright White
5	Control Box 85 Bracket CP*/HP*
6	Coil Bracket Supply Assembly, Galvanized
7	Top Coil Baffle, Galvanized
8	Top Panel Solid, Painted Bright White
9	Base Panel
10	Front Panel Assembly Louver
11	Blower Deck Rail CUH
12	Chassis G*Y Assembly
13	Motor Block Deck Assembly
14	Control Package



Vertical Cabinet Heater, Electric Heat, with Front Supply

Item	Description
1	1-inch Filter
2	Control Package
3	Outer Case Leg FXC/FVC, Painted Bright White
4	Subbase F*C RH, Painted Bright White
5	Control Box 85 Bracket CP*/HP*
6	Top Panel Solid GXY06, Painted Bright White
7	Base Panel
8	Front Panel Assembly Louver
9	Heater Assembly F*C
10	Blower Deck Rail CUH
11	Heat Shield Perforated
12	Chassis G*Y Assembly
13	Motor Block Deck Assembly

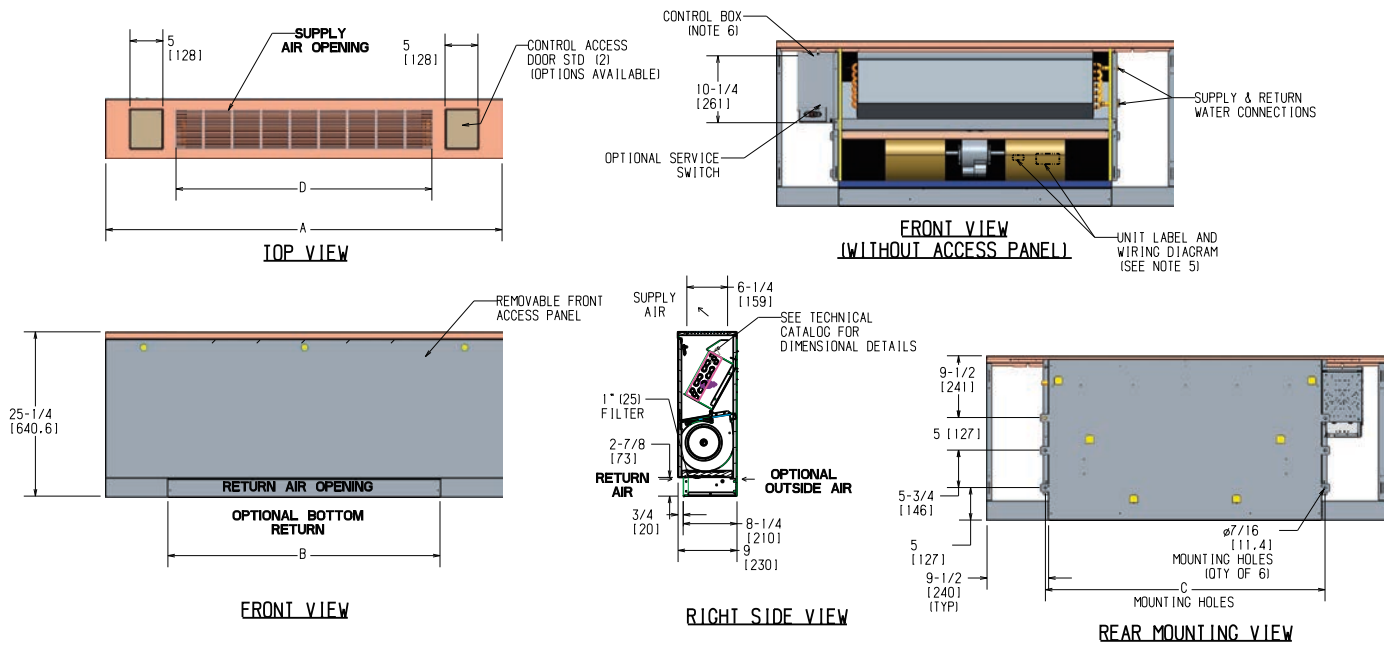


Cabinet Heater G*Y Series

TECHNICAL CATALOG

Physical Data – GXY

GXY – Vertical Cabinet Heater, Hydronic Heat, with Top Supply



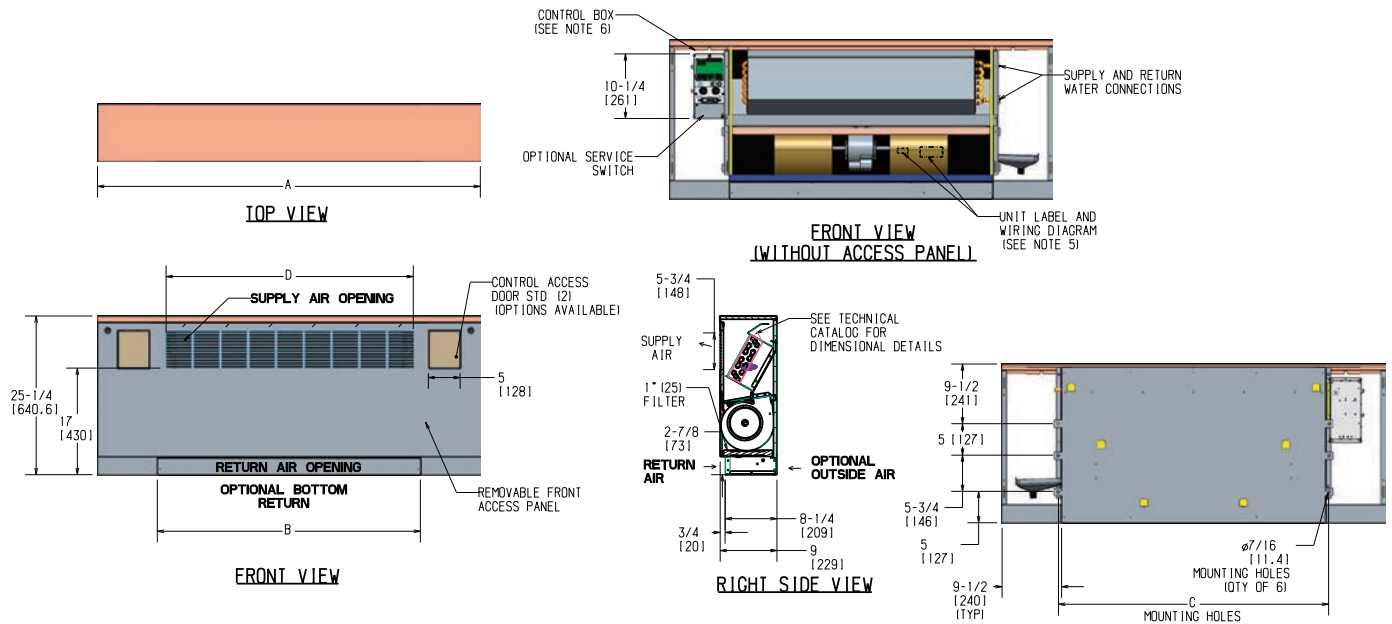
Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight
	A	B	C	D	Blower	Motor	
GXY 02	41 (1041)	22 (559)	23 (584)	17-1/4 (438)	1	1	65
GXY 03	45 (1143)	26 (660)	27 (686)	21-1/2 (546)	1	1	70
GXY 04	51 (1295)	32 (813)	33 (838)	26 (660)	2	1	84
GXY 06	61 (1549)	42 (1067)	43 (1092)	39-1/4 (997)	2	1	102
GXY 08	63 (1600)	44 (1118)	45 (1143)	39-1/4 (997)	2	1	104
GXY 10	77 (1956)	58 (1473)	59 (1499)	52-1/8 (1324)	4	2	136
GXY 12	85 (2159)	66 (1676)	67 (1702)	61-1/4 (1556)	4	2	157

- NOTES:
1. RH coil shown, LH opposite.
 2. All dimensions are +/- 1/4 inch (6). Drawing not to scale.
 3. Product specifications are subject to changes without notice.
 4. Control box size and position may vary (consult factory).
 5. Position may vary.
 6. Service access is located on the front of the control box.
 7. Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is provided for reference only.
 Dimensions may vary with options ordered.
 Consult IEC website for submittal drawings.

Physical Data – GXY

GXY – Vertical Cabinet Heater, Hydronic Heat, with Front Supply



Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight
	A	B	C	D	Blower	Motor	
GXY 02	41 (1041)	22 (559)	23 (584)	17-1/4 (438)	1	1	65
GXY 03	45 (1143)	26 (660)	27 (686)	21-1/2 (546)	1	1	70
GXY 04	51 (1295)	32 (813)	33 (838)	26 (660)	2	1	84
GXY 06	61 (1549)	42 (1067)	43 (1092)	39-1/4 (997)	2	1	102
GXY 08	63 (1600)	44 (1118)	45 (1143)	39-1/4 (997)	2	1	104
GXY 10	77 (1956)	58 (1473)	59 (1499)	52-1/2 (1334)	4	2	136
GXY 12	85 (2159)	66 (1676)	67 (1702)	61-1/4 (1556)	4	2	157

