

WORKSHOP EQUIPMENT FOR TRUE PROFESSIONALS

NEW

THE ASC6000 SERIES – WORLD'S FIRST TRIPLE CERTIFIED A/C UNIT





AirCon Service Center



# **THE WAECO BRAND**

The WAECO brand promise is to make daily work in A/C maintainance and repairs easier, safer, more profitable and more environmentally friendly.

- Single source A/C workshop equipment
- Fully automatic A/C service units for cars, buses and commercial vehicles
- Professional accessories for leak detection
- Environmentally friendly solutions for A/C cleaning and disinfection
- Precise measuring instruments and practical workshop kits
- Compressor oils, leak detection oils, refrigerants and other consumables
- Original replacement parts for vehicle A/C (WAECO AirCon Parts)

# **IMPROVE SUSTAINABILITY NOW**

LOW EMISSION A/C SERVICE UNITS SAVE COSTS AND PROTECT THE ENVIRONMENT



Stop wasting expensive resources!



The benefits:

The WAECO Low Emission service technology gives you an economical, safe and environmentally sound solution – for conventional R134a A/C systems as well as for the alternative R1234yf refrigerant.

• Close to 100% refrigerant recovery

• Virtually no harmful emissions and no money lost unnecessarily



In addition to that, the new modular system that we are currently introducing helps to optimize the use of raw materials, components, logistics and storage costs. All of this makes WAECO a more sustainable brand.



# **ASC A/C SERVICE UNITS**

# **NEW MODULAR SYSTEM ON THE WAY**



#### STEP 1

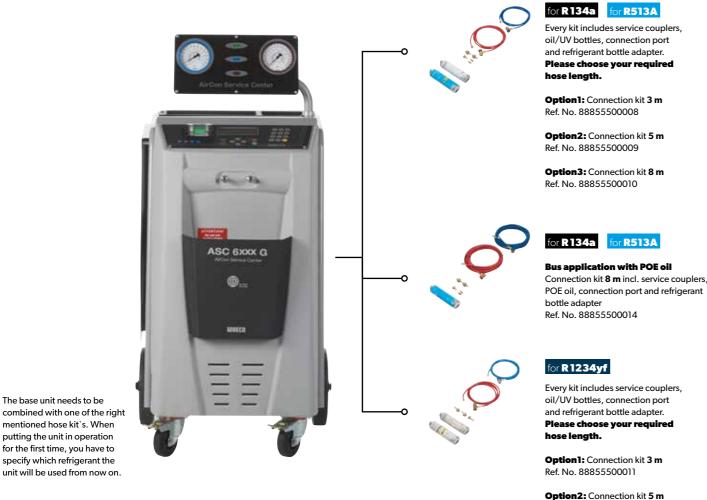
#### **Choose service unit**

The new ASC 6000-series service units from WAECO have a triple certification for R134a, R1234yf and R513A. You can choose between all models, regardless of which refrigerant you want to use them for.

#### STEP 2

#### **Choose connection kit**

The choice of the connection kit depends on the type of refrigerant in the A/C system. You can also choose between different hose lengths: 3, 5 or 8 m. In a busy workshop longer hoses are an advantage, as the aircon service can be done while the car is lifted for other service jobs.



**PLEASE NOTE:** Due to legislation and security reasons it is not permitted to exchange hose sets for the use with various refrigerants. This is why you can lay down this specification only once.

WORLD'S FIRST TRIPLE CERTIFIED A/C UNIT

WAECO ASC 6400 G LE is the first A/C service unit worldwide to be "personalised" for the respective application by using a be approved by a testing institute (TÜV Nord) for use with the dedicated hose package for each refrigerant and by dedicated

three refrigerants R134a, R1234yf and R513A. The service unit can programming for the refrigerant at hand.

Ref. No. 88855500012

Ref. No. 88855500013

Option3: Connection kit 8 m

### NEW

#### ASC 6100 G Universal entry-level model



6-7

### NEW

#### ASC 6300 G

Classic model for professionals



NEW

#### **ASC 6300 G LE**



#### NEW

#### ASC 6400 G

High-volume version for large refrigerant amounts



12 - 13

#### NEW

8-9

#### **ASC 6400 G LE**

Highly efficient Low Emission unit for large refrigerant amounts



#### ASC 5500 G RPA 2020

Designed for highest demands on safety and



LOW EMISSION





The base unit needs to be



# Upgrading options: heat belt, humidity free storage and feeding system for fresh oil and UV additive





# SOFT GRAPHIC DISPLAY

The soft graphic display can also display special characters such as Cyrillic or Chinese script.



# COMPLIES WITH SAE J 2099

The purity of the recovered refrigerant complies with the SAE J 2099 standard.



# UPGRADING OPTIONS

The ASC 6100 G can be upgraded with a heat belt. The unit is also prepared for the humidity free storage and feeding system for fresh oil or UV additive.



#### **USB INTERFACE**

Via the USB port you can simply update the software of the service unit. Or export important data to a USB stick for further processing on a laptop or PC.

Are you just starting to provide A/C service on R 134a air conditioners, with only a few service orders per month? Here is a low-cost service unit that gives you all the features required for safe work. The new ASC 6100 G performs all service processes automatically achieving a refrigerant recycling rate of at least 95%. The purity of the recovered refrigerant complies with the SAE J 2099 standard.

Expecting more orders in the future? You can easily upgrade your entry-level service unit at a later date – e.g. a heat belt for the charging cylinder. A USB port and a soft graphic display that can also display special characters are already included.

# ASC 6100 G Entry-level automatic A/C service unit

- Charging cylinder storage capacity: 9 kg
- Automatic refrigerant recycling, oil or UV additive management controlled by load cell
- Purity of recovered refrigerant according to SAE I 2099
- Refrigerant recycling rate: at least 95%
- Forced ventilation with two fans at the rear
- Soft graphic display can also display special characters

- · USB interface
- Load cell, no transport lock necessary
- Optional: dust cover
- Humidity free storage and feeding system for fresh oil and UV additive
- Optional: heat belt for the charging cylinder
- · Optional: hybrid flushing



 ASC 6100 G
 Ref. No. 9103303104

 Instruction package
 Ref. No. 8889900001

 Dust cover
 Ref. No. 4445900081

Optional: Heat belt for the charging cylinder Ref. No. 8885200277

Scope of delivery: operation manual, used oil container (250 ml), safety kit





# **NEW:** THE FIRST ASC IS "GOING MODULAR". PLEASE ADD THE RIGHT CONNECTION KIT FOR YOUR PURPOSE (APPLICATION FOR R134a, R1234yf OR R513A).



