The new A/C Station for R744 refrigerant

Touch the future oriented experience

POWERFUL
ROBUST
SAFE

New workshop needs – Reason why

Constant changing of automotive air conditioning systems

The technological development of vehicles aims to continuously **improve safety, efficiency and environmental impact**.
The most recent regulatory framework for vehicle cooling and heating systems, EU 517/2014, stipulated the reduction of refrigerants with a high global warming potential (GWP). Since 2017, vehicle air conditioning systems in many countries around the world **must use refrigerants with a GWP <150**. **HFO1234yf gas with a GWP of 4 has become the popular solution** with a GWP 350 times lower than its predecessor R134a with a GWP of 1.470.

The environmentally friendly alternative

Some car manufacturers have followed also the environmentally friendly alternative of using carbon dioxide as a refrigerant and **are installing these systems in some of their vehicle models**. Carbon dioxide (R744) occurs naturally, is biodegradable and offers the **best possible ecological result** with a GWP of 1 (zero impact on ozone depletion).
Increased awareness of environmental protection, cost-effectiveness and the efficiency that can be achieved with the properties of R744 are **further encouraging the use of R744 systems as a long-term** and future-oriented solution in the premium vehicle sector.

The CO2 solution of Snap-on Climate Solutions

The solution for R744 refrigerant

Snap-on Climate Solutions presents the new air conditioning service device for the growing workshop needs of specific maintenance and repair on R744 air conditioning systems.
The thermodynamics of R744 refrigerant differ fundamentally from the chemical refrigerants with new requirements for the air conditioning system itself and the necessary air conditioning service device. Particularly noteworthy are the **very high pressures of up to 130 bar** and further safety precautions to avoid increased CO2 concentrations in the vehicle or in the workshop's working environment.
ECO_2R744 has been developed for the specific safety and high-pressure requirements of R744 air conditioning systems. The device is distinguished by high-quality and **powerful components**, **future-oriented standard features** and extremely intuitive user friendliness via the 7" touchscreen.

Value proposition

Fully automatic air conditioning service unit for emptying, servicing and filling R744 air conditioning systems

ECO2KAre has been developed for the specific safety and high-pressure requirements of R744 air conditioning systems. The device is distinguished by high-quality and **powerful components**, **future-oriented standard features** and extremely intuitive user friendliness via the 7" touchscreen.

- Powerful, robust, safe
- The extremely strong vacuum pump of 142 l/min keep the station suitable for big systems, too (trains, buses)
- Touch screen 7'' confers best userfriendliness
- Heating system with manual setting option for extended heating speeds up filling process and helps to save time
- Pressure Test forming gas and hybrid function are standard
- Management of 3 high-quality, hermetic, refillable containers for compressor oil (1x PAG and 1x POE) and dye

Product description

Best visibility: 100 mm pressure gauges. The inclination confers perfect visibility to check the pressures

7” touchscreen: simple, fast and highly intuitive navigation with Linux operating system. Navigation is extremely easy through images, icons, short texts and the virtual keyboard

Thermal Printer: Printout for customer with all service information

Status Light: Provides immediate information from distance on machine’s status (green = procedure’s running, red = operator required, blue = standby)

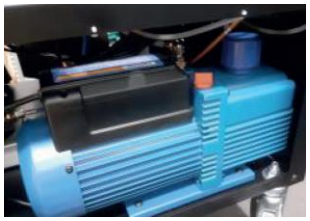
Safety switch

Large front pocket for storing accessories and day by day tools

Large and comfortable handle facilitates the movement of the station inside the workshop

Easy hoses storage

Oil level check external window for visibility of vacuum pump oil level check



Very powerful 142 l / min double-stage vacuum pump guarantees a highly efficient vacuum phase for drying the system, particularly important for CO2 systems

Product description

Quick couplers SAE J639 Hybrid function

Nitrogen pressure test

3 hermetic refillable containers (1 x PAG, 1 x POE, 1 x dye)

