



**CLIMA LINE**  
**CLIMA-1234**

**THE NEW STATION FOR  
THE NEW TECHNOLOGY**

**EVERYTHING UNDER CONTROL**

# CLIMA-1234 THE COLD KEEPER

Rightly ranking among the reference manufacturers of A/C system Recharge Stations for the industry, Brain Bee keeps its vocation of pioneer company, always looking for innovative solutions aimed at facilitating the work of garage professionals.



## **CLIMA-1234 BRAIN BEE TECHNOLOGY**

Brain Bee has always been in the forefront of the automotive industry ready to take up the challenges launched by this sector; for this reason the company is now working on research and development projects on the technology related to the Recharge Stations for A/C systems using the R-1234-yf Gas, the refrigerant which will replace the currently used R-134a coolant in the circuits of the new vehicles, as required by the European Directive 2006/40/EC.

Thanks to the company commitment within International bodies (such as SAE), the cooperation with the major car manufacturers, the performance of tests focusing on construction specifications and dedicated corporate decisions taken during the 2008-2009 period, Brain Bee has been the first company to launch a certified series of A/C RECHARGE STATIONS using the 'new' gas, and to patent its own technology.

## **EXCELLENT PERFORMANCE. MINIMUM ENVIRONMENTAL IMPACT**

The new 1234 technology was conceived starting from the analysis of the characteristics of the top performer CLIMA-9000, in the aim of exploiting its strengths to make the most of their operating advantages. The result is the Ultramatic Station, boasting great performance, featuring an easy and quick system for the setup of the working cycle as well as total control on the touch screen display.

By interpreting the reasons and the spirit of the European regulation which led to the adoption of the new gas, the effort of Brain Bee was aimed at minimizing any source of gas emission during the system recharge to be able to comply to the required thresholds.

## **EXTREME CHARGE ACCURACY. GUARANTEED PERFORMANCE.**

The high cost of the R-1234yf gas sets a challenge connected to the need of optimizing the recovered amounts of gas to be re-injected into the vehicle in order to avoid waste. Brain Bee has been working also on the identification of the accurate amounts of gas to be charged. Such accuracy is one of the main feature of the new Stations of the BRAIN BEE 1234 line.

In particular, thanks to the volumetric injection technology (CLIMA 1234P), deviation to the selected rated values drops below 1%, thus allowing a remarkably efficient use of the gas and hence total costs control.



## GRAPHIC LCD DISPLAY – TOUCH SCREEN

The heart of **CLIMA-1234** is its LCD display, the only user-interface element. Simple and intuitive, the display shows a complete menu that can be activated through a few quick touch-screen operations. Additionally, the displays' great brightness ensures that parameters are easily read, whatever the lighting conditions.



## INFORMATION ALWAYS AVAILABLE

The integrated printer enables the emission of a document acknowledging the successful results of the operations. It can be customised by inserting records of the garage performing the intervention.



## EASY-SERVICE DESIGN

Accurate design of **CLIMA-1234** has taken account of all internal elements subject to the device's ordinary maintenance, by optimising their positioning so as to facilitate access to them for their replacement. Recharge hoses have also been equipped with external quick couplings so as to avoid opening the tool in case of replacement.



## SPECIAL FUNCTIONS

- > **MULTIPASS** enables a further closed-circuit filtering of the recovered cooling liquid
- > **VESSEL HEATER**
- > **FLUSHING** with integrated solenoid valve
- > **HYBRID FUNCTION** thanks to this "reset" function, residual PAG oil within the machine can be completely replaced, with a view to managing changeover from maintenance of traditional engine vehicles to maintenance of hybrid vehicles.
- > **OIL CARE FUNCTION** a protection system that prevents humidity from entering the oil container, in order to preserve the PAG oil's purity until it is completely used
- > **UV TRACER**
- > **NON-CONDENSING VENT VALVE** electronic, it enables the eventual discharge of air by accelerating the recovery phase, thus guaranteeing higher purity of the refrigerant present in the vessel

## UTMOST SAFETY. CERTIFIED

One of the most important criteria for designers of tools applying new technologies and solutions is to ensure utmost operating safety since the first productions. Brain Bee not only did it but it had even certified its product – pursuant to the product directives – in cooperation with the most important Certifying bodies.

Every safety issue has been carefully assessed and every component designed so as to ensure suitable safety standards. The use of antistatic materials, the production of SAE-compliant charge hoses and quick couplers, internal forced ventilation devices and thermal protections are but a few examples of the designed solutions helping us in the achievement of the certification of the stations of the **BRAIN BEE 1234** line.

# TECHNICAL FEATURES

## INTERFACE AND SOFTWARE

Display .....	4,3", 480x272 graphics (widescreen), 65536 Colours
Keyboard .....	Touch screen
Printer .....	24-column thermal printer
Software update .....	via RS232 (with CLIMA SOLUTION, optional)

## R1234yf GAS VESSEL

Vessel capacity .....	26 l
Capacity conforming to PED restrictions .....	20 kg
Maximum operating pressure certified under PED cat. III .....	20
Vessel heater.....	opzionale

## OIL CONTAINERS

Exhaust oil container capacity .....	250 ml
New PAG oil container capacity .....	250 ml
UV tracer container capacity .....	250 ml
OIL CARE valve (new PAG oil container)	
Oils/UV scale 1g resolution, 5 g precision with overcharge mechanical protection	

## PNEUMATIC CIRCUIT

Vacuum pump capacity .....	4,0 m <sup>3</sup> /h
Vacuum level (mbar) .....	0,05 mbar
Refrigerant gas recovery compressor displacement .....	14cc
Pressure safety switch	
Dehydrating filter capacity, expressed as kilograms of recovered refrigerant .....	45 kg
Automatic non-condensing gas purge	
Electronic and automatic HP and LP taps	
Net HP and LP hoses length (m) .....	4,5 m
Bulkhead couplings for HP and LP hoses	
Digital vessel pressure gauge	
Electronic and digital HP and LP pressure gauges	

Dimensions: 641 x 763 x 1200 mm

Weight: 100 kg

Power supply: 50 HZ - 220-240 V - 800 W

# [www.brainbee.com](http://www.brainbee.com)