R134a R513A

Every kit includes service couplers, oil/UV bottles, connection port and refrigerant bottle adapter. Please choose your required

hose length.

Option1: Connection kit 3 m Ref. No. 88855500008

**Option2:** Connection kit **5 m** Ref. No. 88855500009

**Option3:** Connection kit **8 m** Ref. No. 88855500010



#### Bus application with POE oil

Connection kit **8 m** incl. service coupler POE oil, connection port and refrigerant bottle adapter Ref. No. 88855500014





R1234yf

Every kit includes service couplers

and refrigerant bottle adapter.

Please choose your required
hose length.

oil/UV bottles, connection port

Option1: Connection kit 3 m Ref. No. 88855500011

**Option2:** Connection kit **5 m** Ref. No. 88855500012

**Option3:** Connection kit **8 m** Ref. No. 88855500013





Controlled air flow and a high-performance fan with special electronics guarantee adequate ventilation.



#### **USB INTERFACE**

Via the USB port you can simply update the software of the service unit. Or export important data to a USB stick for further processing on a laptop or PC.



#### SOFT GRAPHIC DISPLAY

The soft graphic display can also display special characters such as Cyrillic or Chinese script.

Are you in the market for an A/C service unit for the new R1234yf refrigerant? Do you want one from a renowned manufacturer version of the ASC 6300 G could be just the right thing for you. The unit integrates a wealth of WAECO know-how and experience. Professional A/C service work is performed fully automatically, with

little operator effort. All standard ASC-series features are provided, including refrigerant charging and recovery management, without spending more money than necessary? Then this basic personalised charging amount database and automatic vacuum check. The ASC 6300 G can be added with an external refrigerant analysis tool.

### **NEW! ASC 6300 G** Fully automatic A/C service unit

- Charging cylinder storage capacity: 16 kg
- Vacuum pump designed in cooperation with utility vehicle manufacturers, performance 192 I/min
- Humidity free storage and feeding system for fresh oil and UV additive
- · Dustcover included in the delivery kit
- Fully automatic refrigerant recycling, oil and additive management
- · Automatic vacuum check and charging of leak detection additive
- Complies with SAE | 2099 and SAE | 2788
- · Integrated refrigerant charging and recovery amount management

Adapter for non-returnable bottles 1/4" HD

- Integrated charging amount database
- Personalised charging amount database
- Swivel and tilt manometer panel
- Heated charging cylinder for high-speed charging, heat-up also possible during the charging process
- · Special, 8-bearing weighing platform
- · 500 ml used oil container for longer change
- USB interface and soft graphic display
- · Also suitable for hybrid vehicles if the optional flushing kit for the ASC's internal circuit was installed
- 3 separate weighing cells for UV additive and oil management

Ref. No. 9103303105 Ref. No. 8889900001

Ref. No. 8885400035

Scope of delivery: operation manual, used oil container (500 ml), heated refrigerant tank, dust cover, safety kit



**WORLD'S FIRST TRIPLE CERTIFIED** A/C UNIT

### **NEW:** THE FIRST ASC IS "GOING MODULAR". PLEASE ADD THE RIGHT CONNECTION KIT FOR YOUR PURPOSE (APPLICATION FOR R134a, R1234yf OR R513A).



ASC 6300 G

Instruction package



Every kit includes service couplers. oil/UV bottles, connection port and refrigerant bottle adapter. Please choose your required

Option1: Connection kit 3 m Ref. No. 88855500008

Option2: Connection kit 5 m Ref. No. 88855500009

Option3: Connection kit 8 m Ref. No. 88855500010



#### **Bus application with POE oil**

Connection kit 8 m incl. service couple POE oil, connection port and refrigerant bottle adapter





R1234yf

Every kit includes service couplers oil/UV bottles, connection port and refrigerant bottle adapter. Please choose your required

Option1: Connection kit 3 m Ref. No. 88855500011

Option2: Connection kit 5 m Ref. No. 88855500012

Option3: Connection kit 8 m Ref. No. 88855500013





#### **LOW EMISSION**

Virtually no refrigerant escaping into the environment and identification of the exact amount of the recovered refrigerant in the weighing procedure avoids unnecessary troubleshooting



#### INDIVIDUAL USER CODE

To prevent unauthorised use of WAECO A/C service units, up to 10 user names can be programmed in combination with individual PIN codes



#### PERSONALISED CHARGING

ASC-series units give you the option to create a personalised charging amount database for 100 different vehicles.

The ASC 6300 G LE integrates all refrigerant storage components on the weighing platform. That means the complete amount of refrigerant contained in the unit can be recorded and the amount of the recovered refrigerant can be exactly determined. This in turn will tell the operator about potential leaks in the A/C system. The accurate diagnosis function of the ASC 6300 G LE is also very useful

with regard to decreasing refrigerant charging amounts on modernday vehicles. In the compact car segment we already see models with charging amounts of less than 300 g (e.g. Daihatsu Cuore). Older A/C service units won't be able to charge these systems with the required accuracy. Excessive or insufficient charging would entail major problems.

### **NEW!** ASC 6300 G LE Low Emission Fully automatic A/C service unit

- · Sturdy metal housing
- · Charging cylinder storage capacity: 16 kg
- · Humidity free storage and feeding system for fresh oil and UV additive
- Print-out of important service data, several print-outs possible
- · Fully automatic refrigerant recycling, oil and additive management
- · Automatic vacuum check
- · Automatic charging of leak detection
- · Integrated refrigerant charging and recovery amount management
- Integrated charging amount database
- Complies with SAE J 2099 and SAE J 2788
- · Close to 100% refrigerant recovery
- · Personalised charging amount database

- · Virtually 0% service emission thanks to used oil container and Low Emission concept
- Operator guidance via large display
- Swivel and tilt manometer panel
- Heated charging cylinder for high-speed charging, heat-up also possible during the charging process
- Special, 8-bearing weighing platform
- · Special air conditioner flush function
- Large recessed tray for tools
- · Also suitable for hybrid vehicles if the optional flushing kit for the ASC's internal circuit was installed
- Used oil container
- USB interface and soft graphic display
- · 3 separate weighing cells for UV additive and oil management

**ASC 6300 G LE Low Emission** Instruction package Adapter for non-returnable bottles 1/4" HD

Ref. No. 9103303108 Ref. No. 8889900001 Ref. No. 8885400035

Scope of delivery: operating instructions, hermetically closed used oil container, heated refrigerant tank, dust cover, safety kit



El/hybrid





### **NEW:** THE FIRST ASC IS "GOING MODULAR". PLEASE ADD THE RIGHT CONNECTION KIT FOR YOUR PURPOSE (APPLICATION FOR R134a, R1234yf OR R513A).





