





- Indoor Environment and air Quality
- Design Flexibility
- Performance
- Energy Efficiency
- Serviceability
  - For partially recessed or exposed applications
  - Hot water coils, steel 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**

# Horizontal Telescoping Hideaway (DBY) 200 CFM to 1200 CFM

The Horizontal Telescoping Hideaway (DBY)
Cabinet Heater unit is mounted fully-recessed for ceilingrecessed applications. The DBY's telescoping frame with
hinged panel adapts to any ceiling type and ensures
exact alignment of the panel with the ceiling. The
hinged-bottom panel provides easy access to all internal
components. Standard DBY units are constructed with
18-gauge galvanized steel and are provided with a
galvanized finish on the cabinet and powder-coat paint
finish on the bottom-access panel.





# Horizontal Cabinet (DXY) 200 CFM to 1200 CFM

The Horizontal Cabinet (DXY) Cabinet Heater unit is designed specifically for exposed mounting in hotels, motels, hospitals, nursing homes, offices or other commercial establishments. With the DXY, valuable floor space is not required, and its slim, attractively-styled cabinet blends with all types of decor. Since there is no requirement for duct work or structure modifications, the DXY is ideal for retrofit applications. Standard DXY units are constructed with 18-gauge galvanized steel and are provided with a powder-coat paint finish.

## **Features and Benefits**

#### **Application Fit**

- Multiple cabinet choices are available in 7 nominal CFM sizes for application in a variety of room layouts.
  - Horizontal Cabinet units (DXY) with aesthetically pleasing cabinetry offer capacities that are ideal for air conditioning in dormitories, small apartments, schools and many other applications. Front supply, bottom or rear return are available.
  - Horizontal Telescoping Hideaway units with painted access panel (DBY) allows smooth fit up to plaster or sheet rock ceilings. Standard units include bottom louvered return air with the filter located in the access panel.

#### **Design Flexibility**

- Standard hydronic heat coils or electric heat only systems are available to match the space heating loads.
- 85 Control Board offers enhanced controls solutions with capability for connectivity to building BAS.
- Standard and high capacity hydronic coils are available to match the heating loads of the space.
- Optional powder-paint finish colors and grille selections will complement most décors (exposed units).
- Optional rear return are constructed with a solid bottom panel.
- Customizable cabinetry makes these units ideal for renovation jobs or where special sizes are required to fit oversized valves and control packages.
- Optional airflow configuration (front supply, bottom supply, rear return or bottom return) to meet certain design limitations.
- Outside air connections are available to meet ventilation requirements and reduce field labor.
- Wide variety of factory assembled valve packages (hot water coils only) to meet desired controls specifications.
- Wide variety of optional insulation materials are available to address IAQ concerns.

#### Ease of Installation

- Factory assembled valve packages minimize piping work at the job site (shipped loose for field mounting).
- Optional remote mounted thermostat, service switches and fusing minimize the electrical work required on site.
- Units are tagged at the factory for clear identification on job site.

#### **Ease of Service**

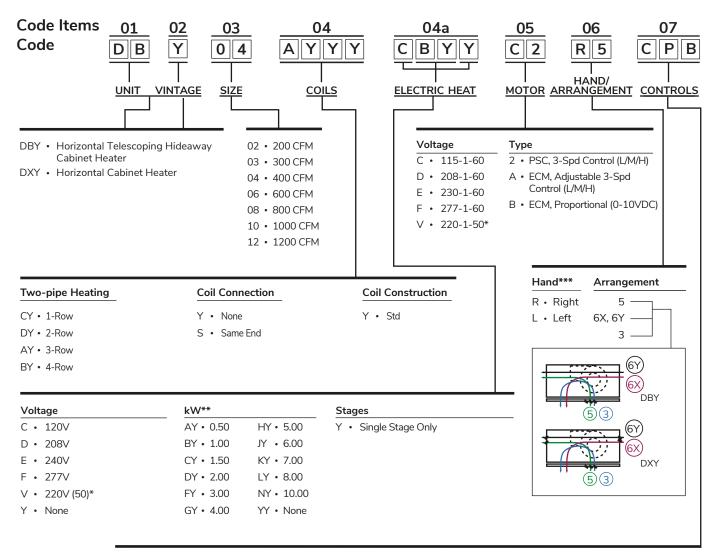
- All components are accessible by simply removing the access panel.
- Filters can be replaced without tools or by opening the bottom panels on exposed units.
- Blower assembly easily removed from the rear or bottom of coil for service and cleaning.

#### **Quality and Safety**

- Every unit is tested and inspected at the factory for trouble free start-up.
- ETL listed for safety compliance to UL 1995, US and Canada
- All hydronic coils are pressure tested to 350 psig.



## **Unit Model Key**



Voltage**	System	
B • 24 V	Manual Fan Operation	Thermostat
C • 120V	A • Standard Unit Mount (Switch Only)	A • Basic Electronic Wall Series, 155, Vertical
D • 208V		B • Basic Electronic Wall Series, 155, Horizontal
E • 240V	Function Control	P • Basic 24V Digital, 7-Day Programmable
F • 277V	G • 2 Pipe Heat Only	N • Basic 24V Digital, Non-Programmable
V • 220V (50)*	E • Electric Heat Only	<ul> <li>F • Premium 24V Digital, 7-Day Programmable/ BACnet with Proportional Fan/ Valves Option</li> </ul>
		G • Premium 24V Digital BACnet with

- Consult factory for 50 Hz applications.
- Note that kWs depend on voltage and unit size.
- Standing in front of the unit, hand is determined by looking into the air supply and assigning the hand to match the location of the cooling coil connections.

- Proportional Fan/ Valves Option
- W Venture 24V Wi-Fi Programmable



# **Ratings and Listings**



### **C-ETL-US Listing**

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

Model	Size	Coil Rows	Air Flow Rating (SCFM)	Water Pressure Drop (ft. water)	Total Cap. (Btuh)	Power Input (Watts)
	02	Electric Heat	261	NA		88
	02	1	302	0.3	9,328	94
	02	2	264	1.5	15,777	74
	02	3	281	3.6	21,002	91
	02	4	261	5.4	22,532	88
	03	Electric Heat	311	NA		95
	03	1	336	0.5	11,282	99
	03	2	336	2.5	20,327	99
	03	3	323	5.3	24,875	97
	03	4	311	8.2	27,257	95
	04	Electric Heat	458	NA		141
	04	1	527	1.1	16,980	150
	04	2	527	5.6	30,516	150
	04	3	492	11.6	37,000	145
	04	4	458	17.4	39,745	141
	06	Electric Heat	521	NA		148
	06	1	606	1.8	21,365	169
DBY,	06	2	606	1.6	36,412	169
DXY	06	3	587	3.2	44,781	166
	06	4	568	5.3	49,537	162
	08	Electric Heat	676	NA		185
	08	1	761	2.9	27,070	228
	08	2	761	2.7	46,052	228
	08	3	733	5.3	56,258	223
	08	4	706	8.7	61,873	219
	10	Electric Heat	872	NA		259
	10	1	1067	6.5	38,451	301
	10	2	1067	5.9	65,247	301
	10	3	998	1.7	75,136	293
	10	4	998	1.7	75,136	293
	12	Electric Heat	1183	NA		336
	12	1	1330	9.9	46,880	422
	12	2	1330	9.0	79,879	422
	12	3	1275	2.8	94,644	413
	12	4	1219	4.6	104,609	404

