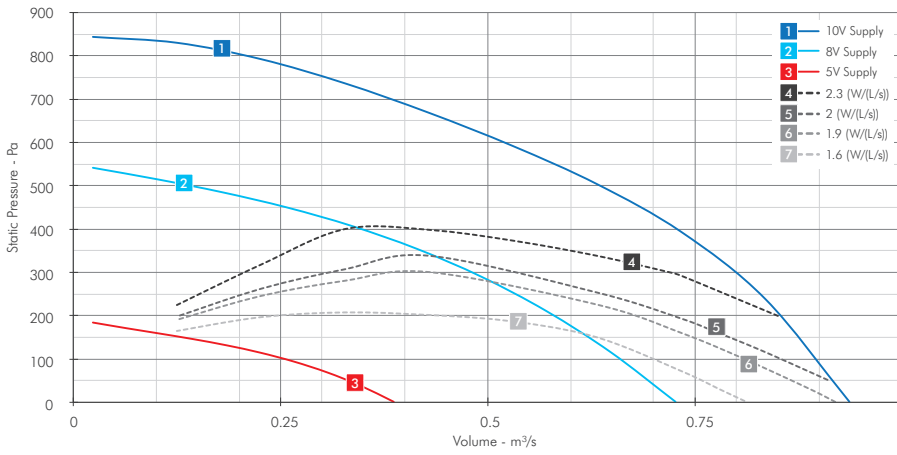


# PREMA900

The PREMA900 unit is optimised for any commercial building services application covering an airflow envelope of 0.296 – 0.909 m<sup>3</sup>/s at 75Pa ESP (low pressure duct systems). Overall unit SFP calculated with ISO ePM<sub>1</sub> 55% (F7) / ISO ePM<sub>10</sub> 55% (M5) filters under clean filter conditions.



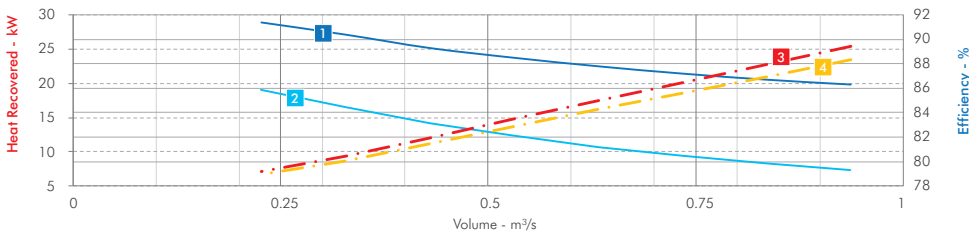
## Airflow Performance Curve



## Key Features

- Heat / Coolth Recovery
- Dual Condensate Tray
- Low energy consumption and quiet EC fans
- Counterflow heat exchanger offering high thermal energy recovery
- 100% motorised bypass damper
- Fine particulate filters fitted as standard
- ErP 2018 compliant
- Demand control options with BMS, CO<sub>2</sub> or constant pressure sensors
- Airflow balancing allows individual fan control and ensures a balanced supply and extract

## Heat Exchanger Efficiency & Energy Recovery

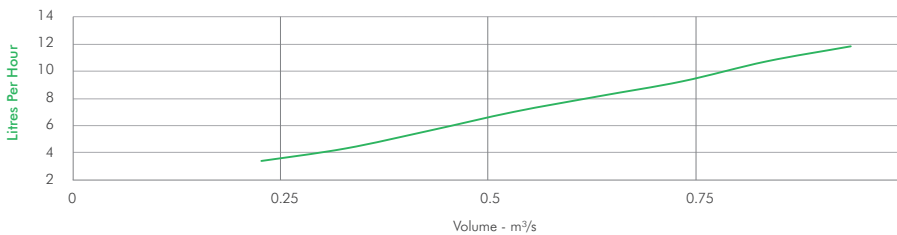


- 1 Eff Wet
- 2 Eff Dry
- 3 kW Wet
- 4 kW Dry

Dry performance based on EN 308

Wet performance based on -5°C supply 95% RH, +21°C extract 50% RH

## Condensate Rate



Condensate

Wet Performance based on -5°C supply 95% RH, +21°C extract 50% RH

## Performance Data

Control Voltage	Speed r/min	Airflow SFP	Airflow m <sup>3</sup> /s @ Static Pressure Pa												Input kW	Peak Amps
			0	25	50	75	100	150	200	250	300	350	400	500		
10V	2199	m <sup>3</sup> / s	0.936	0.928	0.919	0.909	0.899	0.878	0.854	0.828	0.799	0.766	0.728	0.636	1.815	7.97
		W / (L/s)	1.86	1.89	1.93	1.96	1.99	2.05	2.12	2.19	2.26	2.35	2.44	2.67		
8V	1805	m <sup>3</sup> / s	0.726	0.710	0.694	0.677	0.659	0.621	0.579	0.533	0.480	0.420	0.347	0.141	0.950	4.25
		W / (L/s)	1.28	1.32	1.36	1.39	1.44	1.53	1.63	1.74	1.87	2.02	2.26	4.15		
5V	1200	m <sup>3</sup> / s	0.386	0.360	0.331	0.296	0.254	0.131	-	-	-	-	-	-	0.236	1.13
		W / (L/s)	0.61	0.65	0.71	0.77	0.87	1.39	-	-	-	-	-	-		

Specific Fan Power figures (W / (L/s)) are total for both fans running under clean filter conditions (ref. the building regulations).

