

ELECTRONIC SCALE PREVENTER

COMAP 5106 HOUSEHOLD PROTECTION



MAJOR ADVANTAGES of electronic scale preventer

- Removes existing scaling by gradually decomposing it.
- Prevents further scaling deposits, thus protecting the entire system, including pipes.
- Helps remove deposits due to water evaporation (by wiping off, not by abrasion) on sinks, washbasins and taps, etc.
- Allows water heaters to remain efficient and maintain output performance.
- The water, without being softened, is not chemically treated in any way and conserves its original mineral content. It remains drinkable and conserves its original calcium carbonate and mineral salts content that is beneficial for health.
- The scale preventer doesn't use salts and therefore doesn't release sodium into the water. No servicing or consumable ingredients are required.
- Operation does not involve any increase in water consumption.
- Low electricity consumption: 4.5 kW per month, i.e. less than one euro per month.
- Easy to install on new or existing pipe systems.
- Compact.

SOFT TREATMENT, NO CHEMICAL SUBSTANCES AND NO SERVICING.

APPLICATIONS

- Household cold water systems.
- Household hot water systems.



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OPERATING PRINCIPLE

The COMAP 5106 electronic scaling inhibitor* emits an induced pulsed electrical signal that precipitates out the Ca^{2+} and CO_3^{2-} ions present in the water, in the form of calcium carbonate crystals $CaCO_3$. The precipitated crystals grow from a few nm to a few μm and the COMAP 5106 thus neutralises the calcium by destroying its depositing capability.

The electronic scaling inhibitor isn't a water softener. It doesn't change the balanced composition of the water, doesn't remove any mineral salts and therefore doesn't change its drinking qualities. The water is neither softened (no excess sodium or insufficient calcium) nor made aggressive.

* Inhibitor: that which tends to stop or retard a motion, a function or a phenomenon.

TECHNICAL CHARACTERISTICS

- Service pressure: from 0 to 4 bars (relative).
- Max flow: 3000 l/h.
- Fuse: 63 mA timed.
- Electrical rating: max 10 VA.
- Waterproofing: IP 31.
- Water temperature range: +5 to +70 °C.
- Connection to single phase mains supply 230 V AC 50/60 Hz + earth.
- Protected against mains overvoltages.
- Descaling treatment power selector:
 - position 1 for water with TH < 25 °F,
 - position 2 for water with TH ≥ 25 °F.
- Water hardness accepted up to 60 °F or 34 °HD.
- Connections: 3/4" or 1" depending on model.
- No pressure drop.
- Elements in contact with water in special grade steel.

INSTALLATION & MAINTENANCE

- Easy installation. The unit is connected on the incoming water supply or on the return from the water heater loop. Horizontal or vertical installation; water transit in either direction.
- Check that the unit and pipes are properly earthed.

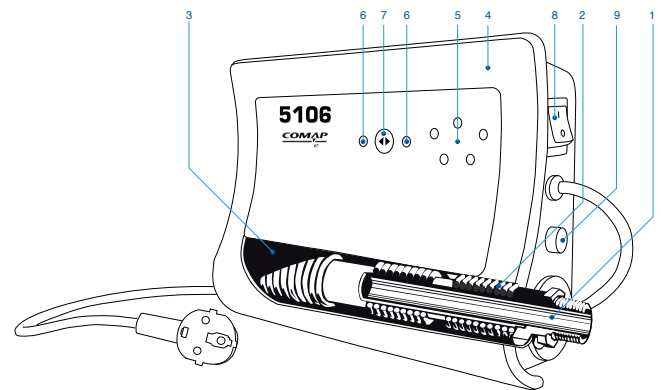
- PROCESS UTILISATION LIMIT PARAMETERS: iron (0.5 mg/l), chlorides (100 mg/l), phosphates (5 mg/l), nitrates (40 mg/l), sulphates (100 mg/l), total dissolved salts (4 g/l), max. total hardness (60 °F).

No servicing required.

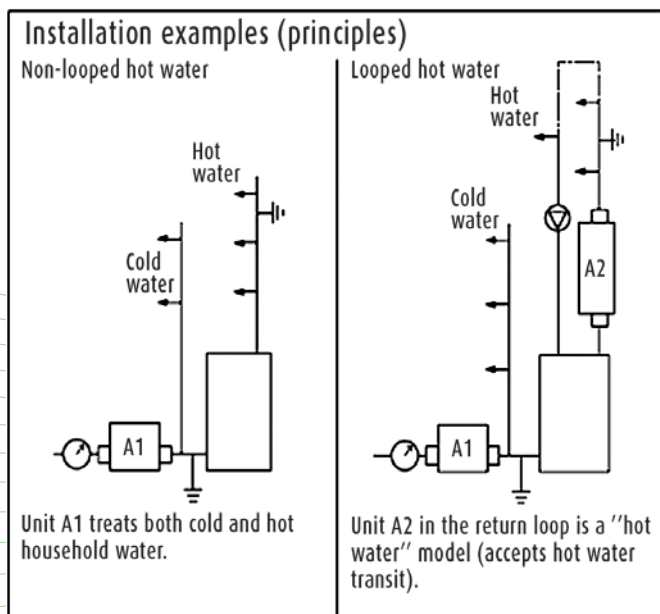
If a filter is installed upstream of the descaling unit, the cartridge should be changed at least once per year.

GUARANTEE

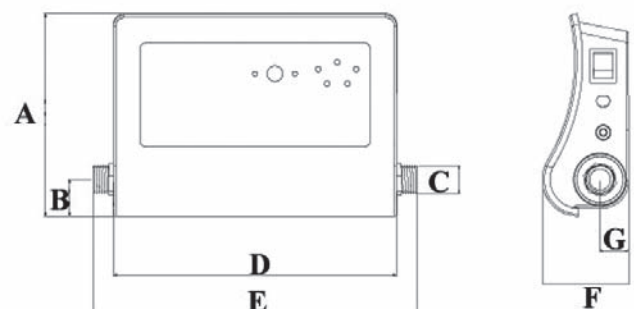
Three years parts and labour – excluding transport.



- 1- Polythene treatment chamber with brass unions
- 2- Triple winding for maximum treatment efficiency
- 3- Insulating resin
- 4- ABS case
- 5- Signal indicator lights
- 6- Signal setting indicator lights
- 7- Treatment signal control button, as a function of water hardness (in French *)
- 8- On-Off button
- 9- Fuse T63mA (5x20)



Note: Hot water loops are treated in order to limit treatment losses due to CO_2 degassing in the loops.



Part	A*	B*	C	D*	E*	F*	G*
Q311002001	193	30	3/4"	270	320	83	27
Q311003001			1"				

* Dimensions in mm.