



## **AIR-CONDITIONING FOR AUTOMOBILES**

To cool the external air refrigerating compressor based systems are exclusively used.

The compressor, activated by the engine, compresses the refrigerant which consequently warms up; in the condenser the working fluid is cooled until it reaches the liquid phase.

The cooling is obtained by giving heat to the exterior in the zone around the compressor.

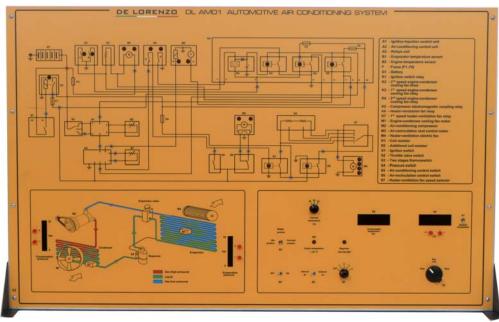
The cooled fluid expands in the expansion valve and in the evaporator and is transformed to gas.

The heat necessary for such transformation is subtracted from the entering cool air.

The simulator analyzes all the phases of the refrigeration cycle.

## In particular:

- Relations between temperature and pressure in the refrigerant
- Operation of the compressor
- Operation of the condenser
- Pressure switches
- Temperature regulation.



DL AM01