

OCS COLD had designed a **CO₂ PUMPED LIQUID ACCUMULATOR/RECEIVER** with the use of a series of calculation software, which keep in consideration a series of parameters and thermodynamic variables that allow to select the component and calculate the performances with high accuracy.

Product Feature:

This pumped liquid receiver / accumulator has the function as accumulator tank for the liquid CO₂ that feeds the pumps and also, as a liquid separator, to accumulate the excess of liquid coming back from the flooded evaporators in order to allow the suction of only saturated CO₂ vapors to the compressors.



- normalized and highly resilient carbon steels.
- welding connections and the manufacturing features customized according customer's needs.
- IN and OUT connections calculated and designed in order to optimize the performances of the refrigerating system, based on optimal velocities and with very low pressure drops, with particular attention to the protection of the compressors from any return of liquid on the suction line. Gas and liquid result perfectly separated inside the pumped receiver.
- Nr. 3 internal heat exchangers of adequate length, configuration and thickness which are used by the backup refrigeration Rack, that maintains the internal pressure at very low values during the time in which the compressors are in standby. The internal exchangers work as evaporators in parallel. They have been designed in order to have very low pressure drops and adequate exchange surfaces, and sized to be able to manage even very high thermal loads during standstill.
- Inside of the receiver are installed small little pipes with calibrated holes mounted at a proper height where the oil has the tendency to accumulate. Their sizing selection has taken into account the difference of density between the refrigerant at subcritical temperature and the oil so, thanks to these pipes, is possible to reach the recovery of an high percentage of oil and send it to the recovery heat exchangers. This takes to minimize the use of the oil in the oil receiver, and ensure the functionality in safe conditions for the compressors of the refrigerating system.
- The component can be supplied with a level cylinder with capacitive device, in order to monitor the liquid level, and its floating movements, during the various operating conditions of the system.

Specifications:

VOLUME	From 750 L up to 5500 L
MAXIMUM WORKING PRESSURE	PS 30 – 45 – 60 BAR
TEMPERATURE	Till TS = -46°C / + 100°C

Contac OCS COLD srl technical department for more information and/or support for the selection of right component