Every kit includes service couplers. oil/UV bottles, connection port and refrigerant bottle adapter. Please choose your required hose length.

Option1: Connection kit 3 m Ref. No. 88855500008

Option2: Connection kit 5 m Ref. No. 88855500009

Option3: Connection kit 8 m Ref. No. 88855500010



#### **Bus application with POE oil**

Connection kit 8 m incl. service couple POE oil, connection port and refrigerant bottle adapter





R1234yf

Every kit includes service couplers oil/UV bottles, connection port and refrigerant bottle adapter. Please choose your required hose lenath.

Option1: Connection kit 3 m Ref. No. 88855500011

Option2: Connection kit 5 m Ref. No. 88855500012

Option3: Connection kit 8 m Ref. No. 88855500013

1

Saving refrigerant with Low Emission equipment pays off – even with refrigerants that are not in short supply.



Time is valuable, especially when it comes to air conditioning service on large vehicles such as **buses and trains** where downtimes are extremely costly for the operators. Speed and reliability are vital. Key service tasks such as refrigerant recovery, evacuation and refrigerant recharging need to be performed within a tight timeframe. The ASC 6400 G perfectly meets these requirements. The **192-litre vacuum pump is exactly designed for these applications.** An additional fluid pump ensures fast refrigerant recharging.

WAECO ASC 6400 G (and ASC G LE) are fully automatic A/C service units featuring a triple certification for R134a, R1234yf and R513A.

The new modular system requires that you order basic ASC and your choice of hose set separately.

Please note: You can assign only one of the refrigerants to your device

The ASC 6400 G optionally features the fresh oil and UV additive feeding system. It allows moisture-free and clean storage of refrigerant oils even over longer periods of time and therefore cuts A/C service costs.

### NEW! ASC 6400 G Fully automatic A/C service unit

- Charging cylinder storage capacity: 25 kg, vacuum pump capacity 192 l/min
- Integrated fluid pump for high-volume refrigerant charging
- Vacuum pump designed in cooperation with utility vehicle manufacturers, performance
   192 I/min
- Humidity free storage and feeding system for fresh oil and UV additive
- Dustcover included in the delivery kit
- Fully automatic refrigerant recycling, oil and additive management
- Automatic vacuum check and charging of leak detection additive
- Complies with SAE J 2099 and SAE J 2788
- Integrated refrigerant charging and recovery amount management

- Integrated charging amount database
- Personalised charging amount database
- Swivel and tilt manometer panel
- Heated charging cylinder for high-speed charging, heat-up also possible during the charging process
- Special, 8-bearing weighing platform
- 500 ml used oil container for longer change intervals
- USB interface and soft graphic display
- Also suitable for hybrid vehicles if the optional flushing kit for the ASC's internal circuit was installed
- 3 separate weighing cells for UV additive and oil management
- Equipped with refrigerant liquid pump
- Prepared for external heat belt, 220 V connection

 ASC 6400 G
 Ref. No. 9103303106

 Instruction package
 Ref. No. 8889900001

 Adapter for non-returnable bottles 1/4" HD
 Ref. No. 8885400035

Scope of delivery: operation manual, used oil container (500 ml), heated refrigerant tank, dust cover, safety kit



**NEW:** THE FIRST ASC IS "GOING MODULAR". PLEASE ADD THE RIGHT CONNECTION KIT FOR YOUR PURPOSE (APPLICATION FOR R134a, R1234yf OR R513A).



R134a R513A

Every kit includes service couplers, oil/UV bottles, connection port and refrigerant bottle adapter.

Please choose your required

**Option1:** Connection kit **3 m** Ref. No. 88855500008

**Option2:** Connection kit **5 m** Ref. No. 88855500009

**Option3:** Connection kit **8 m** Ref. No. 88855500010



Bus application with POE oil

Connection kit **8 m** incl. service couplers POE oil, connection port and refrigerant bottle adapter Ref. No. 88855500014





R1234yf

Every kit includes service couplers, oil/UV bottles, connection port and refrigerant bottle adapter.

Please choose your required hose length.

**Option1:** Connection kit **3 m** Ref. No. 88855500011

**Option2:** Connection kit **5 m** Ref. No. 88855500012

**Option3:** Connection kit **8 m** Ref. No. 88855500013

R134a

R513A

R1234yf

El/hybrid

**LOW EMISSION** 



#### **OPTIONAL: HEAT BELT**

Saves up to 80% worktime during A/C service on large-volume air conditioning systems.



#### TRIPLE CERTIFIED

Triple certified for R134a, R1234yf and R513A



#### **LOW EMISSION**

Virtually no refrigerant escaping into the environment and identification of the exact amount of the recovered refrigerant in the weighing procedure avoids unnecessary troubleshooting.

The ASC 6400 G LE Low Emission A/C service unit offers all the benefits of the WAECO Low Emission technology: close to 100% refrigerant recovery with our well proven four-step process, virtually zero harmful refrigerant emission into the atmosphere.

Integrating a powerful vacuum pump qualifies for highly efficient A/C service on large volumes. This is where the WAECO Low Emission concept pays off in considerable savings!

Note: Please make sure to order the basic ASC and your choice of hose set separately (you can assign only one of the refrigerants to your device).