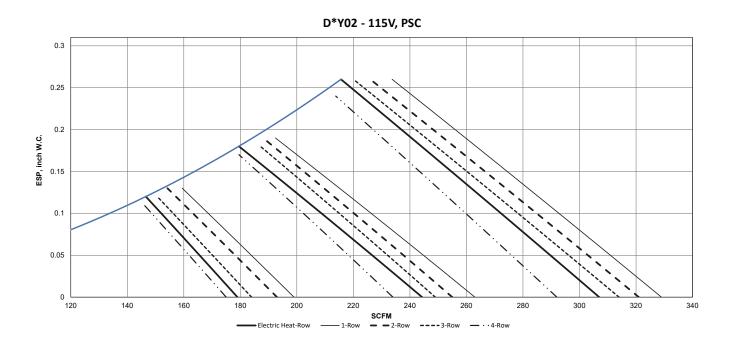
### **Standard Ratings – EC Motors**

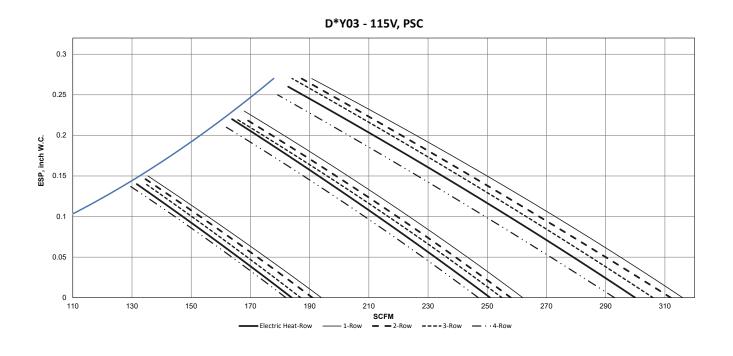
Model	Size	Coil Rows	Air Flow Rating (SCFM)	Water Pressure Drop (ft. water)	Total Cap. (Btuh)	Power Input (Watts)
	02	Electric Heat	257	NA		57
	02	1	301	0.3	9,309	64
	02	2	301	1.7	17,240	64
	02	3	281	3.6	21,002	61
	02	4	262	5.5	22,606	57
	03	Electric Heat	319	NA		74
	03	1	340	0.5	11,363	81
	03	2	340	2.6	20,492	81
	03	3	327	5.4	25,117	81
	03	4	313	8.3	27,408	81
	04	Electric Heat	482	NA		123
	04	1	518	1.1	16,808	119
	04	2	518	5.5	30,167	119
	04	3	500	11.8	37,464	119
	04	4	482	18.6	41,512	119
	06	Electric Heat	571	NA		135
	06	1	606	1.8	21,365	141
DBY, DXY	06	2	606	1.6	36,412	141
DXI	06	3	603	3.3	45,734	141
	06	4	600	5.7	51,920	141
	08	Electric Heat	694	NA		159
	08	1	754	2.9	26,918	157
	08	2	754	2.6	45,763	157
	08	3	739	5.4	56,618	160
	08	4	724	9.0	63,226	164
	10	Electric Heat	1038	NA		270
	10	1	1073	9.0	38,583	235
	10	2	1073	5.9	65,497	235
	10	3	1042	1.8	77,704	238
	10	4	1011	3.1	86,813	242
	12	Electric Heat	1225	NA		305
	12	1	1337	9.9	47,029	294
	12	2	1337	9.1	80,162	294
	12	3	1277	2.8	94,759	296
	12	4	1217	4.6	104,463	298

Ratings are based on 80°F DB and 67°F WB EAT, 45°F EWT, 10°F water temperature rise, high fan speed, motor voltage 115/1/60, and airflow under dry coil conditions. NOTES: 1.

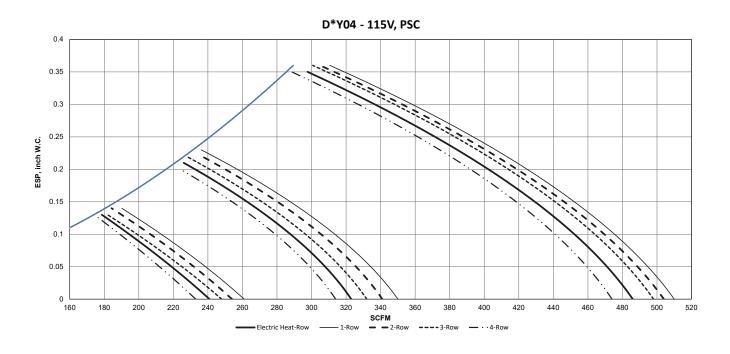
For all application ratings, use IEC's computer selection program, the quick-selection ratings provided in this catalog, or contact your local IEC representative. Ratings are based on the Standard Coil Circuit and FPI option.





