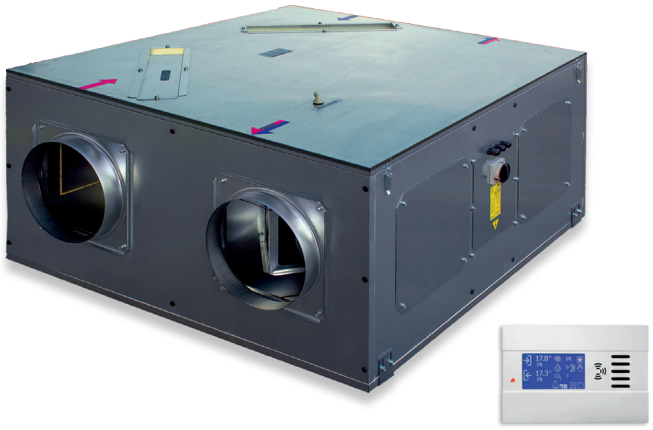
UVR-HE DP SERIES

HEAT RECOVERY UNIT

- Ceiling or false ceiling mounting
- Horizontal configuration
- Equippaed with cross-flow high efficiency heat exchangers from 73% to 88%
- RCE-EC remote control unit included
- In accordance with the 2009/125/CE Directive and Regulation no. 1253/2014 (Ecodesign 2018)



>73%

UVR-HE DP heat recivery units include a heat exchanger and two fans; one fan that extracts air from the indoor environment and the other one that supplies fresh air from outside.
Inside the heat recovery unit, both the exhaust air and the inlet air flow through an aluminum cross-flow heat exchanger without mixing with each other, but transferring heat from the hottest to the coldest air stream.
A motorized damfor can be used to by-pass the heat exchanger, for example, to achieve free-heating in winter or free cooling in summer.

FEATURES

- Equipped with cross-flow or counterflow high efficiency heat exchanger (minimum 73% with dry air and 80% with moist air), in accordance with Directive 2009/125/CE (Eco Design), regulation n. 1253/2021
- Equipped with single-phase and three-phase EC (high efficiency) electrical fans whose speed can be adjusted using a 0-10V signal thanks to their built-in control unit
- Each fan speed can be adjusted step by step and independently of the other
- Two temperature sensors, one for supply air and one for exhaust air
- A by-pass motorized damfor (IP 54 actuator) can be controlled either manually or automatically
- Pressure switch that monitors the status of the filters installed on the supply side
- Control card prepared for the connection of a CO2 probe or humidity probe (both are optional)
- Casing made of double panel galvanized steel sheets. Casing is made of aluminum profile and double panel in galvanized steel, each filled with 23 mm thick polyurethane (40 kg/m3) for thermal and acoustic insulation
- Equipped with a condense discharge drop tank. A plastic, transparent tube extending for about 50 mm outside the unit is connected to such drop tank, so that it is possible to connect the unit to an external condense discharge tube
- Circular connections with supply and exhaust ducts can be fixed on each side of the HRU, thus easing installation of the machines
- Air filters can be easily inspected and removed thanks to dedicated hatches built in the unit cover
- Where necessary, air filters are compatible with RITE regulation (F7/F8/F9 classes)
- Electric control panel installed on IP55. All units can be mounted/installed outdoor when they are equipped with a cover
- Easy installation thanks to the "plug and play" system
- Predisposition for the use of constant flow/ pressure kit

BASE CARD (DEFAULT)

Equipped with a RS485 port that can be used for different purposes:

- Connection to a single remote control
- Full compatibility with the MODBUS interface
- Up to six base cards can be linked together using a cascade connection, and they can be managed using a single remote control. In such a configuration, all the sensors installed on the first unit are used, while sensors installed on the other units, with the only exception of static pressure ones, are ignored. Up to 32 units can be controlled separately, but it is possible to regulate each unit independently of the others. The filter status LED on the remote control lights up whenever one or more units need to have their filters changed.

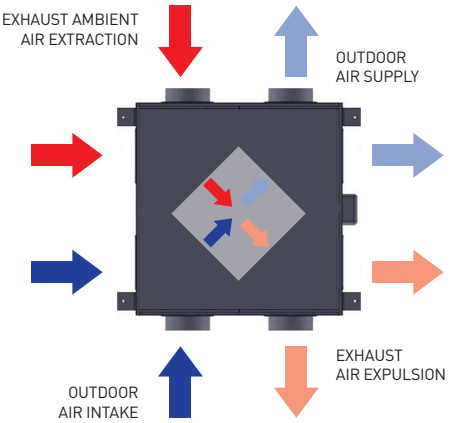
Two operating modes:

MANUAL: The user has the possibility to set directly the speed of the supply and exhaust fan and to control the bypass damper. Moreover, it is possible to set the speed of one of the two fans so that its speed is always a fraction of the other one. If a CO2 sensor, a relative humidity sensor, or a temperature sensor is installed, the measured values are displayed on the remote control panel.

AUTOMATIC: Both the fans and the by-pass are autonomously managed by the controller without any user interventions. Fan speed varies automatically in order to maintain the level of carbon dioxide inside the room below the reference value set by the user. However, the user can set the minimum fan speed over the range from 4% to 20%. By-pass is closed and opened by comparing the indoor temperature value with the user-defined set point.

LAYOUTS

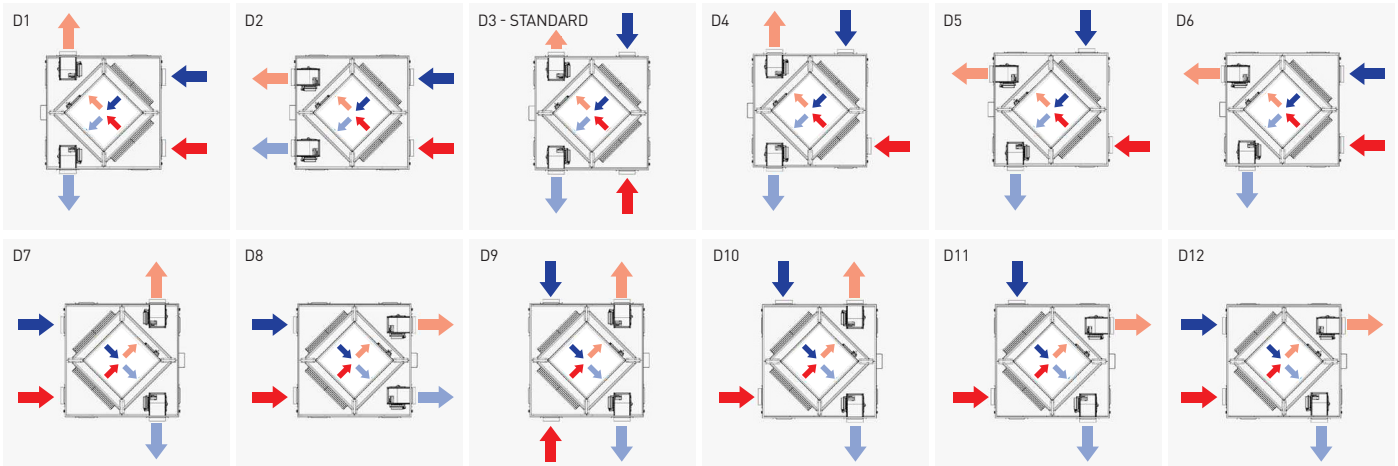
PLAN VIEW



Available configurations. Standard configuration D3. The circular supply and exhaust ducts can be installed on either side of the heat recovery unit during installation. Therefore, the standard configuration D3 is adaptable to almost all situations.

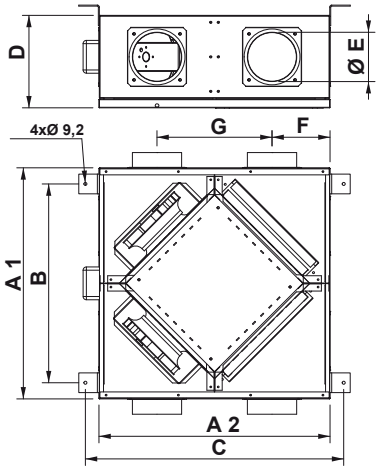
It is important to note that, due to the presence of the bypass, the machine is not symmetrical.

Models ranging from 500 to 1600 allow the supply and exhaust ducts to be repositioned as shown in this document starting from the standard D3 position. For larger models, the customer must select one of the configurations shown below. The desired configuration must be specified at the time of ordering.



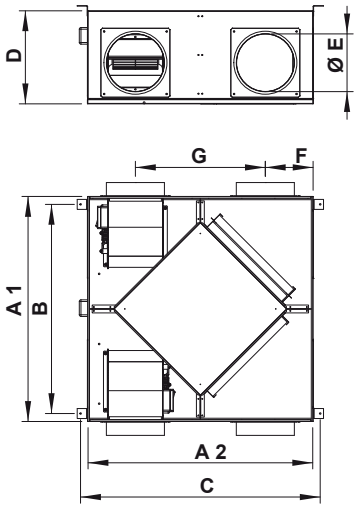
DIMENSIONS (mm)

CODE	MODEL	mm								Kg
		A1	A2	B	C	D	øE	F	G	
AP20600	UVR 500 MF HE DP	900	900	750	960	400	150	200	500	66
AP20602	UVR 700 MF HE DP	1050	1050	900	1110	400	150	275	500	77
AP20604	UVR 1200 MF HE DP	1250	1250	1100	1350	550	315	300	650	110
AP20606	UVR 1600 MF HE DP	1250	1250	1100	1310	645	315	300	650	170
AP20608	UVR 2300 MF HE DP	1380	1380	1200	1440	600	355	315	750	200
AP20610	UVR 2800 MF HE DP	1380	1380	1200	1440	650	355	315	750	230
AP20612	UVR 3200 MF HE DP	1380	1380	1200	1440	750	350	325	730	195
AP20614	UVR 3800 MF HE DP	1380	1380	1200	1440	750	350	325	730	195
AP20616	UVR 4500 MF HE DP	1505	1505	1410	1470	750	350	340	930	290
AP20618	UVR 5400 MF HE DP	1680	1680	1080	1080	810	450	340	1020	370
AP20620	UVR 6500 MF HE DP	1700	1700	1080	1760	800	450	310	940	370
AP20622	UVR 7100 MF HE DP	2170	2170	-	-	1100	600	435	1300	500
AP20624	UVR 8500 MF HE DP	2170	2170	-	-	1100	600	435	1300	500



BACKWARD BLADED FANS

UVR 500 MF HE DP
UVR 700 MF HE DP
UVR 1200 MF HE DP
UVR 1600 MF HE DP



FORWARD BLADED FANS

UVR 2300 MF HE DP
UVR 2800 MF HE DP
UVR 3200 MF HE DP
UVR 3800 MF HE DP
UVR 4500 MF HE DP
UVR 5400 MF HE DP
UVR 6500 MF HE DP
UVR 7100 MF HE DP
UVR 8500 MF HE DP

TECHNICAL SPECIFICATIONS

CODE	MODEL		m³/h max	Pa max	W	A	V~	Hz	Ph	Motor class	dB(A) **
AP20600	UVR 500 MF HE DP		500	340	337	2,61	230	50/60	1	F	52,6
AP20602	UVR 700 MF HE DP		700	450	607	4,9	230	50/60	1	F	56
AP20604	UVR 1200 MF HE DP		1200	380	300 x 2	1,4 x 2	230	50/60	1	F	53
AP20606	UVR 1600 MF HE DP		1600	550	500 x 2	2,2 x 2	230	50/60	1	F	54
AP20608	UVR 2300 MF HE DP		2300	550	680 x 2	2,9 x 2	230	50/60	1	F	58
AP20610	UVR 2800 MF HE DP		2800	550	900 x 2	4,2 x 2	230	50/60	1	F	61
AP20612	UVR 3200 MF HE DP		3200	650	1000 x 2	4,5 x 2	230	50/60	1	F	61
AP20614	UVR 3800 MF HE DP	*	3800	400	1500 x 2	7,5 x 2	230	50/60	1	F	61
AP20616	UVR 4500 MF HE DP	*	4500	650	2000 x 2	8,5 x 2	230	50/60	1	F	61
AP20618	UVR 5400 MF HE DP	*	5400	1400	2200 x 2	3,9 x 2	230	50/60	1	F	71
AP20620	UVR 6500 MF HE DP	*	6500	1200	2310 x 2	9,4 x 2	230	50/60	1	F	72
AP20622	UVR 7100 MF HE DP	*	7100	1100	2370 x 2	9,3 x 2	230	50/60	1	F	74
AP20624	UVR 8500 MF HE DP	*	8500	830	2380 x 2	9,8 x 2	230	50/60	1	F	77

