OTA1 40÷500

Heat recovery unit with aluminium counterflow exchanger

400 m³/h÷4700 m³/h

- Constant air flow fans available on OTA1 100 - 500.
- Built in by-pass facility.
- Case made by sandwich panels 23 mm thickness, galvanized inner skin and prepainted outer skin; 45 kg/m3 density foamed polyurethane as heat and sound insulation.
- Full-range controlled direct driven double inlet centrifugal fans; low consumption EC technology motors on OTAE1.
- Filtering sections composed by cell filters with polypropylene media, extractable from side removable panels, ISO 16890 ePM1 55% efficiency for the fresh air flow, and ePM10 55% efficiency for the exhaust air flow.
- Integrated pressure switch for dirty filter signal.
- Condensate drain pan made of galvanized steel plate with water drain connection downwards, that ensure a total drainage.
- With PCUS cntrol is possible the remote control by App for mobile fone in wi-fi network.

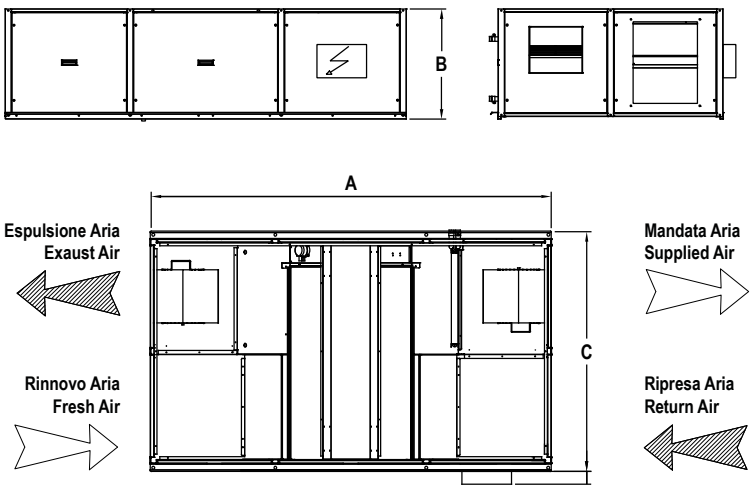
Accessories

ATG	Anti-freeze thermostat
BCR	Post-heating internal water coil
BER	Internal electric post-heating coil
BIOX	Purifying system Bioxigen®
CPA	Kit weather hood for external installation
EXT	Kit for external installation
F7CF	High efficiency filters on exhaust air
KB	Kit bypass management
PCUS	Unit control panel
PCUSM	Unit control panel with modbus
PF	Additional pressure switch
QSC/QSA	CO2 sensor
RMS	3 dampers defrosting section
SBFR	Water cooling or heating coil section
SCMB	Modbus PCB for SIGB / Q
SIGB	Integrated management system on board
SM/SMR230	Damper actuators
SPC	N. 4 connections for circular ducts kit
SR	Regulation damper
SSC	Duct silencers
TUP	Wall mounted remote control panel (only with SIGB)
USD/USW	Humidity sensor
V2O	Kit 2-Way valve with on-off actuator
V3O	Kit 3-Way valve with on-off actuator
V3M	Kit 3-Way valve with modulating actuator
VSD	Constant air flow fans control
SI-SD	Fresh air - exhaust air temperature probes

Versions

OTA1 Horizontal units with AC fans

OTAE1 Horizontal units with EC fans



Mod.		40	75	100	150	200	320	400	500
A	mm	1480	1940	1940	2200	2200	2500	2500	2500
B	mm	380	480	480	550	550	680	680	680
C	mm	800	990	990	1000	1400	1400	1400	1700
Weight	kg	90	140	140	170	200	230	260	300

OTA1		40	75	100	150	200	320
Air flow	m³/h	400	750	1000	1500	2050	3200
External static pressure	Pa	160	120	180	160	120	180
Maximum external static pressure	Pa	160	120	180	160	120	180
Power supply	V/ph/Hz	230/1/50					
Maximum input current	A	1,5	2,9	6,0	6,0	6,0	14
Fans							
Motor type		AC					
(1) Speed	n°	3	3	3	3	3	3
(2) Sound pressure	dB (A)	50	53	53	56	56	60
Heat exchanger							
(3) Winter efficiency	%	83,6	82,9	81,6	83,3	83,7	86,8
(4) Summer efficiency	%	75,5	75,9	74,5	75,1	75,6	78
(5) Dry efficiency	%	75,9	76,4	75,0	75,6	76,0	76,3