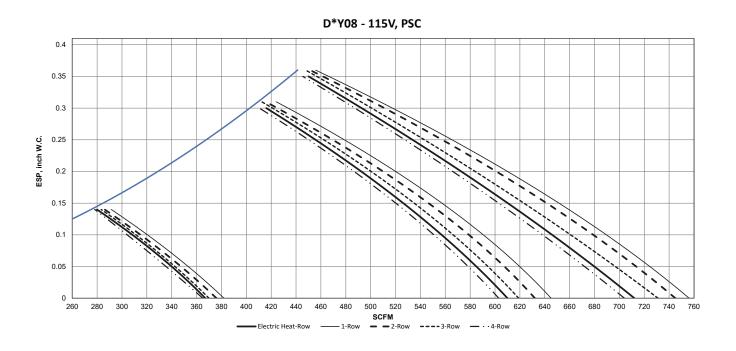


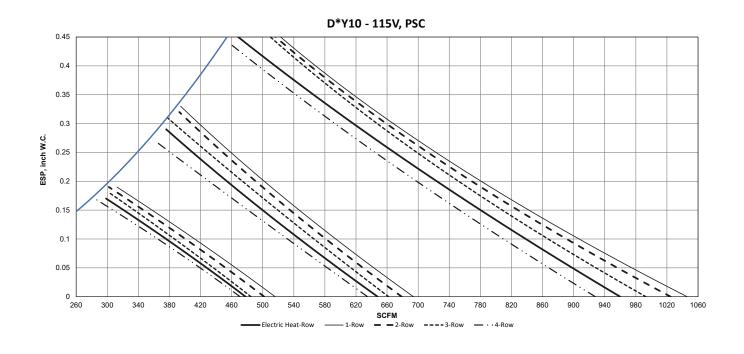
## **Fan Performance Curves - PSC**

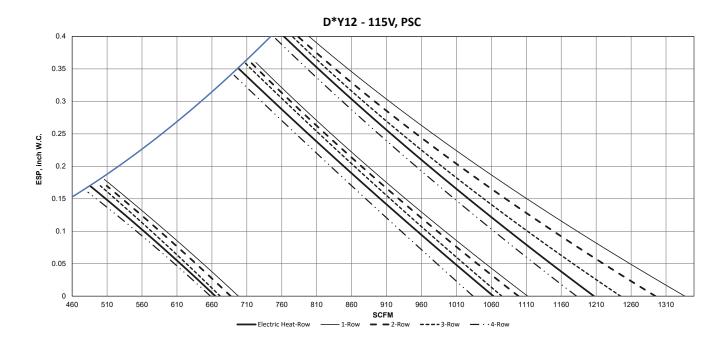




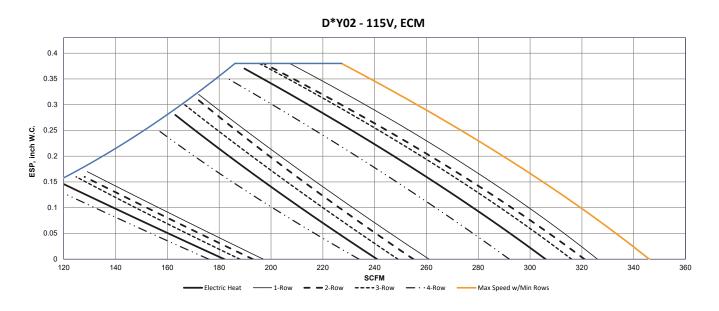


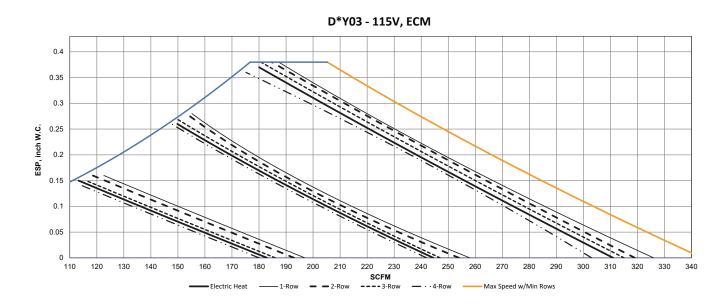


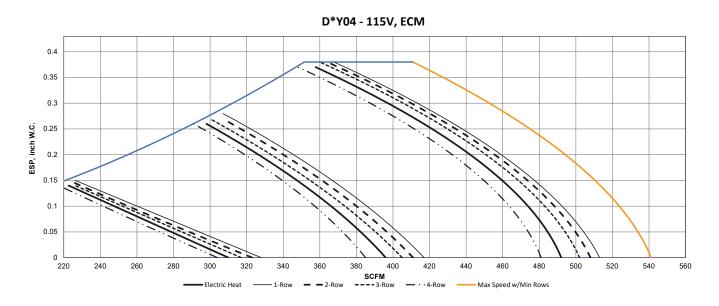


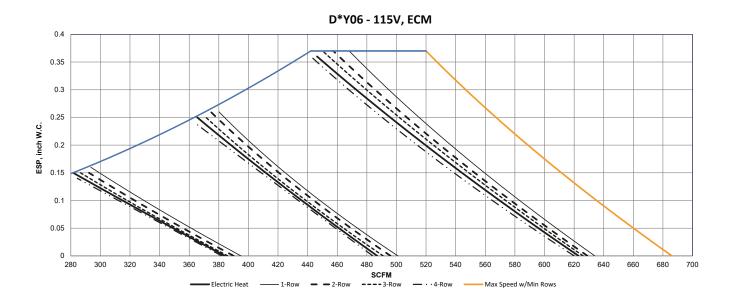




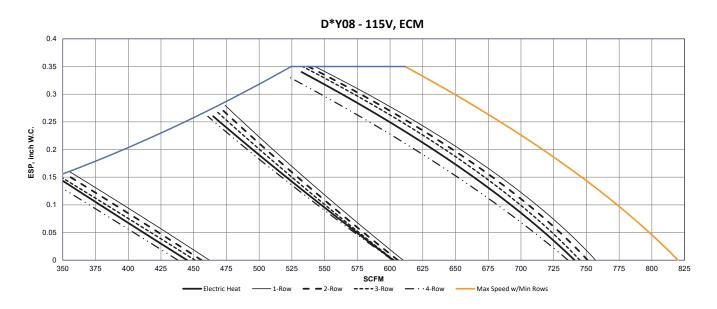


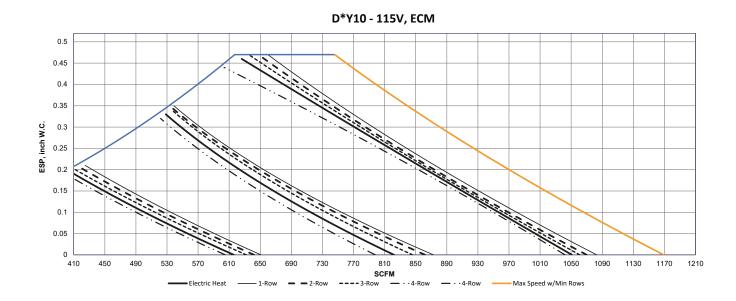


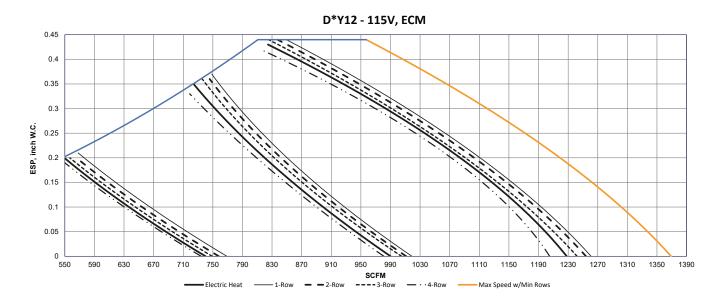














## **Motor Data**

#### **Thermal Overload Protection and ETL Listing**

All permanently lubricated 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. approves the motor and thermal overload combination at locked rotor conditions only.

#### **PSC Motor Performance Data**

V/ II	F 6 1	Unit Size	02	03	04	06	08	10	12
Voltage	Fan Speed	Nominal HP	1/30	1/30	1/12	1/12	1/6	(2) 1/12	(2) 1/6
115V	High	Amps	0.53	0.83	1.40	1.40	2.50	2.80	5.00
60 Hz 1 Phase		Watts	78	89	144	151	223	286	399
208V	115.1	Amps	0.48	0.48	0.69	0.69	1.30	1.38	2.60
60 Hz 1 Phase	High	Watts	98	99	120	132	189	245	325
230V	High	Amps	0.48	0.48	0.69	0.69	1.30	1.38	2.60
60 Hz 1 Phase		Watts	114	112	137	150	206	281	356
277V		Amps	0.35	0.35	0.69	0.69	0.91	1.38	1.82
60 Hz 1 Phase	High	Watts	104	112	143	155	245	288	426

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

#### **EC Motor Performance Data**

V 11	Unit Size	02	03	04	06	08	10	12
Voltage	Nominal HP	1/7	1/7	1/6	1/6	1/6	(2) 1/6	(2) 1/6
120)/	Rated Motor FLA	2.3	2.3	2.4	2.4	2.4	(2) 2.4	(2) 2.4
120V	Max Program Current	1.3	1.5	2.1	1.9	2.4	2.0, 2.0	2.4, 2.4
200 24014	Rated Motor FLA	1.4	1.4	1.6	1.6	1.6	1.6, 1.6	1.6, 1.6
208-240V	Max Program Current	0.8	0.9	1.4	1.3	1.6	1.3, 1.3	1.6, 1.6
2771/	Rated Motor FLA	1.2	1.2	1.3	1.3	1.3	1.3, 1.3	1.3, 1.3
277V	Max Program Current	0.7	0.8	1.1	1	1.3	1.1, 1.1	1.3, 1.3

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## **Sound Data**

#### **DBY Sound Power Data**

	D T. 1. G	FAN	OEN4		SOUND P	OWER LEVE	EL, Lw (dB re	eference one	picowatt)		A-wgt
UNIT SIZE	RATING	SPEED	CFM	125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz	8K Hz	(dBA)
		Н	270	60	54	51	48	43	38	37	53
	CASING RADIATED	М	170	55	51	44	39	35	31	34	47
_	TOABIATED	L	135	53	49	39	34	29	29	34	44
2		Н	270	52	52	53	47	46	40	37	54
	DUCTED DISCHARGE	М	170	47	45	45	39	37	31	34	46
	DISCHARGE	L	135	46	43	40	33	31	29	34	42
		Н	290	63	54	52	49	44	40	38	54
	CASING RADIATED	М	205	59	47	44	40	35	31	34	47
2	KADIATED	L	155	55	42	39	34	29	29	34	43
3		Н	290	59	54	54	51	47	41	38	56
	DUCTED DISCHARGE	М	205	55	46	47	41	37	31	34	48
	DISCHARGE	L	155	51	42	42	35	31	29	34	43
		Н	540	70	58	55	52	48	43	39	58
	CASING	М	360	62	49	46	42	37	32	34	50
	RADIATED	L	250	54	42	38	32	30	30	34	42
4		Н	540	64	57	59	55	50	44	39	60
	DUCTED	М	360	55	49	51	52	46	36	36	50
	DISCHARGE	L	250	48	42	43	35	30	28	33	43
		Н	680	65	59	57	52	48	45	42	59
	CASING	М	445	57	50	47	41	37	33	34	49
	RADIATED	L	330	52	43	40	34	29	29	34	43
6		Н	680	63	58	59	56	50	46	42	60
	DUCTED	М	445	57	49	50	45	39	33	34	50
	DISCHARGE	L	330	53	43	42	37	30	29	34	44
		Н	765	65	61	58	54	51	48	45	60
	CASING	М	670	63	58	55	51	47	44	41	57
_	RADIATED	L	410	55	47	44	38	34	31	34	46
8		Н	765	63	61	61	58	53	50	46	63
	DUCTED	М	670	60	58	58	54	50	46	42	59
	DISCHARGE	L	410	52	47	47	41	36	32	35	48
		Н	1105	68	64	59	55	52	48	45	62
	CASING	М	730	64	55	51	45	41	37	35	54
	RADIATED	L	490	59	48	43	36	31	30	34	47
10		Н	1105	65	62	64	60	55	50	46	65
	DUCTED	М	730	63	54	56	50	44	38	36	56
	DISCHARGE	L	490	58	46	47	40	33	30	34	48
		Н	1225	68	65	61	57	53	50	45	63
	CASING	М	1140	67	63	59	54	51	47	42	61
	RADIATED	L	745	59	54	50	44	40	35	34	52
12		Н	1225	65	63	65	60	57	52	47	66
	DUCTED DISCHARGE	М	1140	63	61	63	58	54	50	44	64
	DISCHARGE	L	745	56	54	55	48	43	37	35	54

NOTES: 1. Unit Test Configuration: Bottom Return/ Front Supply, 3 Row 10 FPI Coil, 0.0" ESP @ High Speed, 115 VAC PSC Motor, 1/2" dual density fiberglass insulation.
2. Casing Radiated tested in accordance with AHRI 350-2008: 4.2.2.3 Casing radiated with free inlet, Sound Rating of Ducted Air Moving and Conditioning Equipment.
3. Ducted Discharge tested in accordance with AHRI 350-2008: 4.2.2.1 Ducted discharge, Sound Rating of Ducted Air Moving and Conditioning Equipment.



<sup>4.</sup> Sound power data is expressed in decibels, dB RE:  $1 \times 10^{-12}$  w (picowatts).

