# INSTALLATION MANUAL VENTUM LITE

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# 1.0 General Information

This manual includes important instructions for safe connection of the Energy Recovery Ventilator (ERV). Before connecting the unit, please read carefully and follow all of the instructions below! The manufacturer reserves the right to make changes, including changes in the technical documentation, without previous notification. Please keep this manual for future reference. Consider this manual a permanent part of the product.

This manual will show the manufacturers' recommended installation method. Please note that local codes and regulations may override these recommendations. The installation must follow local codes and standards.

The National Electric Code (NEC), the National Fire Protection Agency (NFPA), and the Canadian Electrical Code (CEC) must be followed. Installation of this product must be performed by a qualified and accredited professional in conformance with local and national codes, standards and licensing requirements.

#### **Warnings and Caution**

Warnings and cautions appear at the appropriate sections throughout this manual. Please read these sections carefully.



#### Warning

This sign indicates a potentially hazardous situation, which could result in death or serious injury if not avoided.



### Caution

This sign indicates a potentially hazardous situation, which may result in minor or moderate injury if not avoided. It may also alert against unsafe practices.

#### Caution

This label indicates a situation that may result in equipment or property damage only accidents.

# 2.0 Installation

# 2.1 Unwrapping the Product

When removing the shrink wrap, be cautious with knives and sharp tools to prevent scratching the paint.



Unit Packaged for Shipping

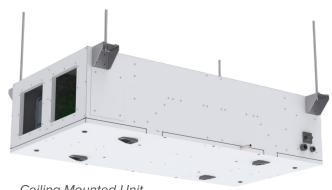
# 2.2 Weights

Model	Fan Weight lbs.	Core Weight lbs.	Total Weight lbs.
H04	27	15	325
H08	29	26	TBD
H12	29	26	TBD

# 2.3 Mounting

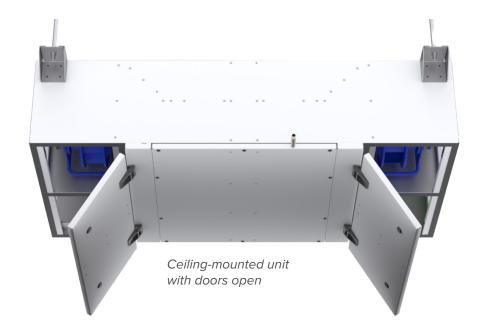
Ventum Lite is available exclusively for ceiling-hung horizontal applications. Units come standard with factory-mounted brackets.

The hole in the outer brackets are designed for a  $\frac{1}{2}$ " threaded rod to hang the units by.



Ceiling Mounted Unit

# **3.0 Access Requirements**





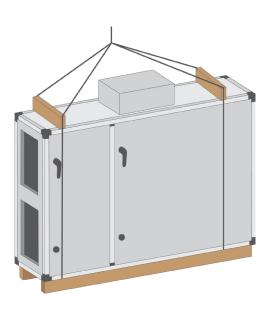
Door with removed hinge pin

Access the fan and filter through the tool access bottom swing doors. Access the electrical enclosure through the RA filter section. Access the core by removing the bottom panel socket screws.

# **4.0 Lifting Requirements**

Ventum Lite units can be lifted by mounting angles or under the removable bottom panel. Necessary care must be taken lifting from bottom panel to avoid scratching of external surfaces.

Image for illustration purposes only.