Integrated fluid pump: For charging high-volume A/C systems



Heat belt for refrigerant collector - up to 80% less worktime for A/C service

### **NEW! ASC 6400 G LE Low Emission** Fully automatic A/C service unit

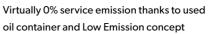
- · Sturdy metal housing
- · Charging cylinder storage capacity: 25 kg, vacuum pump capacity 192 I/min
- Humidity free storage and feeding system for fresh oil and UV additive
- Print-out of important service data, several print-outs possible
- Fully automatic refrigerant recycling, oil and additive management
- · Automatic vacuum check
- · Automatic charging of leak detection additive
- · Integrated refrigerant charging and recovery amount management
- · Integrated charging amount database
- Complies with SAE J 2099 and SAE J 2788
- · Close to 100% refrigerant recovery
- · Personalised charging amount database

- · Virtually 0% service emission thanks to used
- Swivel and tilt manometer panel
- Heated charging cylinder for high-speed charging, heat-up also possible during the
- Special, 8-bearing weighing platform
- · Special air conditioner flush function
- Large recessed tray for tools
- · Also suitable for hybrid vehicles if the optional flushing kit for the ASC's internal
- · USB interface and soft graphic display
- 3 separate weighing cells for UV additive and oil management
- Equipped with refrigerant liquid pump
- Prepared for external heat belt, 220 V connection

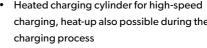
**ASC 6400 G LE Low Emission** Instruction package

Ref. No. 8889900001 Adapter for non-returnable bottles 1/4" HD Ref. No. 8885400035

Scope of delivery: Operating instructions, hermetically closed used oil container, heated refrigerant tank, dust cover, safety kit







- circuit was installed
- Used oil container

Ref. No. 9103303107



### **NEW:** THE FIRST ASC IS "GOING MODULAR". PLEASE ADD THE RIGHT CONNECTION KIT FOR YOUR PURPOSE (APPLICATION FOR R134a, R1234yf OR R513A).





Every kit includes service couplers. oil/UV bottles, connection port and refrigerant bottle adapter. Please choose your required

Option1: Connection kit 3 m

Ref. No. 88855500008 Option2: Connection kit 5 m

Ref. No. 88855500009 Option3: Connection kit 8 m

Ref. No. 88855500010

R134a R513A

#### **Bus application with POE oil**

Connection kit 8 m incl. service couple POE oil, connection port and refrigerant bottle adapter



Every kit includes service couplers oil/UV bottles, connection port and refrigerant bottle adapter. Please choose your required

Option1: Connection kit 3 m Ref. No. 88855500011

R1234yf

Option2: Connection kit 5 m Ref. No. 88855500012

Option3: Connection kit 8 m Ref. No. 88855500013

# **HEAT BELT FOR REFRIGERANT COLLECTOR**

UP TO 80% LESS RECYCLING TIME FOR A/C SERVICE

One of the key issues in bus and train workshops today is to save as much time as possible to avoid costly downtimes for their customers and cut service costs. The heat belt reduces the service time on bus and train air conditioners up to 80%.

Using conventional practice, servicing high-volume A/C systems takes several hours - about 6 to 10 hours for trains, 3 to 5 hours for buses. The main reason for this is the freezing refrigerant collector in the A/C system. That means service technicians have to wait until the collector is heated back up by the ambient temperature to get the remaining refrigerant out of the system. Many workshops are using a fan heater to accelerate the process. Alas, without success as most of the hot air is passing by and won't reach the affected part of the tank.



## THE WAECO AIRCON SERVICE HEAT BELT SOLUTION IS MUCH FASTER AND MORE EFFECTIVE

fitted at the lowest possible point of the collector. The heat belt is ASC 6400 G and ASC 6400 G LE. Naturally, the highest cost savings switched in line with the compressor of the A/C service unit, so the are achieved by using it with the Low Emission unit. heating process starts immediately at the beginning of the refrigerant recovery.

To prevent freezing of the refrigerant collector, a special heat belt is The heat belt works in combination with our A/C service units

### OPTIONAL ACCESSORIES FOR BUS APPLICATION

#### **Connection kit for buses**

For connection of high-volume service units to bus A/C systems

Fits ASC 6400 G and ASC 6400 G LE

Ref. No. 8885400290

#### **Heat belt**

Connection kit for buses

Supplied incl. 12 m supply cord with plug, 230 V, 200 W, temperature limiter 60 °C,

CE approved, protection class II

Heat belt, 60 x 350 mm, for vertically mounted collectors Ref. No. 8885300260

13 cm - 18 cm in diameter

Heat belt, 75 x 480 mm, for vertically mounted collectors Ref. No. 8885300261

13 cm - 25 cm in diameter

Ref. No. 8885300262 Heat belt, 130 x 300 mm, for horizontally mounted collector

13 cm - 18 cm in diameter



# PRACTICAL DOCUMENTATION OF YOUR **SERVICES**

### WI-FI-BASED DATA TRANSMISSION

From now on you can conveniently control your ASC service unit via a Wi-Fi link. All you need is the new WAECO ASC G Wi-Fi kit. The compact module simply connects to the USB port on the display of your ASC service unit. Using an existing or self-created Wi-Fi network, it communicates with an internet-capable device of your choice - PC, laptop, tablet or smart phone. The built-in software automatically generates an interactive website, which can be accessed from all commonly used browsers.



That means: You can have service reports sent to your digital device or conveniently send tasks to the service unit from your PC, tablet or smart phone. ASC G Wi-Fi Kit is compatible with all ASC G-series A/C service units and can be retrofitted with ease.



#### UNIVERSAL USE

WAECO ASC G Wi-Fi-Kit works with all internet-capable devices – desktop PC, laptop, tablet or smart phone

#### **WAECO ASC G Wi-Fi Kit**

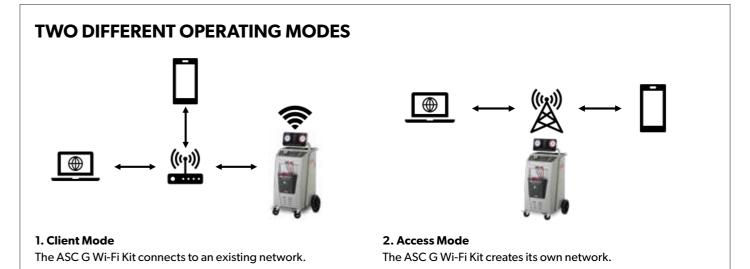
Wi-Fi kit for WAECO ASC G station with USB connection

- Easy retrofitting via the USB port on the display of the ASC service unit
- Communicates with all internet-capable devices PC, laptop, tablet, smart phone
- Data transmission via an existing or self-created Wi-Fi network
- Generates a website accessible via all commonly used browsers
- Sends service data from the ASC service unit to the digital device · Receives tasks for the ASC service unit from the digital device
- Compatible with all ASC G-series A/C service units

Ref. No. 8885200311



VISIT US ON YOUTUBE







The service unit comes with integrated refrigerant analysis function. Explosion protection: hazard analysis performed by an independent test



R1234vf is flammable under certain conditions. Therefore, the system start will only activate the external fan. After the fan has been running for 35 seconds, the voltage is passed on to the system



#### LOW EMISSION CONCEPT

Virtually no refrigerant escaping into the environment and identification of the exact amount of the recovered refrigerant in the weighing procedure avoids unnecessary troubleshooting.

