COOL UP

**Magazine 01/2025** 

## Embrace simplicity -

with the smart networked HVAC/R world of Testo. For refrigeration and air conditioning technology and other applications. NEW manifold intuitive as a smartphone

Be sure. testo

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Table

★ R410 ∨

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Refrigeration

Graphic

00:00:00

testo 570i 420

 $\begin{pmatrix} 12,2\\ bar \\ 48 \end{pmatrix}$ 

testo 570i 420

Temperature 40,8 °C

Subcooling 6,5 K

=

Live

testo 570i 420

UPGRADE

new refrigeration portfolio

## **TREND RADAR**

the HVAC/R world of tomorrow

## Simplicity is the ultimate sophistication.



We are all facing major changes in the air conditioning, refrigeration and heating solutions industry: Heat pumps. Natural refrigerants. A3. Electrification of building technology, to name just a few of the current developments.

The exciting thing is that Testo's mission and our promise to our customers remain the same: Simple measuring instruments. Simple measurement procedures. Simple documentation. Simple app. Simple job.

That's why I'm delighted to be able to present Testo's latest innovation to you today: The new, digital manifold testo 558s with intuitive app feel. It combines state-of-the-art technology with simplicity and flexibility. The best that the HVAC/R world of Testo currently has to offer - for all applications in refrigeration and air conditioning systems.

What makes them so unique? More on this from page 6!

At the same time, this new instrument is just one building block of the overall system: Our tools are not only intelligently networked, but already enable automated processes, e.g. for charging and evacuating systems.

With our digital updates, you can manage complex tasks not only efficiently, but also stress-free. This means you remain relaxed, no matter how the environment and the systems you deal with on a daily basis develop.

At Testo, we are convinced that our innovations not only meet the technical requirements of tomorrow, but also make your daily challenges easier. Let's shape the future of HVAC/R technology together with solutions that are simple and intelligent.

We look forward to breaking new ground together.

Enjoy reading!

Yours, Dirk Göpfert **Director Product Management** Instrumentation

testo

solutions. With smart tools that fulfil tomorrow's technological demands digitalization, a shortage of skilled some even fully automated. With the there are no simple solutions. We want to change that! With digital upgrades. So that you can and stay cool even in hot times. complexity with a new set of simple

testo Smart App THE WHOLE WORLD IN ONE APP.

testo

testo Smart App

😤 Customers

Settings

**Measurement programs** 

Saved data & reports

(?) Help & Information

A Measurement instruments

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#### testo SMART WORLD

## **SIMPLIFIES** SIMPLY **EVERYTHING.**

## Trend radar: These technologies are moving the industry.

#### **VRF** systems

Minimum consumption, maximum energy efficiency: The flexible energy miracles are taking the whole world by storm via China and India.

More on page 4

#### **Geothermal heat pumps**

Sustainable, quiet and efficient: As the centerpiece of the European energy transition, geothermal heat pumps are becoming increasingly important.

More on page 4

#### Hybrid systems

The best of both worlds: the reliability of fossil fuels and the sustainability of renewable energies - hybrid systems are setting new standards.

More on page 11



Simpler, faster, smarter: The testo Smart App brings all tools and measurements together - and documentation can also be conveniently managed using a smartphone or tablet. Experience end-to-end connectivity, wireless measurements and all data at a glance

- Automatic Bluetooth pairing
- ► All measured values centralized
- Second screen function
- Remote control and live measurement data
- Easy documentation



testo Smart App for free download





# READY FOR THE FUTURE.

In a world where sustainability and energy efficiency are more in demand than ever, innovative cooling and heating technologies are becoming increasingly important. Two that are particularly popular in the HVAC/R sector are VRF systems (Variable Refrigerant Flow) and geothermal heat pumps

Both technologies combine state-of-theart technology with flexibility and future-proofing and have already become an integral part of the market. At Testo, we make it easy for you to get to grips with the new systems.

