

Date: 26/08/2013

Subject to change in the interest of technical progress.

Technical Data

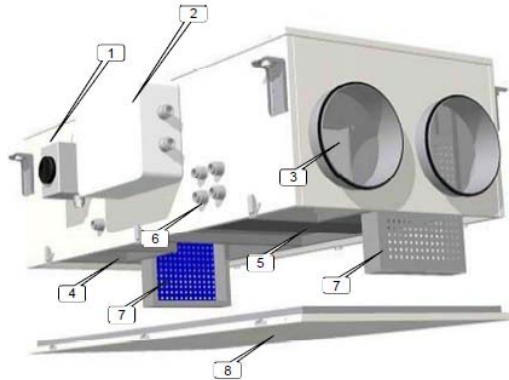
Mechanical Ventilation Heat Recovery Unit

maxi flat 450



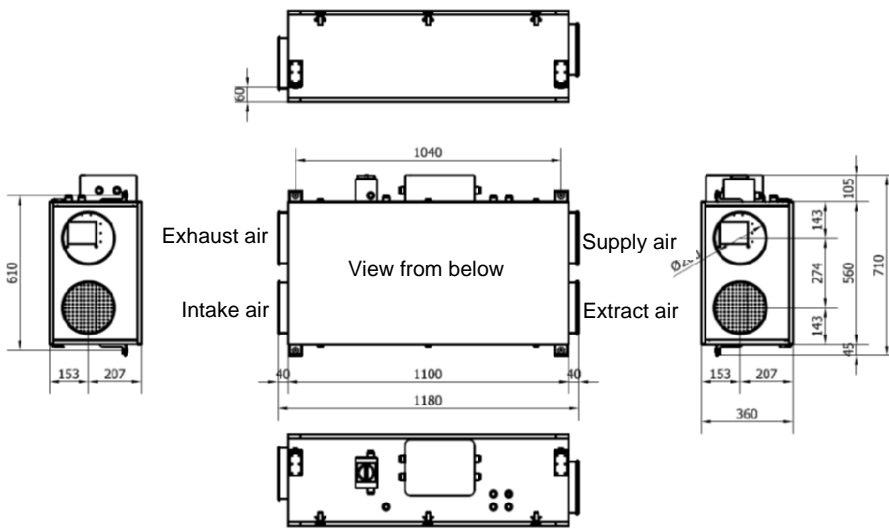
Unit design of the product line (fig. maxi flat 450):

Product photo:

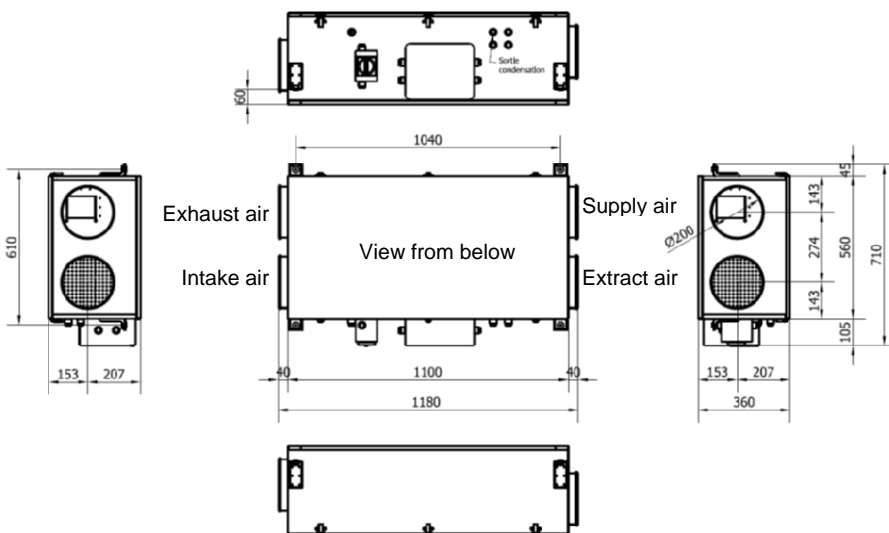


- 1 Main switch for power supply fans and control
- 2 Centralized wiring box of the CB4 TAC4 DG circuit (factory pre-wired)
- 3 Supply fan (right device design)
- 4 Exhaust fan (right device design)
- 5 Air/air – heat exchanger and bypass
- 6 Cable gland for performing condensate hose
- 7 Filter
- 8 Access door