Vehicles with an A/C system filled with R1234yf are already a common case in the workshop today. Brand-bound motor garages, in particular, are obliged to offer service for these systems. Against this backdrop WAECO's AirCon professionals have designed, in RPA service unit.

As R1234yf is very sensitive to contamination with other refrigerants, the ASC 5500 G RPA was fitted with an integrated analysis tool that checks the refrigerant purity.

Designed inside out for use with R1234yf refrigerant, the ASC 5500 close cooperation with the automotive industry, the ASC 5500 G GRPA meets fire regulations and offers all the benefits known from the "classic" models in the ASC series.

### **ASC 5500 G RPA 2020 LOW EMISSION SERVICE UNIT FOR R1234vf**

- · Sturdy metal housing
- · Charging cylinder storage capacity: 13 kg, vacuum pump capacity: 5 cars/h
- Optional: humidity free storage and feeding system for fresh oil and UV additive
- · Integrated fully automatic refrigerant analysis function
- · Fully automatic refrigerant recycling, oil and additive management
- · Automatic vacuum check
- · Automatic leak check prior to service start
- · Automatic charging of leak detection additive
- · Integrated refrigerant charging and recovery amount management
- Integrated charging amount database
- Complies with SAE | 2099, 2788 and 2843

- · Close to 100% refrigerant recovery
- · Personalised charging amount database
- Operator guidance via large display
- Heated charging cylinder for high-speed charging, heat-up also possible during the charging process
- Special, 8-bearing weighing platform
- Special air conditioner flush function
- Large recessed tray for tools
- Also suitable for hybrid vehicles
- Used oil container
- Including adapter for non-returnable bottles 1/4" HD
- 3 separate weighing cells for UV additive and oil management



ASC 5500 G RPA Instruction package Ref. No. 9103301896 Ref. No. 8889900001

Scope of delivery: Service hoses (SAE standard, 3 m), valve adapter for WAECO refrigerant bottles, operating instructions, adapter for 500 ml fresh oil and UV tracer dye bottle, heated refrigerant tank, dust cover, used oil container (500 ml), hermetically closed used oil container, goggles / safety gloves, test bottle UV additive and test bottle WAECO DHO 1234yf



Practical: Innovative used oil container with refrigerant return systen



Complete refrigerant recovery – including the residual amount contained in the used oil



Rear side: Filter is easy to access from the outside (as required by TÜV)

# **ASC BENEFITS AT A GLANCE**

### PROFITABLE, ECO-FRIENDLY, SAFE AND SECURE

#### TRULY AUTOMATIC UNITS - OFTEN COPIED, NEVER MATCHED!

Units with manual control valves involve the risk of erroneously charging the air conditioner from the low pressure side. Automatic units are safer, they have no manual control valves.

# HUMIDITY FREE STORAGE AND FEEDING SYSTEM FOR FRESH OIL AND UV ADDITIVE

Fresh oil and UV additive are stored in aluminium laminated bags contained in protective metal cylinders, this keeps moisture out.

#### INTEGRATED CHARGING AMOUNT DATABASE

The database contains vehicle-specific data such as the oil type and the amount of oil and refrigerant. It provides the option to create a personalised charging amount database for up to 100 vehicles. Updates can be made via the USB interface available on nearly all models. Simply insert a USB stick, turn the unit on, and you're done!

# INTEGRATED REFRIGERANT CHARGING / RECOVERY AMOUNT MANAGEMENT

The total amount of refrigerant charged or recovered per month can be displayed on the service unit or printed out with the thermal printer. Alternatively, it can be exported to a USB stick or laptop via the USB interface (ASC G-series).

#### **ALSO SUITABLE FOR HYBRID VEHICLES (optional)**

Thanks to the optional hybrid flushing kit the unit can be used for service work on hybrid vehicles of all brands / manufacturers. Dangerous oil cross contamination is impossible. The required software is already installed.

#### **ECONOMICAL DIAGNOSIS TOOL**

Low Emission ASC service units have a refrigerant recovery rate of about 99.8%. This saves on expensive refrigerant, and it also helps detect leaks.

# CUSTOMISED FLUSHING PROCESS AND FLUSH BOTTLE (optional)

The efficient and safe flushing process was developed in consultation with the automotive industry.

#### **TÜV-APPROVED REFRIGERANT PURITY**

TÜV Rheinland confirmed that the effectiveness of the refrigerant cleaning function of ASC units complies with SAE J 2099 / J 2210.

#### PROTECTED ACCESS WITH INDIVIDUAL USER CODES

Up to 10 user names can be programmed in combination withindividual PIN codes.

#### **OPERATIONAL SOFTWARE IN MORE THAN 20 LANGUAGES**

de, en, fr, it, sr, hr, sl, tr, nl, da, no, sv, pt, gl, ca, es, eu, fi, et, cs, ro, pl, hu. ru. zh

#### **DESIGNED FOR WORLDWIDE USE**

The ASC range includes service units ready for connection to 230 V/50-60 Hz and all models are available with country-specific mains plugs.

#### **USER-FRIENDLY DISPLAY UNITS**

The swivel and tilt manometer unit is easy to read from every angle.

# **CUSTOM MODELS**

# NO PROBLEM FOR EUROPE'S LEADING MANUFACTURER!

In addition to the standard models presented in this catalogue, we also create customised A/C service units – e.g. for the authorised workshops of leading automotive manufacturers like BMW and Volkswagen. The new VAS service unit generation, featuring an integrated flush container, is standard equipment for A/C service on Volkswagen, Audi and Porsche passenger cars and utility vehicles.



# **HOW TO IDENTIFY A LOW EMISSION UNIT -**

### ONLY REAL WITH FOUR-STEP DISCHARGE

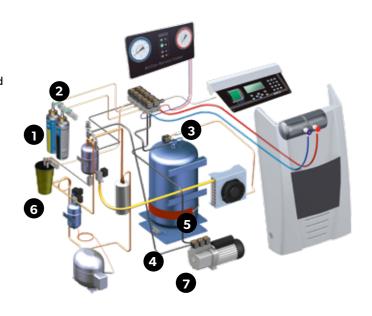
Most A/C service units are using three process steps: refrigerant recovery, evacuation and recharging. WAECO ASC Low Emission service units are using an additional process step to ensure close to 100% refrigerant recovery. In this process step the vacuum pump teams up with the compressor to also recover the refrigerant contained in the oil. It is collected in the patented used oil container and then drained into the internal storage tank.