### VRF systems: The energy miracle.

Minimum consumption, maximum number of installed systems is increasing in other countries. of applications from residential buildings to large commercial properties – with minimal energy consumption. VRF systems are therefore already very popular, especially in Asia, but demand is also steadily increasing for private households, but also for larger

awareness of energy efficiency and ease of installation is creating a real boom.

Testo measurement technology already meets all the requirements for installing and maintaining VRF systems quickly and easily.

### **Geothermal energy:** Sustainable heat from the earth.

heat pumps use the constant temperature for advanced heating and air conditioning of the ground to heat and cool buildings. The technology is not only sustainable, but also extremely efficient, as the earth is available all year round as a renewable, in Europe is growing rapidly. Countries such as Sweden, Germany and the Netherlands are leading the way, but the number of installed systems is also steadily

Geothermal systems for residential buildings in particular play a central role Asia, but demand is also steadily increasing buildings and district heating systems. With It is forecast that the global market for VRF systems will continue to grow in the coming years. In North America in particular.

### **Equipped for tomorrow** today.

Both technologies – VRF systems and geothermal energy - offer a simple answer to the increasing complexity of global markets and the growing demands for energy efficiency and sustainability. With outstanding performance and the ability to adapt to different applications, they are Geothermal systems such as ground source ideally suited to meet the growing demand solutions. For HVAC/R technicians, these technologies not only offer new business opportunities, but also the chance to make an important contribution to a sustainable local source of energy. No wonder demand future. And to simply make the world a little cooler every day with Testo.

#### **GEOTHERMAL HEAT PUR**

Geothermal heat pumps, which also include brine-to-water heat pumps, use the natural heat from the ground to efficiently heat or cool buildings. Using a refrigerant, they extract heat from the ground for heating purposes in winter and transfer excess heat back into the ground in order to cool in summer. This makes the technology particularly environmentally friendly and energy-efficient.

#### HYDRONIC HEAT PUMPS

Hydronic heat pumps use water as a heat transfer medium to which the energy obtained from various renewable energy sources such as air, earth or water is transferred using a refrigerant. The heat is then fed to radiators, underfloor heating or cooling surfaces via a circulating water system. Hydronic heat pumps offer a high degree of flexibility for integration into existing heating and cooling systems, are extremely efficient and protect the environment.

## (VARIABLE REFRIGERANT FLOW)

VRF systems are climate control systems (heating, ventilation and air conditioning) that can both heat and cool a building. VRF systems use a refrigerant, whereby the amount of circulating refrigerant is individually adjusted depending on requirements and the room. This makes VRF systems particularly energy-efficient, extremely precise in temperature control and offer great flexibility both in terms of installation and use.

EuroventMarket Intelligence | Global Newswire, Research and Markets | Mordor Intelligence itudeConsultancy | Geothermie in Frankreich 2021 | EGECGeothermal Market Report, ole years/ SVP Calculations | Fraunhofer IEG | BCC Research | Statista





## 2.08 MIO. **VRF** systems

were sold worldwide in 2023 alone



### Market share

China is currently by far the largest market for VRF systems

## **41.3** BN

### US dollars

Forecast for the global VRF systems market until 2030



## **Geothermal heat pumps**

were sold Europe-wide in 2023 alone



## Hydronic heat pumps

are to be installed annually in the EU by 2027 for decarbonization



### Megawatt

Heat capacity of installed brine-to-water heat pumps in Sweden alone

#### WORLD INNOVATION

# **A TOUCH OF GENIUS.**

The new, digital manifold testo 558s with intuitive app feel.

Genius smart, genius flexible, genius simple - may we introduce: The first manifold that is as cool and easy to use as your smartphone. The result of years of development work. The fulfillment of all your wishes as a Let's get in touch! refrigeration technician. The best the HVAC/R world has to offer.

With touchscreen, intuitive app feel and clear measurement graphs. Fully networked and wirelessly connected to the entire refrigeration portfolio.