## **Sound Data**

#### **DXY Sound Power Data**

		FAN	a=1.4		SOUND P	OWER LEVE	L, Lw (dB re	eference one	picowatt)		A-wgt
UNIT SIZE	RATING	SPEED	CFM	125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz	8K Hz	(dBA)
		Н	220	60	58	56	54	49	44	39	59
2	CASING RADIATED	М	160	54	51	49	45	39	33	31	50
	TOODIATED	L	130	50	46	44	39	33	26	31	45
		Н	265	61	58	57	54	49	45	41	59
3	3 CASING RADIATED	М	185	54	50	49	44	40	33	32	50
		L	135	52	45	44	39	33	27	31	45
		Н	480	68	63	63	60	55	50	44	65
4	CASING RADIATED	М	310	64	53	54	48	42	35	32	55
	TOODIATED	L	205	58	46	45	38	31	26	31	47
		Н	605	67	64	63	59	54	51	45	64
6	CASING RADIATED	М	385	59	54	53	46	41	34	32	53
	TABIATED	L	280	55	48	46	39	31	26	31	47
		Н	690	67	67	66	62	58	55	51	67
8	CASING RADIATED	М	600	66	64	62	58	54	50	46	64
	TOODIATED	L	355	57	52	51	45	39	33	32	51
		Н	925	69	68	68	66	60	55	50	70
10	CASING RADIATED	М	620	64	58	60	55	48	42	34	60
	NADIATED	L	415	59	51	52	44	37	29	31	52
		Н	1180	70	70	69	66	61	58	53	71
12	CASING RADIATED	М	1060	70	68	67	63	58	54	49	68
	NADIATED	L	665	64	57	57	50	44	38	32	57

NOTES: 1. Unit Test Configuration: Bottom Return/ Front Supply, 3 Row 10 FPI Coil, 0.0" ESP @ High Speed, 115VAC PSC Motor, 1/2" dual density fiberglass insulation.
2. Casing Radiated tested in accordance with 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. A heat shield protects the internal heater from any debris. 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**

				-	Unit Size	e		
Voltage	kW	02	03	04	06	08	10	12
	0.5	•	•	-	-	-	-	-
	1.0	•	•	•	•	•	-	-
120V	1.5	•	•	•	•	•	-	-
	2.0	•	•	•	•	•	•	•
	3.0	-	•	•	•	•	•	•
	0.5	•	•	-	-	-	-	-
	1.0	•	•	•	•	•	-	-
	1.5	•	•	•	•	•	-	-
	2.0	•	•	•	•	•	•	•
208V	3.0	-	•	•	•	•	•	•
	4.0	-	-	-	•	•	•	•
	5.0	-	-	-	• Note 5	•	•	•
	6.0	-	-	-	• Note 5	• Note 5	•	•
	8.0	-	-	-	-	-	• Note 5	• Note 5
	0.5	•	•	-	-	-	-	-
	1.0	•	•	•	•	•	-	-
	1.5	•	•	•	•	•	-	-
	2.0	•	•	•	•	•	•	•
240V	3.0	-	•	•	•	•	•	•
277V	4.0	-	-	-	•	•	•	•
	5.0	-	-	1	• Note 5	•	•	•
	6.0	-	-	-	• Note 5	• Note 5	•	•
	8.0	-	-	-	-	-	• Note 5	• Note 5
	10.0	-	-	-	-	-	-	• Note 5

NOTES: 1. All heaters are single stage and single phase.

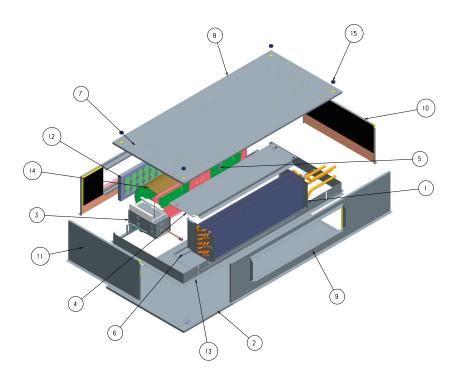
- Heaters over 48 Amps are subdivided and fused.
   Electric Heating Capacities (BTUH) = Heater kW x 3413.
   Consult factory for 50 Hz applications.
- 5. High and medium speed only.



# **CUH Exploded View – DBY**

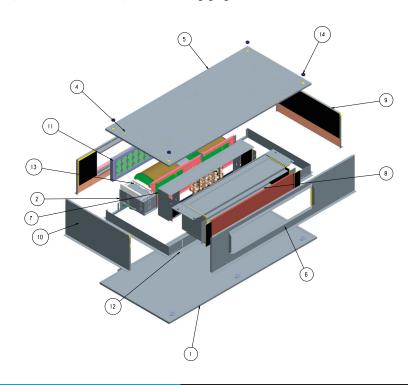
## **Horizontal Telescoping Cabinet Heater, Hydronic Heat, Front Supply**

Item	Description
1	Coil Assembly
2	Bottom Panel Assembly
3	Control Package
4	Top Wrapper Assembly
5	Top Wrapper Support Bracket
6	Bottom Panel, Galvanized
7	Rear Panel Assembly Duct
8	Top Panel Assembly Solid
9	Front Panel Duct
10	Side Panel Assembly
11	Side Panel Assembly
12	Filter
13	Telescope Assembly
14	Motor Block Deck Assembly
15	Grommets



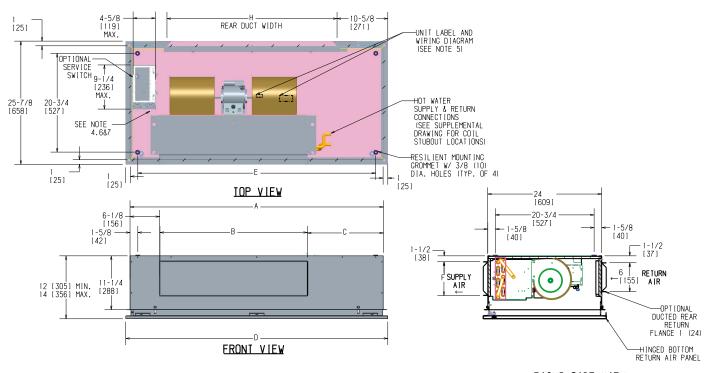
## Horizontal Telescoping Cabinet Heater, Electric Heat, Front Supply

Item	Description
1	Bottom Panel Assembly
2	Control Package
3	Top Wrapper Support Bracket
4	Rear Panel Assembly Duct
5	Top Panel Assembly Solid
6	Front Panel Duct
7	Heater Assembly
8	Heater Plenum Assembly
9	Side Panel Assembly
10	Side Panel Assembly
11	Filter
12	Telescope Assembly
13	Motor Block Deck Assembly
14	Grommets



## Physical Data - DBY

## **DBY - Horizontal Telescoping Cabinet Heater, Hydronic Heat, Front Supply**



RICHT SIDE VIEW

Unit			Dimensio	ons - Inches (Mil	limeters)			Quanti	ty/Unit	Unit
Model	Α	В	С	D	Е	F	Н	Blower	Motor	Weight*
DBY 02	35 (889)	16 (406)	12-3/4 (324)	37 (940)	32 (813)	6 (152)	18-3/4 (476)	1	1	55
DBY 03	35 (889)	20 (508)	8-3/4 (225)	37 (940)	32 (813)	6 (152)	18-3/4 (476)	1	1	60
DBY 04	41 (1041)	26 (660)	8-3/4 (225)	43 (1092)	38 (965)	6 (152)	24-3/4 (629)	2	1	70
DBY 06	53 (1346)	31 (787)	15-3/4 (400)	55 (1397)	50 (1270)	7 (179)	35-3/4 (908)	2	1	82
DBY 08	53 (1346)	38 (965)	8-3/4 (225)	55 (1397)	50 (1270)	7 (179)	35-3/4 (908)	2	1	95
DBY 10	75 (1905)	52 (1321)	16-3/4 (425)	77 (1956)	72 (1829)	7 (179)	49-3/4 (1264)	4	2	135
DBY 12	75 (1905)	60 (1524)	8-3/4 (225)	77 (1956)	72 (1829)	7 (179)	49-3/4 (1264)	4	2	154

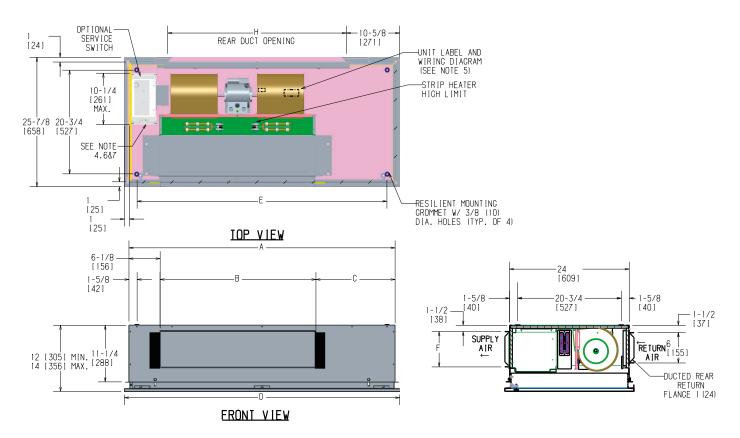
NOTES: 1. RH shown, LH opposite.

- All dimensions are +/- 0.25 (6). Drawing not to scale.
- 3. Product specifications are subject to change without notice.4. Control box size and position may vary (consult factory).
- 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.
- 8. Typical size 06 unit shown with 1-Motor and 2-BLWR Refer to table for variation.
- 9. See Valve Package Supplemental for piping termination.
- 10. Field connection pipes will be shipped loose with valve packages.