*** Available for supply in quantities and with delivery terms to be agreed**

**** Sound power on the enclosure (LWA)**

REMOTE CONTROL

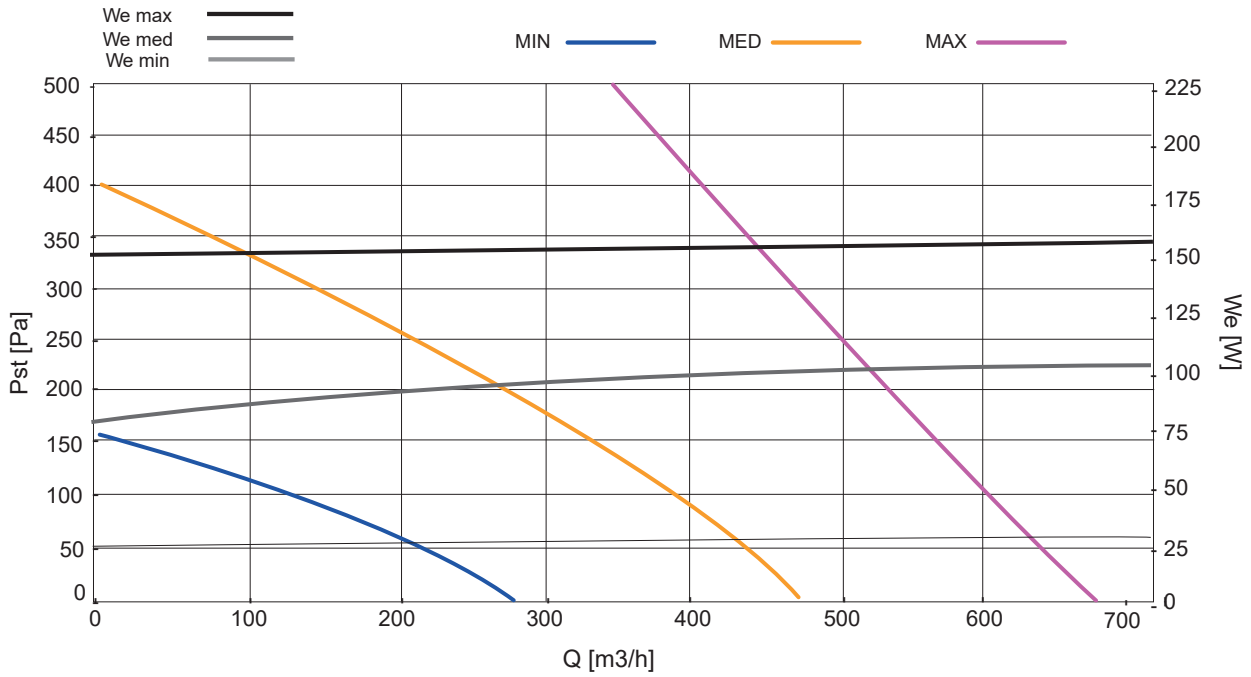
- Backlit, monochromatic LCD display
- Possibility to manage up to 32 HRU separately, via RS 485 MODBUS port
- CO2 control system (2000/5000 Ppm)
- Humidity control sensor
- Room thermostat control
- Electric battery control system (0_10 Volt signal)
- Water battery control system (0_10 Volt signal)
- Fire alarm
- Automatic/manual by-pass
- Week scheduled operation (automatic)
- Automatic sanitizing system (optional)
- Filter quality control system
- Adjustment of fans separately
- Indoor/outdoor temperature control

ACCESSORIES

- Hydronic post-heating batteries
- Hydronic post-cooling batteries
- Electric pre- and post-heating batteries

AP20600 - UVR 500 MF HE DP

CHARACTERISTIC CURVES



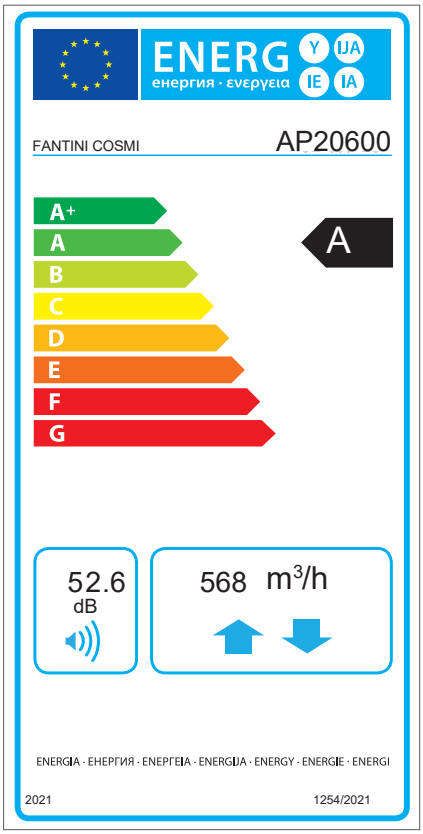
TECHNICAL DATA

Position nL	Default setting	Airflow [m3/h]	Prevalence [Pa]	Electrical power [W]*	Current consumption [A]*
MINIMUM	40%	205	50	53,8	0,89
MEDIUM	70%	424	50	142,9	1,34
MAXIMUM	100%	568	150	337,3	2,61

*Values refer to two fans

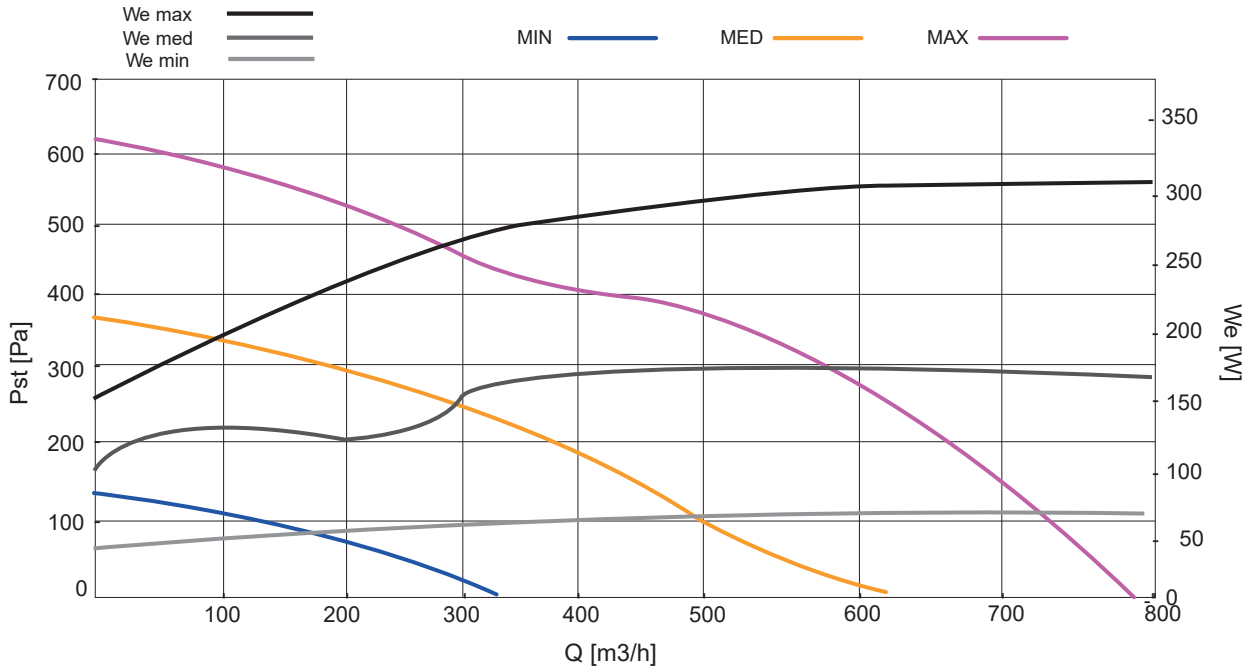
PRODUCT DATASHEET CONFORM ECODESIGN (EU), NR. 1254/2021 (ANNEX IV)

Supplier's name		FANTINI COSMI
Article n.		AP20600
Supplier's model identifier		UVR 500 MF HE DP
Declared typology		Bidirectional
Type of drive installed or intended to be installed		› 3 Multispeed
Type of HRS		RECUPERATORE
SEC class average climate		A
Specific energy consumption average climate (SEC)	kWh/(m3a)	- 39
SEC class cold climate		A+
Specific energy consumption cold climate (SEC)	kWh/(m3a)	- 76,0
SEC class warm climate		E
Specific energy consumption warm climate (SEC)	kWh/(m3a)	- 15,0
Thermal dry efficiency of heat recovery	%	75,4
Maximum flow rate	m3/h	568
Maximum electric power input	W	337,0
Reference flow rate	m3/s	0,1178
Specific fan power (SPI)	W/(m3/h)	0,337
Reference pressure	Pa	50
Control factor and control typology (CTRL)	Temporizzatore	0,65
Annual electricity consumption for 100 m2 floor area (AEC)	kWh/a	223
Annual heating saved average climate (AHS)	kWh	4391
Annual heating saved cold climate (AHS)	kWh	8590
Annual heating saved warm climate (AHS)	kWh	1986
Declared maximum external leakage rates of the casing of ventilation units	%	‹ 3,8
Declared maximum internal leakage rates for bidirectional ventilation units or carry over	%	‹ 3
Sound power level (LWA)	dB (A)	52,6
Internet address for technical documentation		www.fantinicosmi.it



AP20602 - UVR 700 MF HE DP

CHARACTERISTIC CURVES



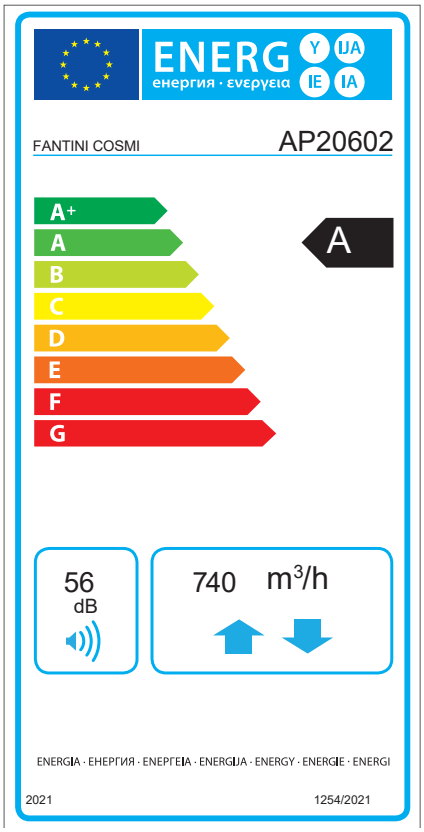
TECHNICAL DATA

Position nL	Default setting	Airflow [m3/h]	Prevalence [Pa]	Electrical power [W]*	Current consumption [A]*
MINIMUM	50%	240	50	94	0,96
MEDIUM	70%	535	50	310	2,6
MAXIMUM	100%	680	150	607	4,9