- NOTES:
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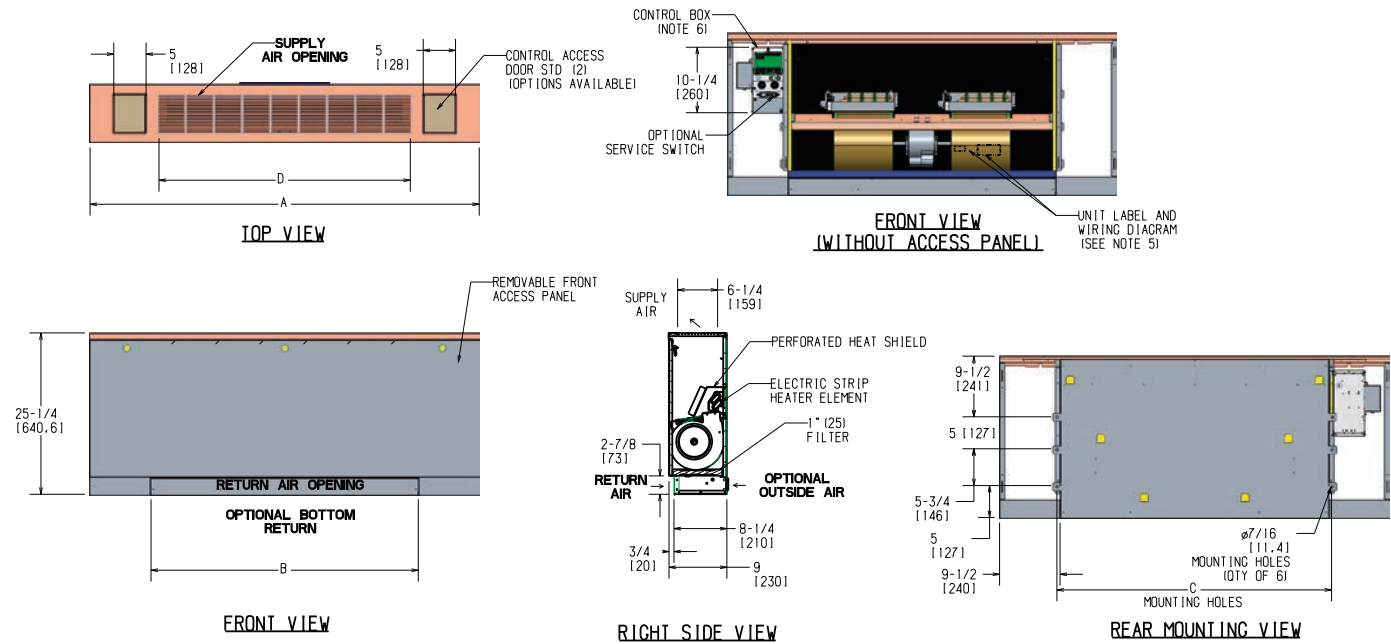
Drawing is provided for reference only.
 Dimensions may vary with options ordered.
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Cabinet Heater G*Y Series

TECHNICAL CATALOG

Physical Data – GXY

GXY – Vertical Cabinet Heater, Electric Heat, with Top Supply



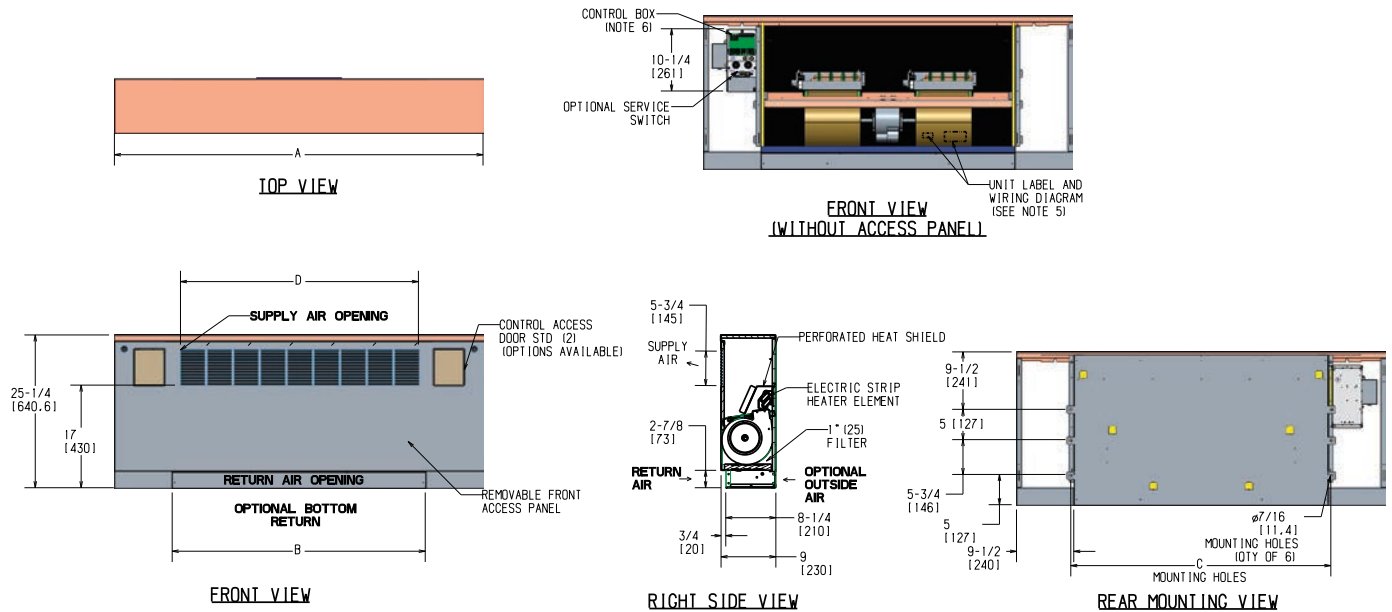
Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight
	A	B	C	D	Blower	Motor	
GXY 02	41 (1041)	22 (559)	23 (584)	17-1/4 (438)	1	1	65
GXY 03	45 (1143)	26 (660)	27 (686)	21-1/2 (546)	1	1	70
GXY 04	51 (1295)	32 (813)	33 (838)	26 (660)	2	1	84
GXY 06	61 (1549)	42 (1067)	43 (1092)	39-1/4 (997)	2	1	102
GXY 08	63 (1600)	44 (1118)	45 (1143)	39-1/4 (997)	2	1	104
GXY 10	77 (1956)	58 (1473)	59 (1499)	52-1/2 (1334)	4	2	136
GXY 12	85 (2159)	66 (1676)	67 (1702)	61-1/4 (1556)	4	2	157

- NOTES:
- LH controls shown, RH opposite.
 - All dimensions are +/- 1/4 inch (6). Drawing not to scale.
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Drawing is provided for reference only.
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Physical Data – GXY

GXY – Vertical Cabinet Heater, Electric Heat, with Front Supply



Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight
	A	B	C	D	Blower	Motor	
GXY 02	41 (1041)	22 (559)	23 (584)	17-1/4 (438)	1	1	65
GXY 03	45 (1143)	26 (660)	27 (686)	21-1/2 (546)	1	1	70
GXY 04	51 (1295)	32 (813)	33 (838)	26 (660)	2	1	84
GXY 06	61 (1549)	42 (1067)	43 (1092)	39-1/4 (997)	2	1	102
GXY 08	63 (1600)	44 (1118)	45 (1143)	39-1/4 (997)	2	1	104
GXY 10	77 (1956)	58 (1473)	59 (1499)	52-1/2 (1334)	4	2	136
GXY 12	85 (2159)	66 (1676)	67 (1702)	61-1/4 (1556)	4	2	157

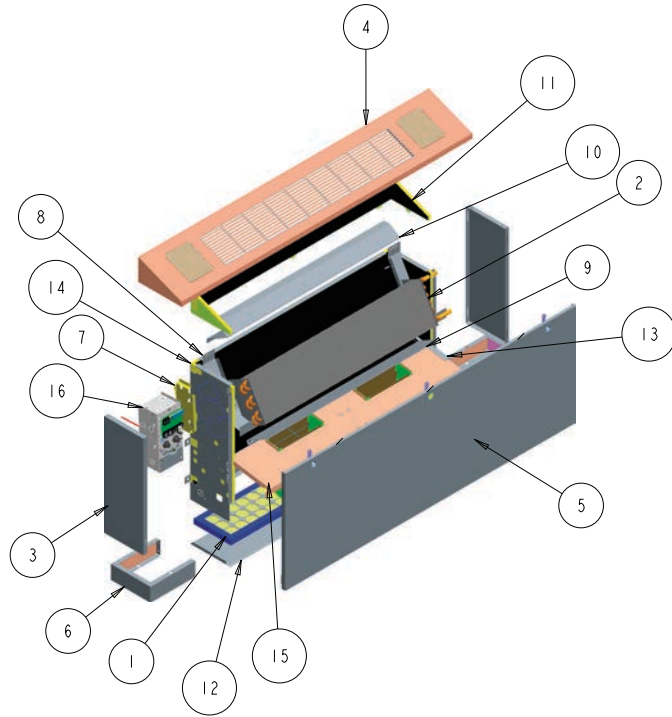
- NOTES:
- LH controls shown, RH opposite.
 - All dimensions are +/- 1/4 inch (6). Drawing not to scale.
 - Product specifications are subject to changes without notice.
 - Control box size and position may vary (consult factory).
 - Position may vary.
 - Service access is located on the front of the control box.
 - Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is provided for reference only.
Dimensions may vary with options ordered.
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CUH Exploded View – GSY

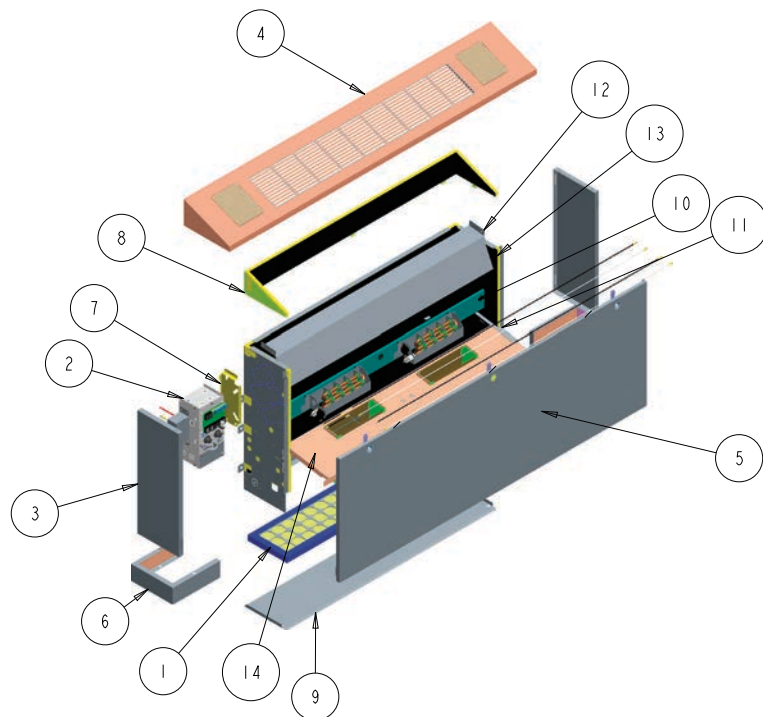
Vertical Sloped Top Cabinet Heater, Hydronic Heat, with Top Supply