## Physical Data – DBY

## **DBY - Horizontal Telescoping Cabinet Heater, Electric Heat, Front Supply**



RICHT SIDE VIEW

Unit			Dimensi	ons - Inches (Mil	limeters)			Quanti	ty/Unit	Unit
Model	Α	В	С	D	Е	F	Н	Blower	Motor	Weight*
DBY 02	35 (889)	16 (406)	12-3/4 (324)	37 (940)	32 (813)	6 (152)	18-3/4 (476)	1	1	55
DBY 03	35 (889)	20 (508)	8-3/4 (225)	37 (940)	32 (813)	6 (152)	18-3/4 (476)	1	1	60
DBY 04	41 (1041)	26 (660)	8-3/4 (225)	43 (1092)	38 (965)	6 (152)	24-3/4 (629)	2	1	70
DBY 06	53 (1346)	31 (787)	15-3/4 (400)	55 (1397)	50 (1270)	7 (179)	35-3/4 (908)	2	1	82
DBY 08	53 (1346)	38 (965)	8-3/4 (225)	55 (1397)	50 (1270)	7 (179)	35-3/4 (908)	2	1	95
DBY 10	75 (1905)	52 (1321)	16-3/4 (425)	77 (1956)	72 (1829)	7 (179)	49-3/4 (1264)	4	2	135
DBY 12	75 (1905)	60 (1524)	8-3/4 (225)	77 (1956)	72 (1829)	7 (179)	49-3/4 (1264)	4	2	154

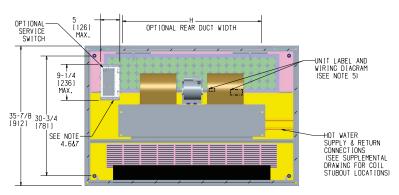
NOTES: 1. RH shown, LH opposite.

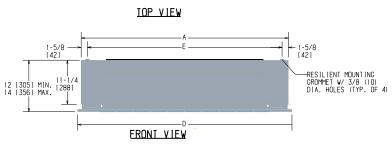
- All dimensions are +/- 0.25 (6). Drawing not to scale.
- Product specifications are subject to change without notice. Control box size and position may vary (consult factory).
- Position may vary.
- Service access is located on the front of the control box.
- Knockouts on the bottom and side of the control box for incoming power connections. Typical size 06 unit shown with 1-Motor and 2-BLWR Refer to table for variation.
- See Valve Package Supplemental for piping termination.
- 10. Field connection pipes will be shipped loose with valve packages.

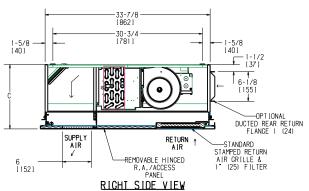


## Physical Data - DBY

## DBY - Horizontal Telescoping Cabinet Heater, Hydronic Heat, Bottom Supply







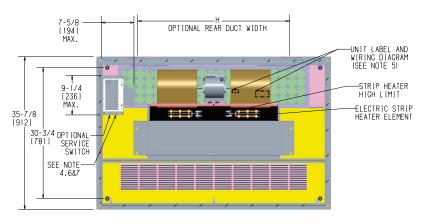
Unit	Dimensions - Inches (Millimeters)			)	Quanti	ty/Unit	Unit
Model	Α	D	Е	Н	Blower	Motor	Weight*
DBY 02	35 (889)	37 (940)	32 (813)	18-3/4 (476)	1	1	55
DBY 03	35 (889)	37 (940)	32 (813)	18-3/4 (476)	1	1	60
DBY 04	41 (1041)	43 (1092)	38 (965)	24-3/4 (629)	2	1	70
DBY 06	53 (1346)	55 (1397)	50 (1270)	35-3/4 (908)	2	1	82
DBY 08	53 (1346)	55 (1397)	50 (1270)	35-3/4 (908)	2	1	95
DBY 10	75 (1905)	77 (1956)	72 (1829)	49-3/4 (1264)	4	2	135
DBY 12	75 (1905)	77 (1956)	72 (1829)	49-3/4 (1264)	4	2	154

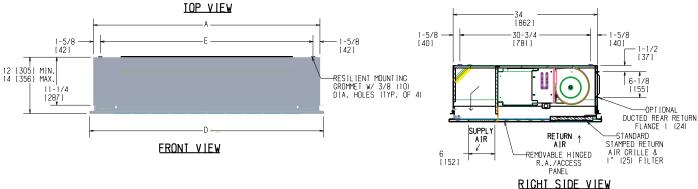
- NOTES: 1. LH shown, RH opposite.
  - 2. All dimensions are +/- 0.25 (6). Drawing not to scale.
  - 3. Product specifications are subject to change without notice.
  - 4. Control box size and position may vary (consult factory).
  - Position may vary.
  - 6. Service access is located on the front of the control box.
  - 7. Knockouts on the bottom and side of the control box for incoming power connections.
  - 8. Typical size 06 unit shown with 1-Motor and 2-BLWR Refer to table for variation.
  - 9. See Valve Package Supplemental for piping termination.
  - 10. Field connection pipes will be shipped loose with valve packages.



## Physical Data – DBY

### **DBY - Horizontal Telescoping Cabinet Heater, Electric Heat, Bottom Supply**





Unit	ı	Dimensions - Inches (Millimeters)			Quanti	ty/Unit	Unit
Model	Α	D	E	Н	Blower	Motor	Weight*
DBY 02	35 (889)	37 (940)	32 (813)	18-3/4 (476)	1	1	55
DBY 03	35 (889)	37 (940)	32 (813)	18-3/4 (476)	1	1	60
DBY 04	41 (1041)	43 (1092)	38 (965)	24-3/4 (629)	2	1	70
DBY 06	53 (1346)	55 (1397)	50 (1270)	35-3/4 (908)	2	1	82
DBY 08	53 (1346)	55 (1397)	50 (1270)	35-3/4 (908)	2	1	95
DBY 10	75 (1905)	77 (1956)	72 (1829)	49-3/4 (1264)	4	2	135
DBY 12	75 (1905)	77 (1956)	72 (1829)	49-3/4 (1264)	4	2	154

- NOTES: 1. RH shown, LH opposite.
  - All dimensions are +/- 0.25 (6). Drawing not to scale.
  - Product specifications are subject to change 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. Typical size 06 unit shown with 1-Motor and 2-BLWR Refer to table for variation.

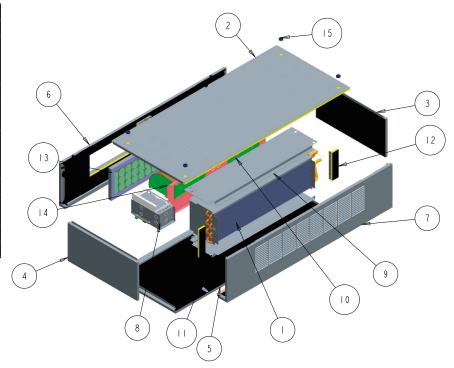
  - See Valve Package Supplemental for piping termination.
  - 10. Field connection pipes will be shipped loose with valve packages.



# **CUH Exploded View – DXY**

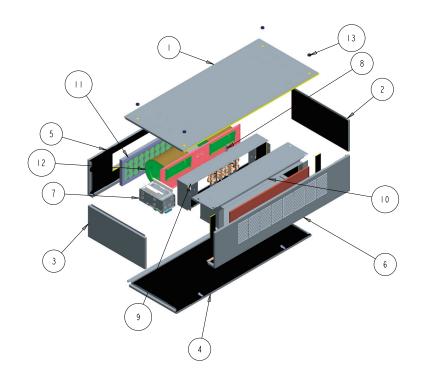
## **Horizontal Cabinet Heater, Hydronic Heat, Front Supply**

Item	Description
1	Coil Assembly
2	Top Panel Assembly
3	Side Panel RH Assembly
4	Side Panel LH Assembly
5	Bottom Access Panel
6	Rear Panel Assembly
7	Front Panel Assembly
8	Control Package
9	Top Wrapper Assembly
10	Top Wrapper Support Bracket
11	Bottom Panel Galvanized
12	Discharge Baffle Assembly
13	Filter
14	Motor Block Deck Assembly
15	Grommets



## **Horizontal Cabinet Heater, Electric Heat, Front Supply**

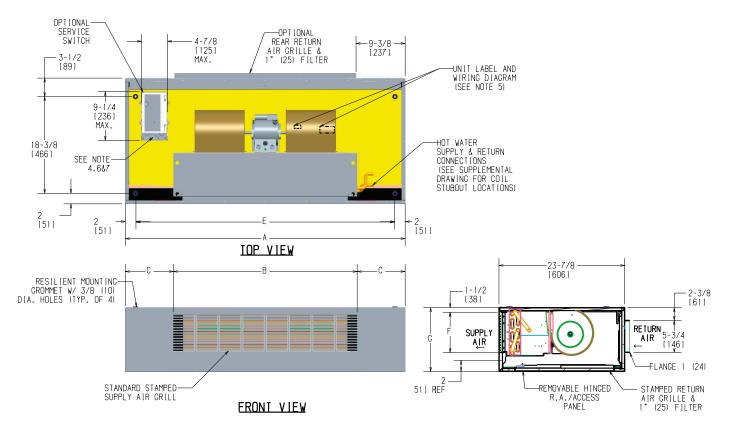
Item	Description
1	Top Panel Assembly
2	Side Panel RH Assembly
3	Side Panel LH Assembly
4	Bottom Access Panel
5	Rear Panel Assembly
6	Front Panel Assembly
7	Remote Electric Heater Connection Guard
8	Control Package
9	Top Wrapper Support Bracket
10	Heater Assembly
11	Heater Plenum Assembly
12	Filter
13	Motor Block Deck Assembly
14	Grommets





