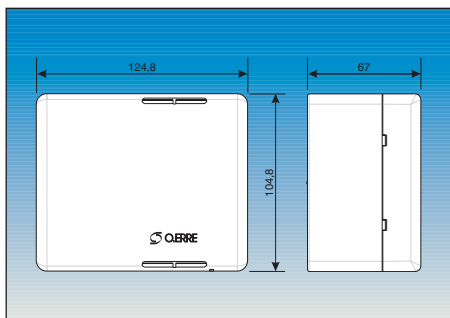




HELICO CENTRIFUGAL EXTRACTOR FANS SILENTE SELV 12V

- Can be installed in safety zones 1 and 2 as established by the IEC 364- 7 where risk of electrical contact is high.
- 220 ÷ 240/12V~ transformer, in accordance with IEC 742 class II, IP22 protected with safety thermostat.
- The very low power voltage of the Silente 12 Volt, (SELV - Safety Extra Low Voltage), with the use of a special transformer supplied with the fan, permits installation even in proximity of the bath tub as the eventual direct contact with the fan does not pose any threat of electrical danger.



- The transformer can be even installed in zone 3. (see page 19)

IEC 364-7 standard, on Part 7 contains a section dedicated to “Locations containing a bath tub or shower basin” where, says the text “ the risk of electric shock is increased by a reduction in body resistance and contact of the body with earth potential”.

In order to avoid this high risk of electric shock the standard classifies in the room different zones and for each zone prescribes different installation limits of electrical components.

The standard describes the different zones as follows:

- Zone 0: is the interior of the bath tub or shower basin.
- Zone 1: is limited by the vertical plane circumscribing the bath tub or shower basin, by the floor and the horizontal plane 2,25 m. above the floor.
- Zone 2: is limited by the vertical plane external to Zone 1 and the parallel vertical plane 0,60 m. external to Zone 1, by floor and the horizontal plane 2,25 m. above the floor.
- Zone 3: is limited by the vertical plane external to Zone 2 and the parallel vertical plane 2,40 m. external to Zone 2, by floor and the horizontal plane 2,25 m. above the floor.

For each zone the standard makes a list of the prescriptions for the electrical equipment that may be or may not be installed as follows:

- In zone 0, only electrical appliances specially intended for use in a bath tub are permitted.
- In zone 1, only water heaters or **SELV** type appliances (Safety Extra Low Voltage) may be installed.
- In zone 2 only water heaters, and Class II luminaires or SELV type appliances may be installed.
- In zone 3 there are no limits for installation of electrical equipment, but anyway the eventual “ Switchgear and Controlgear” must be as follows: supplied individually by an isolating transformer, supplied by **SELV**, protected by a residual current protective device with a residual operating current not exceeding 0,03 A.

Hence, in zone 1 or 2 or 3 only a 12 V **SELV** fan should be installed.

Installation example of SELV Fan.