Item	Description
1	1-inch Filter
2	Coil Package 2/0 F*Y06 RH
3	Outer Case Leg FXC/FVC, Painted Bright White
4	Top Panel Assembly Louver, Painted Bright White
5	Front Panel Assembly
6	Subbase F*C RH, Painted Bright White
7	Control Box 85 Bracket CP*/HP*
8	Coil Bracket Supply Assembly G*Y06, Galvanized, 6 Tubes
9	Bottom Coil Baffle, Galvanized
10	Top Coil Baffle, Galvanized
11	Wrapper Exit Assembly
12	Base Panel
13	Blower Deck Rail CUH
14	Chassis G*Y Assembly
15	Motor Block Deck Assembly
16	Control Package



Vertical Sloped Top Cabinet Heater, Electric Heat, with Top Supply

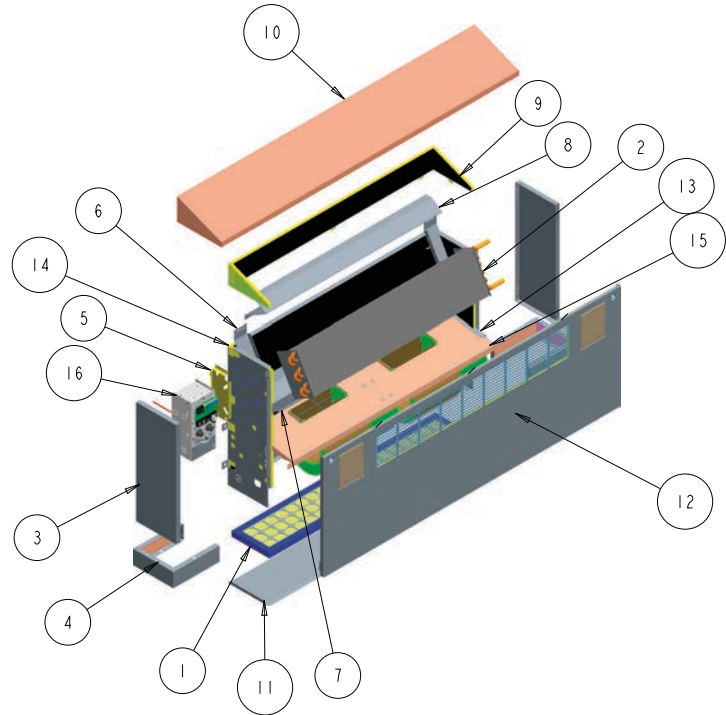
Item	Description
1	1-inch Filter
2	Control Package
3	Outer Case Leg FXC/FVC, Painted Bright White
4	Top Panel Assembly Louver
5	Front Panel Assembly
6	Subbase F*C RH, Painted Bright White
7	Control Box 85 Bracket CP*/HP*
8	Wrapper Exit Assembly
9	Base Panel
10	Heater Assembly F*C
11	Blower Deck Rail CUH
12	Heat Shield Perforated
13	Chassis G*Y Assembly
14	Motor Block Deck Assembly



CUH Exploded View – GSY

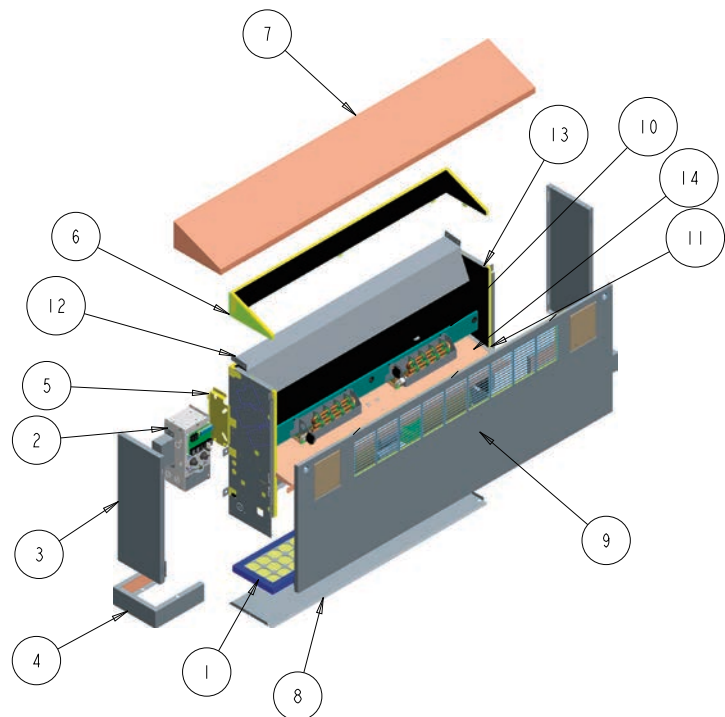
Vertical Sloped Top Cabinet Heater, Hydronic Heat, with Front Supply

Item	Description
1	1-inch Filter
2	Coil Package 2/0 F*Y RH
3	Outer Case Leg FXC/FVC, Painted Bright White
4	Subbase F*C RH, Painted Bright White
5	Control Box 85 Bracket CP*/HP*
6	Coil Bracket Supply Assembly G*Y06, Galvanized, 6 Tubes
7	Bottom Coil Baffle G*Y06, Galvanized
8	Top Coil Baffle G*Y06, Galvanized
9	Wrapper Exit Assembly FVC
10	Top Panel Solid GSY, Painted Bright White
11	Base Panel
12	Front Panel Assembly Louver
13	Blower Deck Rail CUH
14	Chassis G*Y Assembly
15	Motor Block Deck Assembly
16	Control Package



Vertical Sloped Top Cabinet Heater, Electric Heat, with Front Supply

Item	Description
1	1-inch Filter
2	Coil Package 2/0 F*Y RH
3	Outer Case Leg FXC/FVC, Painted Bright White
4	Subbase F*C RH, Painted Bright White
5	Control Box 85 Bracket CP*/HP*
6	Wrapper Exit Assembly FVC
7	Top Panel Solid GSY, Painted Bright White
8	Base Panel
9	Front Panel Assembly Louver
10	Heater Assembly F*C
11	Blower Deck Rail CUH
12	Heat Shield G*YPerforated
13	Chassis G*Y Assembly
14	Motor Block Deck Assembly G*Y