*Values refer to two fans

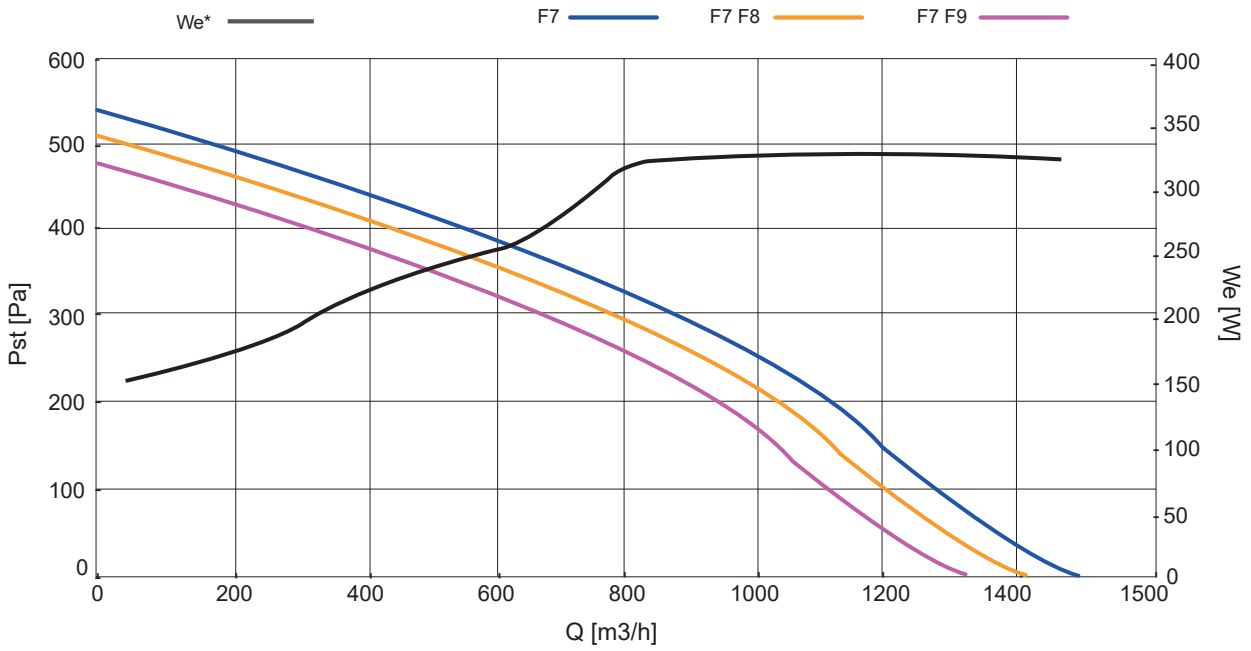
PRODUCT DATASHEET CONFORM ECODESIGN (EU), NR. 1254/2021 (ANNEX IV)

Supplier's name		FANTINI COSMI
Article n.		AP20602
Supplier's model identifier		UVR 700 MF HE DP
Declared typology		Bidirectional
Type of drive installed or intended to be installed		› 3 Multispeed
Type of HRS		RECUPERATORE
SEC class average climate		A
Specific energy consumption average climate (SEC)	kWh/(m3a)	- 38
SEC class cold climate		A+
Specific energy consumption cold climate (SEC)	kWh/(m3a)	- 74,3
SEC class warm climate		E
Specific energy consumption warm climate (SEC)	kWh/(m3a)	- 14,4
Thermal dry efficiency of heat recovery	%	79,4
Maximum flow rate	m3/h	740
Maximum electric power input	W	600,0
Reference flow rate	m3/s	0,147
Specific fan power (SPI)	W/(m3/h)	0,44
Reference pressure	Pa	50
Control factor and control typology (CTRL)	Temporizzatore	0,65
Annual electricity consumption for 100 m2 floor area (AEC)	kWh/a	278
Annual heating saved average climate (AHS)	kWh	4474
Annual heating saved cold climate (AHS)	kWh	8752
Annual heating saved warm climate (AHS)	kWh	2023
Declared maximum external leakage rates of the casing of ventilation units	%	‹ 1
Declared maximum internal leakage rates for bidirectional ventilation units or carry over	%	‹ 3
Sound power level (LWA)	dB (A)	56
Internet address for technical documentation		www.fantinicosmi.it



AP20604 - UVR 1200 MF HE DP

CHARACTERISTIC CURVES



THERMAL EFFICIENCY OF HEAT RECOVERY (EN 308)

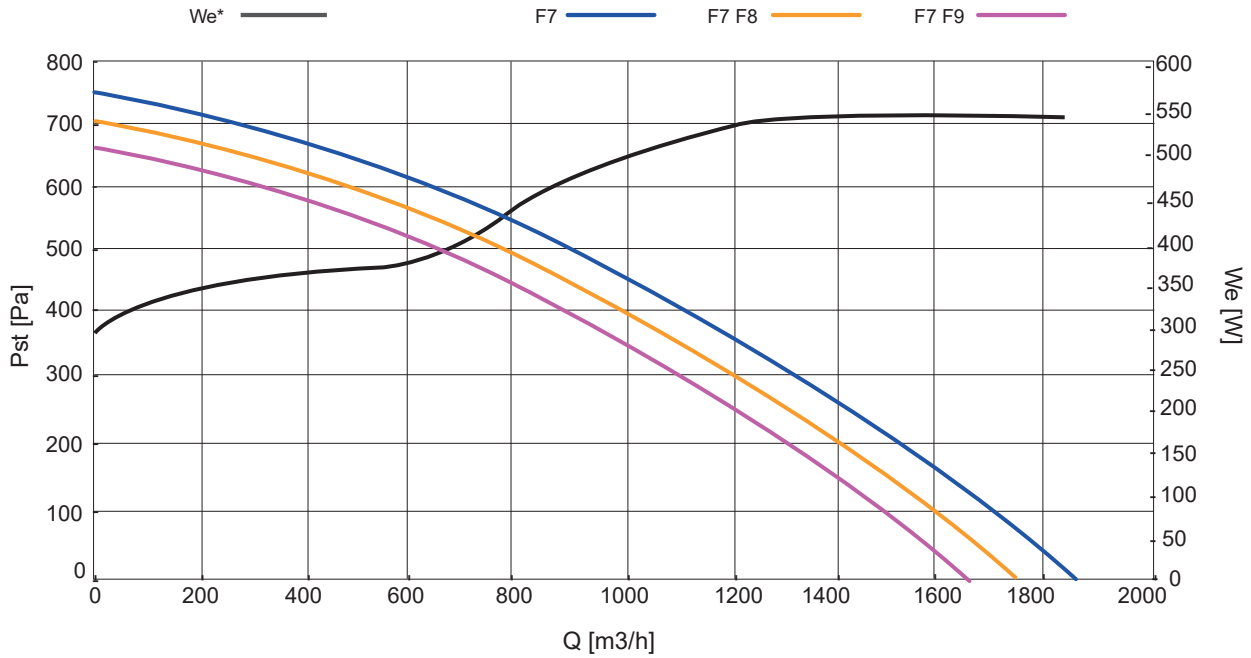
Nominal Flow Rate @ 50 [Pa]	[m3/h]	1400	[m3/s]	0,388
Nominal Flow Rate @ 150 [Pa]	[m3/h]	1200	[m3/s]	0,333

NOMINAL DATA (ECODESIGN: DIRECTIVE 2009/125/CE, REGULATION N. 1253/2014)

Nominal flow rate (qnom)	[m3/h]	1200
	[m3/s]	0,333
Effective electric power input (We,eff)	[W]	300
Internal specific fan power of ventilation components (SFPint)	[W/(m3/s)]	1094
Internal specific fan power of ventilation components, 2018 limit	[W/(m3/s)]	1140
Face velocity at design flow rate	[m/s]	1,53
Nominal external pressure (Δps,ext)	[Pa]	300
Internal pressure drop of ventilation components (Δps,int), supply	[Pa]	170
Internal pressure drop of ventilation components (Δps,int), exhaust	[Pa]	117
Thermal efficiency of heat recovery (nt, dry air, ΔT 20 [°C])	[%]	76,3
Fans static efficiency (according to UE regulation n. 327/2011)	[%]	45,4
Casing sound power level (LWA)	[dB(A)]	53
Maximum external leakage rate	max 3,5 @ -400 Pa	(EN 13141-7)
Maximum internal leakage rate	max 5,5 @ +250 Pa	(EN 13141-7)

AP20606 - UVR 1600 MF HE DP

CHARACTERISTIC CURVES



THERMAL EFFICIENCY OF HEAT RECOVERY (EN 308)

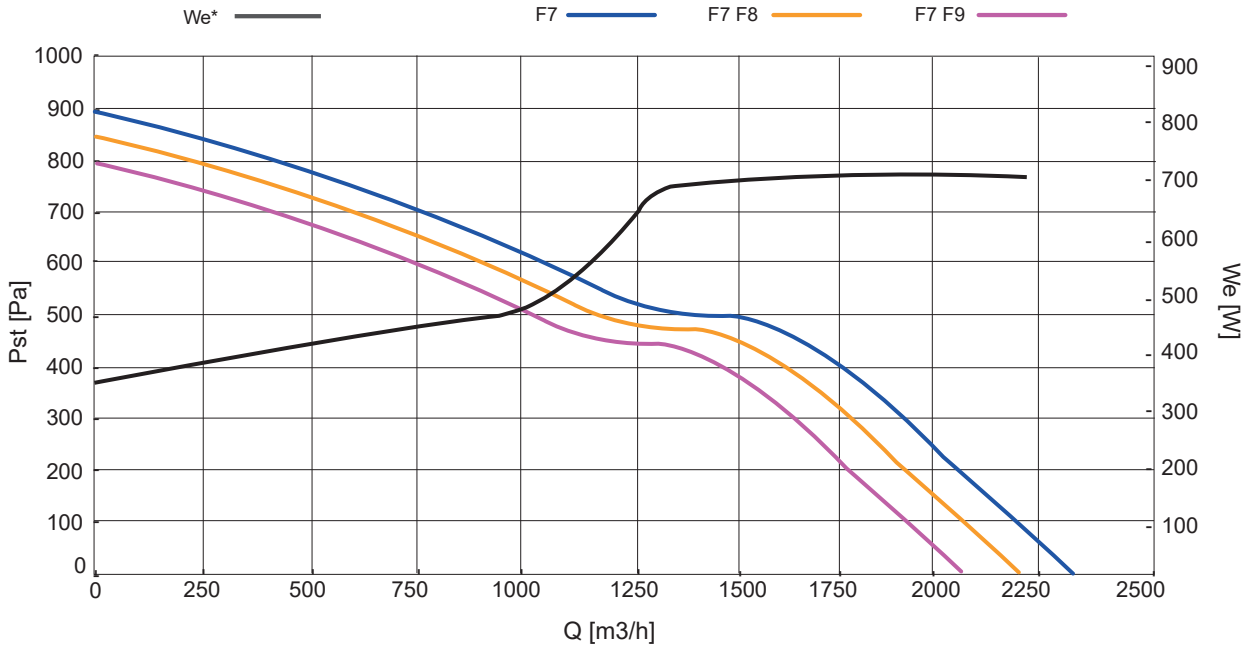
Nominal Flow Rate @ 50 [Pa]	[m3/h]	1800	[m3/s]	0,50
Nominal Flow Rate @ 150 [Pa]	[m3/h]	1600	[m3/s]	0,44

NOMINAL DATA (ECODESIGN: DIRECTIVE 2009/125/CE, REGULATION N. 1253/2014)

Nominal flow rate (qnom)	[m3/h]	1600
	[m3/s]	0,44
Effective electric power input (We,eff)	[W]	1000
Internal specific fan power of ventilation components (SFPint)	[W/(m3/s)]	700
Internal specific fan power of ventilation components, 2018 limit	[W/(m3/s)]	1034
Face velocity at design flow rate	[m/s]	1,6
Nominal external pressure (Δps,ext)	[Pa]	545
Internal pressure drop of ventilation components (Δps,int), supply	[Pa]	169
Internal pressure drop of ventilation components (Δps,int), exhaust	[Pa]	167
Thermal efficiency of heat recovery (nt, dry air, ΔT 20 [°C])	[%]	76
Fans static efficiency (according to UE regulation n. 327/2011)	[%]	49,4
Casing sound power level (LWA)	[dB(A)]	54
Maximum external leakage rate	max 3,5 @ -400 Pa	(EN 13141-7)
Maximum internal leakage rate	max 5,5 @ +250 Pa	(EN 13141-7)

AP20608 - UVR 2300 MF HE DP

CHARACTERISTIC CURVES



THERMAL EFFICIENCY OF HEAT RECOVERY (EN 308)