Data provided is at standard air density of 1.2 kg/m<sup>3</sup>. Air Performance: ISO 5801:2007.

Refer to Air Design Ecodesign document for data in accordance with ErP 1253/2014 of the European Parliament. Product category is NRVU:BVU. Measurement category used to determine energy efficiency: D.

A variable speed drive is integrated within the fan.

Peak Amps @ 230V / 1PH / 50Hz.

## Sound Data

Control Voltage	Speed r/min	Location	Sound Power Level dBW @ Octave Band Hz									Total dB	dBA @ 3m
			63 Hz	125 Hz	250 Hz	500 Hz	1k Hz	2k Hz	4k Hz	8k Hz			
10V	2199	Intake (T21)	80	81	80	72	67	68	63	62	86	56	
		Supply (T22)	73	68	61	57	59	54	35	31	75	42	
		Extract (T11)	81	82	80	73	68	69	64	63	86	56	
		Exhaust (T12)	74	69	59	56	55	53	39	37	75	40	
		Break Out	72	68	71	52	43	41	37	28	75	42	
8V	1805	Intake (T21)	76	78	72	65	60	60	56	54	81	49	
		Supply (T22)	68	62	53	49	50	44	31	29	69	34	
		Extract (T11)	78	79	73	67	61	61	57	54	82	50	
		Exhaust (T12)	69	64	52	49	48	42	33	32	70	33	
		Break Out	66	64	62	46	37	33	30	25	69	34	
5V	1200	Intake (T21)	69	69	57	51	45	46	45	36	72	36	
		Supply (T22)	58	54	40	36	35	31	27	26	60	22	
		Extract (T11)	71	70	59	53	46	47	43	37	74	37	
		Exhaust (T12)	61	54	40	35	34	34	29	27	62	22	
		Break Out	56	57	53	32	24	19	20	18	60	25	

The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20μPa and is presented for comparative purposes only. Tests and preparation of the sound data have been carried out in accordance with BS 848-2:1985 (ducted) and **independently tested** to ISO 3741:2010 (breakout).

The Sound Power Level Spectra are in dB re-1pW.

## Dimensional Data

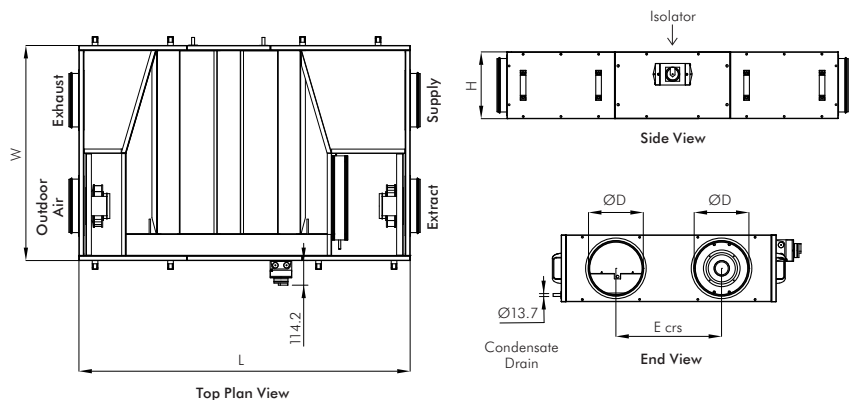
Unit Size	L	W	H*	D	E	Weight kg
PREMA900	2206	1496	624	500	750	330

All dimensions are expressed in mm.

\*Overall height includes unit mounted condensate drain tray.