OTAE1		40	75	100	150	200	320	400	500
Air flow	m³/h	400	750	1000	1500	2050	3200	3800	4700
External static pressure	Pa	160	120	180	160	120	180	200	200
Maximum external static pressure	Pa	340	160	520	500	540	375	330	200
Power supply	V/ph/Hz	230/1/50							
Maximum input current	A	2,4	2,4	9,0	9,0	9,0	10,0	8,8	8,8
Fans									
Motor Type		EC							
(1) Speed	n°	Multiple							
(2) Sound pressure	dB (A)	49	52	51	53	51	56	58	60
Heat exchanger									
(3) Winter efficiency	%	83,6	82,9	81,6	83,3	83,7	86,8	84,1	84
(4) Summer efficiency	%	75,5	75,9	74,5	75,1	75,6	78,0	75,0	75,1
(5) Dry efficiency	%	75,9	76,4	75,0	75,6	76,0	76,3	75,5	75,6

(1) Multiple = Multispeed > 3
Man = Manual by selector switch or control panel; 0-10V = By potentiometer or control panel; VSD = Constant flow control or modulation by air quality or air humidity sensor
(2) Sound pressure level calculated at 1 m far from the service side of the casing, with ducted supply, exhaust, return and fresh air vents, at nominal conditions
(3) Outside air at -5° 80% RH; room air at 20°C 50% RH
(4) Outside air at 32° 50% RH; room air at 26°C 50% RH
(5) Refeer to EU 1253/2014 regulation: at nominal pressure; air conditions refer to EN 308 standard

OTA1-P 40÷320

Energy recovery ventilation units

400 m³/h÷3100 m³/h

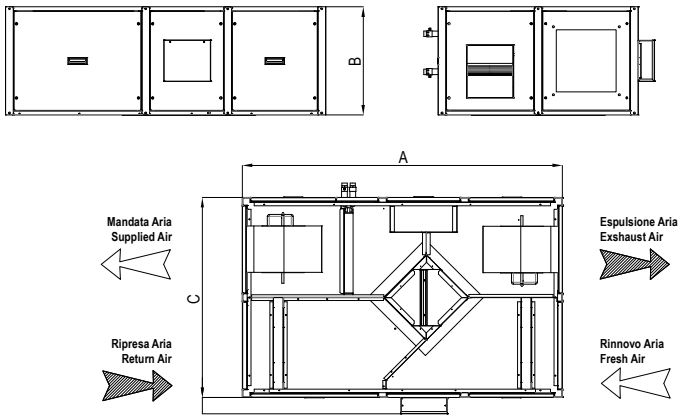
- Constant air flow fans available on OTA1-PE 100-320.
- Ceiling horizontal installation, the heat exchanger is extractable from below for all models.
- Case made by sandwich panels 23 mm thickness, galvanized inner skin and prepainted outer skin; 45 kg/m3 density foamed polyurethane as heat and sound insulation.
- Full-range controlled direct driven double inlet centrifugal fans;
- OTA1-PE version with low consumption EC technology motors available.
- Filtering sections composed by cell filters with polypropylene media, extractable from side removable panels, ISO 16890 ePM1 55% efficiency for the fresh air flow, and ePM10 55% efficiency for the exhaust air flow.
- Integrated pressure switch for dirty filter signal.
- WIth PCUS control is possible to activate remote controll by App in wi-fi network.

Accessories

ATG	Anti-freeze thermostat	**SIGB**	Integrated management system on board
BCR	Post-heating internal water coil		
BER	Internal electric post-heating coil	**SM/SMR230**	Damper actuators
BIOX	Purifying system Bioxigen®	**SPC**	N. 4 connections for circular ducts kit
CPA	Kit weather hood for external installation	**SR**	Regulation damper
EXT	Kit for external installation	**SSC**	Duct silencers
F7CF	High efficiency filters on exhaust air	**TUP**	Wall mounted remote control panel (only with SIGB)
KB	Kit bypass management		
PCUS	Unit control panel	**USD/USW**	Humidity sensor
PCUSM	Unit control panel with modbus	**V2O**	Kit 2-Way valve with on-off actuator
PF	Additional pressure switch	**V3O**	Kit 3-Way valve with on-off actuator
QSC/QSA	CO2 sensor	**V3M**	Kit 3-Way valve with modulating actuator
RMS	3 dampers defrosting section	**VSD**	Constant air flow fans control
SBFR	Water cooling or heating coil section	**SI-SD**	Fresh air - exhaust air temperature probes
SCMB	Modbus PCB for SIGB / Q		