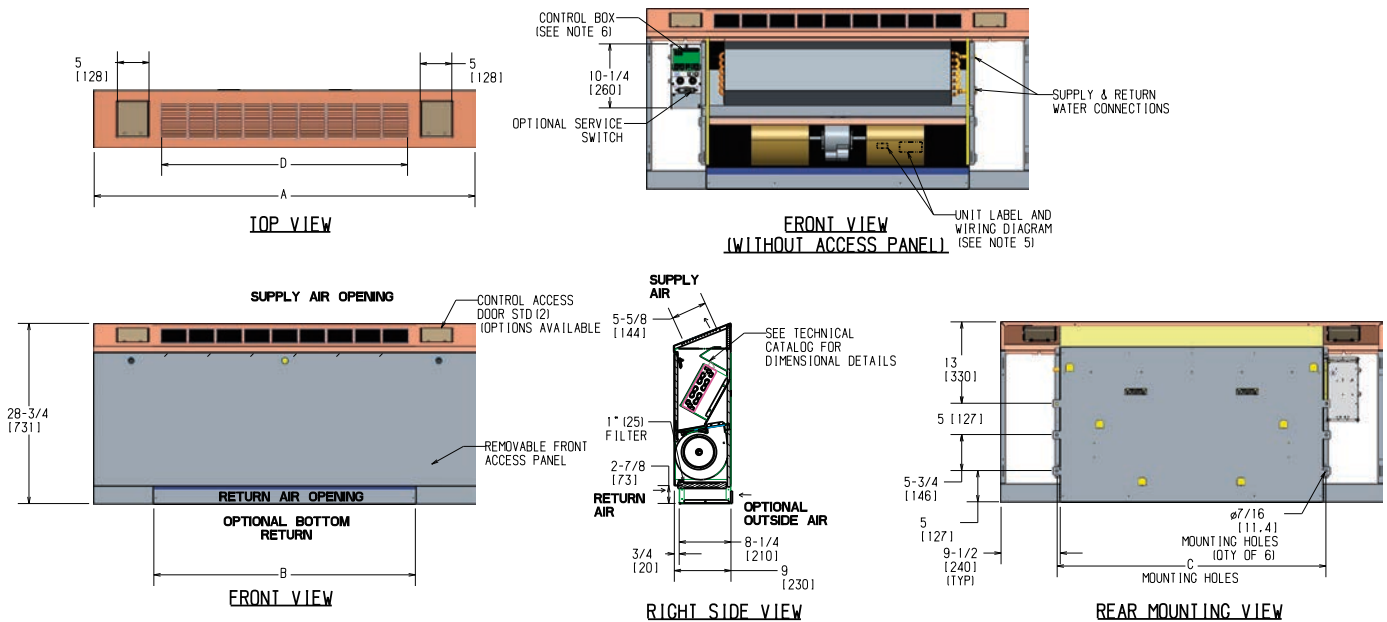


Cabinet Heater G*Y Series

TECHNICAL CATALOG

Physical Data – GSY

GSY – Vertical Sloped Top Cabinet Heater, Hydronic Heat, with Top Supply



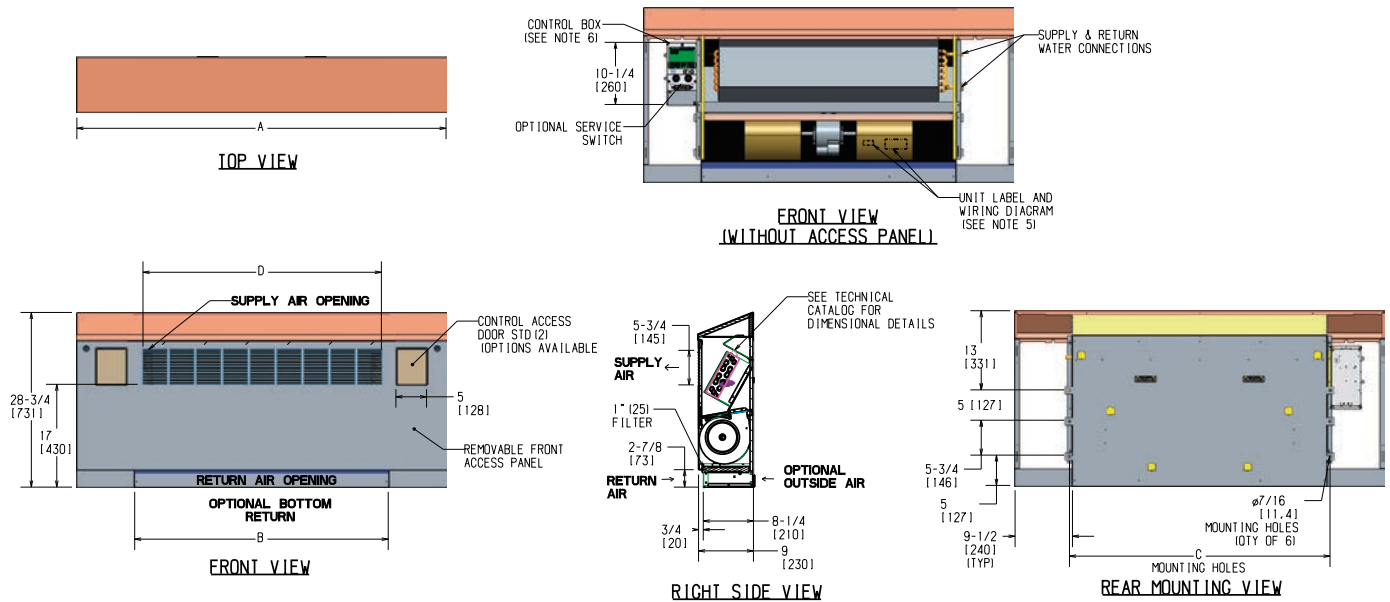
Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight
	A	B	C	D	Blower	Motor	
GSY 02	41 (1041)	22 (559)	23 (584)	17-1/4 (438)	1	1	64
GSY 03	45 (1143)	26 (660)	27 (686)	21-1/2 (546)	1	1	69
GSY 04	51 (1295)	32 (813)	33 (838)	26 (660)	2	1	83
GSY 06	61 (1549)	42 (1067)	43 (1092)	39-1/4 (997)	2	1	100
GSY 08	63 (1600)	44 (1118)	45 (1143)	39-1/4 (997)	2	1	102
GSY 10	77 (1956)	58 (1473)	59 (1499)	52-1/2 (1334)	4	2	135
GSY 12	85 (2159)	66 (1676)	67 (1702)	61-1/4 (1556)	4	2	156

- NOTES: 1. RH coil shown, LH opposite.
 2. All dimensions are +/- 1/4 inch (6). Drawing not to scale.
 3. Product specifications are subject to changes without notice.
 4. Control box size and position may vary (consult factory).
 5. Position may vary.
 6. Service access is located on the front of the control box.
 7. Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is provided for reference only.
 Dimensions may vary with options ordered.
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Physical Data – GSY

GSY – Vertical Sloped Top Cabinet Heater, Hydronic Heat, with Front Supply



Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight
	A	B	C	D	Blower	Motor	
GSY 02	41 (1041)	22 (559)	23 (584)	17-1/4 (438)	1	1	64
GSY 03	45 (1143)	26 (660)	27 (686)	21-1/2 (546)	1	1	69
GSY 04	51 (1295)	32 (813)	33 (838)	26 (660)	2	1	83
GSY 06	61 (1549)	42 (1067)	43 (1092)	39-1/4 (997)	2	1	100
GSY 08	63 (1600)	44 (1118)	45 (1143)	39-1/4 (997)	2	1	102
GSY 10	77 (1956)	58 (1473)	59 (1499)	52-1/2 (1334)	4	2	135
GSY 12	85 (2159)	66 (1676)	67 (1702)	61-1/4 (1556)	4	2	156

- NOTES:
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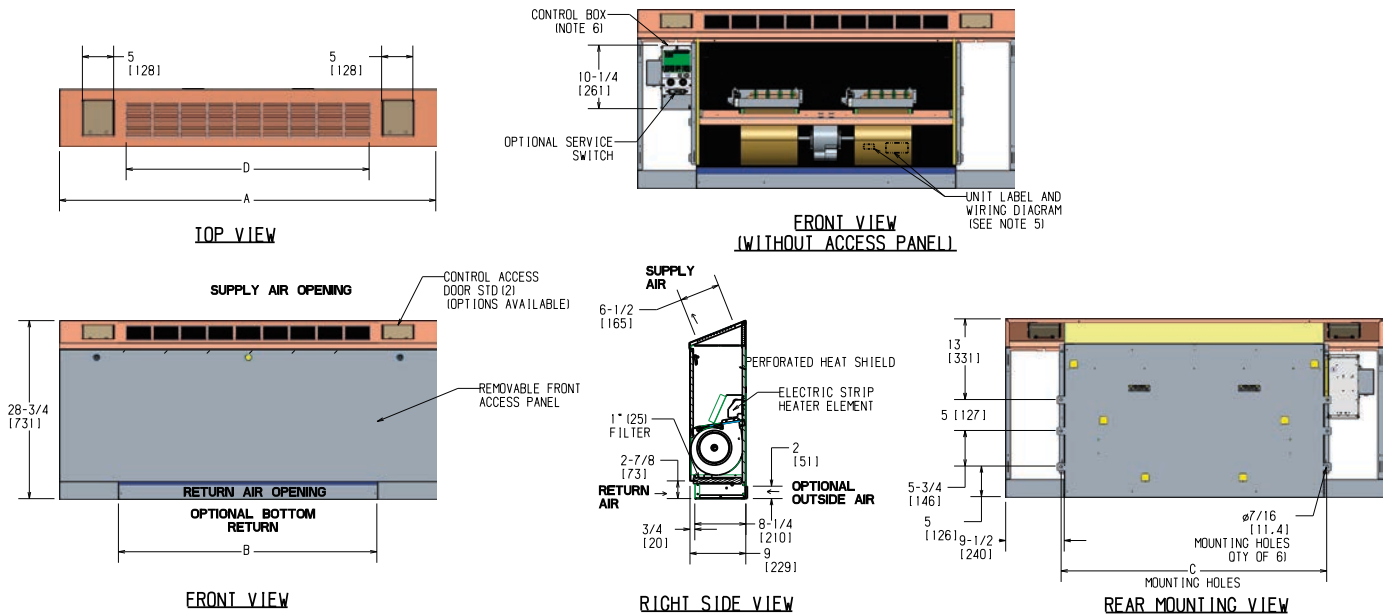
Drawing is provided for reference only.
Dimensions may vary with options ordered.
Consult IEC website for submittal drawings.

Cabinet Heater G*Y Series

TECHNICAL CATALOG

Physical Data – GSY

GSY – Vertical Sloped Top Cabinet Heater, Electric Heat, with Top Supply



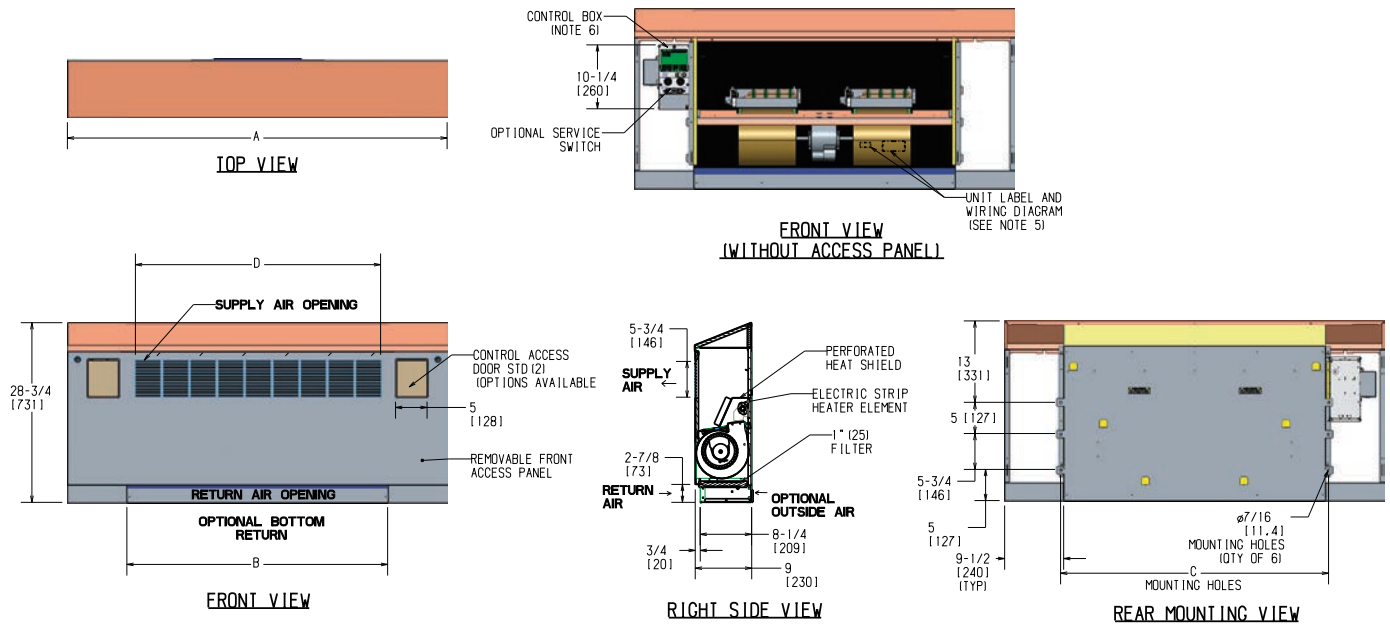
Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight
	A	B	C	D	Blower	Motor	
GSY 02	41 (1041)	22 (559)	23 (584)	17-1/4 (438)	1	1	64
GSY 03	45 (1143)	26 (660)	27 (686)	21-1/2 (546)	1	1	69
GSY 04	51 (1295)	32 (813)	33 (838)	26 (660)	2	1	83
GSY 06	61 (1549)	42 (1067)	43 (1092)	39-1/4 (997)	2	1	100
GSY 08	63 (1600)	44 (1118)	45 (1143)	39-1/4 (997)	2	1	102
GSY 10	77 (1956)	58 (1473)	59 (1499)	52-1/2 (1334)	4	2	135
GSY 12	85 (2159)	66 (1676)	67 (1702)	61-1/4 (1556)	4	2	156

- NOTES: 1. LH controls shown, RH opposite.
 2. All dimensions are +/- 1/4 inch (6). Drawing not to scale.
 3. Product specifications are subject to changes without notice.
 4. Control box size and position may vary (consult factory).
 5. Position may vary.
 6. Service access is located on the front of the control box.
 7. Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is provided for reference only.
 Dimensions may vary with options ordered.
 Consult IEC website for submittal drawings.