The additional step has two major benefits. First, there's virtually no refrigerant lost or escaping into the environment. Second, the exact amount of the recovered refrigerant can be identified in the weighing. This avoids misinterpretation with regard to the tightness of the A/C system, which would otherwise lead to unnecessary trouble-shooting and costly repairs.



- Patented, professional feeding system for fresh oil and UV additive
- 3 separate weighing cells for oil management (used oil / fresh oil / UV additive)
- Refrigerant tank with preassembled condenser and fan for accurate indication of the recovered amount of refrigerant
- Special, 8-bearing weighing platform with high-capacity weighing cell (100 kg load capacity). User friendly: no calibration needed
- 5 Increased pressure due to heating band on the refrigerant tank for complete charging of the A/C system even at high ambient temperature
- Patented, low-emission used oil container prevents refrigerant loss during used oil purging; the refrigerant recovered with the used oil is supplied to the refrigerant tank and included in the weighing
- 7 Vacuum phase

The vacuum pump ensures deep down evacuation of the A/C system. It pumps the evaporated refrigerant into the internal container of the Low Emission service unit, so no refrigerant can escape into the environment.



## **KEY CHARACTERISTICS OF THE LOW EMISSION CONCEPT**



# Patented, low emission used oil container

prevents refrigerant loss during used oil purging; the refrigerant recovered with the used oil is supplied to the refrigerant tank and included in the weighing.



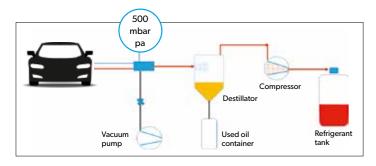
#### Vacuum pump with control block

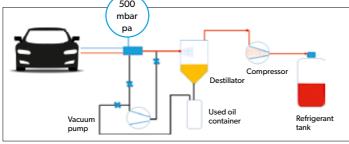
ensures deep down evacuation of the A/C system. It pumps the evaporated refrigerant into the internal container of the Low Emission service unit, so no refrigerant can escape into the environment.

# PROCESS FLOW DURING REFRIGERANT **RECOVERY**

### WITHOUT LOW EMISSION

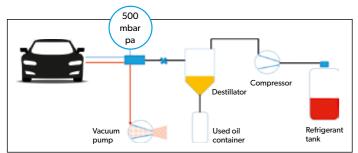
### WITH LOW EMISSION





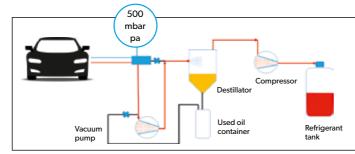
#### Refrigerant discharge without Low Emission

The A/C system is not emptied completely. The remaining refrigerant generates a residual pressure of about 500 mbar (absolute pressure).



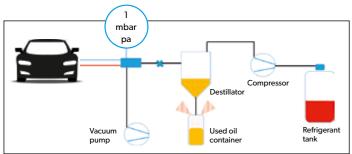
#### **Refrigerant discharge with Low Emission**

The compressor discharges the refrigerant from the A/C system up to a residual pressure of about 500 mbar. Then the deep-discharge with the Low Emission technology starts.



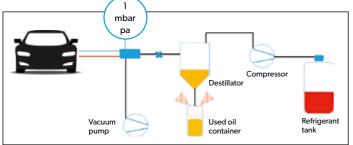
#### **Vacuum phase without Low Emission**

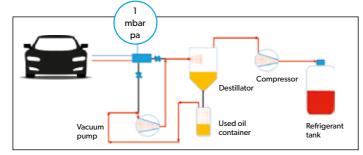
The remaining refrigerant (500 mbar) is discharged into the atmosphere via the ventilation side of the vacuum pump. Depending on the service unit this amounts up to 10% of the refrigerant to be recycled.



## **Deep-discharge with Low Emission**

The compressor teams up with the vacuum pump to achieve a genuine deep-discharge of almost 100%. As a result, virtually no refrigerant is lost.





#### **Used oil discharge without Low Emission**

The refrigerant contained in the used oil escapes through the vent holes of the used oil container into the environment. Depending on the service unit the loss amounts to 40 – 100 g per service.

#### **Used oil discharge with Low Emission**

The refrigerant is discharged by the vacuum pump from the hermetically sealed used oil container and then returned to the refrigerant tank by the compressor. That means you also recover the refrigerant contained in the used oil.

# TIME TO THINK OF THE ENVIRONMENT

## THAT MUCH CO. EQUIVALENT YOU CAN SAVE THANKS TO LOW EMISSION

atmosphere during A/C service. The refrigerant has a specific GWP value (Global Warming Potential). The GWP value multiplied with

An A/C service unit emits a certain amount of refrigerant to the the emission amount gives the CO<sub>2</sub> equivalent. In order to get a clearer idea of the extent of emission, the calculated CO<sub>2</sub> equivalent is converted into litres of diesel (2.65 kg CO<sub>2</sub> per litre of diesel burnt).



A/C service on an average passenger car (500 g refrigerant charged) without Low Emission releases a CO<sub>2</sub> equivalent that can be compared with that resulting from the combustion of about 19 litres of diesel.



A/C service on an average passenger car (500 g refrigerant charged) with a WAECO Low Emission A/C service unit releases a CO<sub>2</sub> equivalent that can be compared with that resulting from the combustion of only about 0.32 litres of diesel.

# **ENVIRONMENTAL FRIENDLINESS CERTIFIED!**

"We herewith confirm to Dometic Germany GmbH that the Low Emission series A/C service units, due to their specific technology, make a better contribution to environmental protection than conventional A/C service units featuring a vacuum pump outlet that is open to the outside and a used oil container that is not hermetically sealed system.

Since the used oil is forced out of the used oil container by pressurised refrigerant, Low Emission A/C service units are additionally using a vacuum pump for the recovery of the refrigerant. The vacuum pump extracts the refrigerant collected in the hermetically tight used oil container and returns it to the A/C service unit's internal refrigerant circuit.

As a result, there are no notable refrigerant emissions to the environment within the scope of the intended use of the Low Emission A/C service units.

In summary, the Low Emission series A/C service units of Dometic GmbH release almost no refrigerant into the environment."