Versions

OTA1-P	Horizontal units with AC fans	**OTA1-PE**	Horizontal units with EC fans



Mod.		40	75	100	150	200	320
A	mm	1480	1450	1600	2000	2000	2100
B	mm	380	480	550	680	680	680
C	mm	800	990	1000	1290	1290	1400
Weight	kg	80	120	150	190	200	220

OTA1-P		40	75	100	150	200	320
Air flow	m³/h	400	660	1000	1500	2300	3100
Nominal external static pressure	Pa	170	120	160	190	240	190
Maximum external static pressure	Pa	170	120	160	190	240	190
Electrical power supply	V/ph/Hz	230/1/50					
Total full load amperage	A	1,50	2,90	6,00	6,00	14,00	14,00
Fans							
Motor type		AC					
(1) Speeds	n°	4	3	3	3	3	3
Absorbed Fan Power	kW	0,16	0,28	0,55	0,96	1,55	1,67
(2) Sound pressure	dB (A)	50	50	53	56	60	61
Heat exchanger							
(3) Winter thermal effic.	%	75,00	73,70	74,00	73,00	73,02	71,40
(4) Winter enthalpy effic.	%	60,00	58,20	58,80	62,50	62,70	55,50
(5) Summer thermal effic.	%	64,10	59,70	60,20	60,10	60,20	57,04
(4) Summer enthalpy effic.	%	56,70	55,10	55,70	58,30	58,50	52,50
(5) Dry thermal efficiency	%	75,10	73,70	74,20	73,10	73,20	73,00

OTA1-PE		40	75	100	150	200	320
Air flow	m³/h	400	660	1000	1500	2300	3100
Nominal external static pressure	Pa	170	120	160	190	240	190
Maximum external static pressure	Pa	375	250	535	550	447	400
Electrical power supply	V/ph/Hz	230/1/50					
Total full load amperage	A	2,40	2,40	9,00	9,00	9,00	10,00
Fans							
Motor type		EC					
(1) Speeds	n°	Multiple					
Absorbed Fan Power	kW	0,15	0,26	0,48	0,62	1,31	1,50
(2) Sound pressure	dB (A)	49	49	52	53	59	58
Heat exchanger							
(3) Winter thermal effic.	%	75,00	73,70	74,00	73,00	73,20	71,40
(4) Winter enthalpy effic.	%	60,00	58,20	58,80	62,50	62,70	55,50
(5) Summer thermal effic.	%	64,10	59,70	60,20	60,10	60,20	57,04
(4) Summer enthalpy effic.	%	56,70	55,10	55,70	58,30	58,50	52,50
(5) Dry thermal efficiency	%	75,10	73,70	74,20	73,10	73,20	73,00

(1) Multiple = Multispeed > 3
Man = Manual by selector switch or control panel; 0-10V = By potentiometer or control panel; VSD = Constant flow control or modulation by air quality or air humidity sensor
(2) Sound pressure level calculated at 1 m far from the service side of the casing, with ducted supply, exhaust, return and fresh air vents, at nominal conditions
(3) Outside air at -5° 80% RH; room air at 20°C 50% RH
(4) Outside air at 32° 50% RH; room air at 26°C 50% RH
(5) Refeer to EU 1253/2014 regulation: at nominal pressure; air conditions refer to EN 308 standard