# Physical Data – DXY

### DXY - Horizontal Cabinet Heater, Hydronic Heat, Front Supply



#### RICHT SIDE VIEW

		Dimensions - Inches (Millimeters)							
Unit Model	Α	В	С	E	F	G	Blower	Motor	Unit Weight*
DXY 02	38 (965)	17-1/8 (435)	10-7/16 (265)	34 (864)	5-3/4 (146)	11 (279)	1	1	98
DXY 03	42 (1067)	21-1/2 (546)	10-1/4 (260)	38 (965)	5-3/4 (146)	11 (279)	1	1	118
DXY 04	48 (1219)	25-7/8 (657)	11-1/16 (281)	44 (1118)	5-3/4 (146)	11 (279)	2	1	126
DXY 06	53 (1346)	34-5/8 (879)	9-3/16 (233)	49 (1245)	6-3/4 (171)	12 (305)	2	1	168
DXY 08	60 (1524)	39 (991)	10-1/2 (267)	56 (1422)	6-3/4 (171)	12 (305)	2	1	176
DXY 10	74 (1880)	52-1/8 (1324)	10-15/16 (262)	70 (1778)	6-3/4 (171)	12 (305)	4	2	215
DXY 12	82 (2083)	60-7/8 (1546)	10-9/16 (268)	78 (1981)	6-3/4 (171)	12 (305)	4	2	245

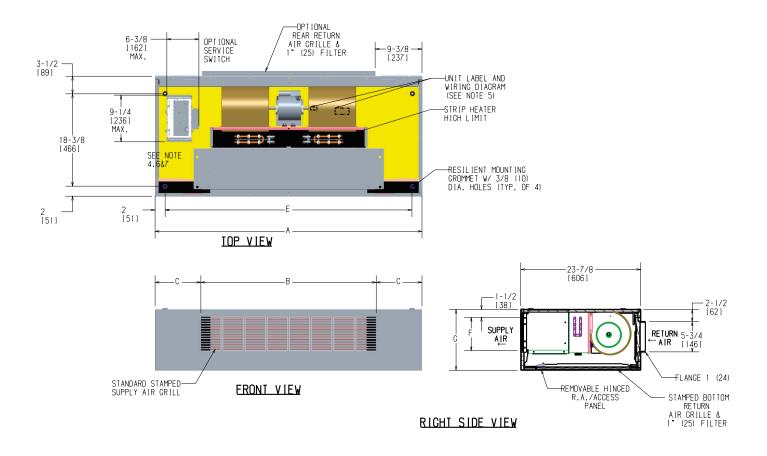
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- All dimensions are +/- .25 (6). Drawing not to scale.
- 3. Product specifications are subject to change without notice. Control box size and position may vary (consult factory).
- Position may vary.
- Service access is located on the front of the control box.
- Knockouts on the bottom and side of the control box for incoming power connections. Typical size 06 unit shown with 1-Motor and 2-BLWR Refer to table for variation.
- See Valve Package Supplemental for piping termination.
- 10. Field connection pipes will be shipped loose with valve packages.



## **Physical Data – DXY**

### **DXY – Horizontal Cabinet Heater, Electric Heat, Front Supply**



	Dimensions - Inches (Millimeters)							Quantity/Unit		
Unit Model	Α	В	С	E	F	G	Blower	Motor	Unit Weight*	
DXY 02	38 (965)	17-1/8 (435)	10-7/16 (265)	34 (864)	5-3/4 (146)	11 (279)	1	1	98	
DXY 03	42 (1067)	21-1/2 (546)	10-1/4 (260)	38 (965)	5-3/4 (146)	11 (279)	1	1	118	
DXY 04	48 (1219)	25-7/8 (657)	11-1/16 (281)	44 (1118)	5-3/4 (146)	11 (279)	2	1	126	
DXY 06	53 (1346)	34-5/8 (879)	9-3/16 (233)	49 (1245)	6-3/4 (171)	12 (305)	2	1	168	
DXY 08	60 (1524)	39 (991)	10-1/2 (267)	56 (1422)	6-3/4 (171)	12 (305)	2	1	176	
DXY 10	74 (1880)	52-1/8 (1324)	10-15/16 (262)	70 (1778)	6-3/4 (171)	12 (305)	4	2	215	
DXY 12	82 (2083)	60-7/8 (1546)	10-9/16 (268)	78 (1981)	6-3/4 (171)	12 (305)	4	2	245	

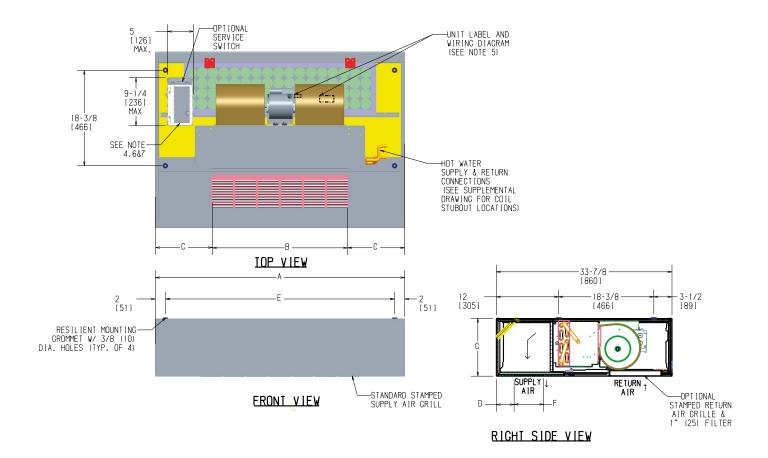
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  - 10. Field connection pipes will be shipped loose with valve packages.



## Physical Data – DXY

## DXY - Horizontal Cabinet Heater, Hydronic Heat, Bottom Supply



	Dimensions - Inches (Millimeters)							Quantity/Unit		Unit
Unit Model	Α	В	С	D	Е	F	G	Blower	Motor	Weight*
DXY 02	38 (965)	17-1/8 (435)	10-7/16 (265)	3-1/4 (83)	34 (864)	5-3/4 (146)	11 (279)	1	1	98
DXY 03	42 (1067)	21-1/2 (546)	10-1/4 (260)	3-1/4 (83)	38 (965)	5-3/4 (146)	11 (279)	1	1	118
DXY 04	48 (1219)	25-7/8 (657)	11-1/16 (281)	3-1/2 (89)	44 (1118)	5-3/4 (146)	11 (279)	2	1	126
DXY 06	53 (1346)	34-5/8 (879)	9-3/16 (233)	2-1/4 (57)	49 (1245)	6-3/4 (171)	12 (305)	2	1	168
DXY 08	60 (1524)	39 (991)	10-1/2 (267)	2-1/4 (57)	56 (1422)	6-3/4 (171)	12 (305)	2	1	176
DXY 10	74 (1880)	52-1/8 (1324)	10-15/16 (262)	2-1/2 (64)	70 (1778)	6-3/4 (171)	12 (305)	4	2	215
DXY 12	82 (2083)	60-7/8 (1546)	10-9/16 (268)	2-1/2 (64)	78 (1981)	6-3/4 (171)	12 (305)	4	2	245

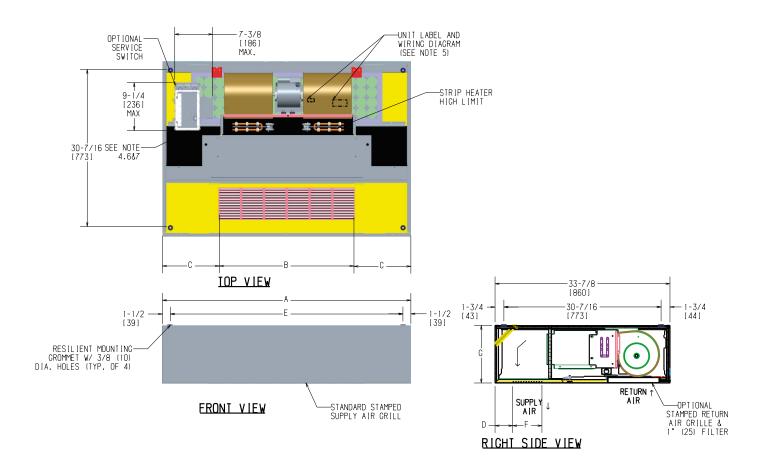
NOTES: 1. RH shown, LH opposite.