AirCon Service Center R134a/R1234yf/R513A	ASC 6100 G	ASC 6300 G	ASC 6300 G Low Emission
Power supply 220/240 V – 50/60 Hz	•	•	•
Suitable for refrigerant	R134a/R1234yf/R513A	R134a/R1234yf/R513A	R134a/R1234yf/R513A
Ref. No.	9103303104	9103303105	9103303108
Recovery / recycling			
Purity of recovered refrigerant according to SAE J 2099	•	•	•
Refrigerant recovery rate in kg/h	30	30	30
Vacuum pump capacity	4 cars/h	5 cars/h	5 cars/h
Performance of the hermetic compressor in kW	0.32	0.32	0.32
Dry filter capacity in kg	150	150	150
Refrigerant recycling rate	min. 95%	min. 95%	close to 100%
Can be used as diagnosis tool	no	no	yes
Charging			
Charging cylinder (net volume)	9	14	14
Processes			
Refrigerant analysis	optional	optional	optional
Recovery/recycling	automatic	automatic	automatic
Purging of non-condensable gases	automatic/electronic	automatic/electronic	automatic/electronic
Purging of used oil	automatic	automatic	automatic
Evacuation	automatic	automatic	automatic
Vacuum check	automatic	automatic	automatic
njection of leak detection additive	automatic	automatic	automatic
Injection of oil into the A/C system	automatic	automatic	automatic
Refrigerant charging	automatic	automatic	automatic
Control panel	automatic	datomatic	uutomute
High/low pressure indicated by	Manometer	Manometer	Manometer
√acuum indicated on	Display	Display	Display
Total process control via display	•		•
Option to set the evacuation time	•	•	
Protocol print-out with printer	•	•	•
JSB connection for software- and database updates	•		•
Printer		•	•
Mandatory accessories (to choose)			
Hose kit <b>3 m</b> incl. service couplers,	R134a 8885500008 R1234yf 8885500011	R134a 8885500008 R1234yf 8885500011	R134a 8885500008 R1234yf 8885500011
oil/UV bottles, connection port and refrigerant bottle adapter	R513A 8885500008	R513A 8885500008	R513A 8885500008
Hose kit <b>5 m</b> incl. service couplers, oil/UV bottles, connection port and refrigerant bottle adapter	R134a 8885500009 R1234yf 8885500012 R513A 8885500009	R134a 8885500009 R1234yf 8885500012 R513A 8885500009	R134a 8885500009 R1234yf 8885500012 R513A 8885500009
Hose kit <b>8 m</b> incl. service couplers, oil/UV bottles, connection port and refrigerant bottle adapter	R134a 8885500010 R1234yf 8885500013 R513A 8885500010	R134a 8885500010 R1234yf 8885500013 R513A 8885500010	R134a 8885500010 R1234yf 8885500013 R513A 8885500010
Hose kit <b>8 m</b> incl. service couplers, POE oil, connection port and refrigerant bottle adapter for bus application Optional accessories and spares	R134a 8885500014 R1234yf on request R513A 8885500014	R134a 8885500014 R1234yf on request R513A 8885500014	R134a 8885500014 R1234yf on request R513A 8885500014
WAECO ASC G WI-FI KIT	8885200311	8885200311	8885200311
Service quick couplers only, HD	R134a 8885400027 R1234yf 8885400370	R134a 8885400027 R1234yf 8885400370	R134a 8885400027 R1234yf 8885400370
Service quick couplers only, ND	R134a 8885400026 R1234yf 8885400369	R134a 8885400026 R1234yf 8885400369	R134a 8885400026 R1234yf 8885400369
Spare rolls for printer	4445900515	4445900515	4445900515
Bottle set for ASC series	4440600110	4440600110	4440600110
Jsed oil bottle	4440600249	4440600033	4440600131
/acuum pump oil	8887200018	8887200018	8887200018
Jniversal flush container	R134a 8885200088 R1234yf 8885200272	R134a 8885200088 R1234yf 8885200272	R134a 8885200088 R1234yf 8885200272
Dust cover Dimensions	4445900081	4445900081	4445900081
<i>N</i> × H × D (mm)	600 x 1040 x 600	560 x 1300 x 650	560 x 1300 x 650

ASC 6400 G	ASC 6400 G Low Emission
•	•
R134a/R1234yf/R513A	R134a/R1234yf/R513A
9103303106	9103303107
•	•
30	30
192 I/min	192 I/min
0.32	0.32
150	150
min. 95%	close to 100%
no	yes
25 kg	25 kg
optional	optional
automatic	automatic
automatic/electronic	automatic/electronic
automatic	automatic
automatic	automatic
automatic automatic	automatic
automatic	automatic automatic
automatic	automatic
automatic	automatic
Manometer	Manometer
	Display
Display	Display
•	
•	•
•	•
•	•
R134a 8885500008 R1234yf 8885500011 R513A 8885500008	R134a 8885500008 R1234yf 8885500011 R513A 8885500008
R134a 8885500009 R1234yf 8885500012	R134a 8885500009 R1234yf 8885500012
R513A 8885500009 R134a 8885500010 R1234yf 8885500013	R513A 8885500009 R134a 8885500010 R1234yf 8885500013
R513A 8885500010	R513A 8885500010
R134a 8885500014 R1234yf on request R513A 8885500014	R134a 8885500014 R1234yf on request R513A 8885500014
8885200311	8885200311
R134a 8885400027	R134a 8885400027
R134a 8885400027 R1234yf 8885400370	R1234yf 8885400370
R134a 8885400026 R1234yf 8885400369	R134a 8885400026 R1234yf 8885400369
4445900515	4445900515
4440600110	4440600110
4440600033	4440600131
8887200018	8887200018
R134a 8885200088 R1234yf 8885200272	R134a 8885200088 R1234yf 8885200272
4445900081	4445900081
560 x 1300 x 650	560 x 1300 x 650

