

## SMW - Smartwarm combined thermal accumulator



Thermal accumulator for the storage of heating water produced from continuous or discontinuous heat sources; instantaneous production of Sanitary Hot Water by means of a AISI 316L stainless steel high-efficiency corrugated heat exchanger. Small sizes for domestic installations. Available with the primary lower heat exchanger. The thermal fluid contained in the external puffer and in the primary heat exchangers must operate "closed loop" (without oxygen), this to avoid corrosion.



TECHNICAL CHARACTERISTICS

Sanitary	Material:	Inox AISI 316L (1.4404)
	Internal protective processing:	Pickling and passivation
	External protective processing:	Pickling and passivation
	Typology:	Corrugated fixed tube with high exchange surface
	Operation (P max. / T max.):	6 bar / 95°C
Puffer	Material:	S 235 Jr
	Internal protective processing:	Rough
	External protective processing:	Painting with anti rust and industrial glaze
	Operation (P max. / T max.):	3 bar / 95°C
Exchanger	Material:	S 235 Jr
	Internal protective processing:	Rough
	External protective processing:	Rough
	Operation (P max. / T max.):	12 bar / 95°C
General characteristics	Capacity:	300 - 400 Lt
	Warranty:	5 years
	Insulation:	- Rigid polyurethane + pvc: <i>Fire resistance class B3 (DIN 4102)</i> - PED 14/68/UE Art. 4 Par. 3 (Pressure equipment)
	Reference legislation:	- M.D. of 6th April 2004 N.174 (suitability of materials in contact with SHW) - Directive 2009/125/CE (Energy related Products)

FITTINGS  
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Electronic control unit



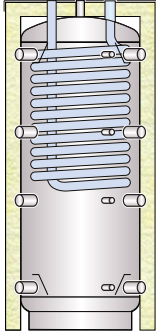
Electrical resistance 1 1/2 connection



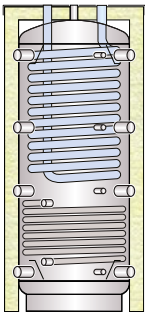
Thermostat



Thermometer

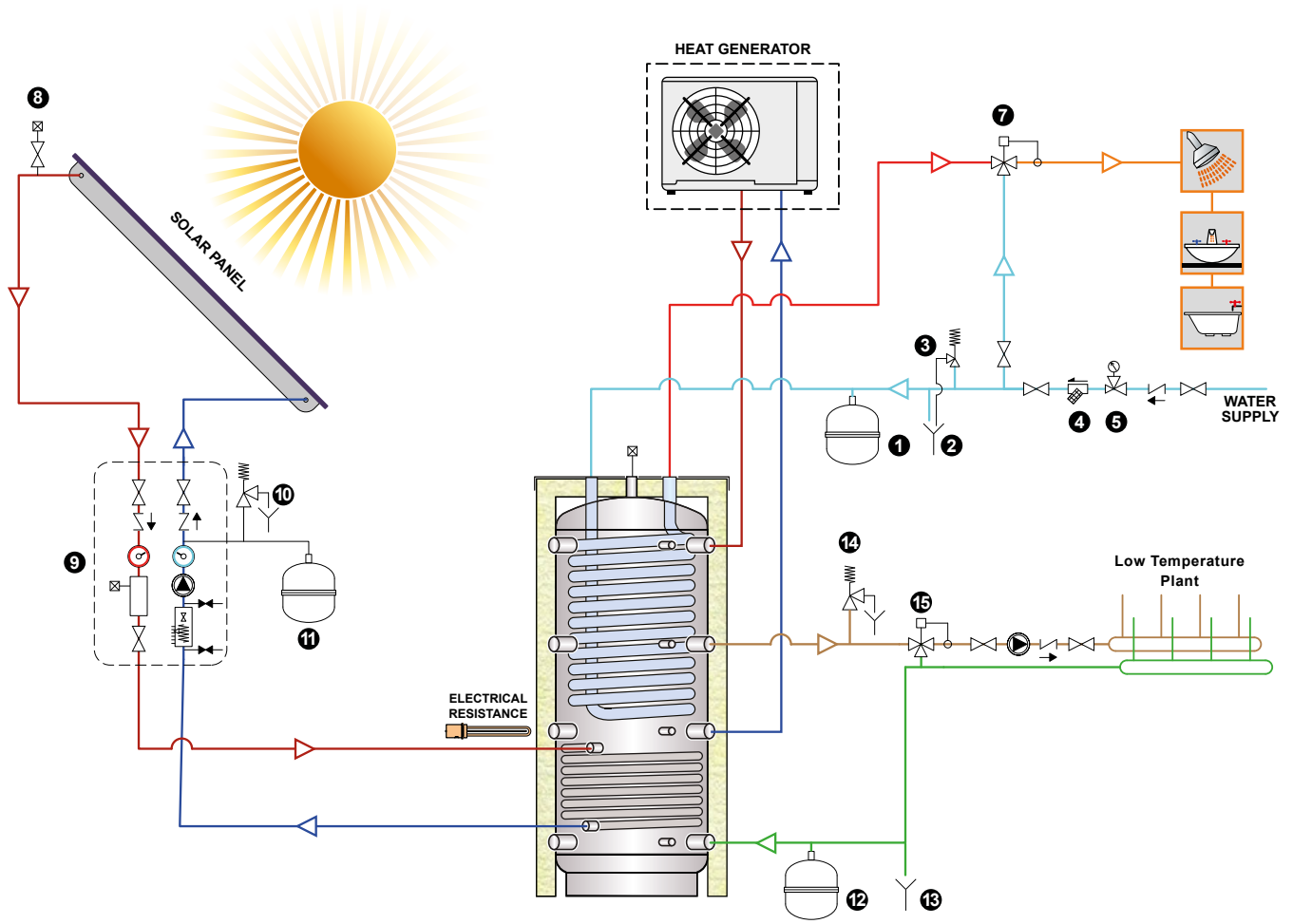


<b>SM0W - Smartwarm combined thermal accumulator</b>		
Insulated with rigid Polyurethane 50 mm + pvc		
Code	ErP	€
SM0W 00300 R	C	-
SM0W 00400 R	C	-