Double scale lock easy to reach

Swift safety belt and bottle heater

Protection cover for external tank

Quick plug in connection for CO2 discharge hose

Used oil container 500 ml

Standard Features

- 7" colour touchscreen
- 3 HR hermetic refillable oil containers
- Nitrogen – pressure test
- WiFi
- Hybrid function
- Thermal printer

Product description summary

Fully automatic air conditioning service unit for emptying, servicing and filling R744 air conditioning systems

- Simple, fast and highly intuitive navigation on a 7” touchscreen with Linux operating system. Navigation is extremely easy through images, icons, short texts and the virtual keyboard
- Ready for use in 15 seconds after switching on
- Absolutely safe: software guided processes include all necessary control instructions and constant monitoring of the CO2 concentration in the atmosphere
- Integrated Hybrid feature for the flushing of service hoses and internal circuits. Indispensable for the safe service on systems with an electric compressor.
- Very powerful 142 l / min double-stage vacuum pump guarantees a highly efficient vacuum phase for drying the system, particularly important for CO2 systems
- Heating system with manual setting option for extended heating speeds up filling process and helps to save time
- Management of 3 high-quality, hermetic, refillable containers for compressor oil (1x PAG and 1x POE) and dye
- Automatic pressure test with nitrogen or hydrogen/nitrogen mixture
- 3 m service hoses for a smart connection to the vehicle
- Large pressure gauges 100 mm
- Status light
- Easy changing of R744 tanks of different sizes, protection cover and fastening with Swift safety belt
- Refrigerant bottles: gross weight max 50 kg, recommended height 70 – 120 cm, diameter 17,8 – 20,3 cm, refrigerant capacity 10 – 20 kg, tara max 30 kg.
- Magnetic temperature sensor to connect the refrigerant bottle also in case of aluminium (optional DECKIMB2013 ALUMINIUM CO2 TANK TEMP. STRAP)
- Connection to the bottle: hose 1 m, RAC8164 adapter W21, 7x1/14“ – ¼ SAE male, RAC8165 adapter W21, 8x1/14“ – ¼ SAE male
- Quick plug-in connection for CO2 discharge hose (PA12 8x10 mm, TUB1259)
- Efficient internal ventilation against icing of internal components
- Online update via USB interface or directly in Wi-Fi connection
- Generous storage compartment for accessories
- Very service-friendly
- Very robust structure for best protection of the station
- Convenient and cost-effective due to low maintenance needs and minimal use of consumables
- Environmentally friendly packaging made of wood and paper without the use of polystyrene

Technical specifications

ECO2KARE
Sun
DECKY1R74420S000

Type of refrigerant	R744
Display	7'' colour touchscreen
Service valves	Automatic
Thermal printer	Standard
Hybrid	Standard
Pressure test forming gas / nitrogen	Standard, max pressure 100 bar
Analizer (KIT.GAS)	Not applicable
Connectivity Wi-Fi	Standard
Flushing Kit	Not applicable
Vacuum leak detection	Standard
Recharge method	CAR
CO2 measurement discharged	Standard
Pressure gauges	100 ø mm
Hoses	3 meters
Data Base	Base + custom records
Safety Sensor environmental CO2 level	Standard
Oil injection	Automatic
Dye injection	Automatic
Hermetic and refillable containers for oil and dye	Standard 2 + 1
Hermetic disposable containers for oil and dye	Option 2 + 1
Refillable standard containers for oil and dye	Not available
Refrigerant configuration	Not applicable
Non condensable gas purge	Not applicable
Volt	220-240V 50/60 Hz (CE), 110V 60 Hz (ETL)
Vacuum pump	142 l/min double stage, 3 Pa / 0,03 mbar
Sealed compressor	Not applicable
Recovery speed	Not applicable
Tank Scale resolution	10 gr
Oil scale resolution	5 gr
Working temperature range	10/48 °C
Filter system	Not applicable
Refrigerant tank	No internal tank. Scale max gross weight 50 kg
Bottle heater	Standard (with setting option for extended heating)
Status light	Standard
Quick couplers	SAE J639
Refrigerant scale max load	50 kg / 110 lb
Max operating pressure	160 bar
Exhausted oil container capacity	500 ml
Refrigerant charge	Automatic
Emergency Stop button	Standard
Casing	Metal with robust plastic cover (thermoformed)
Dimension / weight	cm 67 x 88 x 110, 90 kg
Dimension / weight with packaging	cm 74 x 112 x 125, 100 kg, no double stacking