110 110



AirCon Service Center – R1234yf	ASC 5500 G RPA 2020
Power supply 220/240 V – 50/60 Hz	•
Suitable for refrigerant	R1234yf
Ref. No.	9103301896
Recovery / recycling	
Purity of recovered refrigerant according to SAE J 2099	•
Refrigerant recovery rate in kg/h	30
Vacuum pump capacity	5 cars/h
Performance of the hermetic compressor in kW	0.32
Dry filter capacity in kg	150
Refrigerant recycling rate	Close to 100%
Can be used as diagnosis tool	•
Charging	
Charging cylinder (net volume)	13 kg
Processes	
Refrigerant analysis	integrated/automatic
Recovery/recycling	automatic
Purging of non-condensable gases	automatic / electronic
Purging of used oil	automatic
Evacuation	automatic
Vacuum check	automatic
Injection of leak detection additive	automatic
Injection of oil into the A/C system	automatic
Refrigerant charging	automatic
Control panel	
High/low pressure indicated by	Manometer
Vacuum indicated on	Display
Total process control via display	•
Option to set the evacuation time	•
Protocol print-out with printer	•
USB connection for software- and database updates	-
Printer	•
Ci	
Service and equipment	
Service and equipment WAECO ASC G WI-FI KIT	8885200311
	8885200311 4440600175
WAECO ASC G WI-FI KIT	
WAECO ASC G WI-FI KIT Charging hoses HD	4440600175
WAECO ASC G WI-FI KIT Charging hoses HD Charging hoses ND	4440600175 4440600176
WAECO ASC G WI-FI KIT Charging hoses HD Charging hoses ND Service quick couplers HD	4440600175 4440600176 8885400164
WAECO ASC G WI-FI KIT Charging hoses HD Charging hoses ND Service quick couplers HD Service quick couplers ND	4440600175 4440600176 8885400164 8885400163
WAECO ASC G WI-FI KIT Charging hoses HD Charging hoses ND Service quick couplers HD Service quick couplers ND Service filter	4440600175 4440600176 8885400164 8885400163 4445900221
WAECO ASC G WI-FI KIT Charging hoses HD Charging hoses ND Service quick couplers HD Service quick couplers ND Service filter Spare rolls for printer	4440600175 4440600176 8885400164 8885400163 4445900221 4445900515
WAECO ASC G WI-FI KIT Charging hoses HD Charging hoses ND Service quick couplers HD Service quick couplers ND Service filter Spare rolls for printer Bottle set for ASC series	4440600175 4440600176 8885400164 8885400163 4445900221 4445900515 4440600110
WAECO ASC G WI-FI KIT Charging hoses HD Charging hoses ND Service quick couplers HD Service quick couplers ND Service filter Spare rolls for printer Bottle set for ASC series Used oil bottle	4440600175 4440600176 8885400164 8885400163 4445900221 4445900515 4440600110 see page 35
WAECO ASC G WI-FI KIT Charging hoses HD Charging hoses ND Service quick couplers HD Service quick couplers ND Service filter Spare rolls for printer Bottle set for ASC series Used oil bottle Vaccum pump oil	4440600175 4440600176 8885400164 8885400163 4445900221 4445900515 4440600110 see page 35 8887200018
WAECO ASC G WI-FI KIT Charging hoses HD Charging hoses ND Service quick couplers HD Service quick couplers ND Service filter Spare rolls for printer Bottle set for ASC series Used oil bottle Vaccum pump oil USB stick update ASC G series	4440600175 4440600176 8885400164 8885400163 4445900221 4445900515 4440600110 see page 35 8887200018 4441000174
WAECO ASC G WI-FI KIT Charging hoses HD Charging hoses ND Service quick couplers HD Service quick couplers ND Service filter Spare rolls for printer Bottle set for ASC series Used oil bottle Vaccum pump oil USB stick update ASC G series Universal flush container	4440600175 4440600176 8885400164 8885400163 4445900221 4445900515 4440600110 see page 35 8887200018 4441000174 8885200272
WAECO ASC G WI-FI KIT Charging hoses HD Charging hoses ND Service quick couplers HD Service quick couplers ND Service filter Spare rolls for printer Bottle set for ASC series Used oil bottle Vaccum pump oil USB stick update ASC G series Universal flush container Replacement filter	4440600175 4440600176 8885400164 8885400163 4445900221 4445900515 4440600110 see page 35 8887200018 4441000174 8885200272 8880700246
WAECO ASC G WI-FI KIT Charging hoses HD Charging hoses ND Service quick couplers HD Service quick couplers ND Service filter Spare rolls for printer Bottle set for ASC series Used oil bottle Vaccum pump oil USB stick update ASC G series Universal flush container Replacement filter Adapter R1234yf	4440600175 4440600176 8885400163 4445900221 4445900515 4440600110 see page 35 8887200018 4441000174 8885200272 8880700246 8885400343
WAECO ASC G WI-FI KIT Charging hoses HD Charging hoses ND Service quick couplers HD Service quick couplers ND Service filter Spare rolls for printer Bottle set for ASC series Used oil bottle Vaccum pump oil USB stick update ASC G series Universal flush container Replacement filter Adapter R1234yf Dust cover	4440600175 4440600176 8885400163 4445900221 4445900515 4440600110 see page 35 8887200018 4441000174 8885200272 8880700246 8885400343

# R134a, R1234yf AND R744 REFRIGERANT IN THE PROVEN REFILLABLE WAECO BOTTLE

Quality by experience: the type-tested refillable WAECO bottle for R1234yf - clearly recognisable by the signal red colour of the R134a refrigerant has proven itself in daily workshop use for decades. Naturally, we also offer a version for the new refrigerant

stand-up collar. No confusion possible!

## Type-tested refillable steel bottle

Reusable system with refill safety device. Capacity: 12 kg of R134a refrigerant

- Sturdy design, good stability, stand-up collar and practical extraction valve, bottle without riser tube for extraction in gas or liquid form
- Suitable for all charging units in mobile or stationary use

Fill of WAECO refillable bottle Ref. No. 8887100007 Ref. No. 8887100008 Purchase of bottle\* Bottle adapter (incl. seal) Ref. No. 8885400129





R1234yf

R134a

8885400129

## Type-tested refillable steel bottle

Reusable system with refill safety device. Capacity: 5 kg of R1234yf refrigerant

- Sturdy design, good stability, stand-up collar and practical extraction valve, bottle without riser tube for extraction in gas or liquid form
- Suitable for all charging units in mobile or stationary use

5 kg fill	Ref. No. 8887100019
Purchase of bottle*	Ref. No. 8887100020
10 kg fill	Ref. No. 8887100050
Purchase of bottle*	Ref. No. 8887100051
Bottle adapter, for large bottle valves	Ref. No. 4440600148
Seal	Ref. No. 4440600244

<sup>\*</sup> Purchase price is refunded if bottle is returned within 2 years





4440600148

4440600244

## Type-tested refillable steel bottle

Reusable system with refill safety device. Capacity: 10 kg of R744 refrigerant

- Sturdy design, good stability, stand-up collar and practical extraction valve
- Suitable for charging units in mobile or stationary use

10 kg fill Ref. No. 8887100053 Purchase of bottle\* Ref. No. 8887100054



R 744

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<sup>\*</sup> Purchase price is refunded if bottle is returned within 2 years

 $<sup>^{\</sup>star}$  Purchase price is refunded if bottle is returned within 2 years



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