



Heat Recovery Ventilation designed for classrooms Standard Space Heating Option

**0.75
W/l/s
SFP**
Typical

General:

Units shall be manufactured from high quality galvanized sheet steel with stainless steel drain trays, acoustic, non-hygroscopic class 'O' CFC & HFC-free, open cell expanded foam for thermal and acoustic insulation, fully compliant with London Boroughs and CAA flammability & toxicity requirements.

Fans:

Non-overloading, 100,000 hour life expectancy, low energy IP54 motor protection class, (maximum ambient 60°C), EC fans with sealed-for-life bearings individually mounted for ease of removal shall be fitted.

S.F.P.

CHR260 heat recovery units shall achieve maximum TOTAL SFP <0.9 W/l/s installed performance.

Operation:

CHR units shall incorporate 'variable mass' heat exchanger arrangement, (UK patent), with biologically inert Rigid PVC that offers low noise, high heat recovery efficiency, very low energy input, very low maintenance and low dimensional profile while maintaining a full summer bypass facility and the ability to allow 50% turn-down of airflow while retaining up to 82% temp. efficiency. Optional integral recirculation damper shall be available for rapid warm up when used for space heating with ancillary LPHW coil.

Filters:

Low energy ISO16890-1:2016 Coarse filters shall be fitted as standard to reduce maintenance requirement, in typical situations, to 1 – 2 years. Filter access shall be via removable panels and an ISO16890-1: 2016 ePM2.5 filter option shall be available on supply-air side for inner-city locations.

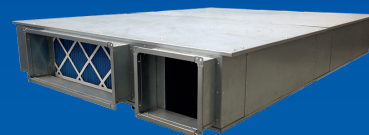
Configurations:

Units shall offer four 'installer interchangeable' spigot configurations as standard to suit site ductwork layouts.

Control:

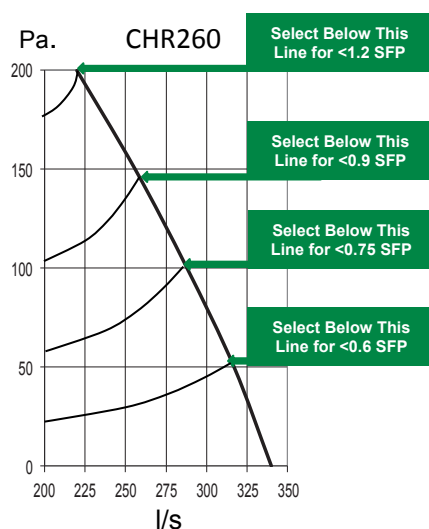
TREND IQ controller compatible with BACnet shall be fitted as standard, offering: automated summer bypass, optional space heating program, frost protection, night cooling, (purge), mode, individual supply & extract fan speed adjustment. Dirty filter warning indication from integral pressure differential sensors and fan fault output.

Ultra-Low Energy HEAT RECOVERY VENTILATION



- ✓ TREND BACNET CONTROL
- ✓ FULLY COMPLIANT WITH BB101 2018
- ✓ UP TO 82% EFFICIENT ENERGY RECLAIM
- ✓ 100,000 HOUR LONG LIFE, LOW ENERGY EC FANS
- ✓ ULTRA LOW PROFILE - 300MM HEIGHT
- ✓ ULTRA LOW SOUND LEVELS
- ✓ LPHW HEATER COIL OPTION WITH INTEGRAL MIXING SECTION
- ✓ FILTER OPTION AVAILABLE FOR INNER-CITY LOCATIONS
- ✓ 'VARIABLE MASS' HEAT EXCHANGER - PATENTED

CLASSMASTER PERFORMANCE CURVES



Note (Where fitted):

Allow 30Pa for F7 Filter (ISO ePM 2.5)

Allow 24Pa for M5 Filter

CHR260 PERFORMANCE DATA:

External Res. (PA.)	0	50	100	150	200
(l/s)	336	320	282	255	220

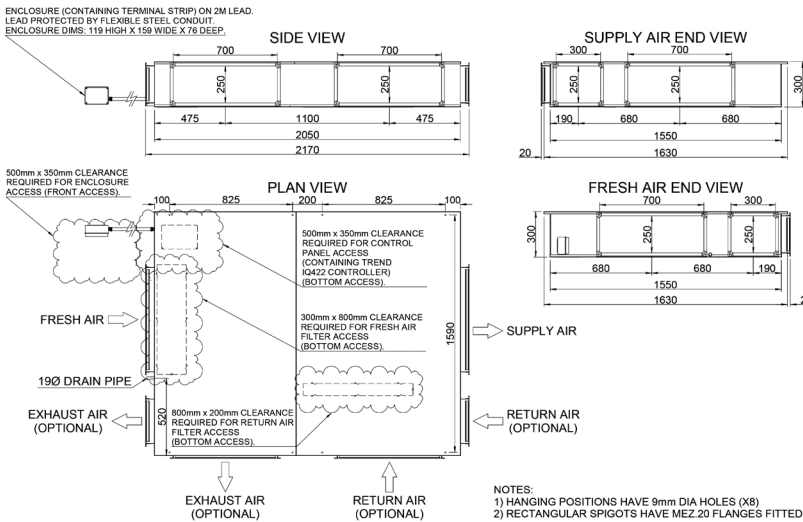
CLASSMASTER Electrical & Technical Data

	Nominal (l/s)	Current (Amps)	Input (W)	Fan SFP (W/l/s)	Unit SFP (W/l/s)	Thermal Efficiency* (%)	Maximum Condensation (l/hr)	Weight (kg)
TRICKLE	130	0.2	72	0.28	0.55	82	2.1	185
BOOST	260	1.8	232	0.45	0.89	82	3.8	

* At typical conditions: Cold side E.A.T. -4°C/ 98% R.H. Hot side E.A.T. 22°C/60% R.H.

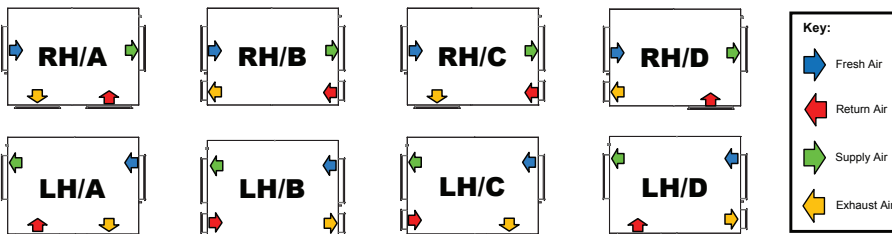


Dimensions:



Heat Recovery Ventilation

Classmaster CHR260 Configuration Options



STANDARD CONTROLLER

TREND IQ422 BACnet BMS Controller:



- Compatible with BACnet & TREND BMS systems
- Individual supply & extract fan speed adjustment available for different modes of operation
- BACnet over IP option
- Filter alarm output from pressure differential switch
- Ethernet, RS232 & USB local engineering/supervisor ports
- Adjustable night cooling option
- Optional LPHW space heating option
- CO₂/temperature or PIR override speed inputs
- Wallbus port for use with room controller/display
- Adjustable summer bypass operation
- Embedded XML web services

CONTROL OPTIONS



- RV-WMB-TH Wall Controller & Temperature & Humidity Sensor
- CO₂/sensor
- PIR movement sensor

CLASSMASTER IN-DUCT SOUND POWER DATA (dB ref. 10⁻¹² W)

Setting		Hz.	63	125	250	500	1k	2k	4k	8k	*dBA @ 3m
Trickle	Supply		38	55	53	49	47	46	35	30	20
	Exhaust		35	52	50	46	44	43	32	27	
Boost	Supply		41	58	56	52	50	49	38	33	22
	Exhaust		38	55	53	49	47	46	35	30	

* Breakout measured as Hemispherical Radiation

Classmaster Matched (Optional) Low Resistance Attenuator Insertion Losses (dB)

Length	Duct Velocity (m/s) @256l/s	A.P.D	Hz.	63	125	250	500	1k	2k	4k	8k
600	1.6	6 Pa	dB	3	6	9	17	22	22	15	11
900	1.6	6 Pa	dB	4	9	14	25	35	36	22	15
1200	1.6	6 Pa	dB	5	11	17	31	46	49	28	18

Attenuators use ZERO GWP & OPD Insulation

We reserve the right to make changes to dimensions, details & specifications without notice. E.&O.E.

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