



# **SIM**

## **BUILT-IN SYSTEM CONDENSA MAXISOL**

**package heating condensing and  
pre-mixed system for heating and hot  
sanitary water production with solar  
integration**

# SIM BUILT-IN SYSTEM CONDENSA MAXISOL



Here below written data are indicative

The new building needs that the heating installations systems foresee energy savings, environment's respect, rispetto dell'ambiente, protection of the habitable space and use of renewable energy. Sile replies to these requirements with a new project named **SIM** that is **BUILT-IN SYSTEM CONDENSA MAXISOL**.

**SIM** is a package system with solar integration for the wall built-in installation in the outside building's wall consisting of 5 main elements:

- 1) a condensing pre-mixed boiler CONDENSA N3V with 3-way automatic valve and SOLARSYSTEM electronic for solar circuit's management with antifreeze function;
- 2) Sile cylinder in stainless steel AISI 316 with double coil entirely insulated with capacity 150 liters;
- 3) sturdy box for built-in in galvanized steel;
- 4) **pre-assembled hydraulic Kit** consisting of all the connection components of the system's appliances and of the solar circuit's components;
- 5) one solar panel RT 2,0 (not included in system's price list)

## The range

The **SIM** package system and can be foreseen with all the three **CONDENSA N3V** models **15**, **24** and **32 kW** with 3-way valve included.

## Fundamental aspects and advantage

- Heating installations done according to the in force norms with energy savings and renewable energy use.
- Perfect integration in the building by built-in installation in the wall.
- Easy component's installation (boiler) and pre-assembled (hydraulic kit).
- The system's elements can be separately delivered to meet the building yard's requirements.

## Solar panel

The system is suitable for the installation of a solar panel SILE SOLE model RT of 2,0 m<sup>2</sup> with relevant frames or kit for in roof installation. The solar panel can be also later installed after the **SIM** mounting according to customer's need.

## Kit TBA-M: zones with different temperatures

The KIT TBA M is mounted on **SIM** for the distribution and heating adjustment with zones at different temperatures: an under the floor circuit (low temperature) and a radiator circuit (high temperature).

## Kit Z2-Z3: zone with single temperature

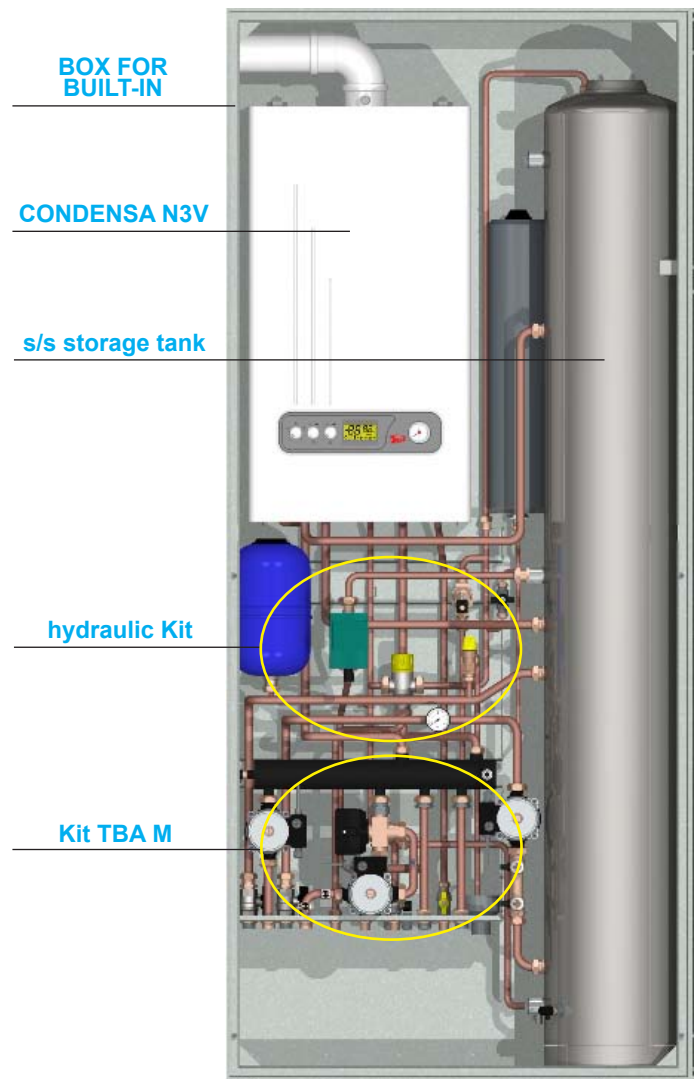
For installations with single temperature, it is possible to have, on request, the KIT Z2-Z3. The KIT consists of two (Z2) or three zones electric valves (Z3) and it is complete of hydraulic and electric connections.