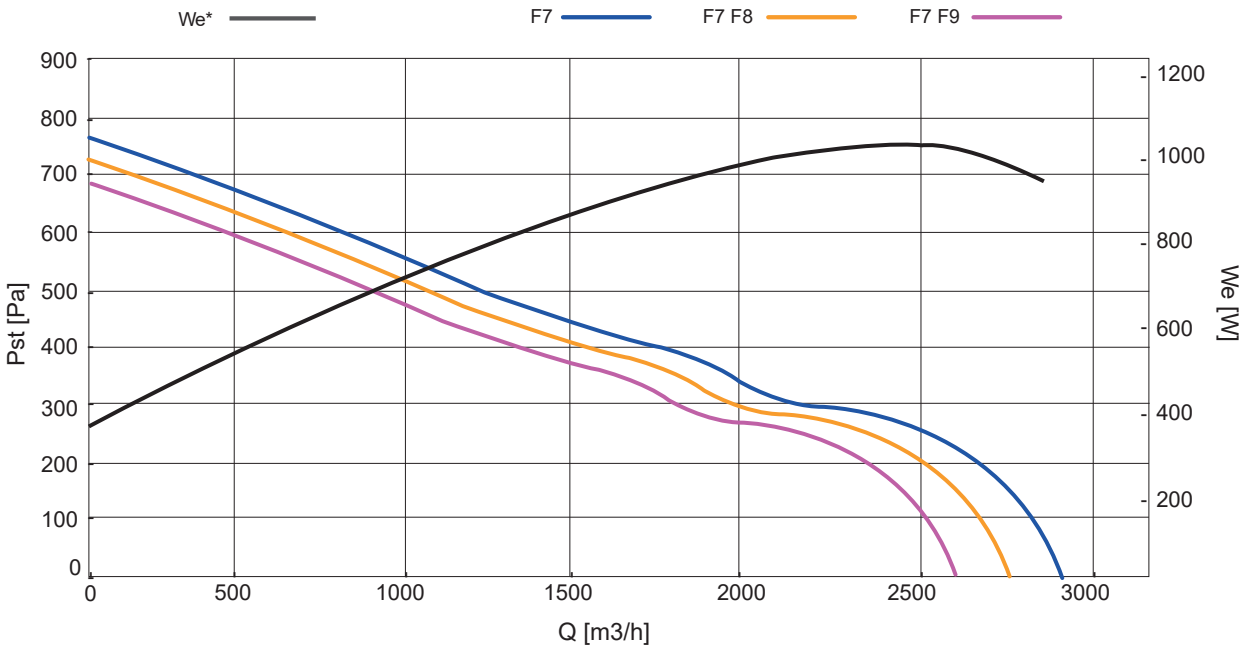
Nominal Flow Rate @ 50 [Pa]	[m3/h]	2270	[m3/s]	0,630
Nominal Flow Rate @ 150 [Pa]	[m3/h]	2120	[m3/s]	0,588

NOMINAL DATA (ECODESIGN: DIRECTIVE 2009/125/CE, REGULATION N. 1253/2014)

Nominal flow rate (qnom)	[m3/h]	2120
	[m3/s]	0,588
Effective electric power input (We,eff)	[W]	1360
Internal specific fan power of ventilation components (SFPint)	[W/(m3/s)]	1005
Internal specific fan power of ventilation components, 2018 limit	[W/(m3/s)]	1073
Face velocity at design flow rate	[m/s]	1,8
Nominal external pressure (Δps,ext)	[Pa]	600
Internal pressure drop of ventilation components (Δps,int), supply	[Pa]	252
Internal pressure drop of ventilation components (Δps,int), exhaust	[Pa]	262
Thermal efficiency of heat recovery (nt, dry air, ΔT 20 [°C])	[%]	74,8
Fans static efficiency (according to UE regulation n. 327/2011)	[%]	51,5
Casing sound power level (LWA)	[dB(A)]	58
Maximum external leakage rate	max 3,5 @ -400 Pa	(EN 13141-7)
Maximum internal leakage rate	max 5,5 @ +250 Pa	(EN 13141-7)

AP20610 - UVR 2800 MF HE DP

CHARACTERISTIC CURVES



THERMAL EFFICIENCY OF HEAT RECOVERY (EN 308)

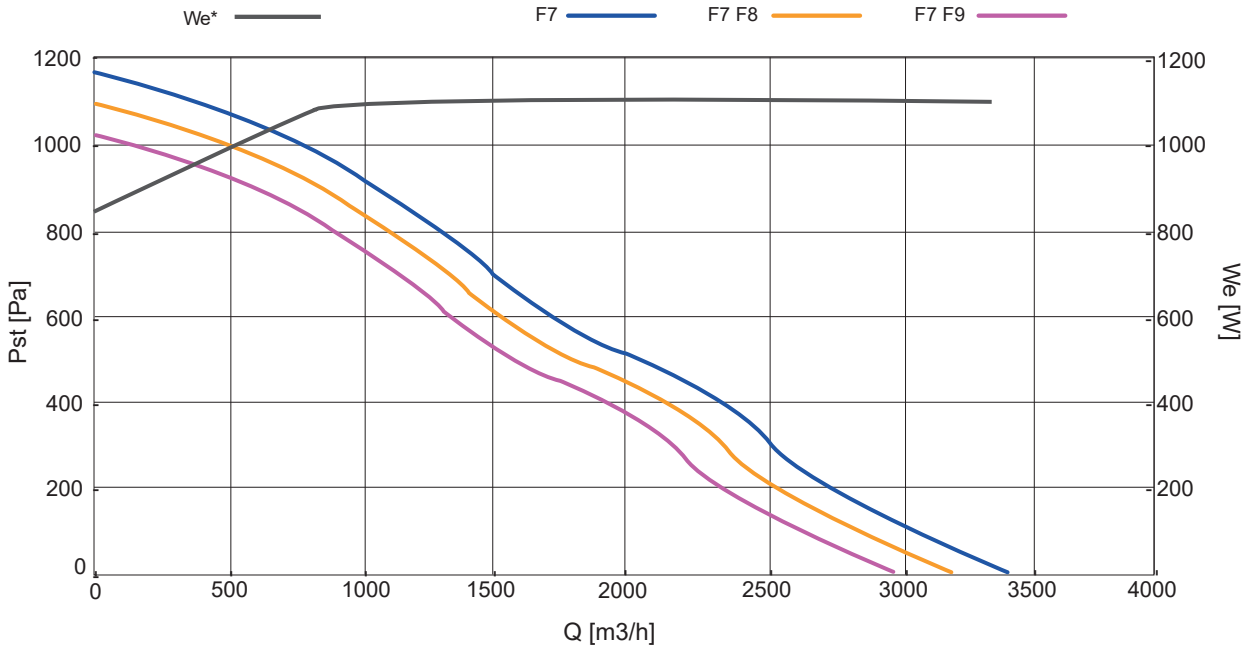
Nominal Flow Rate @ 50 [Pa]	[m3/h]	2800	[m3/s]	0,777
Nominal Flow Rate @ 150 [Pa]	[m3/h]	2600	[m3/s]	0,772

NOMINAL DATA (ECODESIGN: DIRECTIVE 2009/125/CE, REGULATION N. 1253/2014)

Nominal flow rate (qnom)	[m3/h]	2600
	[m3/s]	0,772
Effective electric power input (We,eff)	[W]	1850
Internal specific fan power of ventilation components (SFPint)	[W/(m3/s)]	942
Internal specific fan power of ventilation components, 2018 limit	[W/(m3/s)]	1022
Face velocity at design flow rate	[m/s]	2,2
Nominal external pressure (Δps,ext)	[Pa]	477
Internal pressure drop of ventilation components (Δps,int), supply	[Pa]	249
Internal pressure drop of ventilation components (Δps,int), exhaust	[Pa]	269
Thermal efficiency of heat recovery (nt, dry air, ΔT 20 [°C])	[%]	74,2
Fans static efficiency (according to UE regulation n. 327/2011)	[%]	55
Casing sound power level (LWA)	[dB(A)]	61
Maximum external leakage rate	max 3,5 @ -400 Pa	(EN 13141-7)
Maximum internal leakage rate	max 5,5 @ +250 Pa	(EN 13141-7)

AP20612 - UVR 3200 MF HE DP

CHARACTERISTIC CURVES



THERMAL EFFICIENCY OF HEAT RECOVERY (EN 308)

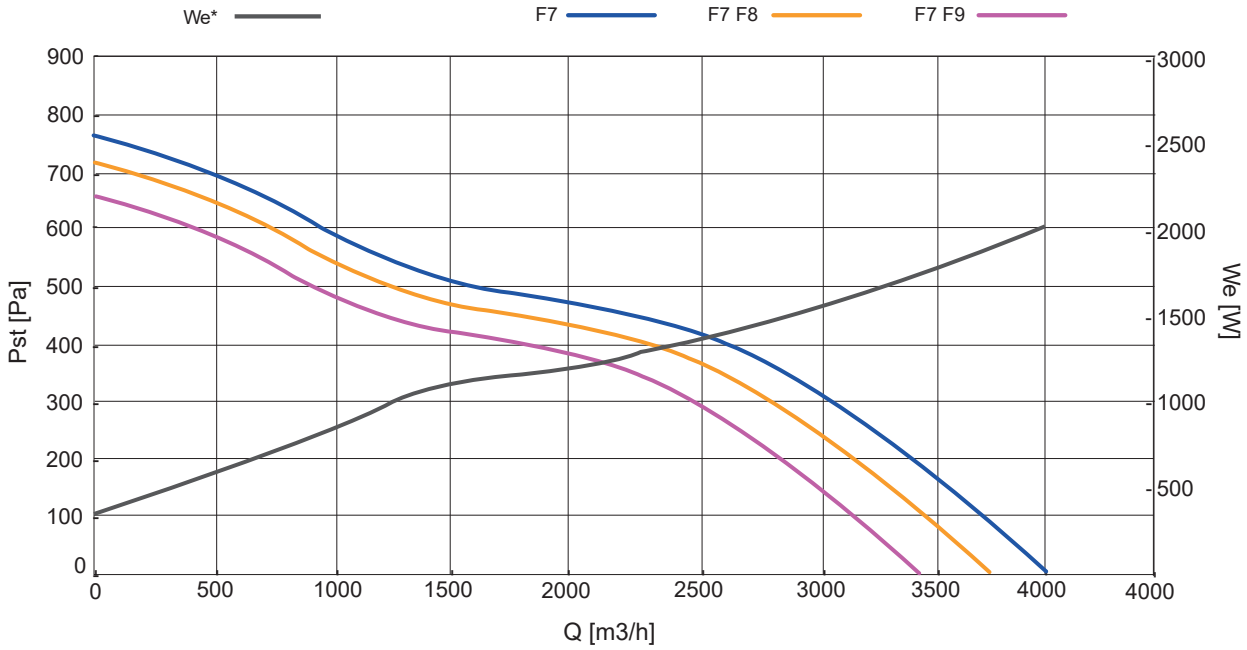
Nominal Flow Rate @ 50 [Pa]	[m3/h]	3200	[m3/s]	0,888
Nominal Flow Rate @ 150 [Pa]	[m3/h]	3000	[m3/s]	0,833

NOMINAL DATA (ECODESIGN: DIRECTIVE 2009/125/CE, REGULATION N. 1253/2014)

Nominal flow rate (qnom)	[m3/h]	3000
	[m3/s]	0,833
Effective electric power input (We,eff)	[W]	2000
Internal specific fan power of ventilation components (SFPint)	[W/(m3/s)]	912
Internal specific fan power of ventilation components, 2018 limit	[W/(m3/s)]	1027
Face velocity at design flow rate	[m/s]	2,15
Nominal external pressure (Δps,ext)	[Pa]	464
Internal pressure drop of ventilation components (Δps,int), supply	[Pa]	315
Internal pressure drop of ventilation components (Δps,int), exhaust	[Pa]	333
Thermal efficiency of heat recovery (nt, dry air, ΔT 20 [°C])	[%]	74,4
Fans static efficiency (according to UE regulation n. 327/2011)	[%]	59,1
Casing sound power level (LWA)	[dB(A)]	61
Maximum external leakage rate	max 3,5 @ -400 Pa	(EN 13141-7)
Maximum internal leakage rate	max 5,5 @ +250 Pa	(EN 13141-7)

