DATASHEET

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

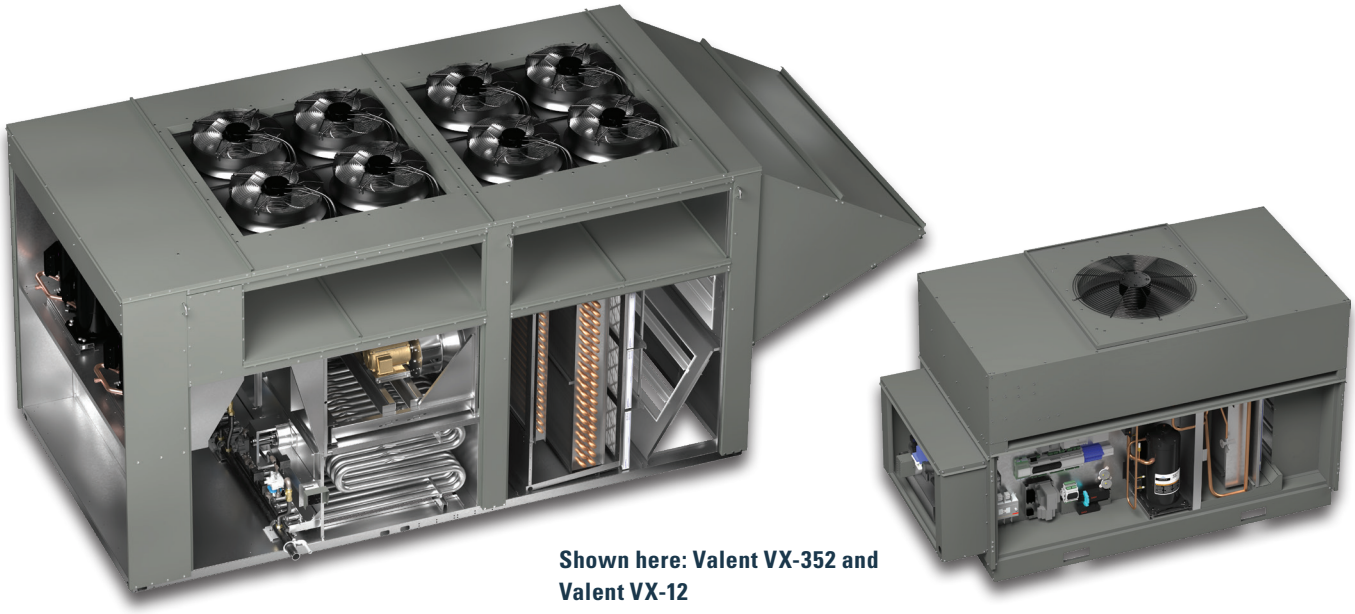
- Valent's years of experience in high outdoor air applications lead to high performing solutions
- Valent's application expertise can be helpful in the design process

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



Shown here: Valent VX-352 and Valent VX-12

VALENT UNITS AT A GLANCE

		VX, VXE & VXC CASING				
		12	**112**	**212**	**312**	**352**[f]
AIRFLOW	**Minimum**[a] (cfm)	500	800	2,250	3,750	3,900
	Maximum[a] (cfm)	2,500	6,500	9,500	16,000	18,000
COOLING TYPE	**Packaged, air cooled**	Tons	Tons	Tons	Tons	Tons
		3	5	15	25	30
		4	7	17.5	30	40
		5	10	20	40	50
		6	12.5	25	50	60
		7	15	30	—	70
		Circuits	Circuits	Circuits	Circuits	Circuits
		1	1	1	2	2
	Chilled water	Option	Option	Option	Option	Option
	Air source heat pump	Not available	Option	Option	Not available	Not available
	No cooling	Option	Option	Option	Option	Option
COOLING COMPONENTS	**Inverter scroll compressor**	Standard	Standard	Standard	Standard	Standard
	Modulating hot gas reheat	Option	Option	Option	Option	Option
	Lead EC modulating condensing fans	Standard	Standard	Standard	Standard	Standard
	All EC modulating condensing fans[b]	Not applicable	Option	Option	Option	Option
INDIRECT GAS FURNACE	**Minimum** (MBh)	75	100	300	600	600
	Maximum (MBh)	200	300	500	1,200	1,200
	Turndown (NG)	Up to 16:1	Up to 16:1	Up to 16:1	Up to 16:1	Up to 10:1
	Turndown (LP)	Up to 16:1	Up to 16:1	Up to 16:1	Not available	Up to 6:1
ELECTRIC HEAT	**Minimum**[c] (kW)	4	15	35	35	50
	Maximum[c] (kW)	60	60	120	230	200
OTHER HEAT	**Air source heat pump**	Not available	Option	Option	Not available	Not available
	Hot water	Option	Option	Option	Option	Option
	Steam coil	Not available	Option	Option	Option	Option