The development of the new testo 558s is the result of close cooperation with our customers and extensive market analyses. Our aim is to simplify our customers' work considerably by modernizing and adapting to current trends. With the new touchscreen and improved user interface, measurements can be carried out faster and more intuitively, resulting in significant time savings. Thanks to unique system compatibility, applications can be flexibly expanded with additional Testo measuring instruments and fully controlled, documented and even automated via the manifold or smartphone. This gives us a significant competitive advantage. At the same time, advanced technologies and expandable features ensure that the testo 558s will continue to be optimally tailored to the needs of our customers in the future.

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Seyit Egin Product Manager Refrigeration

"

## **Genius smart**

and more intuitive - as easy as on a smartphone simplified and even more reliable thanks to new 30-minute trend diagrams and other clear graphs. Simply genius!

Auto charge...

EV

T1

3.5

3.0

15.5

12.5

Superheat

47.3

°C CO

K Sub

3.5

Time

15.0

3.0

## The highlights of the new testo 558s at a glance.

- **GENIUS SMART:** Intuitive touchscreen and clear measurement graphs
- **GENIUS CONNECTIVITY:** All measurement applications, all tools, wirelessly connected
- **GENIUS CHARGING SYSTEM:** Combines batteries and rechargeable battery, always ready for use
- ► GENIUS PRECISION: Highest precision of 0.25% fs over the entire measuring range (60 bar)
- **GENIUS UPDATES:** Always up to date in terms of refrigerants and connectivity
- GENIUS ADD-ONS: With data logging for up to 72 hours
- **GENIUS APP:** Configuration, remote control and documentation via testo Smart App

558s testo Pressure leak test Prel 🕸 🔋 🔒 Refrigeration HP bar LP bar 26.2 7.92 0 15 60 °C CO °C EV 47.2 6.5 14.5 bar T1 (050) °C T2 (051) °C 11.6 37.7 Subcooling Superheat Start P bar Current P 14.5 5.19.5 P=0R454b P=0 ESC testo 3 & A2

XXX.XX €

mpatio



#### **KITS & ACCESSORIES**

## EVEN MORE GENIUS IN A KIT.



#### testo 558s Smart Vacuum Kit

Smart professional kit with wireless temperature and vacuum probes - ideal for high-precision standard measurements.

Order no. 0564 5582 XXX.XX €

Set with clamp meter Order no. 0564 5584 XXX.XX €



#### testo 558s Smart Vacuum Kit with charging hoses

Smart professional set with new highquality charging hoses. All important refrigerants stored in the system.

Order no. 0564 5583 XXX.XX €



#### testo 550s Smart Kit

Practical entry-level kit with temperature probes for quick and wireless measurement and uncomplicated documentation via the testo Smart App.

Order no. 0564 5502 XXX.XX €

Kit with charging hoses Order no. 0564 5503 XXX.XX €

testo 550s Basic Kit Order no. 0564 5501 XXX.XX €

## **FULLY AUTOMATIC** FULLY NETWORKED.

## The genius world of Testo refrigeration technology.

The vision of a smart, networked world that makes jobs much easier. Check! On refrigeration and air conditioning systems at least. Because thanks to our decades of experience, we have managed to develop such a sophisticated HVAC/R world that all tools work together seamlessly and all applications are quick, easy and some even fully automated. All data and measurement results are collected centrally in the testo Smart App, so that the necessary documentation can be completed in no time.



## The tools from Testo are a valuable support

"

in my work as a refrigeration engineer in the offshore sector. The digital manifold enables me to carry out precise and reliable measurements, which is crucial for the maintenance and optimization of refrigeration systems - especially in such demanding environments. Testo's intuitive user interface and Bluetooth connectivity make diagnostics quicker and easier and allow me to track and manage data in real time via the testo Smart App.