OTAE1-RHP 35÷450

Heat recovery units combined to heat pump system

350 m³/h÷4500 m³/h

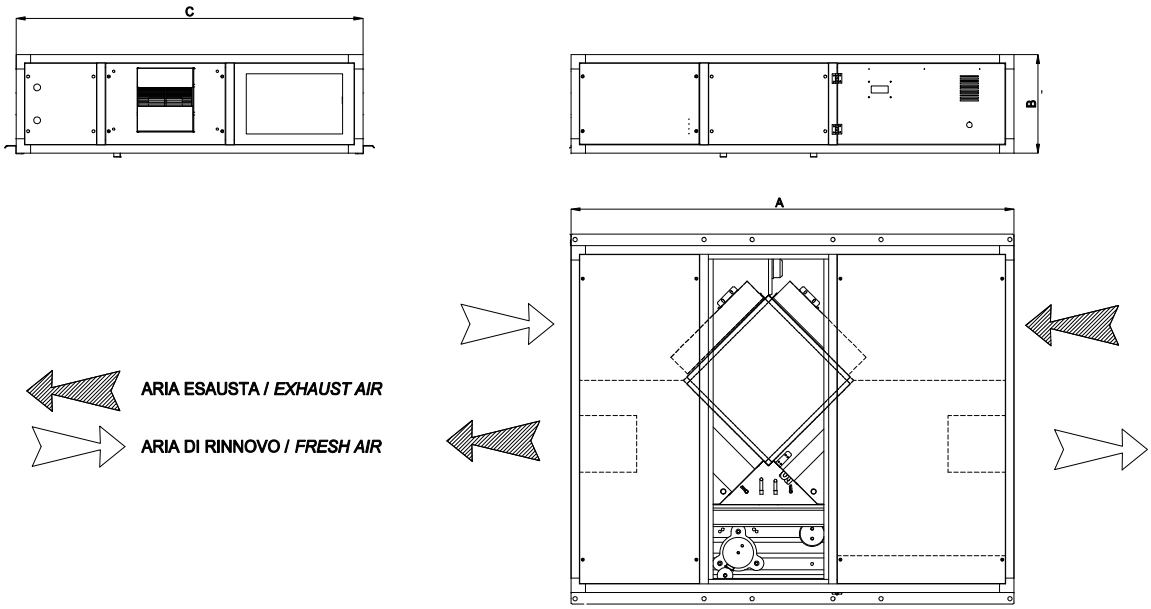
- Global COP >8
- HP mode with very low external temperature without pre-heating

Technical Features

- Series of 7 models for ceiling installation, composed of:
- Frame made from extruded aluminium alloy bars, connected by 3- way reinforced nylon joints.
- Sandwich panels, 23 mm thickness, galvanized steel inner skin and precoated outer skin; 45 kg/m3 foamed polyurethane heat and sound insulation.
- Wide surface ISO 16890 COARSE 55% efficiency synthetic filters on both air intakes; as an option, ePM1 70%.
- Air-to-air crossflow aluminium heat recovery.
- Air-to-air heat pump system (R410A) composed of electric driven on-off compressor, evaporating and condensing reversible copperaluminium finned coils, electronic expansion valve.
- Full-range controlled direct driven double inlet centrifugal fans.
- Low consumption EC technology motors and constant flow regulation mode for 100-450 models.
- Built-in electric box complete with electronics and control panel.
- Possible water or electric integration

Accessories

BER	Additional electric heater post air treatment
BIOX	Purifying system
CPA	Fresh air/exhaust air casing
F7CF	High efficiency filters F7 class
PF	Air filter pressure switch
RMS	3 dampers section for low air fresh temperature up to -20°C, with modulating actuators
SBFR	Additional water coil section
SCMB	Modbus serial card
SPC1	Round air duct adaptor
SR230	ON-OFF external dampers with actuators
SSC	Duct silencer
TUP	Wall mounted remote control panel
TTP	Weather canopy
V2O	2-way water valve kit with on/off actuator
V3M	3-way water valve kit with modulating actuator



OTAE1-RHP		35	60	100	150	230	320	450
A	mm	1540	1540	1840	1840	2040	2040	2240
B	mm	370	370	410	500	550	650	710
C	mm	1240	1240	1440	1440	1690	1690	1890
Weight	kg	122	125	185	228	267	281	329

Outside air / Return air / Supply air / Exhaust air

OTAE1-RHP		35	60	100	150	230	320	450
Air flow	m³/h	350	600	1000	1500	2300	3200	4500
Supply ext. pressure	Pa	270	285	295	290	365	265	270
Return ext. pressure	Pa	245	215	240	230	305	195	205
(1) Sound pressure	dB (A)	59	64	62	67	65	68	70
Power supply	V/ph/Hz	230/1/50				400/3/50		
Absorbed current	A	5,3	9,0	13,2	20,2	10,0	15,4	16,8
(3) Heating capacities								
Static recovery efficiency	%	62	51	50	50	50	50	50
Heat pump capacity	W	1740	2960	5010	7690	11090	16300	17300
Total heating capacity	W	3580	5790	9410	14390	21190	30260	36010
(4) Unit COP	W/W	10,90	9,60	9,20	8,60	8,90	9,90	12,60
(5) Cooling capacities								
Static recovery efficiency	%	56	50	50	50	50	50	49
Total cooling capacity	W	1810	2860	4890	7270	10580	15310	16990
Total cooling capacity	W	2210	3450	5840	8720	12830	18390	21440
(4) Unit EER	W/W	4,2	3,9	4,2	3,9	3,9	4,1	5,0