AP20614 - UVR 3800 MF HE DP

CHARACTERISTIC CURVES



THERMAL EFFICIENCY OF HEAT RECOVERY (EN 308)

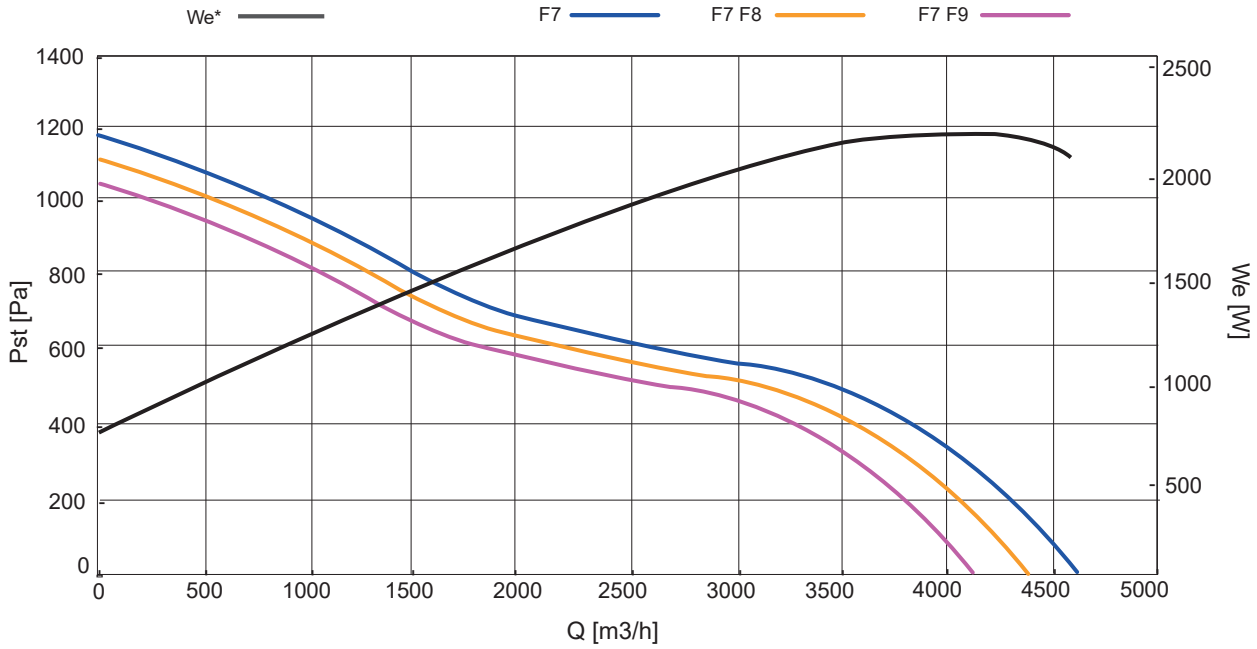
Nominal Flow Rate @ 50 [Pa]	[m3/h]	3800	[m3/s]	1,055
Nominal Flow Rate @ 150 [Pa]	[m3/h]	3500	[m3/s]	0,933

NOMINAL DATA (ECODESIGN: DIRECTIVE 2009/125/CE, REGULATION N. 1253/2014)

Nominal flow rate (qnom)	[m3/h]	3500
	[m3/s]	0,933
Effective electric power input (We,eff)	[W]	1500
Internal specific fan power of ventilation components (SFPint)	[W/(m3/s)]	1040
Internal specific fan power of ventilation components, 2018 limit	[W/(m3/s)]	1068
Face velocity at design flow rate	[m/s]	2,15
Nominal external pressure (Δps,ext)	[Pa]	538
Internal pressure drop of ventilation components (Δps,int), supply	[Pa]	288
Internal pressure drop of ventilation components (Δps,int), exhaust	[Pa]	276
Thermal efficiency of heat recovery (nt, dry air, ΔT 20 [°C])	[%]	75
Fans static efficiency (according to UE regulation n. 327/2011)	[%]	52,8
Casing sound power level (LWA)	[dB(A)]	61
Maximum external leakage rate	max 3,5 @ -400 Pa	(EN 13141-7)
Maximum internal leakage rate	max 5,5 @ +250 Pa	(EN 13141-7)

AP20616 - UVR 4500 MF HE DP

CHARACTERISTIC CURVES



THERMAL EFFICIENCY OF HEAT RECOVERY (EN 308)

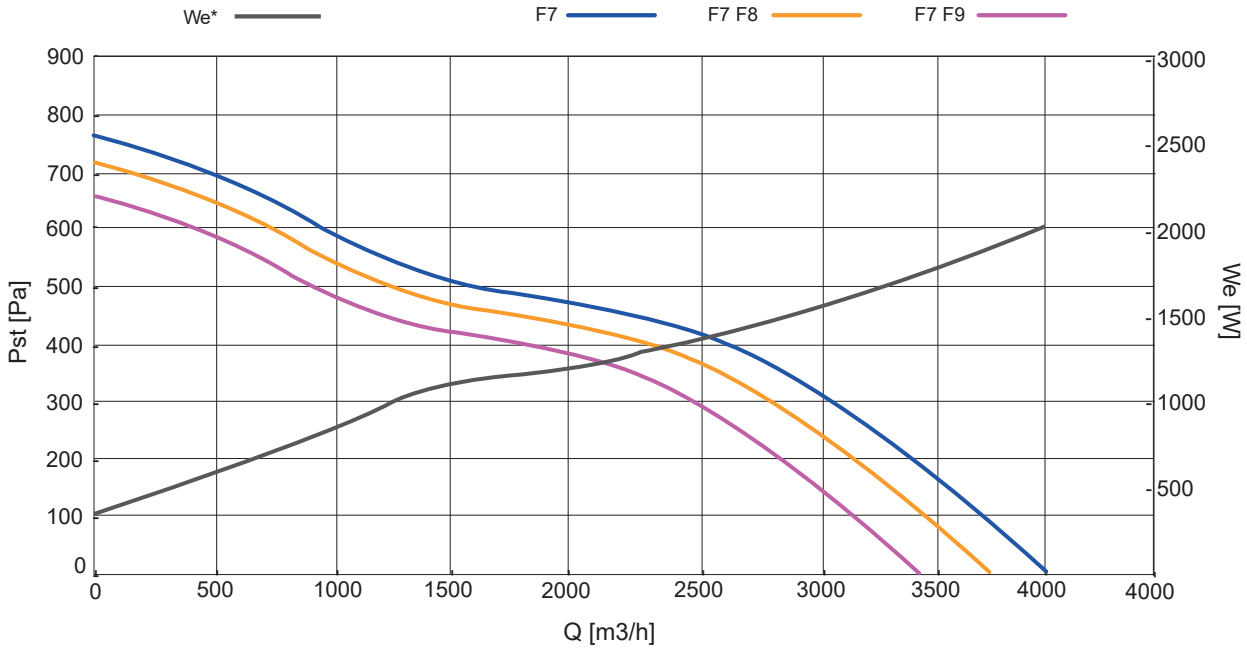
Nominal Flow Rate @ 50 [Pa]	[m3/h]	4500	[m3/s]	1,25
Nominal Flow Rate @ 150 [Pa]	[m3/h]	4300	[m3/s]	1,19

NOMINAL DATA (ECODESIGN: DIRECTIVE 2009/125/CE, REGULATION N. 1253/2014)

Nominal flow rate (qnom)	[m3/h]	4300
	[m3/s]	1,19
Effective electric power input (We,eff)	[W]	2000
Internal specific fan power of ventilation components (SFPint)	[W/(m3/s)]	1069
Internal specific fan power of ventilation components, 2018 limit	[W/(m3/s)]	1071
Face velocity at design flow rate	[m/s]	2,5
Nominal external pressure (Δps,ext)	[Pa]	500
Internal pressure drop of ventilation components (Δps,int), supply	[Pa]	230
Internal pressure drop of ventilation components (Δps,int), exhaust	[Pa]	250
Thermal efficiency of heat recovery (nt, dry air, ΔT 20 [°C])	[%]	78
Fans static efficiency (according to UE regulation n. 327/2011)	[%]	44,5
Casing sound power level (LWA)	[dB(A)]	61
Maximum external leakage rate	max 3,5 @ -400 Pa	(EN 13141-7)
Maximum internal leakage rate	max 5,5 @ +250 Pa	(EN 13141-7)

AP20618 - UVR 5400 MF HE DP

CHARACTERISTIC CURVES



THERMAL EFFICIENCY OF HEAT RECOVERY (EN 308)

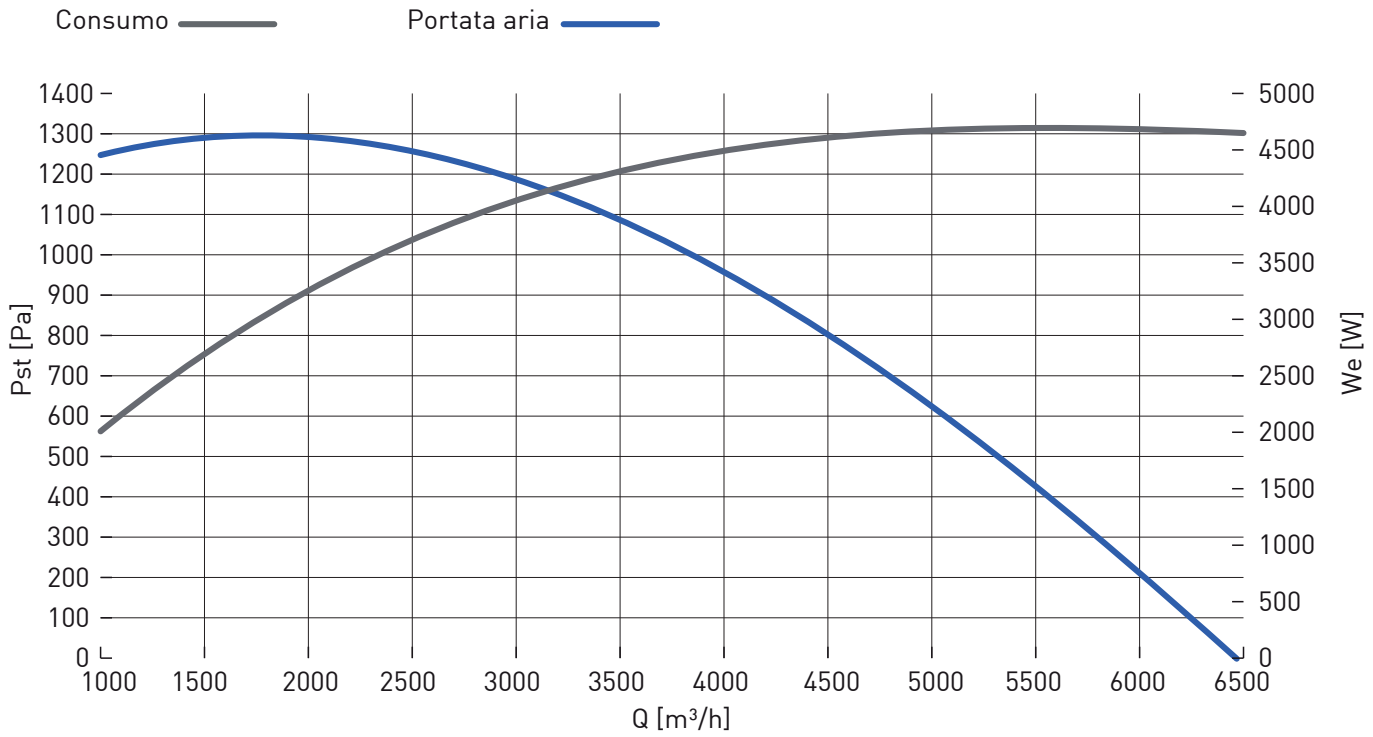
Nominal Flow Rate @ 50 [Pa]	[m3/h]	5500	[m3/s]	1,52
Nominal Flow Rate @ 150 [Pa]	[m3/h]	5350	[m3/s]	1,48