Physical Data – GSY

GSY – Vertical Sloped Top Cabinet Heater, Electric Heat, with Front Supply

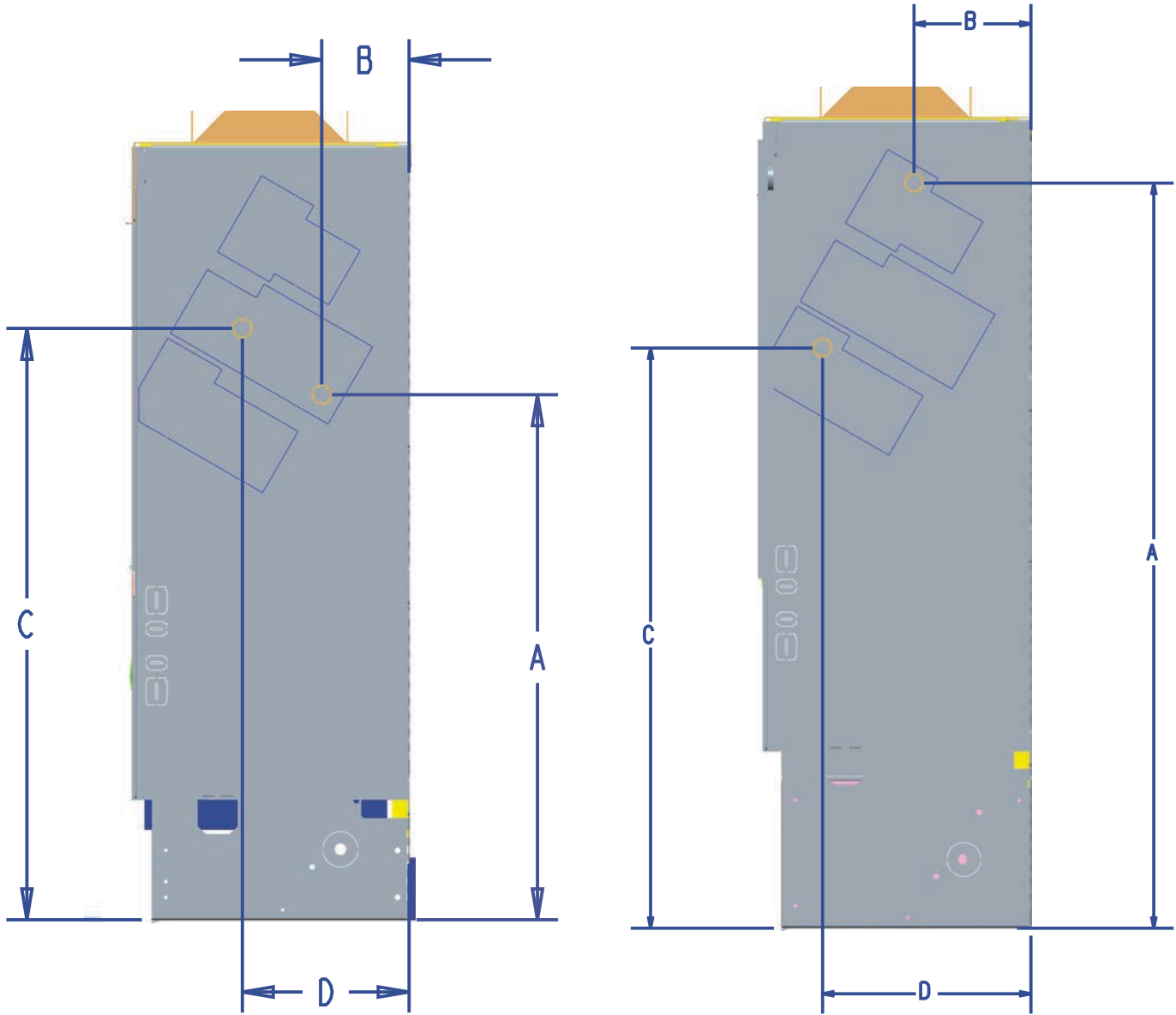


Unit Model	Dimensions – Inches (Millimeters)				Quantity/Unit		Unit Weight
	A	B	C	D	Blower	Motor	
GSY 02	41 (1041)	22 (559)	23 (584)	17-1/4 (438)	1	1	64
GSY 03	45 (1143)	26 (660)	27 (686)	21-1/2 (546)	1	1	69
GSY 04	51 (1295)	32 (813)	33 (838)	26 (660)	2	1	83
GSY 06	61 (1549)	42 (1067)	43 (1092)	39-1/4 (997)	2	1	100
GSY 08	63 (1600)	44 (1118)	45 (1143)	39-1/4 (997)	2	1	102
GSY 10	77 (1956)	58 (1473)	59 (1499)	52-1/2 (1334)	4	2	135
GSY 12	85 (2159)	66 (1676)	67 (1702)	61-1/4 (1556)	4	2	156

- NOTES:
- LH controls shown, RH opposite.
 - All dimensions are +/- 1/4 inch (6). Drawing not to scale.
 - Product specifications are subject to changes without notice.
 - Control box size and position may vary (consult factory).
 - Position may vary.
 - Service access is located on the front of the control box.
 - Knockouts on the bottom and side of the control box for incoming power connections.

Drawing is provided for reference only.
Dimensions may vary with options ordered.
Consult IEC website for submittal drawings.

Coil Stub Out Dimensions



Size 02-06 Stub Out Location				
Coil Row(s)	Dimensions - Inches (Millimeters)			
	Return (A)	Return (B)	Supply (C)	Supply (D)
1	21-5/8 (549)	3-3/4 (95)	16-1/8 (410)	6-7/8 (175)
2	21-1/8 (537)	3-1/2 (89)	15-5/8 (397)	6-5/8 (168)
3	17-7/8 (454)	3-1/2 (89)	18-7/8 (479)	5-3/8 (137)
4	16-3/4 (425)	2-3/4 (70)	18-7/8 (479)	5-3/8 (137)

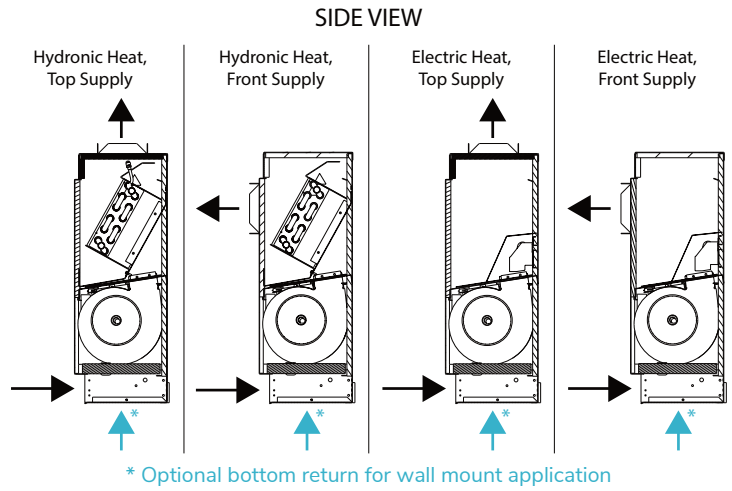
NOTES: Standard coil circuiting configurations shown.
For special coil arrangements, contact Sales Rep.

Size 08-12 Stub Out Location				
Coil Row(s)	Dimensions - Inches (Millimeters)			
	Return (A)	Return (B)	Supply (C)	Supply (D)
1	23-3/4 (603)	3-7/8 (98)	19-1/4 (489)	6-7/8 (175)
2	24-1/8 (613)	4-1/8 (105)	17-5/8 (448)	7-1/4 (184)
3	20-7/8 (530)	3-1/2 (89)	20-7/8 (530)	6 (152)
4	19-7/8 (505)	2-7/8 (73)	20-7/8 (530)	6 (152)

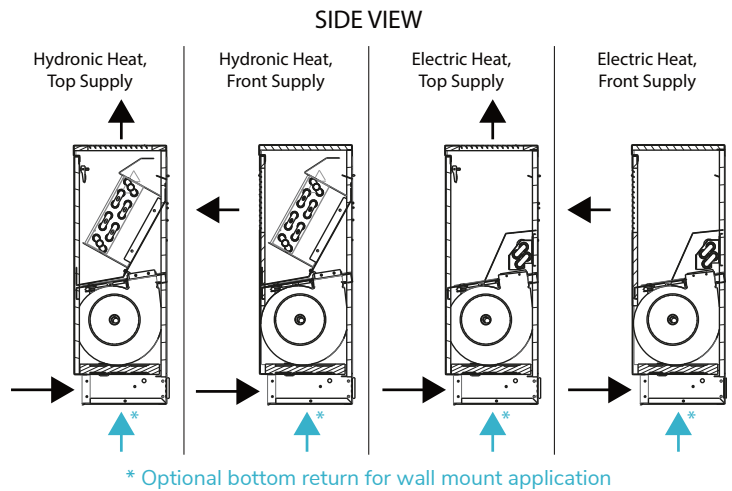
NOTES: Standard coil circuiting configurations shown.
For special coil arrangements, contact Sales Rep.

