REFRIGERANT LOADING SYSTEM



With the loading system refrigerating gas can be replaced in refrigeration systems. The unit carries out a vacuum cycle followed by a loading cycle: it automatically checks vacuum signalling even small leaks in the system then quickly loads the refrigerant without risks of mistakes. Thanks to its the small dimensions and the easiness to move it, it is particularly suitable for house air conditioners, vending machines, house and office refrigerators and dehumidifiers. The system is equipped with a protection system against overpressure and digital scales to check gas inside the circuit.

CONSTRUCTION DIAGRAM OF THE SYSTEM	
Gas cylinder	Air conditioner

The system is designed for three NC solenoid valves: (1) for loading the refrigerant, (2) on the vacuum line, (3) in the intake line of the vacuum pump (vacuum test). In the vacuum cycle solenoid valves 2 & 3 open and the pump takes in remnant gases from the air conditioner and lets them into a disposal container. Once the vacuum cycle is over, solenoid valves 2 & 3 close, the pump stops and solenoid valve 1 opens. Now the loading cycle begins and the refrigerant flows from the cylinder into the circuit of the air conditioner under the effect of vacuum. Thanks to the electronic scales the system will load the exact quantity of gas that had been previously taken.

SOLENOID VALVE APPLICATION

SOLENOID VALVES USED

TYPE D263

2/2 way NC direct acting solenoid valve with series 7 coils



WE RECOMMEND:

The product we have indicated is performing in this application because of its robust and compact construction. The most suitable seal material is FKM, the 3 (mm) orifice allows a quick vacuum phase. **Important:** in case of applications with vacuum the valves should be positioned with the connection from where the medium usually flows out in the direction of the vacuum generating pump.