Magno Pereira da Silva Eng & Tech Ilha



efrigeration nowledge n 3 modules Download now



"

## **PRACTICAL COMPANION:** SIMPLY THINKING AHEAD.

Charging hose set with valve

1/4" SAF

5/16" SAF



Charging hose set

1/4" SAF

Order no. 0554 2113 XX.XX € 5/16" SAE Order no. 0554 2114 XX.XX €



Order no 0554 3112 XX.XX €

**Refrigerant Charging Valve** 

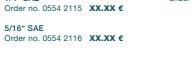


Vacuum hose

Order no. 0554 2117 XX.XX €

**Charging hose adapter** 1/4" zu 5/16" SAF

5/16" zu 1/4" SAF Order no. 0554 3114 XX.XX €





Order no. 0554 3113 XX.XX €





## **SMART PROBES** FOR SMART PROS.

7.92

6.5 °C

11.6 °C

5.1 ĸ

Wireless vacuum probe testo 552i Order no. 0564 2552 XXX.XX €

Clamp temperature probe testo 115i Order no. 0560 2115 02 XXX.XX € • Thermohygrometer testo 605i Order no. 0560 2605 02 XXX.XX €

26.2

47.2 °C

37.7 °c

9.5ĸ

From vacuum to temperature to air humidity: Wireless, precise and simple app-controlled measurement with testo Smart Probes.









Gas leak detector testo 316-3 Order no. 0563 3163 XXX.XX €



## **Refrigeration systems Fully automatic** evacuation ...and charging.



#### With the vacuum pump testo 565i.

Fully automatic evacuation with auto-stop function and self-starting vacuum hold test. Simply enter the target vacuum value and you're done.

7 CFM Order no. 0564 5652 XXX.XX € 10 CFM Order no. 0564 5653 XXX.XX €

#### With the digital refrigerant scale testo 560i.

Automatic and precise refrigerant charging according to target superheat, subcooling and weight thanks to intelligent valve.

Order no. 0564 2560 XXX.XX €

#### **HYBRID SYSTEMS**

## THE BEST OF TWO WORLDS.

Sustainability meets reliability for an energy-efficient future.

In times of rising energy prices and ever stricter environmental regulations, new heating solutions are in demand. Hybrid systems are becoming more and more important. With a mix of at least 65 percent renewable energy and a maximum of 35 percent fossil fuels, they combine the best of both worlds and therefore not only help to reduce CO<sub>2</sub> emissions, but also save money. Testo already today provides you with the expertise and measurement solutions you need to easily install and maintain hybrid systems

## How does a hybrid heating system work?

or more energy sources and heating energy sources are not sufficient, for source is available.

## PERFECTLY COMBINED.

With Testo you are optimally equipped for every heating combination.

- Gas heating & heat pump plus photovoltaic system (optional)
- Oil or gas heating systems & solar thermal, pellet heating or fuel cell heating
- Heat pump & wood heating
- Gas condensing heating & air-to-water heat pump







A hybrid heating system combines two technologies to supply heat to a building. Fossil fuels are only used when renewable example on days with little sunshine or in winter. Hybrid systems are often connected to a buffer storage tank. The water-filled tank stores excess heat and releases it to the heating system as required. This keeps the house warm even when no direct energy

The combination of heating technologies is also suitable for hot water preparation.

## The development in Europe in figures

Italy

Most important market in Europe with 130,000 hybrid systems sold by 2022



## Netherlands

Goal of the government: 1 million hybrid systems installed by 2030



Sales of hybrid heat pumps increased by 47.1 % in 2022



Germany

11,000 hybrid systems sold in 2022, with an upward trend

## **OVERVIEW OF THE ADVANTAGES OF HYBRID HEATING SYSTEMS.**

#### 1. Cost savings.

While fossil fuels such as gas and oil are becoming more expensive due to the CO<sub>2</sub> tax, renewable energies such as sun, air and ambient heat are free.

#### 2. Independence.

By using renewable energy sources, households become less dependent on fossil fuels.

