



1. Compressor unit : The unit should be installed on a level floor capable of taking the weight of the compressor.
2. Compressed air outlet valve.
3. Delivery pipe :
 The max . total pipe length can be calculated from
$$L = \frac{\Delta P \times d^5 \times P}{450 \times Q_c^{1.85}}$$

$$L = \text{Length of the pipe (m)}$$

$$\Delta P = \text{Max. allowable pressure drop (recommended 0.1 bar (1.5psi))}$$

$$d = \text{Inner diameter of the pipe (mm)}$$

$$P = \text{Absolute pressure at compressor outlet (bar)}$$

$$Q_c = \text{Free air delivery of the compressor (l/s)}$$
4. Ventilation :
 The inlet grid(s) and ventilation fan should be installed in such a way that any recirculation of cooling air to the inlet grating of the compressor is avoided.
 The air velocity to the grid(s) has to be limited to 5 m/s. The maximum air temperature at compressor intake opening is 46 °C, min 0 °C.
 Alternative 1 and 3 :
 The required ventilation to limit the compressor room temperature can be calculated from :

$$Q_v = 1.19 N / \Delta T$$

$$Q_v = \text{Required cooling air flow (m}^3/\text{s)}$$

$$N = \text{Nominal motor power (kW)}$$

$$\Delta T = \text{Temperature increase in the compressor room. (°C)}$$
 Alternative 2 and 4 :
 The max. pressure drop over additional AIR/OIL coolers ("10") ducting should be limited to 10 Pa for standard fans.
5. Drain pipes to drain collector must not dip into the water. For draining of pure condensate water, install an oil / water separator. Consult Atlas Copco.
6. Control cubicle with monitoring panel.
7. Power supply cable to be installed by a qualified electrician. For the right cable size, see Atlas Copco technical data. In case of IT network, consult Atlas Copco.
 To preserve the ingress protection rating of the electric cubicle, it is absolutely necessary to use a proper cable gland when connecting the supply cable to the compressor.
8. Filter type DD for general purpose filtration (particle removal down to 1 micron with a maximum oil carry over of 0.5 ppm).
 A high efficiency PD filter may be installed downstream the DD filter (particle removal down to 0.01 micron and max. oil carry over of 0.01ppm)
 Should oil vapours and odours be undesirable, a QD active carbon filter should be installed after the PD filter.
 It is recommended to install by-pass pipes over each filter together with ball valves in order to isolate the filters during service operations, without interrupting the compressed air delivery.
9. Air receiver: A safety valve need to be foreseen on the air receiver.
10. Cooling air outlet grating of AIR/OIL coolers.
11. Ceiling height with ducting (h);
 Ceiling should be considered with a minimum straight length duct from the hot air exhaust and then a 90° bend or main duct header according to the pressure differential limitations given.

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