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## Physical Data - DXY

### DXY - Horizontal Cabinet Heater, Electric Heat, Bottom Supply



	Dimensions - Inches (Millimeters)								Quantity/Unit	
Unit Model	Α	В	С	D	Е	F	G	Blower	Motor	Weight*
DXY 02	38 (965)	17-1/8 (435)	10-7/16 (265)	3-1/4 (83)	34 (864)	5-3/4 (146)	11 (279)	1	1	98
DXY 03	42 (1067)	21-1/2 (546)	10-1/4 (260)	3-1/4 (83)	38 (965)	5-3/4 (146)	11 (279)	1	1	118
DXY 04	48 (1219)	25-7/8 (657)	11-1/16 (281)	3-1/2 (89)	44 (1118)	5-3/4 (146)	11 (279)	2	1	126
DXY 06	53 (1346)	34-5/8 (879)	9-3/16 (233)	2-1/4 (57)	49 (1245)	6-3/4 (171)	12 (305)	2	1	168
DXY 08	60 (1524)	39 (991)	10-1/2 (267)	2-1/4 (57)	56 (1422)	6-3/4 (171)	12 (305)	2	1	176
DXY 10	74 (1880)	52-1/8 (1324)	10-15/16 (262)	2-1/2 (64)	70 (1778)	6-3/4 (171)	12 (305)	4	2	215
DXY 12	82 (2083)	60-7/8 (1546)	10-9/16 (268)	2-1/2 (64)	78 (1981)	6-3/4 (171)	12 (305)	4	2	245

- NOTES: 1. RH shown, LH opposite.
  - All dimensions are +/- .25 (6). Drawing not to scale.
  - Product specifications are subject to change without notice. Control box size and position may vary (consult factory).
  - Position may vary.
  - 6. 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. Typical size 06 unit shown with 1-Motor and 2-BLWR Refer to table for variation.

  - See Valve Package Supplemental for piping termination.
  - 10. Field connection pipes will be shipped loose with valve packages.

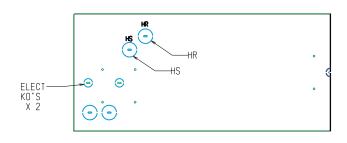


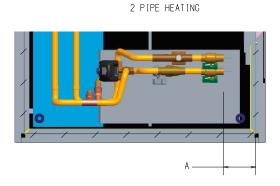
# **Cabinet Heater D\*Y Series**

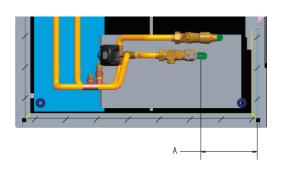
### **TECHNICAL CATALOG**

# **Physical Data**

## **DXY/DBY Valve Package and Coil Termination Supplement**







COMBO VALVE
PARTIAL REAR VIEWS OF DB/DX UNITS

LH SIDE SHOWN RH OPPOSITE

Dimensions - Inches (Millimeters)							
NO COMPONATIVES		4					
NO COMBO VALVES	SUPPLY	RET					
3 WAY TACO/ERIE HEAT	3-3/16 (81)	3-3/16 (81)					
3 WAY MODULATING HEAT	3-1/8 (79)	1-5/8 (41)					
2 WAY TACO/ERIE HEAT	3-1/4 (83)	3-1/4 (83)					
2 WAY MODULATING HEAT	3-3/16 (81)	1-1/4 (32)					

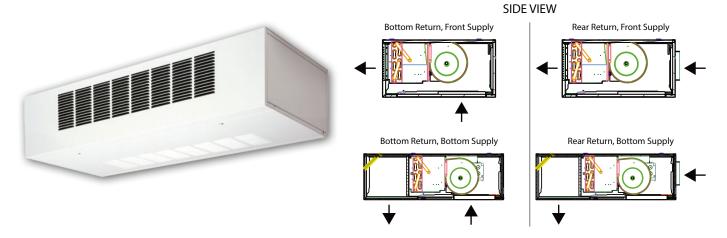
NOTES: 1. All dimension are  $\pm$  1/4" (6.3 mm).

Dimensions - Inches (Millimeters)							
COMPONANTES		A					
COMBO VALVES	SUPPLY RET						
3 WAY TACO/ERIE HEAT	1-1/2 (38)	3-3/16 (81)					
3 WAY MODULATING HEAT	1-9/16 (40)	1-9/16 (40)					
2 WAY TACO/ERIE HEAT	13/16 (21)	5-1/8 (130)					
2 WAY MODULATING HEAT	6 (152)	3-5/8 (92)					

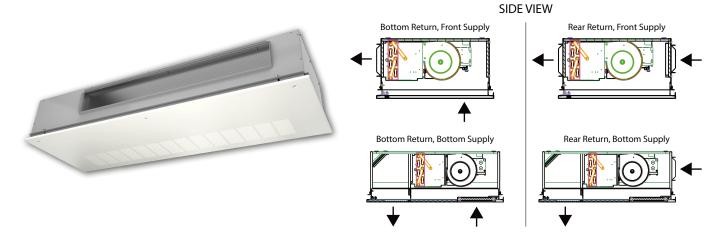


# **Airflow Arrangements**

### **DXY - Horizontal Cabinet Heater**



## **DBY - Horizontal Telescoping Hideaway Cabinet Heater**





# **Standard Features and Options**

Ceiling units are constructed with 18-gauge galvanized steel.

Features And Options	Standard	Factory	Field Installed	Factory Special
Air Flow Arrangement				
Front Supply/Rear Return		X		
Front Supply/ Bottom Return	X			
Bottom Supply/Bottom Return		Х		
Bottom Supply/Rear Return		Х		
Coil Options				
1 Row 2-Pipe		Х		
2 Rows 2-Pipe	X			
3 Rows 2-Pipe		X		
4 Rows 2-Pipe		Х		
Manual Air Vent	X			
0.025" Tube Thickness				Х
Automatic Air Vent		Х		
Steam Coils				X
Coil Test Pressure 350	X			
Coil Test Pressure 400, 450		Х		
Anti-Corrosive Epoxy Coating		Х		
Connection				
Right or Left (Same End)	X			
Fin Material				
Aluminum with Galvanized End Sheets	X			
Heaters				
Nichrome Wire Strip Electric Heater (Total Electric Heat)	X			
Indoor Air Quality				
1" Throwaway non-woven synthetic filter	X			
1" Permanent		X		
1" Pleated MERV 8		Х		
Bipolar lonizer		Х		
Insulation				
1/2" Standard Fiberglass	X			
1/2" Premium IAQ Fiberglass		Х		Х
1/2" Foil Face		Х		
1/4" Closed Cell		Х		
Motor Type				
PSC Motors with Quick Connect Plug	Х			
ECM Motors with Quick Connect		X		
Motor Voltage				
120/1/60 3-Speed	X			
208/230/277/1/60 3-Speed (Optional Voltage)		X		

Table continued on next page



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# **Standard Features and Options**

### Table continued from previous page

Features And Options	Standard	Factory	Field Installed	Factory Special
Supply/Return Air Grilles		, , , ,		· · · · · ·
Louvered Stamped Supply Grille (DXY)	×			
Double Deflection, Aluminum Finish Supply Grille		DXY	DBY	
Double Deflection, Integral Supply Grille - painted		DXY		
Stamped Return Grille	×			
Hinged Bar-Type, Aluminum-finish Return Grille with Throwaway Filter - F.O.			DBY	
Paint Options				
Bright White	X			
Arctic White, Polar White, Flat Black, Ermine Gray, Champagne Beige, Toffee Brown		Х		
Special Color				X
Controls				
Service Switch with Lockout Tabs		Х		
Single Point Power Connection		Х		
Incoming Power Fusing (Total Electric Heat)	X			
24V Controls		Х		
Live Voltage Controls		Х		
3-Speed Switch		Х	Х	
Thermostats			Х	
Custom Control (DDC)		Х		Х
Valve Package Options* (* Valve packages are assembled at the factory but field ins	stalled.)			
Union Connections at the Coil			Х	
24" Braided Hoses			Х	
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			Х	
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			Х	
P-T Ports			Х	
Circuit Setter			Х	
Balance Valve (Return Line)			Х	
Balance Valve (3-Way Bypass)			Х	



# **Standard Features and Options**

### **Nominal Filter Sizes**

All cabinet model units (except CH) have non-woven synthetic throwaway filters furnished as standard equipment. Cleanable and pleated filters are optional.

Unit								
Size	DBY	DBY	DXY	DXY	DXY			
	Bottom Return Stamped	Rear Return	Bottom Return Stamped	Rear Return Stamped	Rear Return Ducted			
02	10" × 28"	7" x 21"	10" x 23-1/2"	8-3/4" x 23-1/2"	8-3/4" x 23-1/2"			
	(254 × 711)	(178 x 533)	(254 x 597)	(222 x 597)	(222 x 597)			
03	10" × 28"	7" x 21"	10" × 28"	8-3/4" x 26-1/2"	8-3/4" x 26-1/2"			
	(254 × 711)	(178 x 533)	(254 × 711)	(222 x 673)	(222 x 673)			
04	10" x 33"	7" × 27"	10" x 32-1/2"	8-3/4" x 32-1/2"	8-3/4" x 32-1/2"			
	(254 x 838)	(178 × 686)	(254 x 826)	(222 x 826)	(222 x 826)			
06	10" x 45"	7" × 38"	10" x 37"	8-3/4" x 37"	8-3/4" x 37"			
	(254 x 1143)	(178 × 965)	(254 x 940)	(222 x 940)	(222 x 940)			
08	10" x 45"	7" × 38"	10" × 41"	8-3/4" x 41"	8-3/4" x 41"			
	(254 x 1371)	(178 × 965)	(254 × 1041)	(222 x 1041)	(222 x 1041)			
10	10" × 62"	7" x 52"	10" x 54-1/2"	8-3/4" x 54-1/2"	8-3/4" x 54-1/2"			
	(254 × 1575)	(178 x 1321)	(254 x 1384)	(222 x 1384)	(222 x 1384)			
12	10" x 62"	7" x 52"	10" x 63"	8-3/4" x 63"	8-3/4" x 63"			
	(254 x 1575)	(178 x 1321)	(254 x 1600)	(222 x 1600)	(222 x 1600)			

NOTES: 1. Filter sizes for the models are recommended filter sizes only. No filter is factory provided with these models.