NOMINAL DATA (ECODESIGN: DIRECTIVE 2009/125/CE, REGULATION N. 1253/2014)

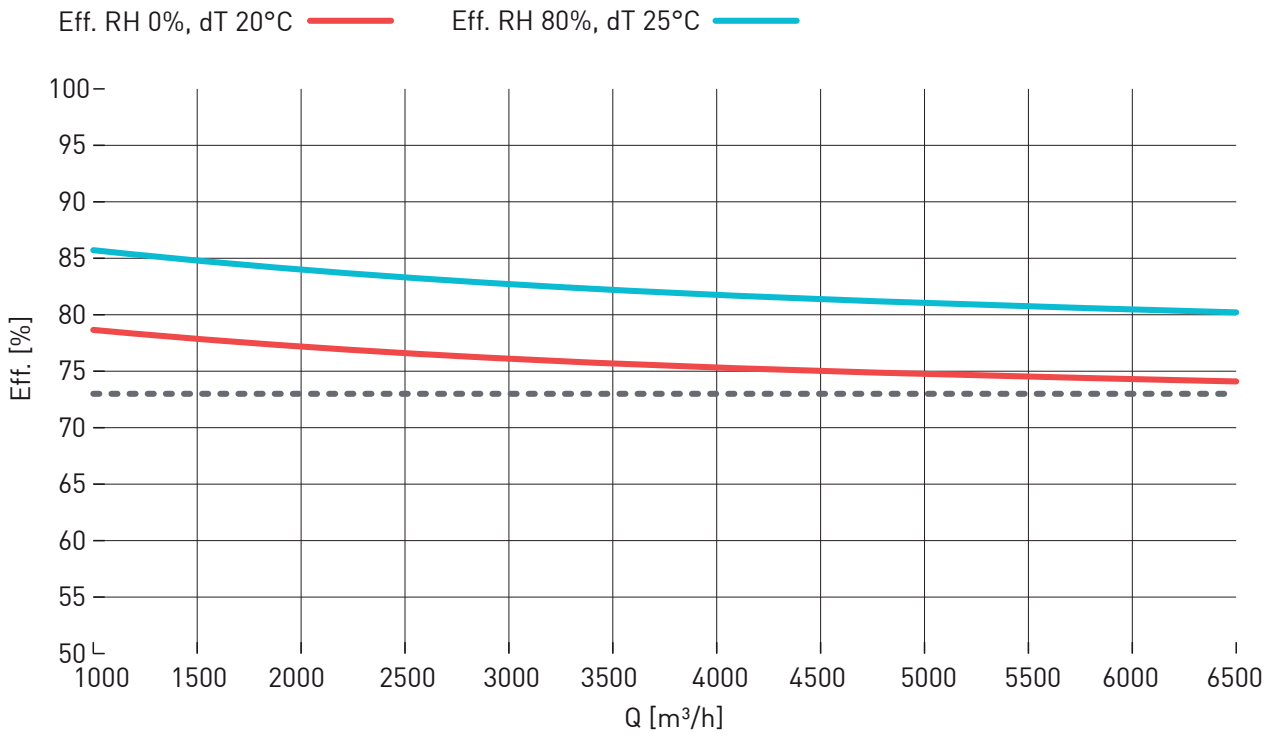
Nominal flow rate (qnom)	[m3/h]	5350
	[m3/s]	1,48
Effective electric power input (We,eff)	[W]	2200
Internal specific fan power of ventilation components (SFPint)	[W/(m3/s)]	1025
Internal specific fan power of ventilation components, 2018 limit	[W/(m3/s)]	1035
Face velocity at design flow rate	[m/s]	2,1
Nominal external pressure (Δps,ext)	[Pa]	550
Internal pressure drop of ventilation components (Δps,int), supply	[Pa]	175
Internal pressure drop of ventilation components (Δps,int), exhaust	[Pa]	180
Thermal efficiency of heat recovery (nt, dry air, ΔT 20 [°C])	[%]	77,4
Fans static efficiency (according to UE regulation n. 327/2011)	[%]	51
Casing sound power level (LWA)	[dB(A)]	71
Maximum external leakage rate	max 3,5 @ -400 Pa	(EN 13141-7)
Maximum internal leakage rate	max 5,5 @ +250 Pa	(EN 13141-7)

CHARACTERISTIC CURVES

AP20620 - UVR 6500 MF HE DP



THERMAL EFFICIENCY OF HEAT RECOVERY



THERMAL EFFICIENCY OF HEAT RECOVERY (EN 308)

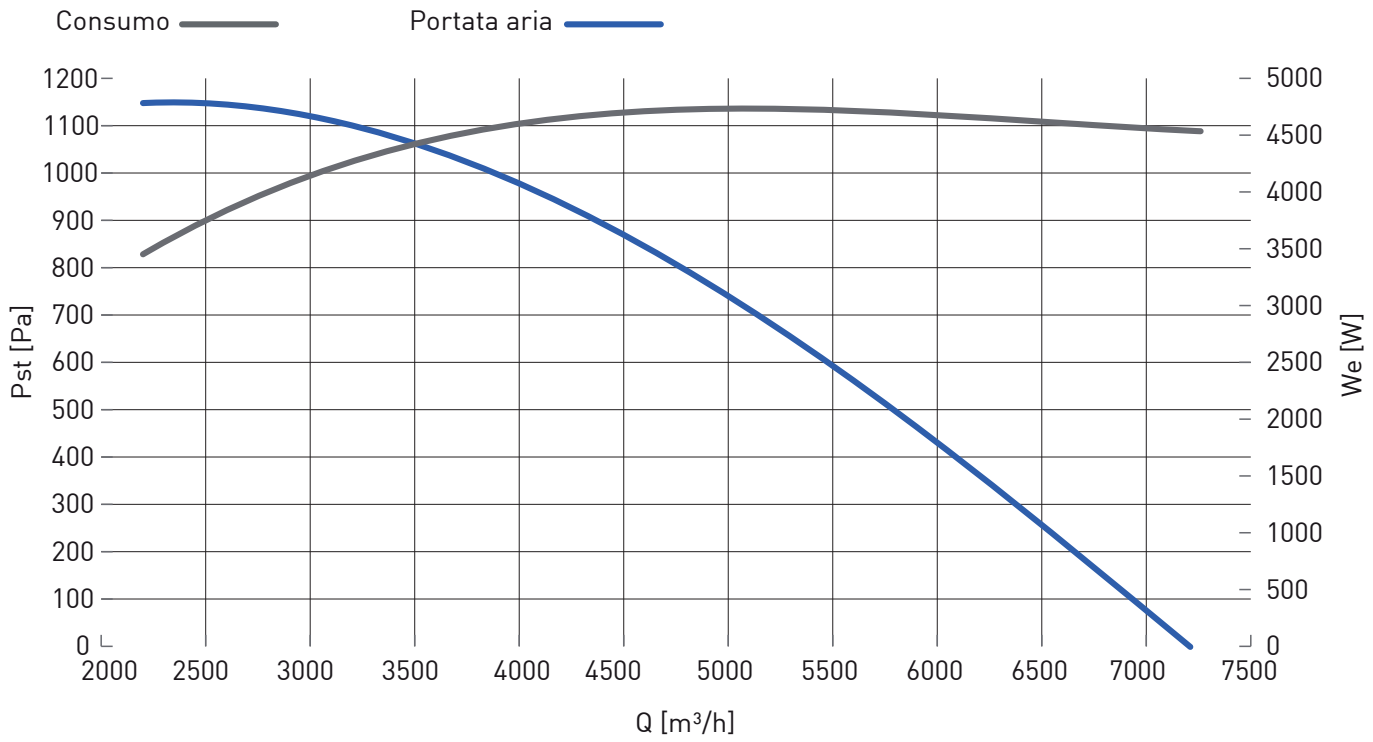
86,0%
External temperature -5 °C - U.R. 80%
Exhaust air +20 °C - U.R. 50%

NOMINAL DATA (DIRECTIVE AND REGULATION NO. 1253/2014 ECODESIGN 2018)

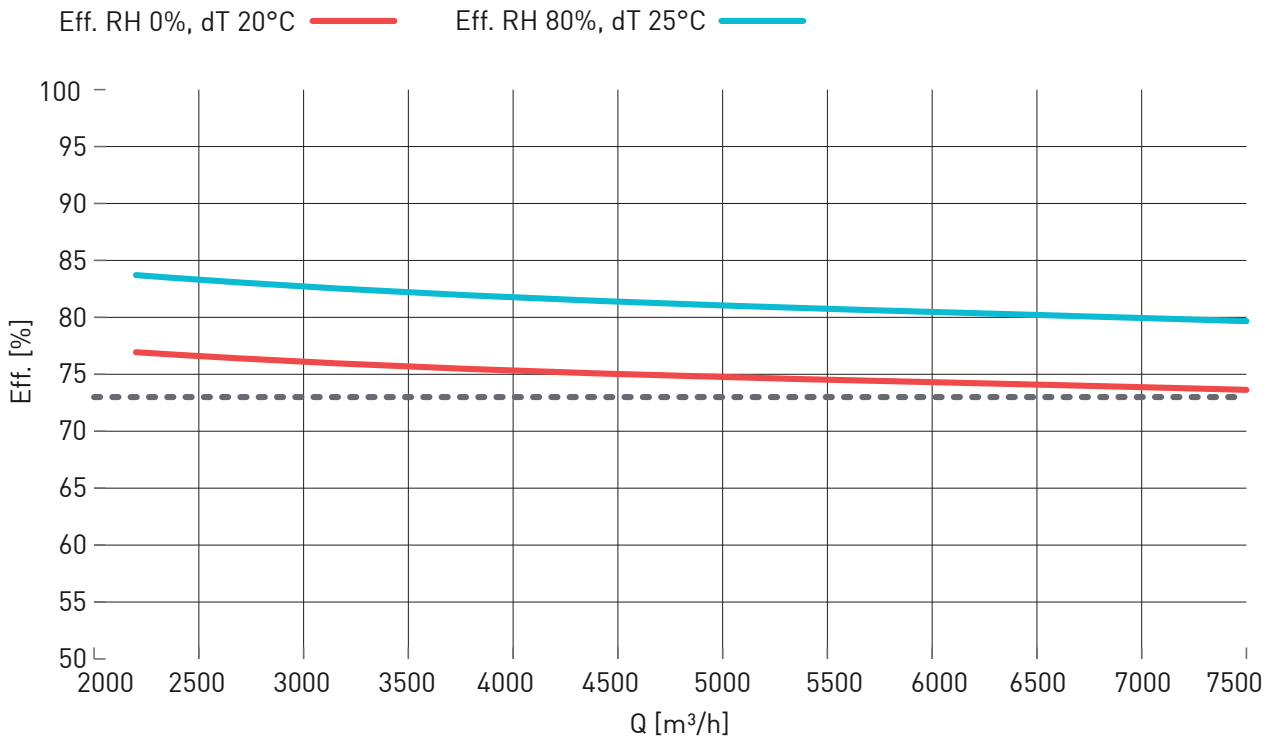
Producer	Fantini Cosmi SpA	
Item N°	AP20620	
Model	UVR 6500 MF HE DP 1700	
Typology of ventilation unit	UVNR, UVB	
Type of drive	MSD (multiple speed drive)	
Type of heat recovery system	air/air heat recovery system	
Nominal flow rate (qnom)	[m³/h]	4880
	[m³/s]	1,356
Electrical power input (We,tot)	[W]	4662
Internal specific fan power (SFPint)	[W/(m³/s)]	942
Internal specific fan power, 2018 limit	[W/(m³/s)]	951
Face velocity	[m/s]	1,7
Nominal external pressure (Δps,ext)	[Pa]	669
Internal pressure drop of ventilation components (Δ ps,int), mandata	[Pa]	257
Internal pressure drop of ventilation components (Δ ps,int), return	[Pa]	261
Thermal efficiency of HRS (nt, dry air, ΔT 20 [°C])	[%]	74,8
Static efficiency of fan (according Regulation UE n. 327/2011)	[%]	62,8
Casing sound power level (LWA)	[dB]	115
External leakage	max 3,5 @ -400 Pa	(EN 13141-7)
Internal leakage	max 5,5 @ +250 Pa	(EN 13141-7)
Web address	www.fantinicosmi.it	
In accordance with the Regulation (UE) N° 1253/2014	2018 compliant product	