Product documentation

Detailed description, point of strength and technical specifications. Online and PDF download

Accessories & Consumables

STANDARD ACCESSORY SUPPLIED WITH MACHINE

- 1 Printer paper
- 1 HP + 1 LP 3m service hoses
- 1 HP + 1 LP quick coupler
- 3 HR hermetic and refillable oil containers GRCNT16, GRCNT17, GRCNT18
- User Manual -> available online on www.ac-service24.com
- Quick setup guide (in paper)
- 1 Dust cover IMB0026
- Power cable

CONSUMABLES LIST FOR STANDARD MAINTENANCE

- Vacuum pump oil PMP3335
- Printer paper STM0012-KIT (10 PCS)

Competitor comparison









Model	ECO_2R744 / ECO2KARE	AVL DITEST ADS 310	AVL DITEST ADS 340	AVL DITEST chillAIR	TEXA KOMFORT R744	MAHLE ACX 744 ArcticPRO (preview 2025)	Dometic Waeco ASC 7400 G	COOLIUS C20 WOW / Wigam PICCOLA-R744	Wigam OPTIMA-R744-BUS
Type of refrigerant	R744	R744	R744	R744	R744	R744		R744	R744
Display	7" colour touchscreen	7-inch graphic TFT colour display	7-inch graphic TFT colour display	Touch display	TFT colour display	TFT colour display	7" colour touchscreen	7" colour touchscreen	7" colour touchscreen
Service valves	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic		Automatic	Automatic
Thermal printer	Standard	Standard	Standard	Standard	Standard	Standard		Standard	Standard
Hybrid	Standard							Option	Standard
Pressure test forming gas / nitrogen	Standard, max pressure 100 bar	Option	Option	Option	Option				Standard
Analizer (KIT.GAS)	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		Not applicable	Not applicable
Connectivity Wi-Fi	Standard	not available	not available	not available	not available		Option	not available	Option
Flushing Kit	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			Not applicable	Not applicable
Vacuum leak detection	Standard	Standard	Standard	Standard					Standard
Recharge method	CAR				compensation			compensation	compensation
CO2 measurement discharged	Standard	Standard	Standard	Standard	Standard			Standard	Standard
Pressure gauges	100 ø mm	digital	digital	digital, Class1	Class 1	Class 1		digital	digital
Hoses	3 meters	2,5 meters	5 meters	4 meters	2,5 meters			3 meters	5 meters
Data Base	Base + custom records	Custom records	Custom records	Custom records	Custom records			Base + custom records	Base + custom records
Safety Sensor environmental CO2 level	Standard	Standard	Standard	Standard	Standard			Standard	Standard
Oil injection	Automatic	Automatic	Automatic	Automatic	Automatic			Automatic	Automatic
Dye injection	Automatic	Automatic	Automatic	Automatic	Automatic			Automatic	Automatic
Hermetic and refillable containers for oil and dye	Standard 2 + 1 (2 oil, 1 dye), 250 ml				1+1 (oil and dye)				
Hermetic disposable containers for oil and dye	Option 2 + 1 (2 oil, 1 dye)							Option	2 + 1 (2 oil 150 ml, 1 dye 200 ml) hermetic bags
Refillable standard containers for oil and dye	Not available	1+1 (oil and dye)	1+1 (oil and dye)	1+1 (oil and dye)				2 + 1 (2 oil 150 ml, 1 dye 200 ml) hermetic bags	
Refrigerant configuration	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			Not applicable	Not applicable
Non condensable gas purge	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			Not applicable	Not applicable
Volt	220-240V 50/60 Hz (CE), 110V 60 Hz (ETL)	220-240V 50/60 Hz (CE)	220-240V 50/60 Hz (CE)	220-240V 50/60 Hz (CE)	220-240V 50/60 Hz (CE)			220-240V 50/60 Hz (CE)	220-240V 50/60 Hz (CE)
Vacuum pump	142 l/min double stage, 3 Pa / 0,03 mbar	3 mc / hour (50 l/min)	3 mc / hour (50 l/min)	3 mc / hour (50 l/min)				100 l/min	230 l/min
Sealed compressor	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			Not applicable	Not applicable
Recovery speed	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			Not applicable	Not applicable
Tank Scale resolution	10 gr	10 gr	10 gr	10 gr	10 gr			15 gr	5 gr
Oil scale resolution	5 gr	5 gr	5 gr	5 gr	2 gr			2 gr	1 gr
Working temperature range	10/48 °C			10/40 °C				0/40 °C	
Filter system	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable			Not applicable	Not applicable
Refrigerant tank	No internal tank. Scale max gross weight 50 kg								40 l
Bottle heater	Standard (with setting option for extended heating)	Standard	Standard	Standard					
Status light	Standard					Standard			Standard
Quick couplers	SAE J639								
Refrigerant scale max load	50 kg / 110 lb	20 kg	30 kg	20 kg				50 kg	40 l
Max operating pressure	160 bar	140 bar	140 bar	140 bar				160 bar	
Exhausted oil container capacity	500 ml								
Refrigerant charge	Automatic	Automatic	Automatic	Automatic	Automatic			Automatic	Automatic
Emergency Stop button	Standard				Standard				
Casing	Metal with robust plastic cover (thermoformed)							Metal with robust plastic cover	
Dimension / weight	cm 67 x 88 x 110, 90 kg	cm 67 x 100 x 81, 75 kg		cm 60 x 110 x 65				cm 53 x 53 x 92, 37 kg	cm 60 x 92 x 119, 85 kg
Dimension / weight with packaging	cm 74 x 112 x 125, 100 kg, no double stacking								