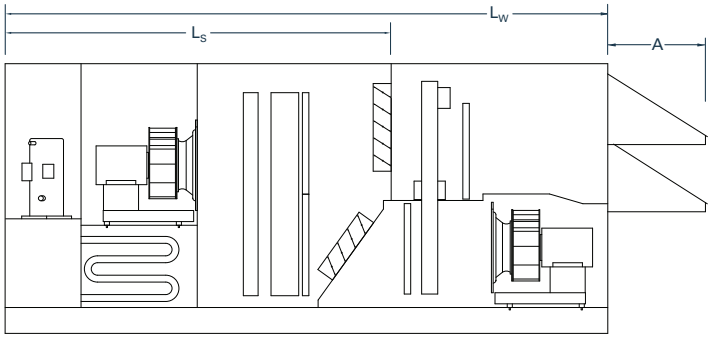
VALENT UNITS AT A GLANCE

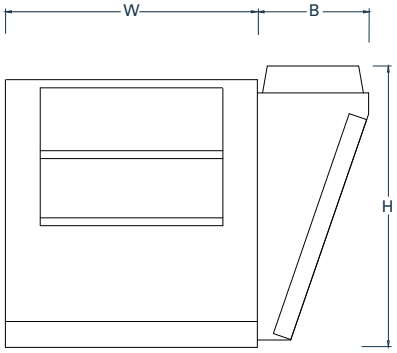
		VX, VXE & VXC CASING				
		12	112	212	312	352[f]
ENERGY RECOVERY	**Full width wheel** Polymer	Not available	Option	Option	Option	Option
	Full width wheel Aluminum	Not available	Option	Option	Option	Option
	Enthalpy core Polymer	Not available	Option	Option	Not available	Option
	Enthalpy core Fiber	Not available	Option	Option	Not available	Not available
DUCT CONNECTIONS	**Bottom supply/ return**	Standard	Standard	Standard	Standard	Standard
	Side supply	Option	Option	Option	Option	Option
	Side return[d]	Not available	Option	Option	Option	Option
	End return[e]	Option	Option	Option	Option	Option
CONTROLS	**Full controls**	Standard	Standard	Standard	Standard	Standard
	Heat-cool only	Option	Option	Option	Option	Option
	Web user interface	Standard	Standard	Standard	Standard	Standard
AIRFLOW MONITORING	**Damper**	Option	Option	Option	Option	Option
	Fan	Option	Option	Option	Option	Option
CONSTRUCTION	**Injected foam insulation**	2" double-wall R-13	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	Gray prepainted
	Interior	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized
CERTIFICATION	**AHRI 1060**	N/A	Compliant	Compliant	Compliant	Compliant
	ASHRAE 90.1-2019	Compliant	Compliant	Compliant	Compliant	Compliant
	DOE 2023	Compliant	Compliant	Compliant	Compliant	Compliant

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 All EC condensing fans are not available for 575V unit configurations.
c Actual kW minimums and maximums vary by voltage.
d Not available in the VXC-112 or VXC-212.
e Not available with energy recovery or powered exhaust. Not allowed with barometric relief damper in the end position.
f Not available in Canadian markets.

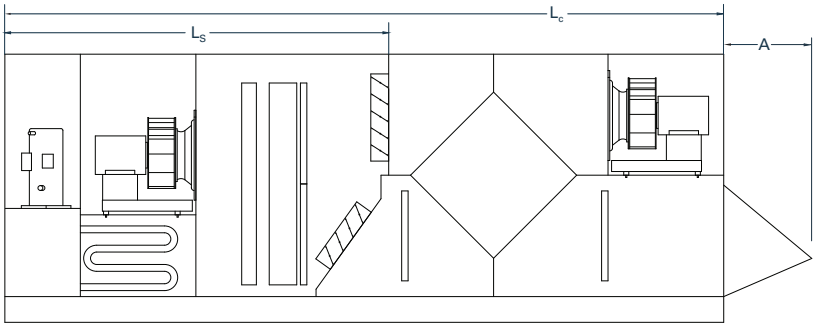
DIMENSIONS AND WEIGHTS

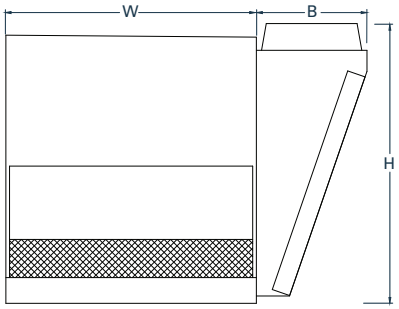
Elevations with and without energy recovery wheel





Elevations with enthalpy core heat exchangers





		DIMENSIONS (inches), **WEIGHTS** (pounds)											
		Height	**Width**	**Length**[a]	**Length with wheel**		**Length with core**		**Hood length**	**Condenser width**	**Nominal weight**		
		H	W	L_S	L_W		L_C		A	B	VX	VXE	VXC
					Bottom return	Side return	Bottom return	Side return					
CASING	**VX-12**	58.1	44.0	82.2[c]	N/A	N/A	N/A	N/A	22.3	N/A	1,180	N/A	N/A
	VX-112	59.3	52.5	98.6[a]	149.5[a]	180.5	180.5	N/A	22.1/40.0[e]	30.1	2,700	3,400	3,800
	VX-212	72.5	68.2	109.0[a]	163.2[a]	197.3	197.3	N/A	27.1/38.0[e]	30.1	4,500	5,100	5,675
	VX-312	101.3	98.0	155.2[d]	247.9	276.9	N/A	N/A	39.0[b]	N/A	6,500	8,000	N/A
	VX-352	99.5	96.0	185.0	263.0	307.0	308.0	353.0	45.3/46.0[e]	N/A	7,950	10,450	12,000

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.
b If the VXE-312 has an exhaust fan, the exhaust blower bump-out will have a length of 48.4 inches.
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.