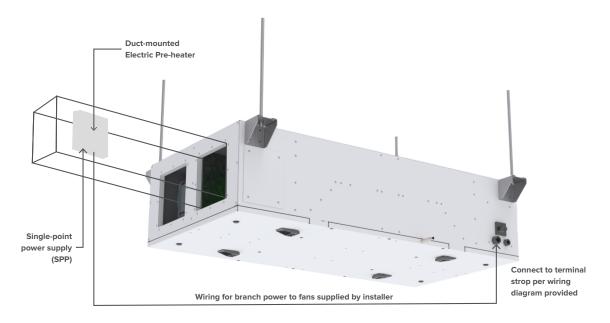
# **5.0 Electrical**

## **5.1 General Electrical**

Model	Nom. V.	Phase	<b>Motor</b> (kW)	SA Fan Qty	SA Fan FLA	SA Fan FLA Total	RA Fan Qty	RA Fan FLA	RA Fan FLA Total	FLA	MCA	MROPD	RFS
H04	208/240	1	0.53	1	3.50	3.50	1	3.50	3.50	7.00	7.88	11.38	15A
H08	208/240	1	0.50	1	2.50	2.50	1	2.50	2.50	5.00	5.63	8.13	15A
H12	208/240	1	0.78	1	3.90	3.90	1	3.90	3.90	7.80	8.78	12.68	15A

# **5.2 DOAS/ERV and Single Point Power Electric Heater**

Electric pre-heaters come in standard duct-mounted sizes and capacities where the fan power coms off as a brand circuit from this single-point power source.



Recommended fuse sizes provided in the following tables.

#### H04

Nominal Voltage	Airflow	Heater Capacity Variant	Heater Capacity (kW)	Heater FLA	EA Fan QTY	EA Fan FLA	SA Fan QTY	SA FLA	Unit FLA	Total FLA	MCA	MROPD	Recommended Fuse Size
208/1/60	450	1	1	4.81						11.81	14.76	17.82	15A
		2	2	9.62						16.62	20.78	28.65	25A
		3	4	19.24	1	2.50	1	2.50	700	26.24	32.80	50.29	35A
		4	6	28.86	] '	3.50	'	3.50	7.00	35.86	44.83	71.94	45A
		5	8	38.48						38.48	48.10	86.58	50A
		6	10	48.10						55.10	68.88	115.23	70A
240/1/60	450	1	1	4.17						11.17	13.96	16.38	15A
		2	2	8.34						15.34	19.18	25.77	20A
		3	4	16.68						23.68	29.60	44.53	30A
		4	6	25.02	] 1	3.50	1	3.50	7.00	32.02	40.03	63.30	45A
		5	8	33.36						33.36	41.70	75.06	45A
		6	10	41.70						48.70	60.88	100.83	70A

#### H08

Nominal Voltage	Airflow	Heater Capacity Variant	Heater Capacity (kW)	Heater FLA	EA Fan QTY	EA Fan FLA	SA Fan QTY	SA FLA	Unit FLA	Total FLA	MCA	MROPD	Recommended Fuse Size
208/1/60	800	1	2	9.62						14.62	18.28	26.65	20A
		2	4	19.24						24.24	30.30	48.29	35A
		3	7	33.67	1	3.90	1	3.90	5.00	38.67	48.34	80.76	50A
		4	10	48.10		3.90	'	3.90	5.00	53.10	66.38	113.23	70A
		5	14	67.34						67.34	84.18	151.52	90A
		6	18	86.58						91.58	114.48	199.81	125A
240/1/60	800	1	2	8.34						13.34	16.68	23.77	20A
		2	4	16.68						21.68	27.10	42.53	30A
		3	7	29.19						34.19	42.74	70.68	45A
		4	10	41.70	1	3.90	1	3.90	5.00	46.70	58.38	98.83	60A
		5	14	58.38						58.38	72.98	131.36	80A
		6	18	75.06						80.06	100.08	173.89	110A

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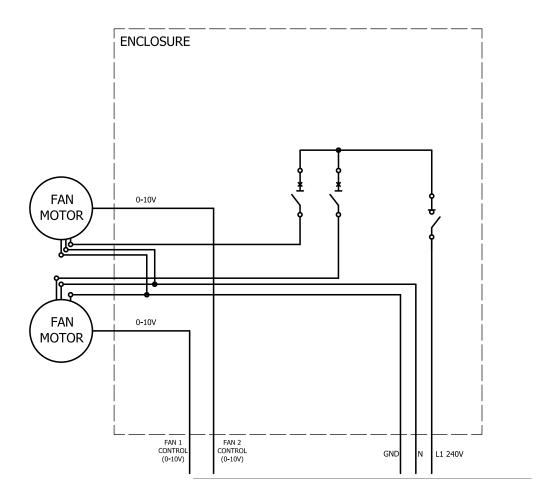
#### H12