## Ordering Stock Codes

Product Stock Code	Product Description
7835824-900	PREMA Size 900
7835824-900CP	PREMA Size 900 Constant Pressure Control

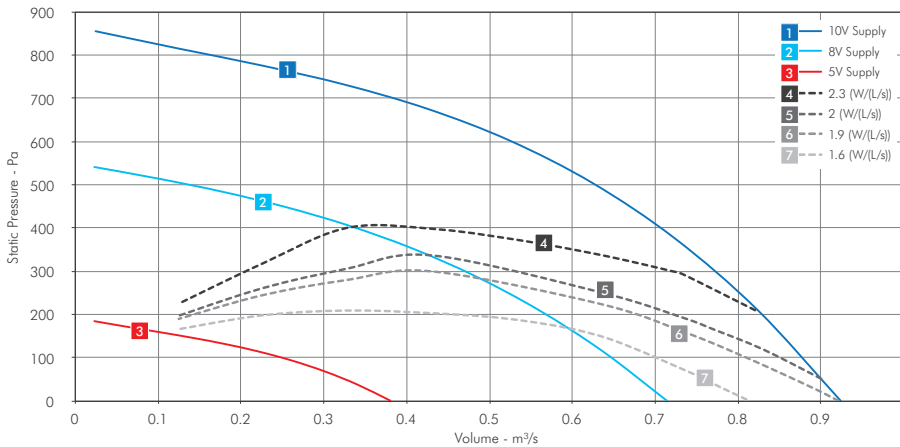


# PREMA900+

The PREMA900+ have evolved to deliver comfort ventilation with added heating capabilities and a dedicated Kinairtico Mini controller for superior demand controlled ventilation and BMS connectivity.



## Airflow Performance Curve - Water Heater Version



## +Features

In addition to the features listed for PREMA900, the PREMA900+ includes:

- **Heating** (Electric or Hot Water)
- **Kinairtico0 / Kinairtico Mini**

## Heating Loads – Performance Table

+Heating	Electric Heater Battery (kW)*	Hot Water Coil (kW)	Fluid Data		
			Internal Volume (L)	Flow Rate (L/s)	Flow / Return temps. (°C)
PREMA900+	3.5	11.50	1.11	0.14	80/60

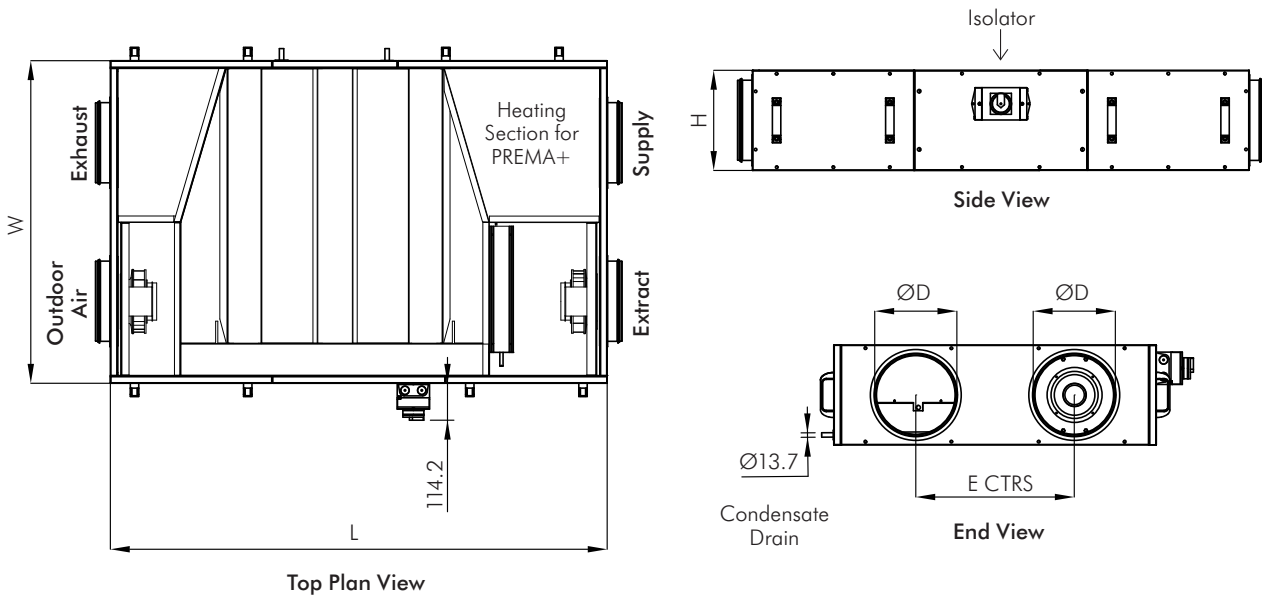
\*1phase modulating heater battery.

