

All the products you need for
Engineered Kitchen Ventilation Systems.
Packaged Rooftops—Model XVPR



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Features

Application solutions for difficult ventilation challenges

- Packaged rooftop unit
- Designed for 50 to 100% OA applications
- Air-cooled with six-row DX coil
- EERs calculated for each application typically ranging from 10.5 - 13
- Modulating hot gas reheat
- Modulating indirect gas-fired heat
- Direct drive supply fans with VFDs
- 5 to 40 nominal tons of cooling
- 100 to 800 MBH of heating input
- Three cabinet sizes
- Factory wired with disconnect
- Through-the-curb gas and electric connections

CASING The casing is a 2 inch thick double-wall with expanded polyurethane foam insulation. Foam insulation will not slough and creates very rigid, durable panels. More importantly, the foam will not absorb water or support mold growth. Cabinet includes hinged, toolless panels to provide quick and easy access to components. Hinged access protects both the access panels and the roof membrane during service.

DIRECT DRIVE FANS The XVPR's direct-drive supply fans eliminate the maintenance, downtime, noise, and vibration associated with typical belt-driven systems. The fan wheel is a high performance composite radial plug fan with backward curved blades. Variable frequency drives, standard on the XVPR, allow for easy on-site air balancing, variable supply volume operation, and customized control sequences.



ELECTRICAL PANEL Unique electrical panel design allows an operator to adjust controls without disabling the disconnect. All high-voltage components are housed in the panel creating a safer environment when servicing the unit.

SEPARATED HOT GAS REHEAT COIL To ensure proper dehumidification and humidity control the hot gas reheat coil is separated (min. 6 inches) from the DX coil. This prevents any condensate carryover from evaporating on the HGR coil and re-humidifying the supply air. This also prevents heat from the HGR coil from evaporating condensate off the fins of the DX coil and provides for easy cleaning. The HGR coil is controlled via a modulating valve for extremely tight discharge temperature control. *Available on refrigeration circuit 1 only.*



CONTROL SYSTEM To handle the demands of 100% outside air and humidity control, the XVPR is provided with a powerful DDC system. The system offers flexible sequences, communications protocols (BACnet, Lon, Modbus), internet connectivity, remote control options and/or a unit mounted display (LCD) with keypad.

AIR FILTRATION 2, 4 or 6 inch pleated media filters are located in the mixed air chamber upstream of the cooling coil and are available with MERV ratings from 8 to 15.

SUPPLY AIR Supply air can exit the unit vertically downward through the floor or horizontally outward through the side of the unit. Special curbs or curb adaptors are not required for horizontal discharge.

SUPPLEMENTAL ELECTRIC HEAT An optional electric heater is available. The "Temperator" provides additional heating capacity that can be used to eliminate the temperature swings associated with gas heating turn-down ratios. The Temperator does not increase the MCA or disconnect size of the XVPR and is located between the supply fan and gas furnace (not shown).

INDIRECT GAS FURNACE Consists of a stainless steel heat exchanger with modulating control valve and a 4:1 turn-down ratio.

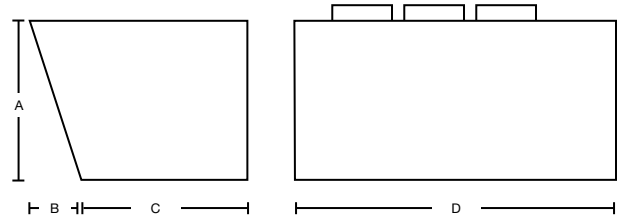
R-22 SCROLL COMPRESSORS Multiple compressor units have two independent refrigeration circuits, providing efficient cooling and up to four stages of control. Compressors are protected by high/low pressure switches and include a five-year parts warranty.

COOLING COIL 6 row intertwined DX slab coil ensures moisture removal for superior humidity control. Coil capacity is controlled via thermostatic expansion valves. Coil faces are easily accessible for cleaning.

XVPR- Performance and Dimensional Data



Size	XVPR110	XVPR210	XVPR310
A	56	63.25	84
B	34	34	34
C	48	60.25	67
D	110	120	130



Performance Data		XVPR 110 SERIES			XVPR 210 SERIES						XVPR 310 SERIES				
Specs	Nominal tonnage	5	8	10	10	13	16	18	20	25	20	25	30	35	40
	Airflow, min.	750	1200	1500	1500	1950	2400	2700	3000	3750	3000	3750	4500	5250	6000
	Airflow, max.	1500	2400	3000	3000	3900	4800	5400	6000	7500	6000	7500	9000	10500	12000
	Cooling circuits	1	1	1	2	2	2	2	2	2	2	2	2	2	2
	Cooling stages	1	1	1	2	2	2	2	2	2	2	4	4	4	4
	Nominal Weight, lbs.	1500	1600	1700	2000	2200	2400	2600	2800	3000	3300	3500	3700	4000	4000
Evap. Coil	Rows	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	Coil area, ft. ²	3.8	5.6	6.6	6.8	8.0	9.6	10.8	12.8	14.4	13.5	16.5	18.2	20.0	21.9
	Min face velocity, fpm	200	213	229	221	244	250	250	235	261	223	227	247	263	274
	Max face velocity, fpm	400	426	457	442	488	501	501	470	522	446	455	494	526	549
Condenser	Coil face area, ft. ²	13.9	13.9	19.4	30.0	27.5	30.0	35.0	35.0	36.6	37.5	38.9	47.9	48.6	48.6
	Fan qty.	1	1	1	2	2	2	2	3	3	3	3	3	3	3
	Fan hp	1.5	1.5	1.5	1	1	1	1	1	1	1	2	2	2	2
Compressors	Circuit 1 nominal tons	5	8	10	5	5	8	8	10	12	10	12	14	15	20
	Circuit 2 nominal tons				5	8	8	10	10	13	10	13	16	20	20
Hot Gas Reheat Coil	Coil area, ft. ²	2.4	3.6	4.9	4.7	6.3	7.8	9.4	10.2	10.9	9.5	10.4	12.2	13.9	15.6
	Rows	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Gas Heat Section	Max. input, MBH	125	150	150	250	300	400	400	400	400	600	700	800	800	800
SA Filters	Qty.	4	4	4	6	6	6	6	6	6	9	9	9	9	9
	Size	20x20	20x20	20x20	16x25	16x25	16x25	16x25	16x25	16x25	24x20	24x20	24x20	24x20	24x20
Supplemental Electric Heater	kW	6.0	9.0	12.0	12.0	15.0	18.0	21.0	25.0	28.0	25.0	28.0	34.0	44.0	44.0
	Max. temp rise, °F	29.6	27.8	29.6	29.6	28.5	27.8	28.8	30.0	27.6	30.9	27.6	28.0	31.0	23.0
	Min. temp rise, °F	14.8	13.9	14.8	14.8	14.2	13.9	14.4	15.4	13.8	15.4	13.8	14.0	15.5	11.5



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