CHARACTERISTIC CURVES

AP20622 - UVR 7100 MF HE DP



THERMAL EFFICIENCY OF HEAT RECOVERY



THERMAL EFFICIENCY OF HEAT RECOVERY (EN 308)

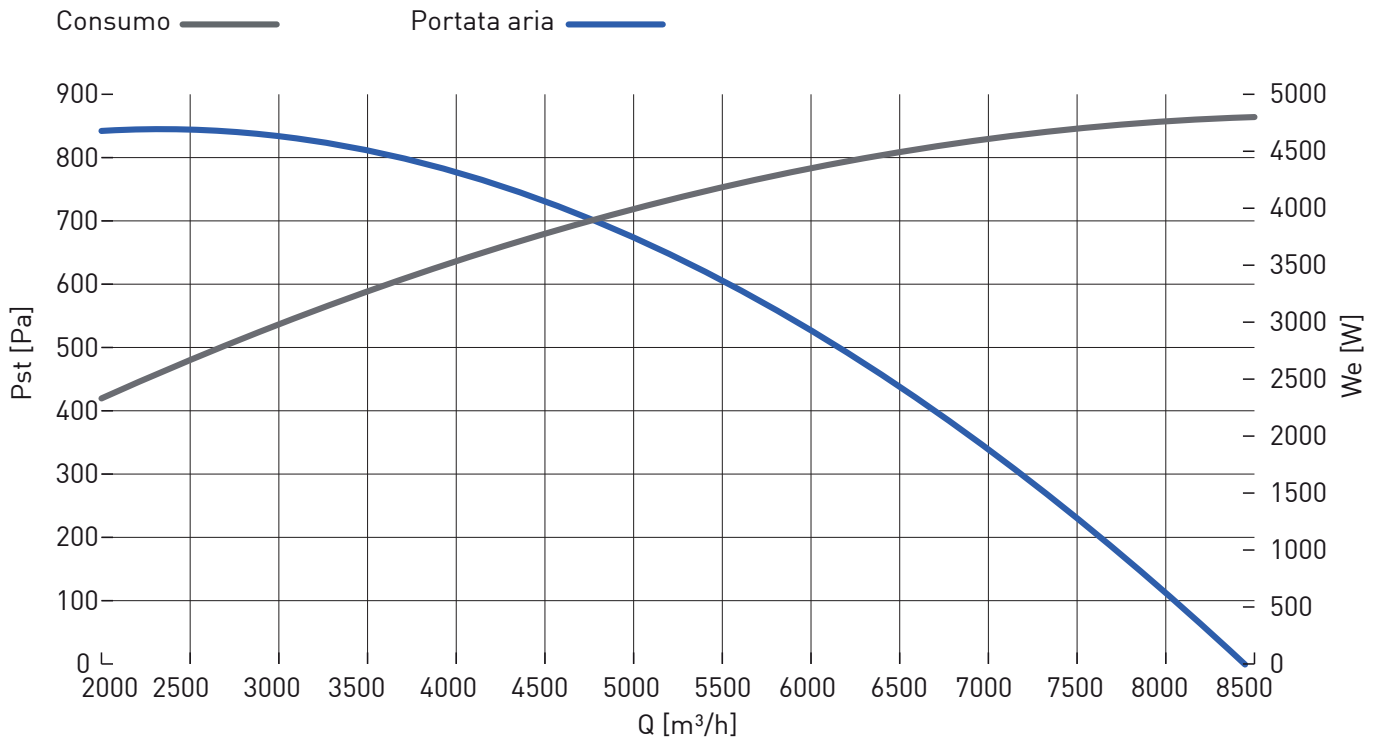
84,0%
External temperature -5 °C - U.R. 80%
Exhaust air +20 °C - U.R. 50%

NOMINAL DATA (DIRECTIVE AND REGULATION NO. 1253/2014 ECODESIGN 2018)

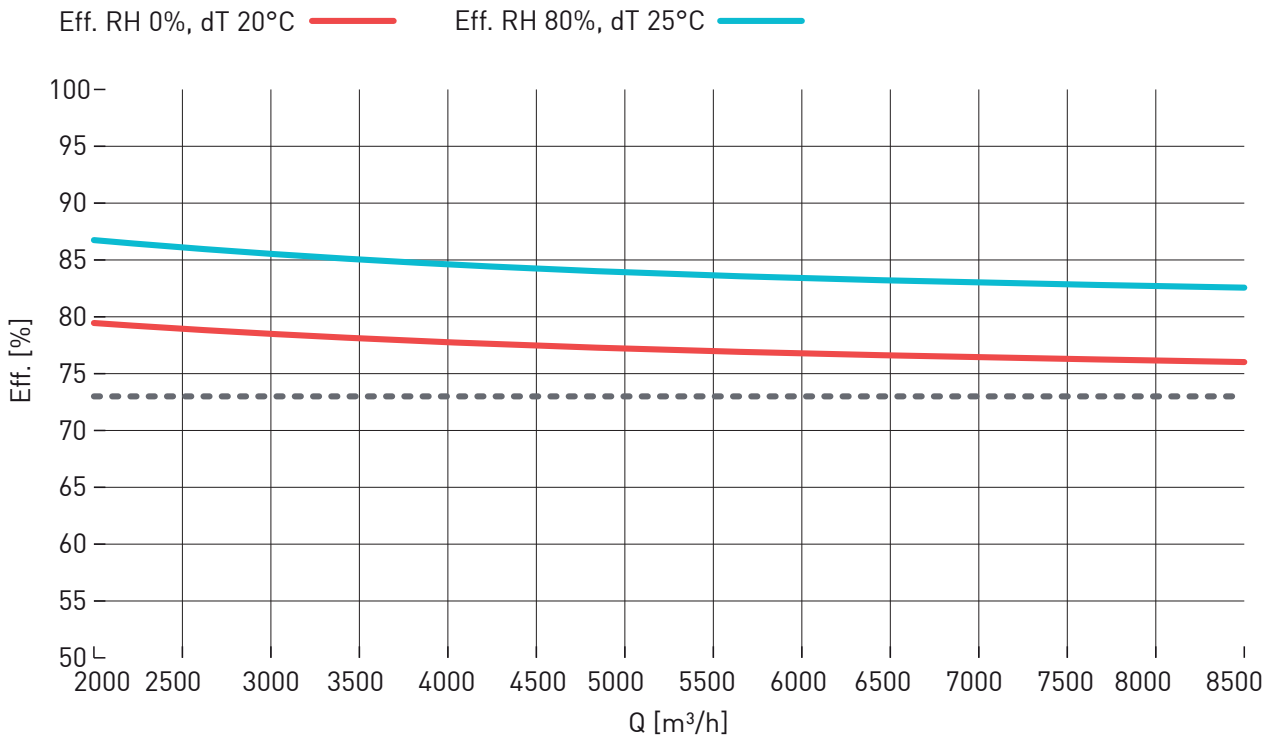
Producer	Fantini Cosmi SpA	
Item N°	AP20622	
Model	UVR 7100 MF HE DP 2170	
Typology of ventilation unit	UVNR, UVB	
Type of drive	MSD (multiple speed drive)	
Type of heat recovery system	air/air heat recovery system	
Nominal flow rate (qnom)	[m³/h]	5140
	[m³/s]	1,428
Electrical power input (We,tot)	[W]	4735
Internal specific fan power (SFPint)	[W/(m³/s)]	935
Internal specific fan power, 2018 limit	[W/(m³/s)]	937
Face velocity	[m/s]	1,8
Nominal external pressure (Δps,ext)	[Pa]	700
Internal pressure drop of ventilation components (Δ ps,int), mandata	[Pa]	279
Internal pressure drop of ventilation components (Δ ps,int), return	[Pa]	285
Thermal efficiency of HRS (nt, dry air, ΔT 20 [°C])	[%]	74,7
Static efficiency of fan (according Regulation UE n. 327/2011)	[%]	65,5
Casing sound power level (LWA)	[dB]	116
External leakage	max 3,5 @ -400 Pa	(EN 13141-7)
Internal leakage	max 5,5 @ +250 Pa	(EN 13141-7)
Web address	www.fantinicosmi.it	
In accordance with the Regulation (UE) N° 1253/2014	2018 compliant product	

CHARACTERISTIC CURVES

AP20624 - UVR 8500 MF HE DP



THERMAL EFFICIENCY OF HEAT RECOVERY



THERMAL EFFICIENCY OF HEAT RECOVERY (EN 308)

86,0%
External temperature -5 °C - U.R. 80%
Exhaust air +20 °C - U.R. 50%

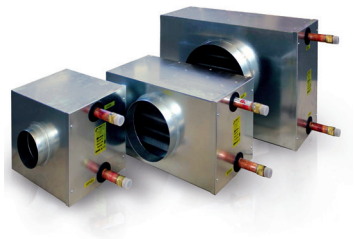
NOMINAL DATA (DIRECTIVE AND REGULATION NO. 1253/2014 ECODESIGN 2018)

Producer	Fantini Cosmi SpA	
Item N°	AP20624	
Model	UVR 8500 MF HE DP 2170	
Typology of ventilation unit	UVNR, UVB	
Type of drive	MSD (multiple speed drive)	
Type of heat recovery system	air/air heat recovery system	
Nominal flow rate (qnom)	[m³/h]	6460
	[m³/s]	1,794
Electrical power input (We,tot)	[W]	4482
Internal specific fan power (SFPint)	[W/(m³/s)]	938
Internal specific fan power, 2018 limit	[W/(m³/s)]	939
Face velocity	[m/s]	1,7
Nominal external pressure (Δps,ext)	[Pa]	445
Internal pressure drop of ventilation components (Δ ps,int), mandata	[Pa]	273
Internal pressure drop of ventilation components (Δ ps,int), return	[Pa]	278
Thermal efficiency of HRS (nt, dry air, ΔT 20 [°C])	[%]	76,6
Static efficiency of fan (according Regulation UE n. 327/2011)	[%]	66,2
Casing sound power level (LWA)	[dB]	116
External leakage	max 3,5 @ -400 Pa	(EN 13141-7)
Internal leakage	max 5,5 @ +250 Pa	(EN 13141-7)
Web address	www.fantinicosmi.it	
In accordance with the Regulation (UE) N° 1253/2014	2018 compliant product	

ACCESSORIES

POST HEATING WATER COIL MODULE

- Press-bent galvanized steel box
- Circular section inlet/outlet connections
- 2 ranks
- U.R. 50%
- Air inlet temperature: 10 °C



Water inlet/outlet temperature: 45/40 °C

CODE	MODEL	for	H2O [m3/h]	Thermal efficiency (kW)	Air outlet temp. (°C)	R.H. exit (%)	Air pressure drop (Pa)	Water press. drop (kPa)	Ø conn.
AP20102	BAT_AC-2_05-07	UVR 500 MF HE DP	0,3	2	21,8	23	35	3,9	¾"
		UVR 700 MF HE DP	0,4	2,8	21,8	23	62	7,3	
AP20104	BAT_AC-2_12	UVR 1200 MF HE DP	0,7	4,9	21,8	23	55	9,6	¾"
AP20106	BAT_AC-2_16	UVR 1600 MF HE DP	0,9	6,9	22,5	22	90	18,8	¾"
AP20108	BAT_AC-2_2300-2800	UVR 2300 MF HE DP	1,4	9,5	21,9	22	59	12,1	¾"
		UVR 2800 MF HE DP	1,7	11,5	21,8	22	82	17,3	
AP20112	BAT_AC-2_3200	UVR 3200 MF HE DP	1,9	13,4	22,1	23	102	23,4	¾"
AP20114	BAT_AC-2_38-45	UVR 3800 MF HE DP	2,3	15,6	21,8	23	100	11,3	1"
		UVR 4500 MF HE DP	2,7	18,5	21,8	23	133	15,6	
AP20116	BAT_AC-2_54	UVR 5400 MF HE DP	3,3	22,2	21,8	23	45	13,8	1"
AP20118	BAT_AC-2_65	UVR 6500 MF HE DP	3,6	26,9	21,9	23	62	20,1	1"
AP20121	BAT_AC-2_71-85	UVR 7100 MF HE DP	4,3	29,1	21,8	23	50	19,3	1¼"
		UVR 8500 MF HE DP	4,9	33,6	21,4	23	68	25,4	