Nominal Voltage	Airflow	Heater Capacity Variant	Heater Capacity (kW)	Heater FLA	EA Fan QTY	EA Fan FLA	SA Fan QTY	SA FLA	Unit FLA	Total FLA	MCA	MROPD	Recommended Fuse Size
208/1/60	1200	1	3	14.43						20.63	25.79	38.67	30A
		2	6	28.86					90 6.20	35.06	43.83	71.14	45A
		3	10	48.10	1	1 3.90	1	3.90		54.30	67.88	114.43	70A
		4	15	72.15	'	3.90	'		6.20	78.35	97.94	168.54	100A
		5	21	101.01						101.01	126.26	227.27	150A
		6	27	129.87						136.07	170.09	298.41	175A
240/1/60	1200	1	3	12.51						18.71	23.39	34.35	25A
		2	6	25.02						31.22	39.03	62.50	40A
		3	10	41.70						47.90	59.88	100.03	60A
		4	15	62.55	1	3.90	1	3.90	6.20	68.75	85.94	146.94	90A
		5	21	87.57						87.57	109.46	197.03	110A
		6	27	112.59						118.79	148.49	259.53	150A

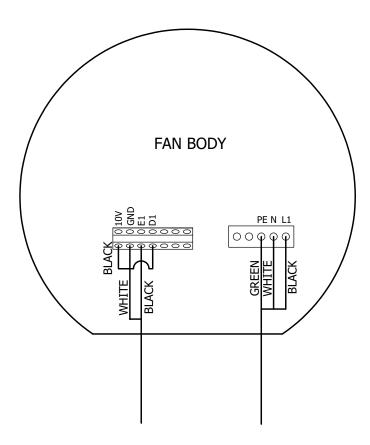
# **5.3 Single-Phase Lite Electrical Hook Up (2 Fans)**

Attention: Single phase electrical consists of single Line, Neutral and Ground OR two hot lines and Ground (Line 1, Line 2 and Ground) based on voltage availability. Dual 120V feeds will not work.

1 phase, 3 wire, 240V - 10% - +15%, 60Hz

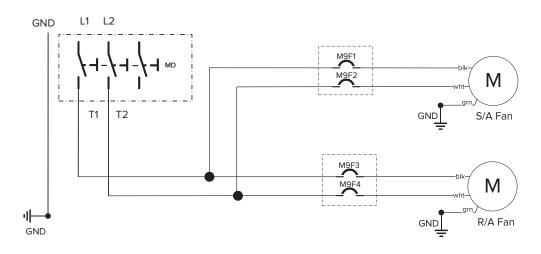


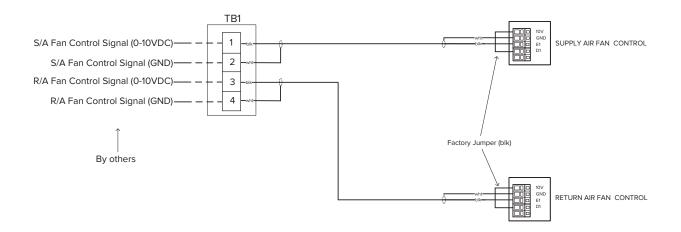
# **5.4 Fan Connection - Single Phase**



# 5.5 Wiring Diagram - Ventum Lite 208V, Single Phase

#### 208VAC/1Ø/60HZ





# Legend Factory wired Field wiring required

# 5.6 Wiring Diagram - Ventum Lite 208V, Single Phase, SPP Electrical Pre-Heater