<b>SM1W - Smartwarm combined thermal accumulator with a coil</b>		
Insulated with rigid Polyurethane 50 mm + pvc		
Code	ErP	€
SM1W 00300 R	C	-
SM1W 00400 R	C	-

Caution: Indicative Schematic diagram, not substitutive for project work.



- LEGEND**
- 1. Sanitary expansion vessel
  - 2. Sanitary drain
  - 3. Sanitary safety valve (6 bar)
  - 4. Dirt filter
  - 5. Pressure reducer
  - 7. Sanitary mixing valve
  - 8. Vent with shut-off
  - 9. Solar power managing module
  - 10. Solar power safety unit (6 bar)
  - 11. Solar expansion vessel
  - 12. Heating system expansion tank
  - 13. Discharge system
  - 14. Heating system safety valve
  - 15. Mixing for low-temperature system

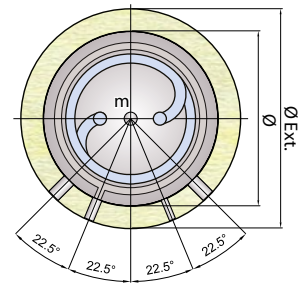
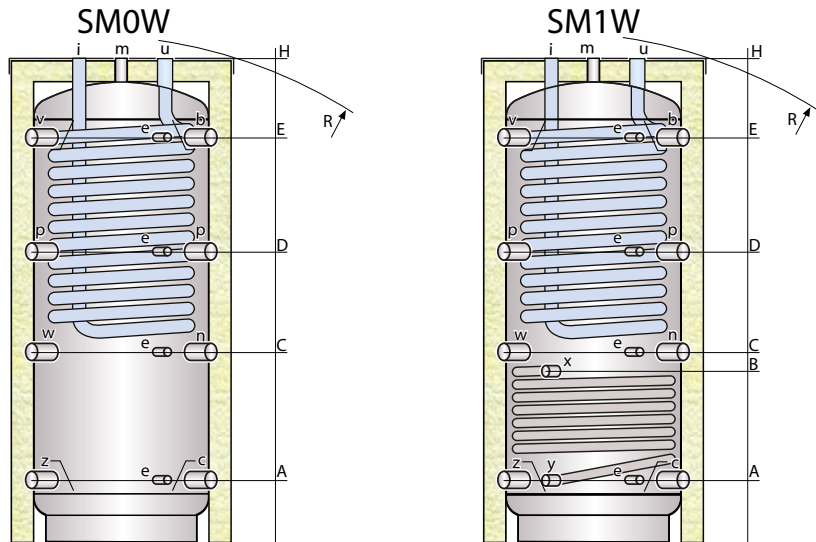
Model	FE spiral lower exchanger				
	Sq.m. (Lt)	Power (kW)			
		$\Delta T^*=10^\circ\text{C}$	$\Delta T^*=15^\circ\text{C}$	$\Delta T^*=20^\circ\text{C}$	$\Delta T^*=25^\circ\text{C}$
SM_W 00300R	1,2 (8,5)	7,7	11,6	15,4	19,3
SM_W 00400R	1,6 (11,4)	10,2	15,3	20,4	25,5

Model	sanitary exchanger			
	Sq.m. (Lt)	Power* (kW)	Flow in continuous SHW * (Lt/h)	Efficiency coefficient (DIN 4708) NL*
SM_W 00300R	3,6 (18,0)	32,4	796	1,6
SM_W 00400R	3,6 (18,0)	32,4	796	2,3

\* Puffer average temperature: 65° C - Temperature sanitary inlet: 10° C – sanitary outlet temperature: 45° C

For the purposes of the Directive (ErP) 2009/125 / EC Regulation N° 812/2013 and N° 814/2013 the results of the energy measurements are given on page 235

- b heat source flow
- c heat source return
- e thermometer - probe
- i sanitary cold water inlet
- m vent puffer
- n heating system return
- p service connection
- u Sanitary Hot Water output
- v heating system flow
- w preparation for electrical resistance,
- x solar flow
- y solar return
- z heating flow at low temperature



Model	Dimensions (mm)				Exchanger (Sq.m.) Lower	Inox sanitary exchanger (Sq.m.)	Weight SM1W (Kg)
	Ø	H	Ø Ext*	R			
SM_W 00300R	500	1595	600	1720	1,20	3,6	70
SM_W 00400R	600	1610	700	1770	1,60	3,6	104

\* Non-removable insulation

Model	Dimensions (mm)					Connections (gas)			
	A	B	C	D	E	xy	em	iu	bcnpvwz
SM_W 00300R	215	490	580	1080	1350	1"	1/2"	1"1/4	1"1/2
SM_W 00400R	230	550	610	1090	1365	1"	1/2"	1"1/4	1"1/2