* available for quantities and with delivery terms to be agreed

Water inlet/outlet temperature: 60/55 °C

CODE	MODEL	for	H2O [m3/h]	Thermal efficiency (kW)	Air outlet temp. (°C)	R.H. exit (%)	Air pressure drop (Pa)	Water press. drop (kPa)	Ø conn.
AP20102	BAT_AC-2_05-07	UVR 500 MF HE DP	0,3	3,1	28,1	15,7	35	8,7	¾"
		UVR 700 MF HE DP	0,4	4,3	27,9	15,8	63	16,4	
AP20104	BAT_AC-2_12	UVR 1200 MF HE DP	0,7	7,4	27,9	15,9	56	21,4	¾"
AP20106	BAT_AC-2_16	UVR 1600 MF HE DP	0,9	8,3	25	18,8	90	26,7	¾"
AP20108	BAT_AC-2_2300-2800	UVR 2300 MF HE DP	1,4	12,8	26	17,7	59	21,1	¾"
		UVR 2800 MF HE DP	1,7	14,7	25	18,8	82	27,4	
AP20112	BAT_AC-2_3200	UVR 3200 MF HE DP	1,9	15,4	23,8	20,3	102	29,9	¾"
AP20114	BAT_AC-2_38-45	UVR 3800 MF HE DP	2,3	23,9	28,1	15,6	101	25,6	1"
		UVR 4500 MF HE DP	2,7	24,2	25,4	18,4	133	26,1	
AP20116	BAT_AC-2_54	UVR 5400 MF HE DP	3,3	30,8	26,4	17,3	46	25,6	1"
AP20118	BAT_AC-2_65	UVR 6500 MF HE DP	3,6	33,4	24,8	19,2	62	29,8	1"
AP20121	BAT_AC-2_71-85	UVR 7100 MF HE DP	4,3	36,6	24,8	19,1	50	29,5	1¼"
		UVR 8500 MF HE DP	4,9	36,8	22,4	22,2	68	29,7	

* available for quantities and with delivery terms to be agreed

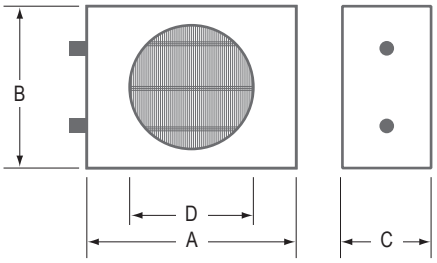
Water inlet/outlet temperature: 80/70 °C

CODE	MODEL	for	H2O [m3/h]	Thermal efficiency (kW)	Air outlet temp. (°C)	R.H. exit (%)	Air pressure drop (Pa)	Water press. drop (kPa)	Ø conn.
AP20102	BAT_AC-2_05-07	UVR 500 MF HE DP	0,3	4,2	34	11	36	3,9	¾"
		UVR 700 MF HE DP	0,4	5,8	34	11	63	7,5	
AP20104	BAT_AC-2_12	UVR 1200 MF HE DP	0,7	10	34	11	56	9,8	¾"
AP20106	BAT_AC-2_16	UVR 1600 MF HE DP	0,9	14,1	35,3	10,2	91	19	¾"
AP20108	BAT_AC-2_2300-2800	UVR 2300 MF HE DP	1,4	19,5	34,4	10,8	59	12,3	¾"
		UVR 2800 MF HE DP	1,7	23,4	34	11	83	17,5	
AP20112	BAT_AC-2_3200	UVR 3200 MF HE DP	1,9	27,4	34,6	10,6	103	23,7	¾"
AP20114	BAT_AC-2_38-45	UVR 3800 MF HE DP	2,3	32	34,2	10,9	101	11,6	1"
		UVR 4500 MF HE DP	2,7	37,8	34,1	10,9	135	16	
AP20116	BAT_AC-2_54	UVR 5400 MF HE DP	3,3	44,8	33,8	11,1	46	13,7	1"
AP20118	BAT_AC-2_65	UVR 6500 MF HE DP	3,6	54,6	34,1	10,9	63	20	1"
AP20121	BAT_AC-2_71-85	UVR 7100 MF HE DP	4,3	58,9	33,8	11,1	51	19,1	1¼"
		UVR 8500 MF HE DP	4,9	69,6	33,5	11,3	69	26,4	

* available for quantities and with delivery terms to be agreed

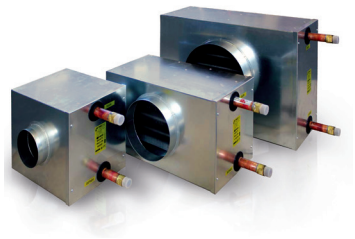
DIMENSIONS (mm)

	mm			
MODEL	A	B	C	ØD
BAT_AC-2_05-07	410	350	300	150
BAT_AC-2_12	620	350	300	180
BAT_AC-2_16	620	350	300	250
BAT_AC-2_2300-2800	790	410	300	315
BAT_AC-2_3200	790	410	300	350
BAT_AC-2_38-45	790	530	300	350
BAT_AC-2_54	1170	650	400	350
BAT_AC-2_65	1170	650	400	450
BAT_AC-2_71-85	1100	1100	400	600



MODULO BATTERIA AD ACQUA DI POST RAFFREDDAMENTO

- Galvanized steel box made of press-bent sheets
- Circular inlet/outlet connections
- 4 rows
- Relative humidity (RH): 60%
- Water inlet/outlet temperature: 7/12 °C
- Air inlet/outlet temperature: 30/20 °C
- Can be supplied with hot water to function as heating coils

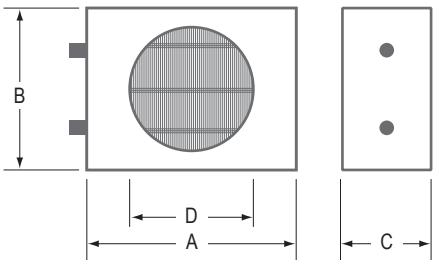


CODE	MODEL	for	H2O [m3/h]	Thermal efficiency (kW)	U.R. uscita (%)	Air pressure drop (Pa)	Water press. drop (kPa)	Ø conn.
AP20202	BAT_AF-4_05-07	UVR 500 MF HE DP	0,2	2,9	89	47	11,1	½"
		UVR 700 MF HE DP	0,2	4,1	88	83	21,1	
AP20204	BAT_AF-4_12	UVR 1200 MF HE DP	0,6	6,9	89	74	10,9	½"
AP20206	BAT_AF-4_16	UVR 1600 MF HE DP	0,8	9,4	88	119	18,7	½"
AP20208	BAT_AF-4_23	UVR 2300 MF HE DP	1,1	13,5	88	117	17,5	¾"
AP20212	BAT_AF-4_2800	UVR 2800 MF HE DP	1,4	16,2	89	113	12,9	¾"
AP20214	BAT_AF-4_3200	UVR 3200 MF HE DP	1,6	18,8	88	140	16,6	¾"
AP20216	BAT_AF-4_38-45	UVR 3800 MF HE DP	1,9	22	89	118	12,5	1"
		UVR 4500 MF HE DP	2,3	26,4	88	156	17,1	
AP20218	BAT_AF-4_54	UVR 5400 MF HE DP	2,9	31,5	88	60	13,3	1¼"
AP20221	BAT_AF-4_65	UVR 6500 MF HE DP	3,5	38,5	88	82	18,7	1¼"
AP20223	BAT_AF-4_71-85	UVR 7100 MF HE DP	3,7	41,5	88	65	15	1¼"
		UVR 8500 MF HE DP	4,6	50,3	88	88	21	

* fornibile for quantità e con termini di consegna da concordare

DIMENSIONS (mm)

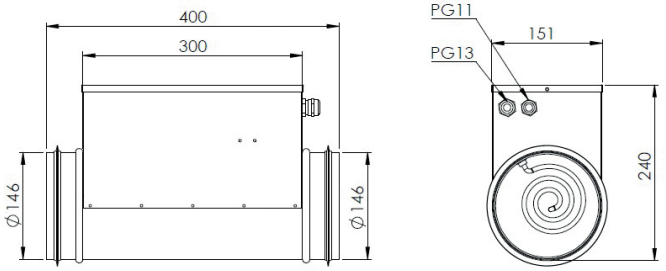
	mm			
MODEL	A	B	C	ØD
BAT_AF-4_05-07	410	350	300	150
BAT_AF-4_12	620	350	300	180
BAT_AF-4_16	620	350	300	250
BAT_AF-4_23	670	410	300	315
BAT_AF-4_2800	790	410	300	315
BAT_AF-4_3200	790	410	300	350
BAT_AF-4_38-45	790	530	300	350
BAT_AF-4_54	1170	650	400	350
BAT_AF-4_65	1170	650	400	450
BAT_AF-4_71-85	1100	1100	400	600



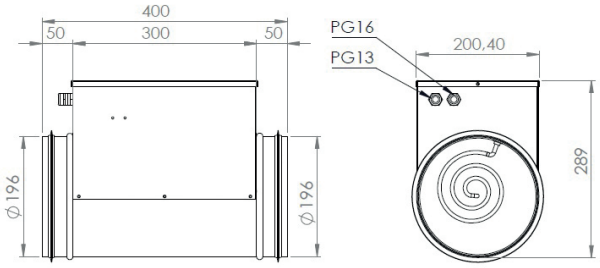
ELECTRIC PRE-HEATING AND POST-HEATING RESISTANCES

CODE	MODEL	V~	Hz	IP	Thermal Yield (W)	Ø Nominal Conn
AP19431	BE 150-2	230	50	40	2000	150 mm
AP19432	BE 200-3	230	50	40	3000	200 mm
AP19433	BE 250-4	230	50	40	4000	250 mm
AP19435	BE 315-4	230	50	40	4000	315 mm
AP19437	BE 355-6	230	50	40	6000	355 mm

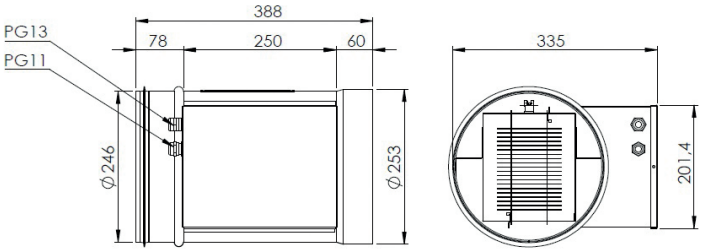
DIMENSIONS (mm)



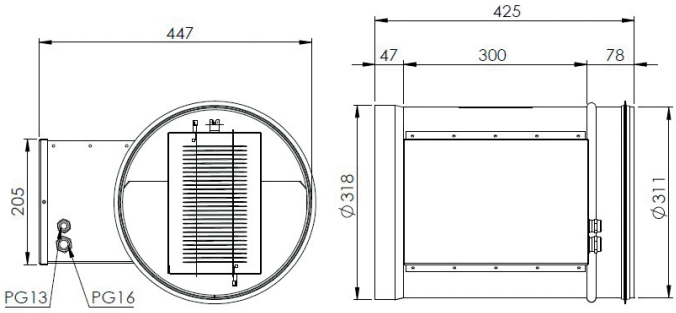
AP19431



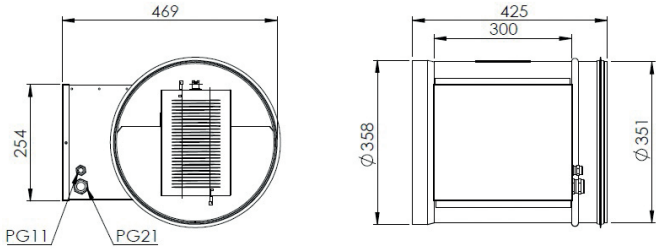
AP19432



AP19433



AP19435



AP19437