(1) Livello di pressione sonora valutata a 1 m da: presa premente canalizzata / presa aspirante / vano compressore.
(2) Riferite alla portata nominale
(3) Aria esterna -5°C 80% UR; aria ambiente 20°C 50% UR
(4) Esclusa la potenza assorbita per la ventilazione
(5) Aria esterna 32°C 50% UR; aria ambiente 26°C 50% UR

OTA1 micro E 25÷130

Energy recovery ventilation unit

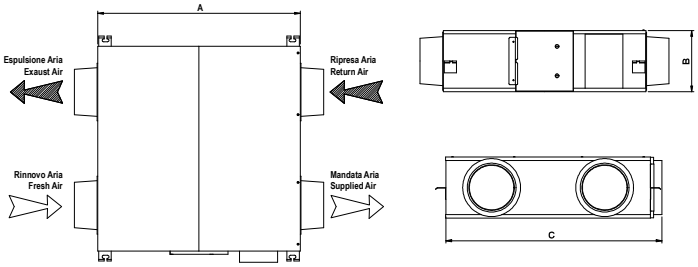
250 m³/h÷1300 m³/h

Technical features

- Galvanized steel self-supporting panels, internally and externally insulated; accessibility from side door.
- ISO 16890 ePM2.5 95% efficiency class filter with synthetic cleanable media and COARSE 50% pre-filter on fresh air, COARSE 50% filter on return air intake.
- Integrated pressure switch for dirty filter signal.
- Motorised heat recovery by-pass device, automatically controlled by unit control to use fresh air free-cooling when convenient.
- Low consumption high efficiency & low noise direct driven fans with 10-speed EC motors.
- Duct connections by circular plastic collars.
- Built-in electric box equipped with PCB to control fan and by-pass function.
- With wi-fi accessory is possible the remote control the unit by app and mobile phone.

Accessories

PTS	Touch screen controller	**BIOX**	Purifying system BIOXIGEN®
QSW	CO2 wall mount sensor	**SBE1**	Electric pre-heater module
USW	Humidity wall mount sensor	**SBE2**	Electric post-heater module
SLC	Duct circular sound attenuator	**WFM**	WiFi module for remote control via app



Mod.		25	35	50	65	80	100	130
A	mm	815	815	895	1185	1185	1200	1200
B	mm	270	270	270	390	390	390	390
C	mm	650	855	955	945	1200	1290	1290
Weight	kg	30	37	43	65	71	83	83

OTA1 micro E		25	35	50	65	80	100	130
Air flow	m³/h	250	350	500	650	800	1000	1300
Nominal external static pressure	Pa	90	140	110	100	140	140	135
Power supply	V/ph/Hz	230 / 1 / 50						
Absorbed current	A	0,5	0,6	0,6	1,2	1,4	2,1	2,7
Fans								
Motor typology		EC						
Number of speeds		10						
Fan control (1)	W	Man / VSD						
Power input	W	80	130	150	230	320	390	490
Sound pressure (2)	dB(A)	34	37	39	40	42	43	44
Heat exchanger								
Winter efficiency (3)	%	73	74	76	74	76	76	74,2
Winter enthalpy effic. (3)	%	65	65	67	65	65	62	59
Summer thermal effic. (4)	%	73	74	76	74	76	76	74
Summer enthalpy effic. (4)	%	62	62	63	60	63	60	58
Dry thermal efficiency (5)	%	73	74	76	74	76	76	74

(1) Man = Manual by selector switch or control panel; VSD = Modulation by air quality or air humidity sensor
(2) Sound pressure level calculated at 1m far from the service side of the casing, at nominal conditions
(3) Outside air at -5° 80% RH; room air at 20°C 50% RH
(4) Outside air at 32° 50% RH; room air at 26°C 50% RH
(5) Refeer to EU 1253/2014 regulation: at nominal pressure; air conditions refer to EN 308 standard