Air Flow Arrangements

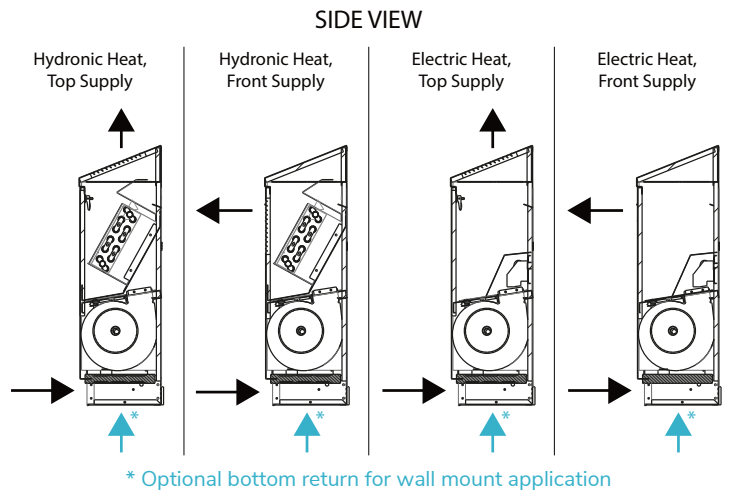
GHY – Vertical Hideaway Cabinet Heater



GXY – Vertical Cabinet Heater



GSY – Vertical Sloped Top Cabinet Heater



Cabinet Heater G*Y Series

TECHNICAL CATALOG

Standard Features, Options and Accessories

Features and Options	Standard	Factory	Field Installed	Factory Special
Air Flow Arrangements				
Front Return/Top Supply	X			
Front Return/Front Supply		X		
Bottom Return/Top Supply (Wall Mount Only)		X		
Bottom Return/Front Supply (Wall Mount Only)		X		
Floor Mount	X			
Wall Mount		X		
Coil Options				
1, 2, 3, 4-Row	X	X		
Steam				X
Manual Air Vent	X			
Automatic Air Vent		X		
Anti-Corrosive Epoxy Coating		X		
Electric Heat				
Nichrome Wire Strip Electric Heater (Total and Auxiliary)	X	X		
Peforated Electric Heat Shield	X			
Connection				
Right or Left (Same End)	X			
Drain Pan				
Plastic Auxiliary Drain Pan			X	
Fin Material				
Aluminum w/Galvanized End Sheets	X			
Indoor Air Quality				
1" Throwaway Non-Woven Synthetic	X			
1" Permanent		X		
1" MERV 8 Pleated		X		
1" MERV 13 Pleated				X
Bipolar Ionizer		X		
Insulation				
1/2" Standard Fiberglass	X			
1/2" Premium IAQ Fiberglass		X		
1/2" Foil Face		X		
1/2" Closed Cell		X		
Motor Type				
PSC Motors	X			
ECM Motors		X		
Motor Voltage				
120/1/60 3-Speed	X			
208/230/277/1/60 3-Speed		X		
Supply/Return Air Grilles				
Stamped Supply Grille (GXY, GSY)	X			
Double Deflection Integral Supply Grille, Painted (GXY, GSY)		X		
Double Deflection Aluminum Supply Grille (GXY, GSY)		X		
Stamped Return Grille (GXY, GSY)		X		

table continued on next page

Standard Features, Options and Accessories

Features and Options	Standard	Factory	Field Installed	Factory Special
Controls				
Service Switch with Lockout Tabs		X		
Single Point Power Connection		X		
Incoming Power Fusing		X		
24V Controls		X		
Three Speed Switch		X		
Thermostats		X	X	
Paint Options				
Bright White	X			
Arctic White, Polar White, Flat Black, Ermine Gray, Champagne Beige, Toffee Brown		X		
Special Color				X
Outside Air Dampers/Wall Panels				
Manually Controlled Damper		X		
Motorized Controlled Damper		X		
Outside Air Box			X	
Front Panel/Decorative Wall Panel				
16ga Decorative Framed Wall Panels (GHY)			X	
16ga Front Panel	X			
Fully Insulated Front Panel		X		
Front/Wall Panel Tamper Proof Locks		X		
Tamperproof Locks				
Front/Wall Panel		X		
Access Doors		X		
Cabinet Options				
Floor/Wall Mount Trim Kit			X	
Rear Cabinet Extensions		X		
Insulated Rear Cabinet Extensions		X		
Left/Right Cabinet Extensions		X		
Height Cabinet Extensions		X		
1", 2.5" Leveling Legs		X		
16ga, 14ga Cabinet		X		
Finished Back Panel		X		
Valve Package Options* (* Valve packages are assembled at the factory but field installed.)				
Union Connections at the Coil			X	
24" Braided Hoses			X	
Ball Valves			X	
2-Way/3-Way 25 psi Control Valve			X	
2-Way/3-Way 150 psi, Normally Closed, Control Valve			X	
2-Way/3-Way 150 psi, Normally Open, Control Valve			X	
2-Way/3-Way 35 psi Floating Control Valve			X	
2-Way/3-Way 35 psi Proportional Control Valve			X	
Combination Supply/Return Valves			X	
Fixed Flow Control 1.0-8.0 GMP			X	
Y-Strainer/Y-Strainer with Blowdown			X	
P-T Ports			X	
Circuit Setter			X	
Balance Valve (Return Line)			X	
Balance Valve (3-Way Bypass)			X	

Cabinet Heater G*Y Series

TECHNICAL CATALOG

Standard Features, Options, and Accessories

Filters

All Vertical GHY, GXY, GSY Series units include a non-woven, synthetic throwaway filter, designed to maximize airflow and performance. Permanent (cleanable), MERV 8 filters are also available as factory-installed options.

Filter Static Resistance (in w.c.)

Unit Size	Nominal One-Inch Filter Size – Inches (Millimeters)
	GHY, GXY, GSY
02	7-3/4" x 21-3/4" (197 x 552)
03	7-3/4" x 25-3/4" (197 x 654)
04	7-3/4" x 31-3/4" (197 x 806)
06	7-3/4" x 41-3/4" (197 x 1060)
08	7-3/4" x 43-3/4" (197 x 1111)
10	7-3/4" x 57-3/4" (197 x 1467)
12	7-3/4" x 65-3/4" (197 x 1670)

Unit Data			Filter Pressure Drop		
Model	Unit Size	Nominal CFM	1" Throwaway	1" Permanent	1" Merv 8
G*Y	02	200	0.041	0.064	0.120
	03	300	0.051	0.090	0.140
	04	400	0.055	0.102	0.148
	06	600	0.061	0.125	0.163
	08	800	0.074	0.184	0.204
	10	1000	0.071	0.168	0.192
	12	1200	0.074	0.183	0.204

NOTES: Sizes shown are nominal ordering sizes

Bipolar Ionizer Specifications

SPECIFICATIONS:

- Airflow Capacity: 2,400 CFM
- Pressure Drop: Less than 0.01 In. WG
- Housing Material: ABS
- Weight: 0.2 lbs.
- Maximum Operating Temperature: 200° F (93°C)
- Electrical:
 - Voltage: 24V AC (60Z)
 - Power Consumptions: Less than 1 watt
 - Frequency: 50/60 hertz
 - Over Current Protection:.. 500mA Glass Cartridge Fuse
 - Lead Wires 50 inches(L)

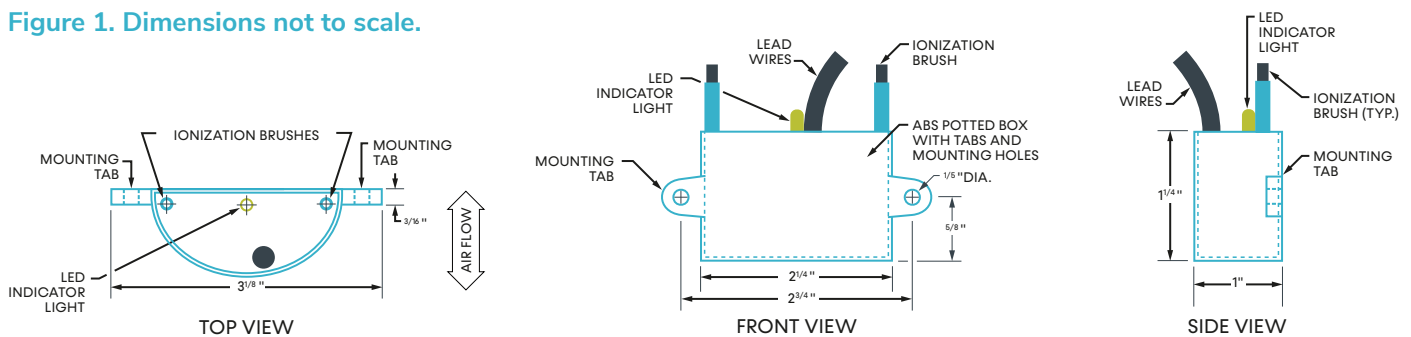
Ionization Output:

- Mode of Operation Needlepoint Type
- Needle Configuration: Brush Type

DIMENSIONS: See Figure 1

APPROVALS: Intertek/ETL Standard UL 867

Figure 1. Dimensions not to scale.



Standard Features, Options and Accessories

Control Packages

Controls

As detailed in the table below, we offer control packages that fit most customer needs. Additional controls and devices are available to meet even the most demanding operating logic.

Low Voltage Control (24V)

The 85 Control Board offers simplified install and service with its plug-in connections and QR code for quick wiring diagram reference. It also offers LED diagnostics and built-in design flexibility for added features such as staged cooling or BAS signal input. The 85 Control board is available with most control schemes.

85 Control Board Standard Features

- Simplified plug connections
- PSC or ECM control
- LED diagnostics (See IOM-010 for detailed LED function and outcome)
- QR code to wire diagram for ease of troubleshooting
- Conduit compatible for remote mounted control boxes
- Compatibility with all actuator types
- Removable thermostat connector

85 Control Board Options

- ECM fan speed adjustment
- BAS signal input to interrupt fan and actuators
- Fusing and service switch with electric heat
- Condensate switch LED indication
- Damper control

Service Switches

We offer concealed service switches for use by maintenance and service personnel to shut off the power while working on the unit.

Fusing

We offer incoming power fusing for all units as well as blower motor and control sub-fusing (single power source wiring).

