

# VALENT DEDICATED OUTDOOR AIR SYSTEMS DESIGNED FOR 100% OUTDOOR AIR

Valent was one of the first to specialize in high outdoor air units, which can be more challenging to design than recirculated air units. Valent's robust designs are highly configurable to fit almost any project.

## **OUTDOOR AIR EXPERTS**

- Valent's years of experience in high outdoor air applications lead to high performing solutions
- Valent's application expertise can be helpful in the design process

## **ROBUST DESIGNS**

- Valent uses quality components to increase unit longevity
- Injected foam casings improve thermal performance
- Pre-painted cabinets reduce environmental wear and tear

## DEDICATED SUPPORT

- Valent's commitment to quality reduces the need for post sale support, but we'll help with any issues
- Valent representatives can provide product and selection support in the design process
- End-of-line testing reduces installation time



## VALENT UNITS AT A GLANCE

		VX, VXE & VXC CASING							
		12	112	212	312				
LOW	<b>Minimum</b> <sup>a</sup> (cfm)	500	800	2,250	3,750				
AIRFLOW	<b>Maximum</b> <sup>a</sup> (cfm)	2,500	6,500	9,500	18,000				
		Tons	Tons	Tons	Tons				
		3	5	15	25				
		4	7	17.5	30				
	Packaged, air cooled	5	10	20	40				
		6	12.5	25	50				
COOLING TYPE		7	15	30	60				
. 9NIJ		-	-	-	70				
000		Circuits	Circuits	Circuits	Circuits				
		1	1	1	2				
	Chilled water	Option	Option	Option	Option				
	Air source heat pump	Not available	Option	Option	Not available				
	No cooling	Option	Option	Option	Option				
INTS	Inverter scroll compressor	Standard	Standard	Standard	Standard				
MPONE	Modulating hot gas reheat	Option	Option	Option	Option				
COOLING COMPONENTS	Lead EC modulating condensing fans	Standard	Standard	Standard	Standard				
COOL	All EC modulating condensing fans <sup>b</sup>	Not applicable	Option	Option	Option				
IACE	Minimum (MBh)	75	100	300	600				
<b>VS FURN</b>	Maximum (MBh)	200	300	500	1,200				
INDIRECT GAS FURNACE	Turndown (NG)	Up to 16:1	Up to 16:1	Up to 16:1	Up to 16:1				
INDIF	Turndown (LP)	Up to 16:1	Up to 16:1	Up to 16:1	Up to 16:1 <sup>c</sup>				
TRIC AT	<b>Minimum</b> <sup>d</sup> (kW)	5	15	35	40				
ELECTRIC HEAT	<b>Maximum</b> <sup>d</sup> (kW)	60	60	120	230				
АТ	Air source heat pump	Not available	Option	Option	Not available				
<b>OTHER HEAT</b>	Hot water	Option	Option	Option	Option				
0Т	Steam coil	Not available	Option	Option	Option				

## VALENT UNITS AT A GLANCE

	VX, VXE & VXC CASING								
	12	112	212	312					
<b>Full width wheel</b> Polymer	Option	Option	Option	Option					
Full width wheel Aluminum	Not available	Option	Option	Option					
<b>Enthalpy core</b> Polymer	Not available	Option	Option	Not available					
Enthalpy core Fiber	Not available	Option	Option	Not available					
Bottom supply/ return	Standard	Standard	Standard	Standard					
Side supply	Option	Option	Option	Option					
Side return	Not available	Option	Option	Option					
End return	Option	Option	Option	Option					
Full controls	Standard	Standard	Standard	Standard					
Heat-cool only	Option	Option <sup>e</sup>	Option <sup>e</sup>	Option					
Web user interface	Standard	Standard	Standard	Standard					
Damper	Option	Option	Option	Option					
Fan	Option	Option	Option	Option					
Injected foam insulation	2" double-wall R-13	2" double-wall R-13	2" double-wall R-13	2" double-wall R-13					
Exterior	Gray prepainted	Gray prepainted	Gray prepainted	Gray prepainted					
Interior	Galvanized	Galvanized	Galvanized	Galvanized					
AHRI 1060	Compliant	Compliant	Compliant	Compliant					
ASHRAE 90.1-2019	Compliant	Compliant	Compliant	Compliant					
DOE 2023	Compliant	Compliant	Compliant	Compliant					
	Polymer Full width wheel Aluminum Polymer Enthalpy core Fiber Bottom supply/ Gide supply Side supply Gide return Full controls Full controls Heat-cool only Web user interface Damper Damper Side supply Gide foam Injected foam Injected foam Supply Component Componen	Full width wheel PolymerOptionFull width wheel AluminumNot availableFull width wheel AluminumNot availableEnthalpy core PolymerNot availableEnthalpy core FiberNot availableBottom supply/ PeturnStandardSide supplyOptionSide returnOptionFull controlsStandardHeat-cool onlyOptionWeb user interfaceStandardInjected foam insulationQuitonFanOptionInigected foam insulation2" double-wall R-13InteriorGalvanizedAHRI 1060Compliant	12112Full width wheel PolymerOptionOptionFull width wheel AluminumNot availableOptionFull width wheel AluminumNot availableOptionFuthalyr core PolymerNot availableOptionFuthalyr core FiberNot availableOptionFuthalyr core Side supply/StandardStandardSide supplyOptionOptionSide returnOptionOptionFull controlsStandardOptionFull controlsOptionOptionFuerOptionOptionFanOptionOptionFanOptionOptionFanOptionOptionInscription2" double-wall R-132" double-wall R-13FueriorGalyanizedGalyanizedARR 1060CompliantCompliant	12112212Full width wheel PolymerOptionOptionOptionFull width wheel AluminumNot availableOptionOptionFull width wheel PolymerNot availableOptionOptionEnthalpy core FiberNot availableOptionOptionBettom supply/StandardStandardStandardSide supplyOptionOptionOptionSide returnOptionOptionOptionFull controlsStandardStandardStandardFull controlsOptionOptionOptionFull controlsGray prepaintedGray prepaintedFull controlCompliantCompliantFull controlCompliantCompliantFull control					