Unit dimensions:



Right device design



Left device design





Technical Spezification:	
Air flow:	50 – 450 m³/h
Demension (LxWxH):	(1100 x 665 x 360) mm
Weight:	111 kg (Base unit without any additional components)
Duct connection:	DN 200
Electrical connection:	Fans and control devices: 1 x 230 V, 50/60 Hz; on main switch (pre-wired with centralized wiring box) Electric pre-heating, optionally: 1 x 230 V, 50/60 Hz; separate main switch (pre-wired with main switch)
Power input:	700 W (Base unit without any additional components)
IP Code (acc. to DIN 40050):	IP 44 (Fany) IP 20 (RC TAC4 REC)
Operating range:	-20°C (lower value if option KWin) to +50°C
Heat exchanger:	Aluminum cross counterflow heat exchanger, sea water resistand
Fans:	EC direct current radial fans
Filter:	Filter G4 (Intake air and extract air), optional F7 (Intake air)
Housing:	Compact housing made of an anodised aluminium structure and acoustically and thermally insulated panels in painted steel on the outside (RAL9002) and galvanised steel inside.
Condensate drain:	Stainless steel drip pan, condensate pump and condensate hose Ø 6 mm (1/4") ID
Summer operation:	motorized summer bypass, temperature-controlled, heat exchanger is 100% shut off

Operating Data:					
air flow	Heat exchanger efficiency ¹⁾	Supply air temperature ¹⁾ (after exchanger)	SFP	Power absorbed ²⁾	Sound pesser level ²⁾ (open field in 3 m distance)
m³/h	%	°C	W/m³/h	W	dB(A)
100	95,6	20,6	0,08	8	11,7
200	93,4	19,9	0,21	42	22,6
300	92,1	19,5	0,38	114	29,5
450	90,7	19,0	0,73	330	36,4

¹⁾ Values for supply and extract air volume flow at $t_{Au} = -10\text{ °C}$, $\varphi_{Au} = 90\%$ r.F. and $t_{Ab} = 22\text{ °C}$, $\varphi_{Ab} = 50\%$ r.F.

²⁾ at external pressure of 100 Pa

TAC4 control system:
<ul style="list-style-type: none"> • Fan airflow management (accurate knowledge of fan's working point) • Management of time slots depending from the control units • Signaling/information for all alarms • Fire alarm management • Boost function • Automatic bypass control (freecooling) • Automatic opening and closing motrised dampers (option) • Automatic anti-freeze protection of the counterflow • Regulation of external post-heating/cold coil (option) • Display of all the operating parameters • Control and display systems via WEB pages (TCP/IP or GPRS modules) • Networking units via MODBUS, KNX, or BAcnet communication

Control options / communications:	
<p>RC TAC4, Remote Control with LCD</p>  <p>Size: 122 x 66 mm Cable to the control unit: IYSTY 2x2x0,6; max. 1000 m; by costumer</p>	<p>TCP/IP TAC4 MODULE</p> <p>This is a communication module in TCP/IP with built-in web server</p> <p>This module can be combined with an RC but not with a GRC</p> 
<p>GRCTAC4, Grafic Remote Control with touch display - can control up to 247 units</p>  <p>Size: 152 x 87 mm Cable to the control unit: IYSTY 2x2x0,6 with RS-232-connector; 3 m</p>	<p>GPRS TAC4 MODULE</p> <p>This is a communication module in GPRS with built-in web server</p> <p>This module can be combined with an RC but not with a GRC</p> 
	<p>SAT TAC4 MODBUS MODULE</p> <p>MODBUS RTU communication circuit to be plugged in the TAC4 regulation circuit.</p> 