

INSTALLATION GUIDE & TECHNICAL DATA SHEET

**GAS COMPANY
INSTALLATION**

**TRIVENTEK EQUIPMENT - PE80 to RE80
Installation checklist**



CO2 supply specification

Amongst other things the following issues are to be considered before/during and after an installation of a complete dry ice production facility

- CO₂ tank size
- Quality of the LCO₂
- Tank pressure
- Tank design
(*dip or drain pipeline*)
- Choice of pipe material
Must be approved for CO₂ use
- Pipe dimensions
- Pipe length
- Pipeline must be climbing upwards from the tank to the production machinery
- Gas bleeding for CO₂
- Pressure drop in the pipeline
- Flow velocity
- Insulation material and quality
- Fittings and valves must be approved for CO₂ use
- The connection to the PE80 must be flexible

PE80 specification

- Powers supply: 3x400/50Hz 16A/3P+E CEE2-215
- Other voltages/Hz on request
- Power consumption: 2x3 kW
- Max. current: 2x6,5 Amps
- Required start-up Amps should be calculated as 5 to 6 times Amp usage.
- Dimensions (WxDxH): 600x1000x1560 mm
- Weight: 203 kg.
- Pressure range: 15-18 bar
- Production rate: 80 kg/h
- Max ambient temperature: 40°C
- LCO₂ to dry ice conversion without recovery unit: 2.5:1 producing std. 3,0 mm pellets
- Lubrication oil: Castrol Optileb GT 460
(*approved for the food industry*)

RE80 specification

- Powers supply: 3x400V/50Hz 63A/3P+E
- Other voltages/Hz on request
- Power consumption: 24 kW
- Max. current: 41 Amps
- Operation current: 28 Amps
- Required start-up Amps should be calculated as 5 to 6 times Amp usage.
- Dimensions (WxDxH): 1111x1911x1567 mm
- Weight: 1024 kg
- Max ambient temperature: 32°C
- Max. hose length between PE80 and RE80: 6 m.
- Airflow: 8500 m³/h
- Total heat rejection: 18 kW
- Protection against recycling discharge air required
- Protection against direct sun, rain and snow
- Protection against dust, dirt and impurities
- LCO₂ to dry ice conversion with recovery unit: 1.2:1 (use insulated cover on dry ice box)
- Oil type: Castrol Cygnus PAO 68
- CO₂ monitor

Cooling system:

- Bitzer LH104/4TCS8.2Y
- Refrigerant type R404A
- Refrigerant charge approx. 10 kg
- High and low pressure protection
- Fanspeed control (1 fan)
- Refrigerant safety valve