## Hydraulic Kit (supplied already assembled) M

The hydraulic kit is a SILE PACKAGE consisting of: 3 speed circulation pump of solar circuit, flowmeter or flow regulator suitable also for installation's loading from bottom, solar circuit expansion vessel, safety electric valve for overheating prevention and drain, solar panels' temperature probe, connections, interceptions, drain, solar safety valve, thermometer, copper pipe, mixing tap. Circulation pump (optional).

## Kit ANTIFREEZE

ANTIFREEZE Kit for sanitary circuit piping with electric heating element (optional)



remote control  
(optional)



external probe  
(optional)



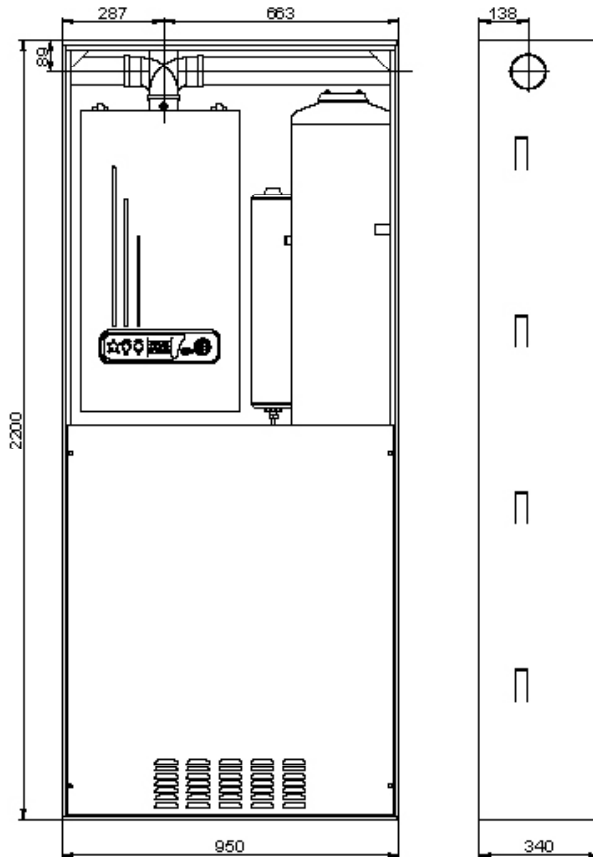
flow meter  
for air charge and vent from  
bottom of solar installation



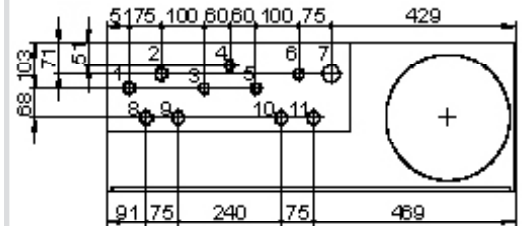
Stainless steel  
1.150 heater

Here below written data are indicative

## Dimensions



## Connections' mould (view from above)



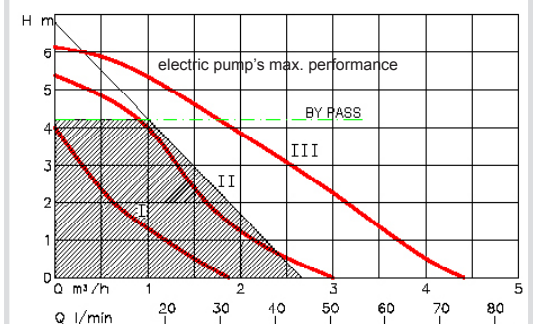
## connections' legend

- 1) Ø3/4" Delivery hot water from solar panel
- 2) Ø3/4" Return cold water to the solar panel
- 3) Ø1/2" Hot sanitary water
- 4) Ø1/2" Recirculation pump (optional)
- 5) Ø1/2" Cold water inlet
- 6) Ø1/2" Gas
- 7) Condensate drain
- 8) Ø3/4" Delivery heating
- 9) Ø3/4" Delivery to heating low temperature
- 10) Ø3/4" Return low temperature heating
- 11) Ø3/4" Return heating