Competitor comparison

Sales argumentation
Main distinctive points of strength

- Extremely strong vacuum pump
- Refrigerant scale: gross weight up 50 kg
- Pressure Test forming gas and hybrid function are standard
- Touch screen 7’’ confers best userfriendliness (others graphic TFT display, navigation by key pad
- Time saving filling process due to heating system with manual setting option for extended heating
- Management of 3 high-quality, hermetic, refillable containers for compressor oil (1x PAG and 1x POE) and dye
- Perfect visibility pressure gauges of 100 mm
- Connectivity WiFi

Vehicles List

BRAND	MODEL	VERSION	ENGINE CODE	YEAR
AUDI	A8 IV (4N)	45 TDI quattro Ber 4p/d/2967cc	CVMD	1/2019-
AUDI	A8 IV (4N)	50 3.0 TDI quattro Ber. 4p/d/2967cc	DDVC	9/2021-
AUDI	A8 IV (4N)	55 3.0 TFSI quattro Ber. 4p/b/2995cc	CZSE	9/2017-
AUDI	A8 IV (4N)	60 4.0 TFSI quattro Ber. 4p/b/3996cc	CXYA	3/2018-
AUDI	A8 IV (4N)	60 TDI MHEV quattro lunga Ber 4p/de/3956cc	CVXB	1/2017-
AUDI	A8 IV (4N)	60 TDI Mild Hybrid quattro Ber 4p/de/3956cc	CVXB	11/2019-
AUDI	A8 IV (4N)	60 TFSI e quattro Ber 4p/be/2995cc	CZSE	10/2019-
AUDI	A8 IV (4N)	60 TFSI MHEV quattro lungaBer. 4p/be/3996cc	CXYA	1/2017-
AUDI	A8 IV (4N)	S8 40 TFSI MHEV quattro Ber 4p/be/3996cc	CWWB	2/2019-
MERCEDES-BENZ	Classe S (A/C217)	500 (217.382) Coupè 2p/b/4663cc	278929	11/2014-5/2018
MERCEDES-BENZ	Classe S (A/C217)	65 AMG Coupè 2p/b/5461cc	279980	7/2014-5/2018
MERCEDES-BENZ	Classe S (A/C217)	AMG S 63 4-matic (217.478) Cbr 2p/b/5461cc	157985	12/2015-5/2018
MERCEDES-BENZ	Classe S (A/C217)	AMG S 65 Cbr 2p/b/5980cc	279980	4/2016-5/2018
MERCEDES-BENZ	Classe S (A/C217)	S 400 4-matic (217.367) Coupè 2p/b/2996cc	276824	10/2015-5/2018
MERCEDES-BENZ	Classe S (A/C217)	S 500 (217.482) Cbr 2p/b/4663cc	278929	12/2015-5/2018
