



# EVAPORATORS

## series M 3100 C

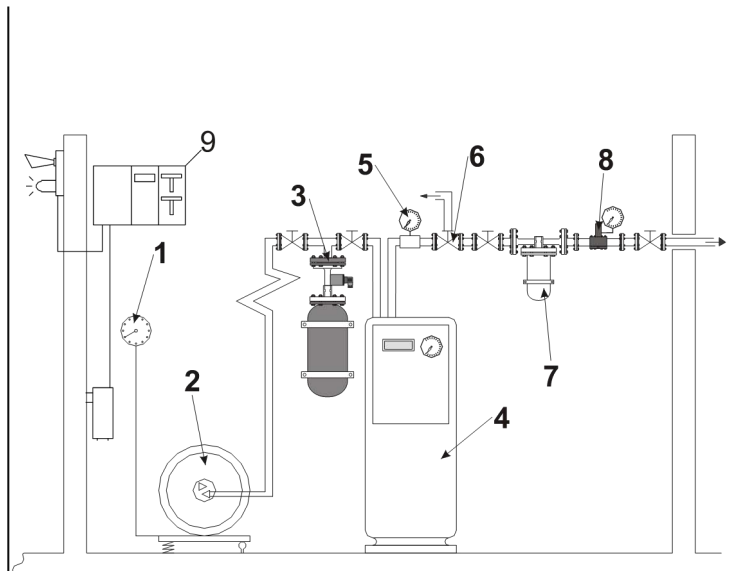
### GENERAL

Evaporators series M 3100 C are designed to heat liquid chlorine taken from storage containers and turn it to gas chlorine.

They are specially suitable for installations where large quantities of gas are required directly from gas drums. Evaporation is achieved mainly by electric heating. The unit consists of regulation, control and safety devices as well as the separate control panel. All parts except the control panel are built-in the fibre glass reinforced polyester cabinet.

### OPERATION PRINCIPLE

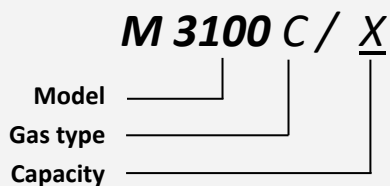
The spiral tube is immersed into an hot water bath of 70° C. The thermostat-regulated heating creates a constant temperature. In case of temperature drop (below 60°C) or temperature rise (above 80°C), the alarm is activated. The liquid gas under pressure enters the evaporator on the top part, where it evaporates in the progressive heating zone and then leaves it as a dry saturated gas, also on the top part. In order to protect the installations (up to the pressure reducing valve) from re-liquefaction of the gas, the evaporator is designed generously, considering the gas outlet temperature. In liquid side of the system, the bursting disk with connected expansion chamber ensures that the highest admissible operating pressure is not exceeded. This chamber is dimensioned in a way that transforms the overpressure after the bursting of the bursting disc into the normal operating pressure. On the gas side a pressure relief valve must be installed after a bursting disc and outlet must be connected to the neutralization device. A contact manometer indicates too high or to low gas pressure. Water level in a thermal bath is strictly monitored and water must be refilled if the level drops under the prescribed level. All exposed parts are made of materials or material combinations which are absolutely resistant to the media that needs to be evaporated, and which are proven to resist many years of use.



#### LEGEND:

1. Scale
2. Ton Container
3. Bursting membrane with expansion chamber
4. Evaporator
5. Pressure gauge
6. Exhaust pressure safety valve
7. Chlorine gas filter
8. Pressure reducing valve
9. Chlorine gas Leak detector

ORDER CODES



**OPTIONS:**

- Gas type: "C" - Cl<sub>2</sub>
- Capacity\*: is chosen from technical data table below and the suitable number is written into the ordering code

TECHNICAL DATA



**Capacity (X)\*:**

- 50 up to 50 kg/h
- 100 up to 100 kg/h
- 150 up to 150 kg/h
- 200 up to 200 kg/h

**Higher capacities on request!**

**Evaporator capacity :** 30 - 200 kg/h

**Power Supply :** 400 V 50-60Hz

**Consumption :** 9 kW—18kW

**Operating pressure :**

Cl<sub>2</sub> : max 16 bar    H<sub>2</sub>O : max 8 bar

**Test pressure:** 20 bar

**Construction weight :** cca 450kg

**Temperature :**

Operating : 70°C

Max. 80°C - Min. 60°C

**Connections**

**Inlet Gas:** DN15 NP40

**Outlet Gas:** DN20 NP40

**Inlet Water:** R3/4"

**Outlet Water:** R3/4"

**Other connections on request!**

MEASURE DRAWINGS