Other Control Options

- Unit mounted 3-speed switch (thermostat by others)
- Low voltage remote shutdown relays (Special Quote)
- Fan and valve cycle applications (Special Quote)
- Thermostats available with large letter print for handicap applications (Special Quote)

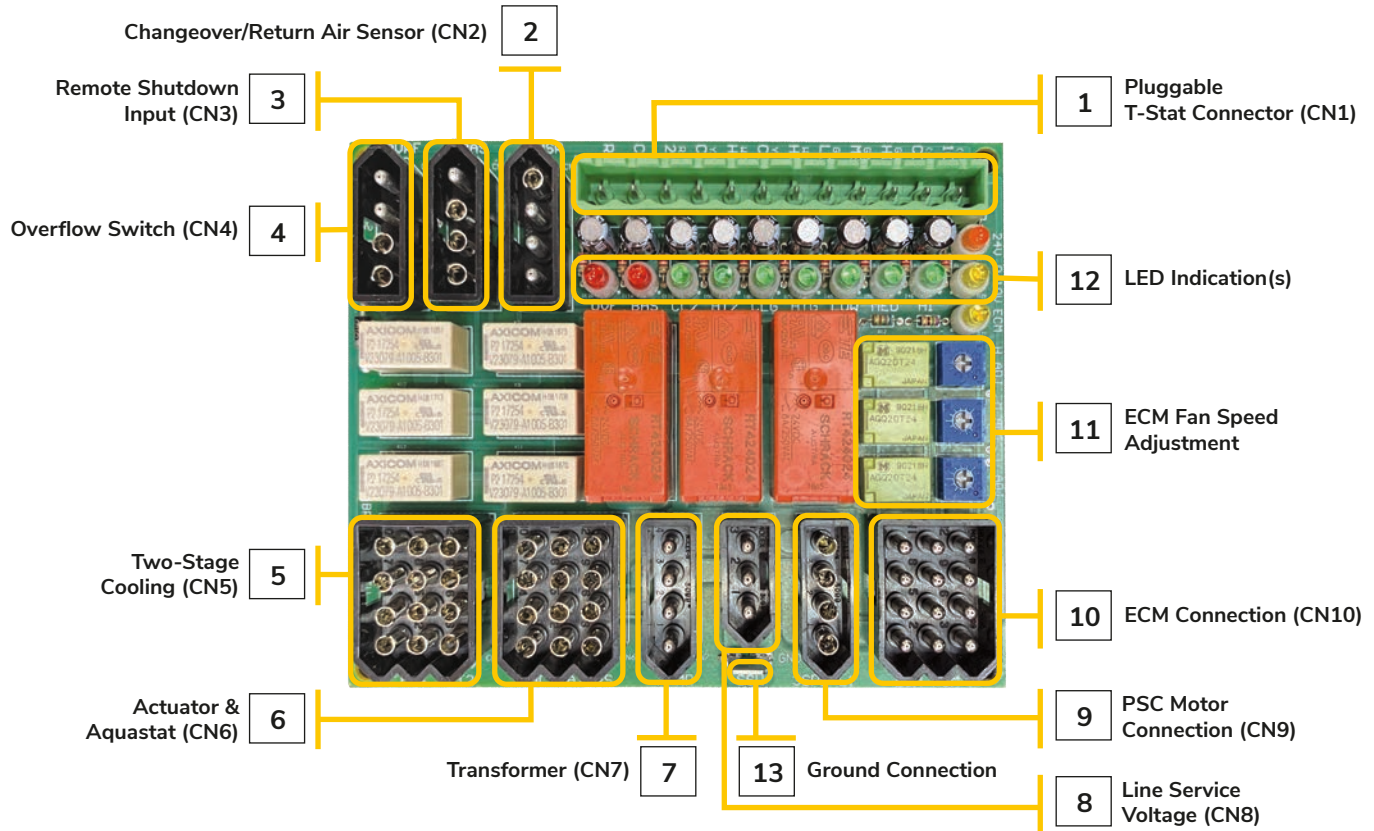
Cabinet Heater G*Y Series

TECHNICAL CATALOG

Standard Features, Options and Accessories

Controls Packages

85 Control Board



1	CN1 – 24V Customer Input (Thermostat)
2	CN2 – Changeover/Return Air Sensor
3	CN3 – Remote Shutdown Input
4	CN4 – Condensate Overflow Switch
5	CN5 – Two Stage Cooling
6	CN6 – Actuator & Aquastat
7	CN7 – Transformer
8	CN8 – Line Service Voltage
9	CN9 – PSC Motor Connection
10	CN10 – ECM Connection
11	ECM Fan Speed Adjustment
12	LED Diagnostics
13	Ground Connection

Standard Features, Options and Accessories

Thermostat Control Package Applications

Unit Type	Control Option	System Type	Changeover Type	W	P	N	F	G	A	B	C
-	Manual Fan	Manual ¹	None	-	-	-	-	-	-	-	-
2-Pipe	Valve Cycle*	Heat Only	None	•	•	•	•	•	•	•	•
Electric Heat		Total Electric Heat	None	•	•	•	•	•	•	•	•

NOTES: 1. Fan switch only; no thermostat

Thermostat Features

All listed controls include fan switching.	Control Type ¹							
	W	P	N	F	G	A	B	C
24V, 115V, 208V, 240V, 277V	24V only	24V only	24V only	24V only	24V only	•	•	•
Wi-Fi Enabled	•	-	-	-	-	-	-	-
Mobile and Web App for Remote Control	•	-	-	-	-	-	-	-
Staged Cooling	•	-	-	-	-	-	-	-
Programmable	•	•	-	•	-	-	-	-
Remote Wall Mounted	•	•	•	•	•	•	•	•
Manual Fan Switch Operation	•	•	•	•	•	•	•	•
Auto Fan Speed Control	•	•	•	•	•	-	-	-
Continuous 3-Speed Fan	•	•	•	•	•	•	•	•
Cycling Fan	•	•	•	•	•	•	•	•
O.A Damper Signal	•	•	•	•	•	-	-	-
Remote Temperature Sensor	Opt	Opt	Opt	Opt	Opt	•	•	•
Digital Display & Buttons	•	•	•	•	•	-	-	-
Local Temperature Set-Back	•	•	•	•	•	-	-	-
Water Temperature Purge Cycle	•	•	•	•	•	-	-	-
Proportional Control Valves	-	-	-	•	•	-	-	-
Floating Control Valves	-	-	-	•	•	-	-	-
Pipe Sensor	•	•	•	•	•	-	-	-

NOTES: 1. Control packages with valve cycle control are continuous fan operation only.
 2. All wall-mount control packages are shipped loose for field installation. (Boxes, tile rings, plaster rings, etc. are not provided).
 3. Aquastats are included in control packages, as required.

*LEGEND: A • Basic Electronic Wall Series, 155, Vertical
 B • Basic Electronic Wall Series, 155, Horizontal
 C • Basic Electronic Wall Series, 156, Vertical
 P • Basic 24V Digital, 7-Day Programmable
 N • Basic 24V Digital, Non-Programmable
 F • Premium 24V Digital, 7-Day Programmable/BACnet with Proportional Fan/Valves Option
 G • Premium 24V Digital BACnet with Proportional Fan/Valves Option
 W • Venture 24V Wi-Fi Programmable

Cabinet Heater G*Y Series

TECHNICAL CATALOG

Standard Features, Options, and Accessories



Venture 24V,
Wi-Fi Programmable



Basic 24V Digital
7-Day Programmable and
Non-Programmable Series



Premium 24V Digital
7-Day Programmable/BACnet



Basic Electronic Wall Series
155, Vertical and Horizontal

Standard Features, Options, and Accessories

Outside Air Dampers

GHY, GXY, GSY models may be supplied with an outside air inlet connection. When a damper for control of the outside air is provided, two styles of outside air damper control are available.

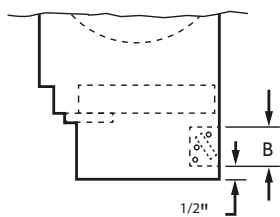
Manual Damper

Control of the damper is by manual operation of the damper in the unit return air toe space. GHY, GXY, GSY models are provided with a lever arm on the damper.

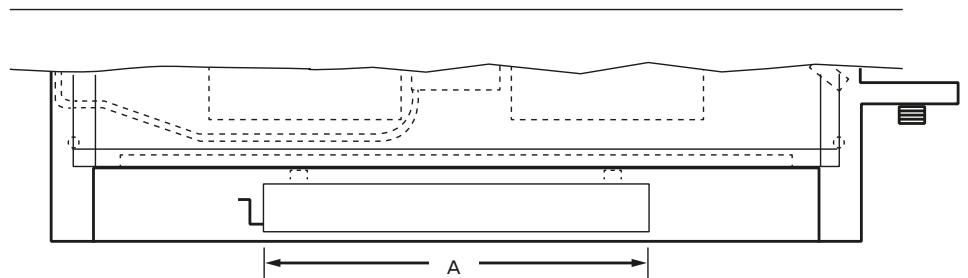
Motorized Damper

For GHY, GXY, GSY models only, control of the damper is achieved by a motorized operator installed in the left-hand end compartment. Consult the factory for application restrictions.

