



1	Dryer service panel	5	Condensate drain
2	Service panel	6	Manual drain
3	Supply cable	7	Automatic drain
4	Minimum area to be reserved for servicing purposes		

LES03-LES07

Recommendations

- Install the compressor on a level horizontal floor, suitable for taking the weight of the compressor. The location must be frost-free and preferably low dust location. The compressor unit must be installed on a level floor.
- Delivery pipe. The pressure drop in the delivery pipe can be calculated from:
 - $\Delta p = (L \times 450 \times Q_c^{1.85}) / (d^5 \times P)$, with
 - d = inner diameter of the pipe in mm
 - Δp = pressure drop in bar (recommended maximum: 0.1 bar (1.5 psi))
 - L = length of the pipe in m
 - P = absolute pressure at the compressor outlet in bar
 - Q_c = free air delivery of the compressor in l/s
- Ventilation: the inlet grids and ventilation fan should be installed in such a way that any recirculation of cooling air to the compressor is avoided. The maximum air velocity through the grids is 5 m/s (16.5 ft/s). The maximum allowable pressure drop over the cooling air ducts is 30 Pa (0.12 in wc). The maximum air temperature at the compressor intake opening is 40°C (104°F).
Take care that the temperature of the ambient air and the cooling air may never be lower than 0°C (32°F) to avoid freezing of condensate.
The required ventilation capacity to limit the compressor room temperature can be calculated from:
 - $Q_v = 1.06 N/\Delta t$ for compressors without integrated dryer.
 - $Q_v = (1.06 N + 0.2)/\Delta t$ for compressors with integrated dryer.
 with
 - Q_v = required ventilation capacity in m³/s
 - N = shaft input of the compressor in kW
 - Δt = temperature increase in the compressor room in °C
- Air receiver: an optional air receiver can be necessary to limit the cycle frequency. Recommended maximum is 20 starts per hour.
- Optional filters can be installed in the pressure line downstream the air outlet valve, e.g.:
 - A filter for general purpose filtration. The filter traps solid particles down to 1 micron.
 - A filter for filtration down to 0.01 micron. This filter must always be installed downstream of the general purpose filter.
- Control cubicle with monitoring panel.
- Compressor and dryer cooling air outlet
- Compressor cooling air inlet
- Refrigerant dryer cooling air inlet
- Connect condensate drain outlet to a sewer. It is recommended to provide a funnel to allow visual inspection of the condensate flow. If the condensate piping has been led outside the compressor room where it may be exposed to freezing temperatures, the piping must be insulated. The condensate drain pipe from the compressor to the sewer must not dip into the water of the sewer.
- All piping to be connected free of stress.

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