#### 3. Security of supply.

Two heating systems ensure a stable heat supply all year round - even in extreme weather conditions.

#### 4. Flexibility.

Thanks to their modular design, hybrid heating systems can be flexibly expanded and adapted to the respective requirements and local conditions.

## 5. Compliance with legal specifications.

Hybrid heating systems in Germany meet the legal requirements for climate protection if they use 65 percent or more renewable energy.

## THE TECHNOLOGY LEADER.

New systems, new requirements, too few new specialists: Where others see the increasing complexity of the heating world as a major challenge, we at Testo turn it into an opportunity. With the smart networked HVAC/R product world, which is already fully prepared for the future and makes your job on heating systems easier. Whether

gas boiler or heat pump, geothermal or hybrid system: With Testo's well thoughtout complete portfolio and the digital testo Smart World, you can face technological change with confidence - and master every application with ease.

### testo 300 NEXT LEVEL

## The new simplicity of flue gas measurement.

How wireless parallel measurement makes your work easier.

Orders are coming in thick and fast - but you have everything under control with the testo 300 NEXT LEVEL. Automatically connected to the testo Smart Probes via BLUETOOTH®, you can save up to 20 minutes per job by simply measuring up to four additional parameters in parallel. Documentation is also more efficient and uncomplicated than ever before via the testo Smart App. So why make complicated measurements when it's easy with Testo?

Facy	naralla	mase	iromont

- Easy second screen function
- Easy data integration
- Easy documentation via testo Smart App

QUICK TIP: Discover all products easily online



#### THE SPECIAL PACKAGES AT A GLANCE:

testo 300 NEXT LEVEL Kit 1 Order no. 0564 3002 70

testo 300 NEXT LEVEL Kit 1 with printer Order no. 0564 3002 71

Flue Gas ▼ Natural ga Sample Cellar sto 915i 869 27,0 <sup>AT</sup> •C 21,0 🖁 testo 510i 442 38,0 mbar

<sup>812</sup>27,5 <sup>T1</sup>

2,4 .

115i 770 25,1 +C

testo 300

testo 300 NEXT LEVEL Longlife Kit 2 Order no. 0564 3004 82 testo 300 NEXT LEVEL Longlife Kit 2 with printer Order no. 0564 3004 89

#### testo 310 II

## Your entry into the digital heating world.

Flue gas analysis made easy: The testo 310 II with individually configurable display. For simple parallel measurements and smart documentation.

- Efficient: Measure and display up to 7 parameters simultaneously
- Simple: Intuitive menu guidance

17,7 .

13,4 %

12 pc

6,1 %

33 pt 4,31 %

93.9

Digital: Data transfer and customer data management via testo Smart App

1 Ideal for flow and return temperature testo 115i clamp thermometer with smartphone operation

- Ideal for a wide range of temperature measurements testo 915i thermometer with large probe selection and smartphone operation
- Ideal for gas boilers, air flow velocity and volume flow testo 510i differential pressure measuring instrument with smartphone operatior

#### THE SPECIAL PACKAGES AT A GLANCE:

testo 310 II Kit 1 Order no. 0563 XXXX

testo 310 II Kit 1 with printer Order no. 0563 XXXX

testo Smart Probes HVAC kit Order no. 0563 0010





#### **RECOMMENDED BY THE PROS**

I've been working with Testo instruments for over 20 years. Testo's innovations are sensational. Testo's tools solve real problems, they're uncomplicated to use, easy to handle and make work much easier.

## Karl-Heinz Bilz

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## How can we make our customers' day-to-day work easier with our systems?

When developing new products, we always ask ourselves the central question: How can we make our customers' day-to-day work easier with our systems? We not only look at the instrument level, but also focus on the entire system. Our aim is to continuously develop new functionalities that can be seamlessly integrated into our customers' workflows and thus reduce complexity.