MERCEDES-BENZ	Classe S (A/C217)	S 500 4-matic (217.385) Coupè 2p/b/4663cc	278929	4/2014-5/2018
MERCEDES-BENZ	Classe S (A/C217)	S 63 AMG (217.377) Coupè 2p/b/5461cc	157985	7/2014-5/2018
MERCEDES-BENZ	Classe S (A/C217)	S 63 AMG 4-matic (217.378) Coupè 2p/b/5461cc	157985	4/2014-5/2018
MERCEDES-BENZ	Classe S (A/C217)	S 65 AMG (217.379) Coupè 2p/b/5980cc	279980	7/2014-5/2018
VOLKSWAGEN	ID.3 (E11)	Id.3 ber 5p/e/0cc	EBJA	7/2020-
VOLKSWAGEN	ID.3 (E11)	Id.3 ber 5p/e/0cc	EBJA	7/2020-
VOLKSWAGEN	ID.3 (E11)	Id.3 ber 5p/e/0cc	EBJD	7/2020-
VOLKSWAGEN	ID.3 (E11)	Id.3 ber 5p/e/0cc	EBJD	7/2020-
VOLKSWAGEN	ID.4 (E21)	ID.4 150 KW Suv 5p/e/0cc	EBJA	7/2020-
VOLKSWAGEN	ID.4 (E21)	ID.4 150 KW Suv 5p/e/0cc	EBJA	7/2020-
AUDI	Q4 (F4B)	35 e-tron Suv 5p/e/0cc	EBJA	1/2021-
AUDI	Q4 (F4B)	35 e-tron Suv 5p/e/0cc	EBRA	1/2021-
AUDI	Q4 (F4B)	40 e-tron Suv 5p/e/0cc	EBJA	1/2021-
AUDI	Q4 (F4B)	40 e-tron Suv 5p/e/0cc	EBRA	1/2021-
AUDI	Q4 (F4B)	45 e-tron quattro Suv 5p/e/0cc	EBJA	1/2021-
AUDI	Q4 (F4B)	45 e-tron quattro Suv 5p/e/0cc	EBRA	1/2021-
AUDI	Q4 (F4B)	50 e-tron quattro Suv 5p/e/0cc	EBJA	1/2021-
AUDI	Q4 (F4B)	50 e-tron quattro Suv 5p/e/0cc	EBRA	1/2021-

Vehicles List

Others

- **Audi Q4 etron / Audi Q4 Sportback mit R744 Wärmepumpe**
- **Ford Explorer EV and Capri**
- **VW Amarok mit R744 Wärmepumpe**
- **Seat Cupra Born mit R744 Wärmepumpe**
- **Skoda Enyaq mit R744 Wärmepumpe**
- **Volkswagen ID3 / ID4 / ID5 / ID6 / ID Buzz / ID7 mit R744 Wärmepumpe**
- **Mercedes Benz W213 / W222 / C217 mit R744 Klimaanlage**

Further, there seems to be increasing upcoming interest with new probable homologations of CO2 A/C Stations as

- **News launch VW in 2026**
- **News launch BMW in 2027**

Thank you for the attention!

SNAP-ON CLIMATE SOLUTIONS S.R.L. a unico socio

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