2. Sizes shown are nominal ordering sizes.

#### Filter Static Resistance (in w.c.)

	Unit Data		Filter Pressure Drop				
Model Unit Size		Nominal CFM	1" Throwaway	1" Permanent	1" Merv 8		
	02	200	0.046	0.078	0.13		
	03	300	0.066	0.145	0.18		
	04	400	0.068	0.154	0.18		
DBY	06	600	0.072	0.171	0.19		
	08	800	0.088	0.274	0.30		
	10	1000	0.083	0.236	0.25		
	12	1200	0.093	0.321	0.37		
	02	200	0.037	0.054	0.11		
	03	300	0.046	0.076	0.13		
	04	400	0.052	0.094	0.14		
DXY	06	600	0.066	0.144	0.17		
	08	800	0.076	0.194	0.21		
	10	1000	0.073	0.175	0.20		
	12	1200	0.075	0.186	0.21		

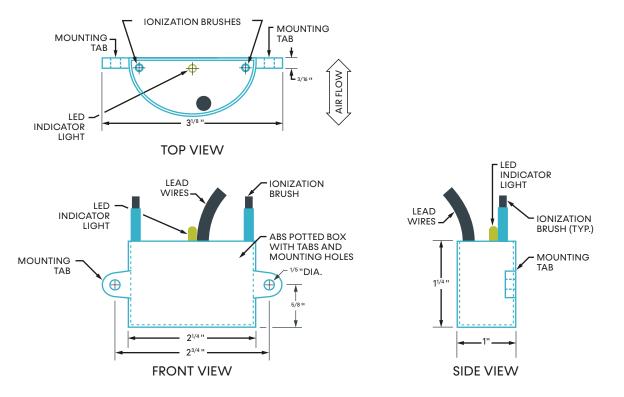
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# **Standard Features and Options**

### **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: 24V AC (602)  Power Consumptions: Less than 1 watt  Frequency: 50/60 hertz  Over Current Protection: 500mA Glass Cartridge Fuse Lead Wires 50"(L)	Ionization Output:  Mode of Operation
--	---------------------------------------

Figure 1. Dimensions not to scale.





## **Standard Features and Options**

### **Control Packages**

#### **Controls**

As detailed in the table below and on page 55, 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 (see page 58) 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-100 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
- Staged Cooling: compatible with IEC Venture Wi-Fi Thermostat (E055 - 1520330)
- BAS signal input to interrupt fan and actuators
- Fusing and service switch with electric heat
- Changeover or aquastat sensor
- 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**

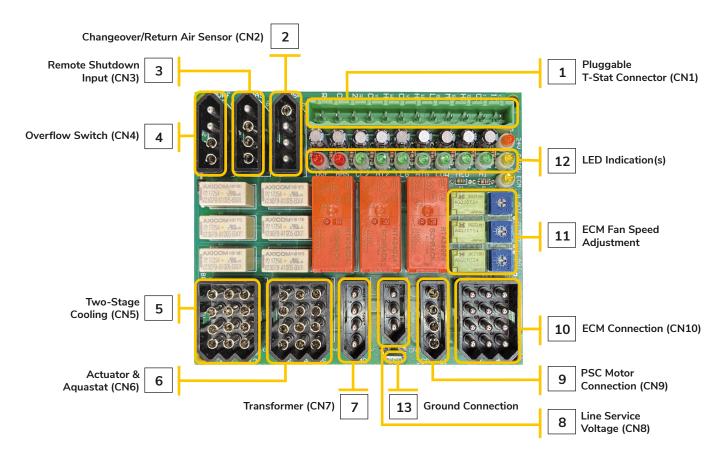
- Unit mounted 3-speed switch (thermostat by others)
- Low voltage remote shutdown relays (Special Quote)
- Fan and valve cycle applications (Special Quote)
- Thermostats available with large letter print for handicap applications (Special Quote)



# **Standard Features and Options**

## **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 and Options**

## **Thermostat Control Package Applications**

Unit Type	Control Option	System Type	Changeover Type	W	Р	N	F	G	Α	В	С
-	Manual Fan	Manual <sup>1</sup>	None	-	-	-	-	-	-	-	-
2-Pipe		Heat Only	None	•	•	•	•	•	•	•	•
Electric Heat	Valve Cycle*	Total Electric Heat	None	•	•	•	•	•	•	•	•

NOTE: 1. Fan switch only; no thermostat

#### **Thermostat Features**

	Control Type <sup>1</sup>						
All listed controls include fan switching.	W	Р	N	F	G	Α	В
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 are continuous fan operation only.

- 2. All wall-mounted 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

  - P Basic 24 V Digital, 7-Day Programmable
     N Basic 24 V Digital, Non-Programmable
     F Premium 24 V Digital, 7-Day Programmable
  - G Premium 24 V Digital BACnet with Proportional Fan/Valves Option
  - W● Venture 24 V Wi-Fi Programmable

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# **Standard Features and Options**



Venture 24V, Wi-Fi Programmable



Premium 24V Digital 7-Day Programmable/BACnet



Basic Series, 156, Unit Mounted



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



**Basic Electronic Wall Series** 155, Vertical and Horizontal



# **Standard Features and Options**

### **Supply Air Grilles**

Unit Size	Nominal CFM	Recommended Grille Size - Inches (Millimeters)		
02	200	16" x 6" (406 x 152)		
03	300	20" x 6" (508 x 152)		
04	400	26" x 6" (660 x 152)		
06	600	30" x 6" (762 x 152)		
08	800	38" x 6" (965 x 152)		
10	1000	52" x 6" (1320 x 152)		
12	1200	60" x 6" (1524 x 152)		

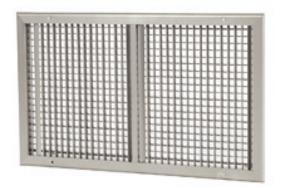
NOTES: 1. Refer to Submittal Data pages for actual unit supply air opening dimensions.

#### Field-furnished duct transitions may be required.

### **Return Air Filter Grilles**

Unit Size	Nominal CFM	Recommended Grille Size - Inches (Millimeters)			
02	200	24" x 10" (610 x 254)			
03	300	28" x 10" (711 x 254)			
04	400	32" x 10" (813 x 254)			
06	600	42" x 10" (1067 x 254)			
08	800	42" x 10" (1067 x 254)			
10	1000	54" x 10" (1372 x 254)			
12	1200	64" x 10" (1626 x 254)			

NOTES: 1. Refer to Submittal Data pages for actual unit supply air opening dimensions.



Optional Double Deflection, Aluminum-finish Supply Grille (Optional special ship separate for DBY Consult factory for details.)



Optional Hinged, Bar-type, Aluminum-finish Return Grille with Throwaway Filter (Optional special ship separate for DBY. Consult factory for details.)



Optional Double-deflection, Integral Supply Grille Painted to Match Color of Unit

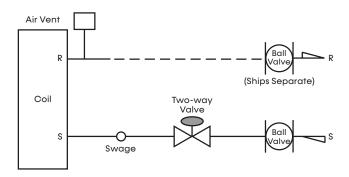


Field-furnished duct transitions may be required.

## **Piping Packages (Typical)**

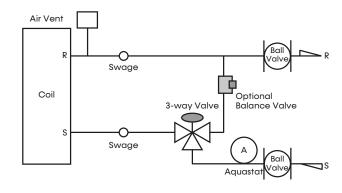
## **Two-way Motorized Control Valve**

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 brazing. 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, or 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.



NOTES: 1. Please note that project specifications for system pressure, pressure drop limitations and flow rate should be checked prior to selecting specific components or the valve package size

- The supply and return piping connections of the factory-provided valve package are either swaged for field brazing (standard) or union fitted (optional) for field connection to the coil.
- 3. Consult IEC's Valve Packages and Piping Components manual or your local representative for detailed piping and valve application information. Factoryprovided valve packages are assembled, brazed, wired electrically and dry-fit to the coil connections before shipping. Field brazing to the coil completes the installation. Some applications dictate shipping isolation valves loose.



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# **Cabinet Heater D\*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.