We do not limit ourselves to new developments, but also continuously add new functions to our existing portfolio. So with Testo you are always at the most up-to-date level of simplicity.

Niklas Maier

"

#### NEW!

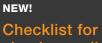
### Tips and tricks for flue gas analysis

Download now free of charge









## simple parallel measurement

Download now free of charge







## **TESTO HEAT PUMP KITS NEW TIMES. NEW TOOLKITS.**



### Set for the future: The digital manifold kits from Testo

Get ready for the new heating systems of today and tomorrow: With Testo's smart manifolds, you are optimally equipped for all new technologies such as heat pumps, hybrid and geothermal systems. Fully networked, fully digital and fully simple. With the testo Smart Probes and the testo Smart App, vacuum, temperature, pressure and weight are also recorded faster, more wirelessly and conveniently than ever before.



HP bar 26.2

47.2

37.7

9.5

LP bar 7.92

6.5

11.6

5.1

00:00:00

3,5

3,0 °C

5,5°c

25

#### JUST EASY Simply shop for Testo heat pump kits online

n pa



testo 558s Heat pump professional kit Order no. 0564 5002 XXX.XX €

testo 550s Heat pump entry-level kit Order no. 0564 5000 XXX.XX €

New

## **TOOL TIPS** SMART, FLEXIBLE, **FUTURE-READY.**



QUICK TIP: Discover all products easily online



1 DIGITAL refrigerant scales **testo 560i** Order no. 0564 2560 XXX.XX € 2 SMART vacuum pumptesto 565i Order no. 0564 5652 XXX.XX € 3 Gas leak detector testo 316-3 Order no. 0563 3163 XXX.XX € 4 WIRELESS vacuum probe testo 552i Order no. 0564 2552 XXX.XX € 5 SMART thermometer testo 915i Order no. 0563 5915 XXX.XX € 6 Thermohygrometer testo 605i Order no. 0560 2605 02 XXX.XX € 7 BLUETOOTH clamp meter testo 770-3 Order no. 0590 7703 02 XXX.XX €

## THERMOGRAPHY

## THE FULL OVERVIEW.

The best thermal imagers for modern heating systems.



1 For pros: Thermal imager testo 872s Order no. 0564 1560 XXX.XX € 2 For entry-level users: Thermal imager testo 865s Order no. 0564 5652 XXX.XX €



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## **RECOMMENDED BY THE PROS** Testo is our perfect partner for all service assignments.

As we place a very high value on quality, we only use the latest technology in measuring and testing equipment. Testo is our perfect partner for all service assignments in the field of heating & cooling solutions.

Melano Hellwig Team Leader Field Support, Panasonic Heating





The simple interconnectivity of the instruments gives the customer unprecedented flexibility.

Testo's cross-application product range has always been a major customer advantage. In particular, however, the easy connectivity of the instruments with each other, especially with regard to the additional functionalities of the testo Smart App, provides the customer with unprecedented flexibility, including personalization of the functional areas. The breadth of connectivity and ease of use is unique to Testo!

Hubert Mitterling Product Owner, Cloud & mobile software at Testo

## Concentrated heat pump knowledge

Download now free of charge







## **COMPLEX TASKS. SIMPLY UNDER CONTROL.**

#### How intuitive tools from Testo make your job easier.

As an air conditioning and ventilation technician, you don't have an easy job. But an important one. Because the correct adjustment of air conditioning and ventilation systems helps to save valuable energy and costs. In addition, efficiently regulated systems improve the quality of life and work thanks to good indoor air. Testo makes

it easy for you to master the increasing complexity of tasks. With intuitive and efficient measurement technology for all systems and parameters. Simple to operate. Simple documentation. Simply smart and digitally networked. For more simplicity - and less stress.

## All measurements. All parameters. All easy.

### **Volume flow measurement** in ducts

hanks to intuitive measurement programs, calculation of the volume flow.