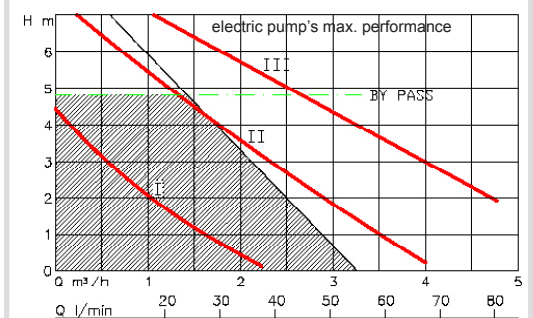
SIM		3.15	5.24	5.32
Certificate approval CONDENSA N 3V		694BN3845		
Power output 50/30°C	kW - kcal/h	15,9-13.674	25,40 - 21.850	31,80 - 27.350
Heat flow (gas net heat value)	kW - kcal/h	15,0-12.900	24,00 - 20.640	30,00 - 25.800
Efficiency at 100% at 50/30°C	%	106,0	106,0	106,0
Power output at 100% at 80/60°C	kW - kcal/h	14,4-12.384	23,50 - 20.210	29,40 - 25.284
Efficiency at 100% at 80/60°C	%	98	98	98
Reduced heat flow (gas net heat value)	kW - kcal/h	3,5-3.010	5,50 - 4.730	6,70 - 5.762
Reduced power output at 80/60°C	kW - kcal/h	3,4-2.924	5,30 - 4.558	6,50 - 5.590
Efficiency at 30% at 50/30°C	%	108,6	108,6	108,6
Net weight	kg	+36	+38	+42
Max. pressure heating circuit	bar	3	3	3
Total capacity	l	2,5	3	4
Max. electric power (with solar and recirculation pump)	W	233 / 435	233 / 435	253 / 455
Electric power kit TBA M (to be added to the max. power)	W	318	318	318
Feeding tension	V - Hz.	230 - 50	230 - 50	230 - 50
CO with 0% of O <sub>2</sub>	p.p.m.	< 30	< 30	< 30
NO <sub>x</sub> with 0% of O <sub>2</sub>	p.p.m.	< 28	< 28	< 28
Solar circuit's expansion vessel	l	4	4	4
Sanitary circuit's expansion vessel	l	4	4	4
Heating circuit's expansion vessel	l	7	7	7
Boiler's energy efficiency marking (92/42/CEE)		★★★★		
<b>Hot sanitary water production Δt 30°C without solar integration:</b>				
- in continuous service	l/min	7,0	12,2	12,2
- in 12 minutes	l	213	275	275
- in the first hour	l	550	862	862
Hot sanitary water temp. regulation until	°C	60	60	60
Total water heater capacity	l	150	150	150
Capacity of boiler's integration	l	90	90	90
Max. water heater working pressure	bar	8	8	8
Min. and max. water heater feeding pressure	bar	0,5÷8	0,5÷8	0,5÷8

## Boiler's electric pump graph

mod. 3.15 - 5.24 and of kit TBA M high temperature



## Electric pump graph of boiler mod. 5.32 and of kit TBA M low temperature



Bend III shows the max. flow-head of the pump at speed 3

for boilers CONDENSA  
FLOW AND HEAD AVAILABLE AT THE PLATE  
OF HYDRAULIC CONNECTION

## UK & Ireland Distributors



Head Office: THERMPAK SYSTEMS LTD 2 Pineridge ,Donaghadee Co Down . BT21 0QR Tel +44(0)28 91 883875  
Dublin tel +353 1 2820624 or mobile +353 87 7485333  
e mail [ivan@tpsheatexchangers.com](mailto:ivan@tpsheatexchangers.com) [www.tpsheatexchangers.com](http://www.tpsheatexchangers.com) [david@tpsheatexchangers.com](mailto:david@tpsheatexchangers.com)

