

Company :	Date :	2018/06/11.
To :	From :	agrava
Subject :		
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Model :	<b>MURAL PX 450T FW</b>
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The MURAL PX TOP 450 FW is a "high efficiency" controlled mechanical ventilation unit distinguished from other MURAL PX models by the fact that all airflow connections are upwards.

- The air/air counterflow heat exchanger allows a recovery rate of 90% and more. It is Eurovent certified is made of "seawater resistant" aluminium.
- The fan is a TAC type fan (motor performance remains high regardless of the operating point). The Total Airflow Control technology optimizes power consumption in function of installation requirements (no energy waste).

The MURAL PX TOP 450 FW is equipped with a drainpan, folded filters G4 and comes with a motorized by-pass. Delivered ready to use (plug&play), just plug it and set the parameters and it's ready to run.

The panels are double-wall insulated 15 mm: outside is steel off-white pre-painted (RAL 9002) and the Interior is galvanized steel. The heat and sound insulation is made of mineral wool. Wall mounting kit is available as an option. In the case of limited available height, we can also offer the GLOBAL LP FW range, until 2.000 m<sup>3</sup>/h (555l/s).

<b>Supply : Fans + Controls</b>	
Voltage :	1 x 230 V
Intensity :	2,4 A max.
Electrical protection :	D8A - 10kA - AC3

<b>Fans - TAC</b>																																											
Units are equipped with high efficiency TAC (Total Airflow Control) technology fans. They are driven by electronically commutated motors and allow accurate control of the fan's actual working point. The efficiency of the motor remains between 85% and 60%, whatever the working point. The motor is a permanent magnet DC driven motor but AC power supplied.																																											
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<b>Controls</b>
The units are delivered fully pre-wired as standard ('plug & play') with main switch (except MURAL PX 450 FW with plug) and complete control of the unit.
The latter includes all the necessary components and is fully wired to T° probes, fans, main switch, by-pass , as well as all options. Connect the power supply and configure the parameters and the unit is ready to run.
The controller monitors each component:
<ul style="list-style-type: none"> <li>•Setting and piloting of TAC fans in selected mode: CA (constant flow), CP (constant pressure measured by an optional external sensor) or LS (link with signal 0 - 10V, for example a CO2 air quality sensor).</li> <li>•Automatic freecooling control with bypass</li> <li>•Antifrost system of the air/air heat exchanger (airflow modulation)</li> <li>•Control of external post-heating coil (water or electrical) or cooling coil (water), or reversible coil (heating or cooling water coil)</li> <li>•Open/Close motorized dampers</li> <li>•Time slot management (scheduling)</li> <li>•Alarms management (fire, pressure, maintenance, component failure,...)</li> <li>•Display and management of all system parameters via TACtouch, BMS or web page (option)</li> <li>•MODBUS communication RTU or KNX (option)</li> </ul>

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**Heat Recovery unit - CF**

The heat exchanger is an air/air high efficiency counterflow heat exchanger, executed in sea water resistant aluminium, at a temperature of up to 80°C. The airtightness tests according to DIN1946 show a leakage rate of 0.017 % at 400 Pa difference between the 2 air streams. The heat exchanger is compliant to standard EN 308. The technical selection as presented below is realised with the Eurovent certified selection software from our supplier of the rotary heat exchanger.

Eurovent Certification Diploma N° : 05.03.243 & 11.07.006

Updates of this document are available via: <http://www.eurovent-certification.com>.

Air pressure :	1013 mbar					
	<u>Supply</u>	<u>Exhaust</u>		<u>Supply</u>	<u>Exhaust</u>	
Airflow :	450	450	m³/h	Air outlet temperature :	17,2	-7,1 °C
	0,13	0,13	m³/s	Relative humidity out :	4,3	100,0 %
Airspeed through HRU :	1,88	2,20	m/s	Humidity out :	0,5	2,1 g/kg
Air inlet temperature :	-21,0	22,0	°C	Capacity (W.B.) :	5,8	kW
Relative humidity in :	90,0	35,0	%	Efficiency HRU (W.B.) :	88,9	%
Humidity in :	0,5	5,7	g/kg	Capacity (D.B.) :	5,2	kW
Pressure drop in HRU :	117	162	Pa	Efficiency HRU (D.B.) :	79,7	%

**Filter - G/F**

The heat recovery ventilation unit is equipped with M5 (G4 for 300/400/450) class plane filters at the inlet of the polluted air and M5 (G4 for 300/400/450) class plane filters at inlet of the fresh air, to correctly protect the heat exchanger and guarantee optimum air quality inside the building. Filters are easily accessible through the access doors for maintenance purposes. M5/F7 (G4/F7 for 300/400/450) filters kit are available as an additional option.

