

# Percentage Timer Control (PTL)

Installation and Operation Manual: Aeri™/EV/EV Premium/SL Series



## OPERATION

The Percentage Timer Control with indicator lights (PTL) is the primary control for RenewAir Energy Recovery Ventilator (ERV) Aeri™, EV, EV Premium, and SL series models. This proportional runtime control will operate your ERV an adjustable amount of time each hour. When the “Runtime %” light is on, the PTL control is telling your ERV to operate. Additionally, the PTL can be set to turn your ERV off or to operate constantly. ERV operation time will vary from application to application as well as time of year, lifestyle, indoor air quality concerns and other factors. Discuss any questions with your HVAC professional or contact RenewAir directly.

**Constant Operation:** Press the RenewAir logo until the light next to “100” is lit.

**Operation Each Hour:** Run time of your ERV can be adjusted from 10%, or 6 minutes each hour, up to 100% operation in 10% increments. Simply press the RenewAir logo until the light next to the desired percentage amount is lit. You can increase or decrease the run time based upon daily, weekly or monthly variations in occupancy levels, indoor odors, cold weather winter humidity, or other indoor air quality concerns as needed.

**FOR NO REGULAR OPERATION:** Press the logo until all lights are off. The control is off.

## INSTALLATION

1. Install control in a standard 2" x 4" electrical box, with a minimum depth of 1.5", with the two screws provided.
2. Wire Size: 18–22 gauge, no more than 500 feet. Wiring is non-polar.
3. The two wires from the ERV should be attached to the ‘C’ and ‘R’ positions on the terminal block on the back of the PTL Control.
4. Use Lutron Decora™ cover plate to complete installation (single cover plate included).

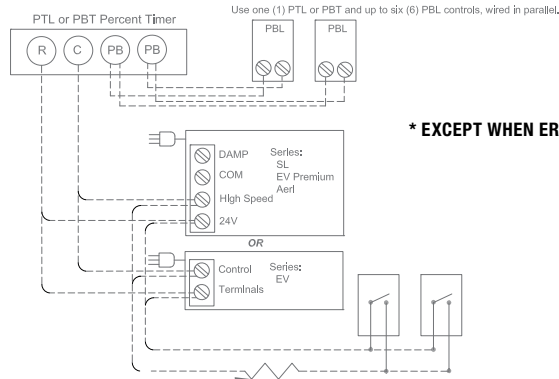
## PERCENTAGE RUN TIME TABLES

RUNTIME % SETTING	MINUTES OF OPERATION (PER HOUR)	EQUIVALENT CONTINUOUS OPERATION CFM*								
		AERI™	SL75	EV90	EV130	EV200	EVPS	EVPM	EVPL	EV PX
10	6	26	13	9	13	18	13	21	24	39
20	12	51	26	18	26	36	26	42	48	78
30	18	77	39	27	39	54	39	63	72	117
40	24	102	52	36	52	72	52	84	96	156
50	30	128	65	45	65	91	65	105	120	195
60	36	153	78	54	78	109	78	126	144	234
70	42	179	91	63	91	127	91	147	168	273
80	48	204	104	72	104	145	104	168	192	312
90	54	230	117	81	117	163	117	189	216	351
100	60	255	130	90	130	181	130	210	240	390

\*EV Premium and SL models running at max speed.

ASHRAE 62.2 2013/16 RESIDENTIAL VENTILATION AIR REQUIREMENTS CONTINUOUS CFM					
FLOOR AREA (FT <sup>2</sup> )	BEDROOMS				
	1	2	3	4	5
<500	30	38	45	53	60
501–1000	45	53	60	68	75
1001–1500	60	68	75	83	90
1501–2000	75	83	90	98	105
2001–2500	90	98	105	113	120
2501–3000	105	113	120	128	135
3001–3500	120	128	135	143	150
3501–4000	135	143	150	158	165
4001–4500	150	158	165	173	180
4501–5000	165	173	180	188	195

## WIRING DIAGRAM



\* EXCEPT WHEN ERV IS OPERATING DUE TO AN ADDITIONAL CONTROL WIRED DIRECTLY TO THE UNIT.

To install one or more additional low-voltage controls other than PTL, PBT, or PBL, install a 150 ohm resistor (rated at 1/8 watt or more) between one terminal on the ERV and one of the wires to the other controls as shown. Wire the other controls in parallel with each other.

**NOTE:**  
For ERV systems with more than one control:

Another control other than the push button may be causing your ventilator to run. If you wish to keep your ventilator from running, check that none of your controls are calling for unit operation.

**NOTE:**  
Aeri™/EV Premium/SL models are running at Low-Speed when powered and operate at High-Speed only when activated by signal when used with a PTL.