

OPTIMA-R744-BUS

FULLY AUTOMATIC UNIT FOR LARGE-CAPACITY R744 (CO₂) AIR-CONDITIONING SYSTEMS



TECHNOLOGY AND SIMPLICITY FOR LARGE R744 (CO₂) SYSTEMS

OPTIMA-R744-BUS is the unit designed and manufactured by WIGAM for the new generation of large-capacity R744 (CO₂) air conditioning systems increasingly found in the electric traction **Bus and Rail industry**.

OPTIMA-R744-BUS, works completely automatically and guarantees a total safety during the complete process.

The 3 independent scales with a resolution of 1 g, for the handling of oils and additives, allow a safe and reliable operation.

The WIGAM solution of channelled discharge offers a higher safety in the working area. By means of the special hose, the discharge can be made directly to the outside or indirectly via the workshop vacuum cleaner.

Thanks to the 7" touch screen display, the ease of use is fully comparable to the one of OPTIMA Series units for refrigerants such as R134a or R1234yf. The optional Wi-Fi Kit also allows interconnection to the WIGAM Service Portal with the resulting countless potentials.



AUTOMATIC MANAGEMENT OF ALL PHASES



GRAPHIC DATABASE BY BRAND



WIGAM SERVICE PORTAL (OPTIONAL)



SIMPLE HANDLING



Thanks to the 7" TOUCH SCREEN DISPLAY, the ease of use is fully comparable to that of the OPTIMA Series units.

Technical features

Refrigerants	R744 (CO ₂)
Discharge speed	≈ 300 g/min
Pipes (LOW/HIGH)	5 m with quick couplings
Discharge piping	10 m
Charging accuracy	+/- 15 g
Pump swept volume	230 l/min
Bottle compatibility	40 l double tap
Refrigerant scale resolution	5 g
Oil/UV scale resolution	1 g
Dimensions (without packaging)	60 x 92 x 119 cm
Weight (without packaging)	85 kg

Quick and easy CO₂ cylinder replacement.



Ready for connection via WI-FI KIT (OPTIONAL).

MAIN FUNCTIONS

- Ideal for large-capacity R744 (CO₂) air conditioning systems of the bus and rail industry.
- HYBRID-READY: AUTO-CLEAN function for hybrid and electric vehicles.
- 7" Touch screen display, intuitive and user-friendly.
- EQUIPMENT OPERATION LIGHT INDICATOR.
- Fully automatic unit:
 - Automatic LOW and HIGH valves.
 - Automatic discharge with quantification.
 - Automatic Vacuum/Vacuum Test.
 - Automatic oil discharge (with scale).
 - Automatic charge of PAG and POE oils and UV.
 - Automatic refrigerant charge.
 - Automatic personalized cycle (discharge-vacuum-charge).
- 5 m flexible hoses with quick couplers.
- 10 m hose for channelled discharge.
- Easy handling thanks to two rear handles.
- Quick and easy CO₂ cylinder replacement.
- Automatic alarm for maintenance: the unit warns when it is necessary to change the oil in the vacuum pump.
- Continuous check of the inner pressure of the cylinder.
- Auto-test of the internal circuit: the unit checks it every 20 days.
- Pressure test with refrigerant before the charging phase.
- Pressure test with nitrogen or AZOIDRO (N₂+H₂).
- Built-in ambient temperature probe.
- Automatic anti-shock system of the refrigerant scale.
- 3 independent scales for oils and additives.
- Automatic compensation of the service hoses length.
- Standard thermal printer.
- Customisable paper report with data of the workshop/operator/vehicle.
- Database that can be updated via USB memory.
- Unit ready for interconnection through Wi-Fi kit (Optional).
- Wigam Service Portal, accessible through PC and smartphone, form management, information exchange and reports (Wi-Fi kit necessary).

Code	Model	Description
13003105	OPTIMA-R744-BUS	R744 BUS automatic unit with printer
14025171	K-WIFI	Wi-Fi kit