## Ordering Stock Codes

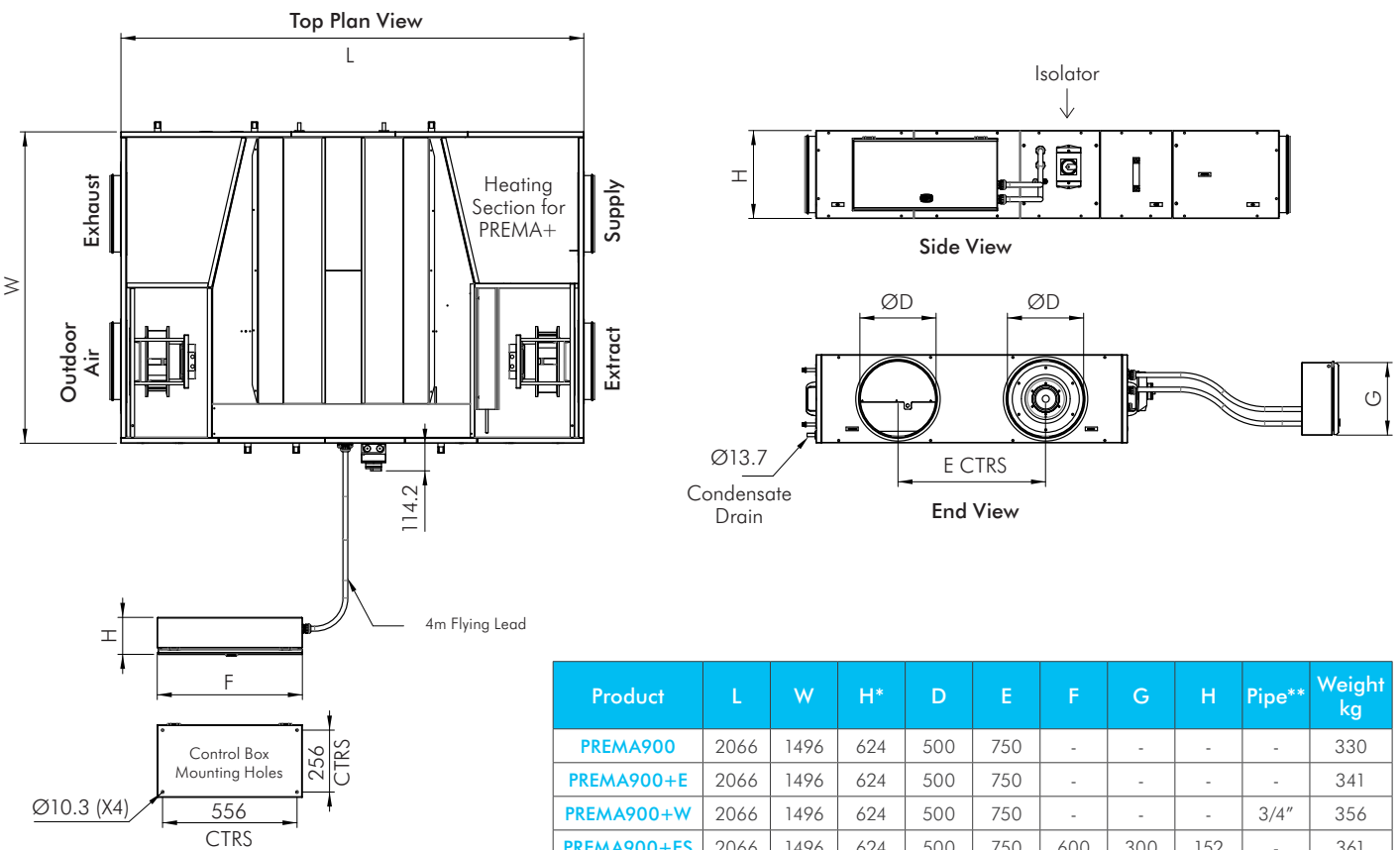
Product Stock Code	Product	Product Description
7835824-900E	PREMA900+E	Electric heater version (Kinairtico0 control)
7835824-900ES	PREMA900+ES	Electric heater version (Kinairtico Mini control)
7835824-900W	PREMA900+W	Water heater version (Kinairtico0 control)
7835824-900WS	PREMA900+WS	Water heater version (Kinairtico Mini control)
7835824-900ECP	PREMA900+ECP	Electric heater version (Kinairtico0 control) constant pressure control
7835824-900ESCP	PREMA900+ESCP	Electric heater version (Kinairtico Mini control) constant pressure control
7835824-900WCP	PREMA900+WCP	Water heater version (Kinairtico0 control) constant pressure control
7835824-900WSCP	PREMA900+WSCP	Water heater version (Kinairtico Mini control) constant pressure control

## Dimensional Data

### PREMA900, PREMA900+E & PREMA900+W



### PREMA900+ES & PREMA900+WS



Product	L	W	H*	D	E	F	G	H	Pipe**	Weight kg
PREMA900	2066	1496	624	500	750	-	-	-	-	330
PREMA900+E	2066	1496	624	500	750	-	-	-	-	341
PREMA900+W	2066	1496	624	500	750	-	-	-	3/4"	356
PREMA900+ES	2066	1496	624	500	750	600	300	152	-	361
PREMA900+WS	2066	1496	624	500	750	600	300	152	3/4"	376

All dimensions are expressed in mm.

\*Overall height includes unit mounted condensate drain tray.

\*\*LPHW Coil Header dimension.