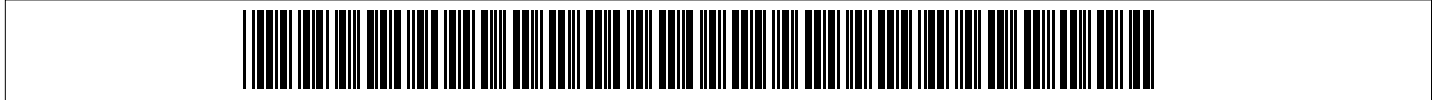
				<u>Supply</u>	<u>Exhaust</u>	
Filter class :	G4	Dimensions :	415 x 200 x 50 mm	Air speed :	1,51	m/s
		Quantity :	1	Filter pressure drop :	30	Pa
Filter class :	G4	Dimensions :	415 x 200 x 50 mm	Air speed :	1,51	m/s
		Quantity :	1	Filter pressure drop :	30	Pa

<b>Circular inlet - ER ø 200 mm</b>	<b>Circular outlet - SR ø 200 mm</b>
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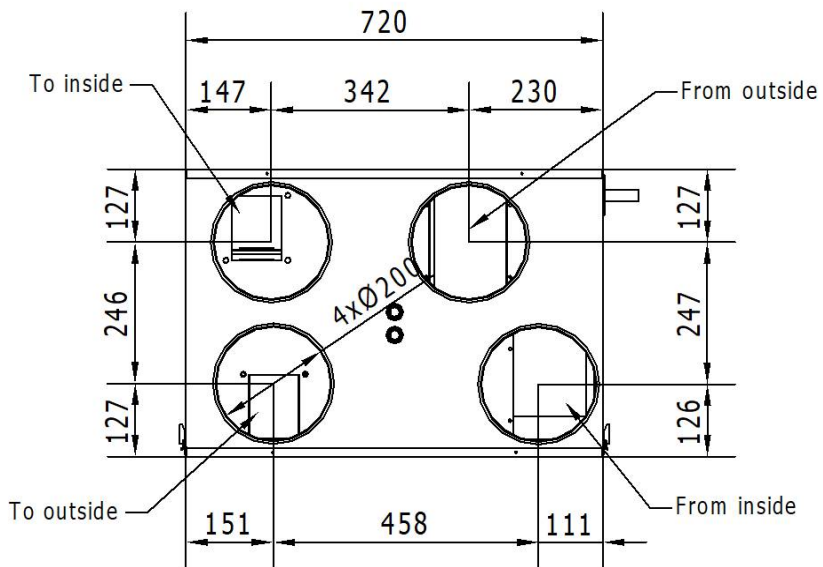
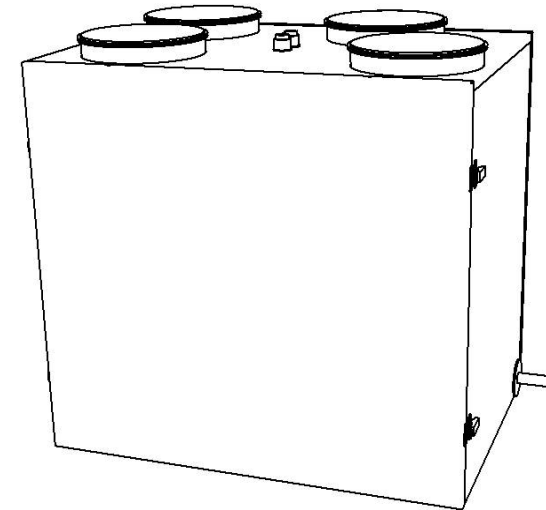
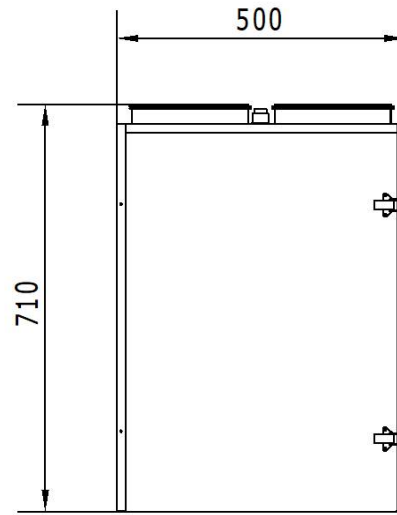
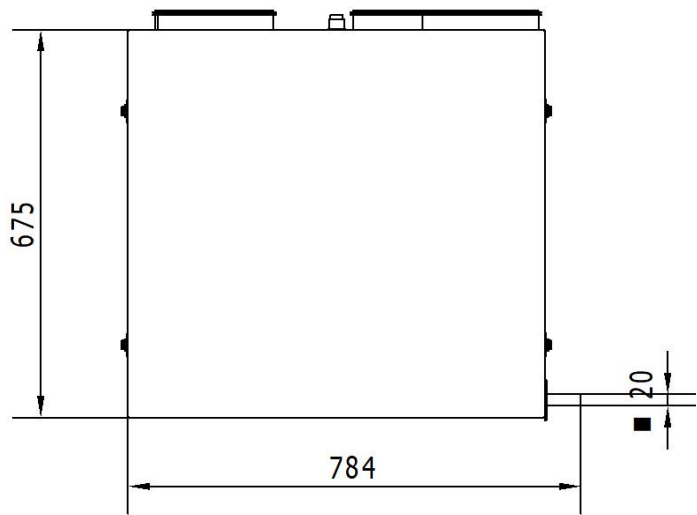
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<b>Manufacturing info</b>
884295



<b>Detail</b>	
<u>IDCode</u>	<u>Description</u>
884295	MURAL PX 450T FW

<b>Options (not included)</b>		
<u>IDCode</u>	<u>Quantity</u>	<u>Description</u>
510042	1	GF Filter kit MURAL PX 450 FW(G4/G4)
370005	1	SAT3 Relay satellite (fan ON or CT+ AL dPA)



Index	Date	Modification	By	Controlled
Toutes les cotes sont des cotes extérieures / All dimensions are outside dimensions				
Titre :		MURAL PX TOP 450 FW		
Date :		20/08/2012		Numéro de plan : Drawing number : <b>884295</b>
Unité :		mm		
Dessiné par :		Henrot M.		
Code client/Customer code:				