

OIL SEPARATOR (UL COMPLIANT) FUNDAMENTAL COMPONENT AT THE SERVICE OF THE COMPRESSOR

Why install an oil separator?

Correct lubrication is one of the fundamental aspects to ensure long life of the compressor.

Oil separators ensure that the compressor lubricating oil is fed back directly to the crankcase.

This prevents the oil circulating with the refrigerant throughout the circuit, improving the performance of the system.

How does it work?

The refrigerant vapour (mixed with oil) enters the oil separator. Due to the expansion, the fluid separates from the oil that falls towards the bottom of the tank.

The lighter fluid rises towards the outlet connection.

The oil accumulated at the bottom of the tank is drawn from the dedicated connection.

A ball float regulates the flow.

A permanent magnet attracts any metal particles that could obstruct the oil passage.

Installation

The operation of the oil separator, as described above, is very simple. Castel has developed a product that is just as simple to install.

Usually, these products are made with steel connections, Castel has developed a **new model with copper connections**, this makes the installation operations easier.

In this way the copper pipes of the system, are brazed into the copper connections of the separator.

Brazing is simpler, faster, safer and cheaper.

The version with steel connections is always available as a standard version, while the version with copper connections is on request only.

Applications

The oil that leaves the compressor through the discharge line can be recovered immediately through the installation of an

oil separator, which allows the oil to be separated from the refrigerant and returned to the compressor crankcase via an oil reservoir and oil level regulator.

If you are interested in learning more about the oil separator, read the tips & tricks that Castel technicians recommend:

- the oil separators must be installed in a vertical position.
- insert a **check valve** to prevent liquid refrigerant flowing back into the separator.
- the inlet diameter of the separator must not be smaller than the discharge line from the compressor; this avoids turbulence and noise.
- to check it's functioning, install a **liquid indicator** in the oil return line to the compressor.
- install a **strainer** to protect the system against impurities.
- the installation of an **oil level regulator** guarantees the correct supply of oil to the compressor crankcase.

Technical data

PS = 45 bar

MWP = 600 psi (according to **UL approval**)

TS = -10 +130 °C

The range of oil separators with **steel connections** is always available and now also **UL approved**.

Castel proposes a wide range of products suitable for oil management control, download the brand new 2022 General Catalogue from www.castel.it