Refer to Valent CAPS® selection software or the Valent Mechanical IOMs for additional detail. a Based on packaged DX cooling, indirect gas heating, 100% outdoor air, 1.5 in. wg supply external and 0.5 in. wg return air static pressure. Airflows will vary based on unit configuration.

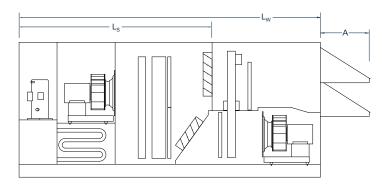
b Not available on 575 V units c LP furnaces available on 600 and 800 mbh furnaces only

d Max kW is dependent on unit voltage

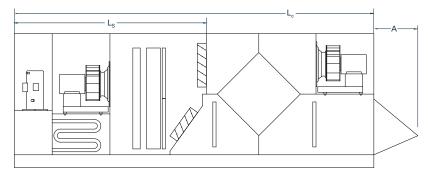
e Not available with the fiber core

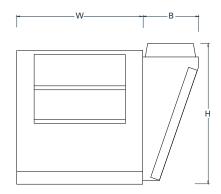
## **DIMENSIONS AND WEIGHTS**

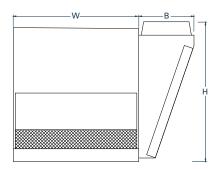
### Elevations with and without energy recovery wheel



### **Elevations with enthalpy core heat exchangers**







		DIMENSIONS (inches), WEIGHTS (pounds)											
		Height	Width	Length <sup>a</sup>	Length w	ith wheel	Length with core		Hood length	Condenser width	Nominal weight		
		Н	W	Ls	L <sub>W</sub>		L	L <sub>C</sub> A		В	VX	VXE	VXC
					Bottom return	Side return	Bottom return	Side return	A	D	VA	VAL	VXC
CASING	VX-12	58.1	44.0	82.2 <sup>c</sup>	125.0	N/A	N/A	N/A	22.3	N/A	1,180	1,780	N/A
	VX-112	59.3	52.5	98.6 <sup>a</sup>	149.5 <sup>a</sup>	180.5	180.5	N/A	22.1/40.0 <sup>e</sup>	30.1	2,700	3,400	3,800
	VX-212	72.5	68.2	109.0 <sup>a</sup>	163.2 <sup>a</sup>	197.3	197.3	N/A	27.1/38.0 <sup>e</sup>	30.1	4,500	5,100	5,675
	VX-312	101.3	98.0	155.2 <sup>d</sup>	247.9	276.9	N/A	N/A	39.0 <sup>b</sup>	N/A	7,750	9,600	N/A

Powered exhaust units with no energy recovery, whether bottom or side return, have the same length as the wheel units with bottom return. This applies to the VX-112 and VX-212. If the VXE-312 has an exhaust fan, the exhaust blower bump-out will have a length of 48.4 inches. a b

c If the VX-12 has an indirect gas furnace, the furnace bump-out will have a length of 13.3 inches.

d If the VX-312 has powered exhaust but no energy recovery, the length will be 203.6 inches for bottom return and 222.7 inches for side return.

e Longer dimension reflects VXC hood length.



OUTDOOR AIR EXPERTS | ROBUST DESIGNS | DEDICATED SUPPORT