Unit Size	Nominal CFM	Outside Air Opening Dimensions – Inches (Millimeters)	
		GHY, GXY, GSY	
		Front View (A)	Side View (B)
02	200	8" (203)	2" (51)
03	300	10" (254)	2" (51)
04	400	12" (305)	2" (51)
06	600	14" (356)	2" (51)
08	800	18" (457)	2" (51)
10	1000	27" (686)	2" (51)
12	1200	27" (686)	2" (51)



Side View



Front View

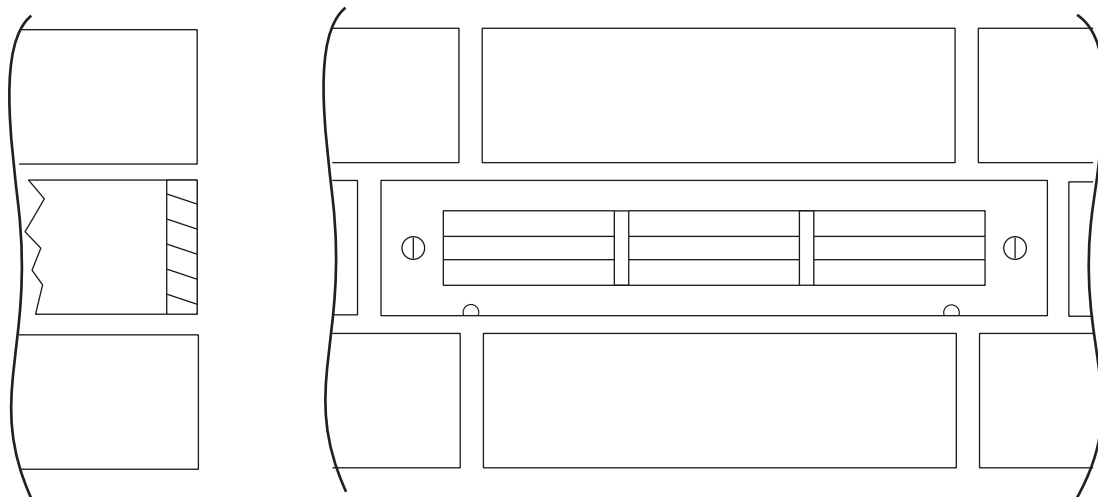
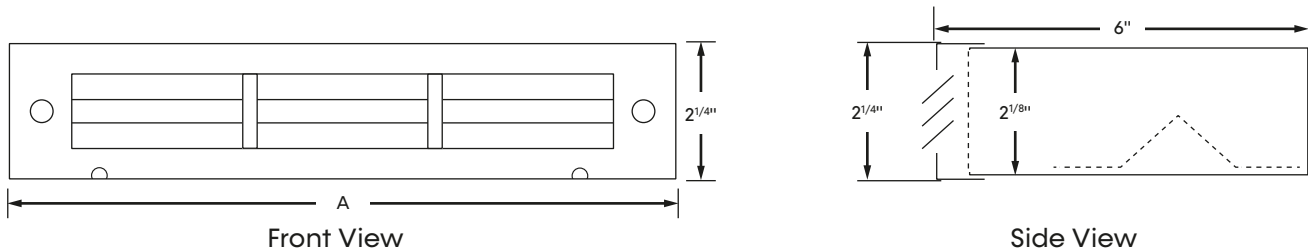
Standard Features, Options, and Accessories

Outside Air Wall Boxes

Optional outside air wall boxes are constructed of aluminum to minimize corrosion. A louvered grille caps the wall box on the exterior side. A fine mesh insect screen is installed behind the louver on the inside of the box.

Standard wall box depth is six inches with the width and length dimensions established to be used with the appropriate outside air openings.

Unit Size	Nominal CFM	Outside Air Opening Dimensions – Inches (Millimeters)	
		GHY, GXY, GSY	
		Front View (A)	Side View (B)
02	200	8-1/4" (203)	2-1/8" (54)
03	300	8-1/4" (203)	2-1/8" (54)
04	400	12-1/4" (311)	2-1/8" (54)
06	600	14-1/4" (362)	2-1/8" (54)
08	800	18-1/4" (464)	2-1/8" (54)
10	1000	27-1/4" (692)	2-1/8" (54)
12	1200	27-1/4" (692)	2-1/8" (54)



Standard Features, Options, and Accessories

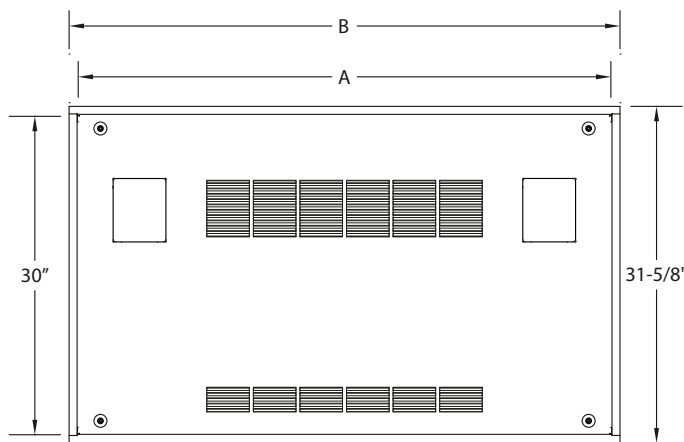
Decorative Wall Panels

Optional decorative wall panels are used with GHY model when fully recessed into the wall of the conditioned space. The wall panels cover the recessed unit on all sides and can be removed for access to the unit for servicing. The wall panel provides the air seal for the front of the unit; therefore, installation alignment is critical. Consult the factory for installation instructions.

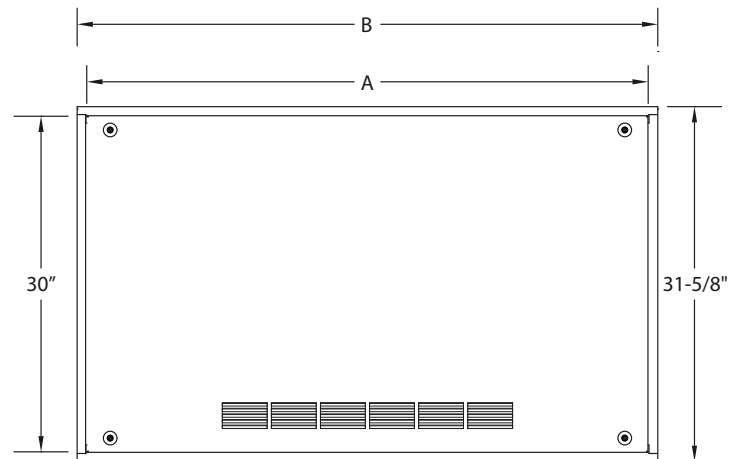
Two styles of decorative wall panels are available – Style W, with stamped return and supply louvers and front facing hinged-access doors; and Style Z, with stamped return louvers only.

Options for tamper proof access doors and/or tamper proof wall panels available.

Nominal CFM	Panel Width (A) Inches (mm)	Frame Width (B) Inches (mm)	Wall Opening Inches (mm)	
			Width	Height
200	40" (1016)	41-3/4" (1061)	40-3/8" (1026)	30-1/4" (768)
300	44" (1118)	45-3/4" (1163)	44-3/8" (1128)	30-1/4" (768)
400	50" (1270)	51-3/4" (1315)	50-3/8" (1280)	30-1/4" (768)
600	60" (1524)	61-3/4" (1569)	60-3/8" (1534)	30-1/4" (768)
800	62" (1575)	63-3/4" (1619)	62-3/8" (1585)	30-1/4" (768)
1000	76" (1930)	77-3/4" (1975)	76-3/8" (1940)	30-1/4" (768)
1200	84" (2134)	85-3/4" (2178)	84-3/8" (2143)	30-1/4" (768)



Style W



Style Z

Supply Air Grilles (Optional)

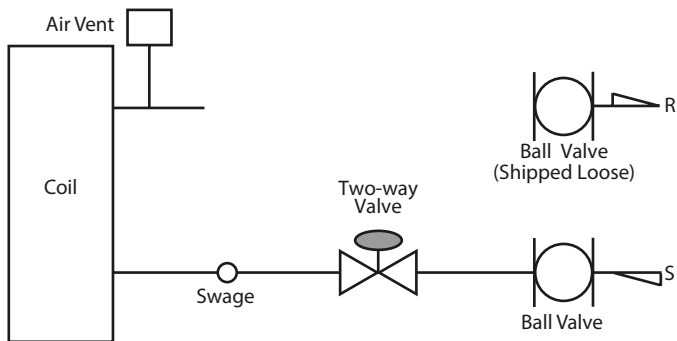
Unit Size	Nominal CFM	Recommended Grille Sizes – Inches (Millimeters)	
		GXY, GSY	GHY
02	200	16" x 6" (406 x 152)	16" x 5" (406 x 127)
03	300	16" x 6" (406 x 152)	18" x 5" (457 x 127)
04	400	26" x 6" (660 x 152)	26" x 5" (660 x 127)
06	600	36" x 6" (914 x 152)	36" x 5" (914 x 127)
08	800	38" x 6" (965 x 152)	38" x 5" (965 x 127)
10	1000	52" x 6" (1321 x 152)	52" x 5" (1321 x 127)
12	1200	60" x 6" (1524 x 152)	60" x 5" (1524 x 127)

- NOTES:**
1. Refer to Submittal Data pages for actual unit supply air opening dimensions.
 2. GXY and GSY models supply air grilles are factory installed.
 3. GHY models supply air grilles are shipped loose.

Standard Features, Option, and Accessories

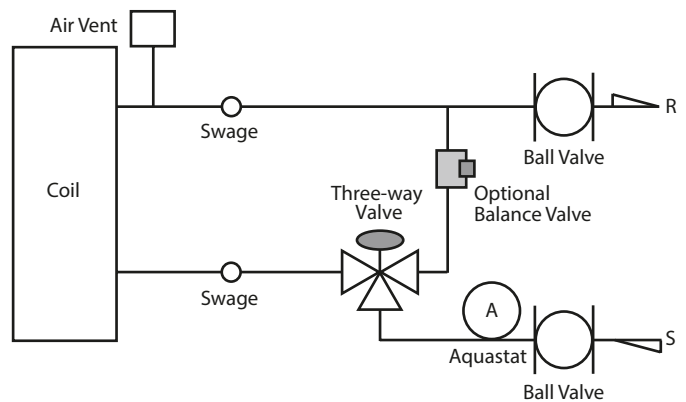
Two-way Motorized Control Valve

In a two-way motorized control valve package, the motor drives the valve open, and a spring returns the valve to a normally closed position. No water flows with the unit off. The standard supply connection from the coil will accept a swaged copper fitting for field soldering. As an option, this connection may be factory furnished with a union. When a swage is necessary, it becomes part of the valve package. The isolation ball valve in the return piping is shipped loose for field installation.



Three-way Motorized Control Valve

In a three-way motorized control valve package, a diverting valve controls water flow to the coil. When the unit is off, water bypasses the coil and flows directly to the system return. A balancing valve may be specified in the bypass line to permit equal flow balancing.



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Cabinet Heater G*Y Series

TECHNICAL CATALOG



Contact your local IEC Sales Representative for further details and pricing applicable to this product. Visit our website (www.iec-okc.com) to find your local IEC Sales Rep.

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