### Volume flow measurement at vents

Especially at ventilation and swirl outlets, often make correct measurement difficult. With the testo 440 and the wireless vane master these challenges with ease.

Whether in ducts, at vents, at filters or in balanced residential ventilation - with tools from Testo, all measurement tasks are completed quickly and easily.



## **Regulation of balanced** ventilation systems

stress when adjusting ventilation systems: measurement funnel and the PRO measurement program Air Balancing, measured values are setpoint value. You receive recommendations for the hecessary system adjustments.

#### **Filter checks**

Air filters must be checked regularly in order to comply with the strict hygiene regulations. With the testo 440 dp, you can quickly and reliably determine whether a filter is dirty with two simple downstream of the filter.



#### **Pitot tube measurement**

connection to the testo Smart App then calculates the volume flow automatically. It couldn't be easier.

testo 440

## EASY. COMPACT. **MULTIFUNCTIONAL.**

The climate measuring instrument testo 440 for all climate-related parameters.

Intuitive measurement menus for all air velocity and IAQ applications

for up to 7,500 measurement values

with extensive probe portfolio and practical

Wireless Bluetooth probes for maximum convenience

Versatile and expandable

More about the testo 440

Internal memory

accessories

A real all-rounder: With the compact testo 440 climate measuring instrument, you have all measurements on air conditioning and ventilation systems easily and efficiently under control. In ducts, at filters and at any type of vent. Intuitive measurement programs guide you to

precise results in just a few clicks, and thanks to wireless Bluetooth probes with automatic pairing, you can save yourself the tangle of cables. The selection of suitable accessories is almost limitless as is the noticeable relief in everyday work.





Air flow measurements in ducts according to DIN EN 12599.

### Make complex measurements easier.

Benefit from our practical knowledge of air flow measurements in ducts.

Download now free of charge







Ideal for measurements on filters, in ventilation ducts and at air/ceiling vents: testo 440 delta P flow ComboKit 2 with **Bluetooth**®

testo 440 dP flow ComboKit 2 Order no. 0563 4410 XXX.XX €



14(

10:01 AM

olume Flow

Multi-point

1425 m³/h

3.71 m/s

24.6 °c

OK

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t

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Ideal for measurements in ventilation ducts and at vents: testo 440 flow ComboKit 1 with Bluetooth®

testo 440 flow ComboKit 1 Order no. 0563 4406 XXX.XX € **TOOL TIPS** 

## THE COMPACT SPECIALISTS.

Simple, smart, precise: The digital HVAC measuring instrument with app connection.

Made to make it easy: The compact HVAC measuring instruments are uncomplicated, flexible and, while connected to a smartphone, provide exact measurement values for all climate parameters. The connection to the testo Smart App makes configuration, measurement, analysis and documentation easy, and even complex measurements can be carried out quickly and easily.

Easier measurement at outlets.



Digital 100 mm vane anemometer - also ideal on balanced ventilation systems

testovent 417 Funnel/flow straightener kit - also ideal on balanced ventilation systems

#### Smarter measurement in ducts and on filters.



testo 512-1 Digital differential pressure measuring instrument with App connection

#### testo 417 Order no. 0563 0417 XXX.XX € testovent 417 Order no. 0554 4173 XXX.XX € • testo 416 Order no. 0563 0416 XXX.XX € testo 425 Order no. 0563 0425 XXX.XX € • testo 512-1 Order no. 0563 1512 XXX.XX €



### Measure up to 30% faster on balanced residential ventilation systems

Ξ	Air Balancing	(j) (j)
Live	Balancing	History
	1 values applied	
-	Living Room	
teference value		<b>75</b> m³/h
esults • Measu	rement round 1	:
leasured value		87 m³/h
eviation (abso	lute)	+12 m³/h
eviation (%)		+16 🐒
esto 417 · 358		:
ir velocity		92,3 m/s

## Practical guide **Measurement** tasks on residentia ventilation systems

Download now free of charge





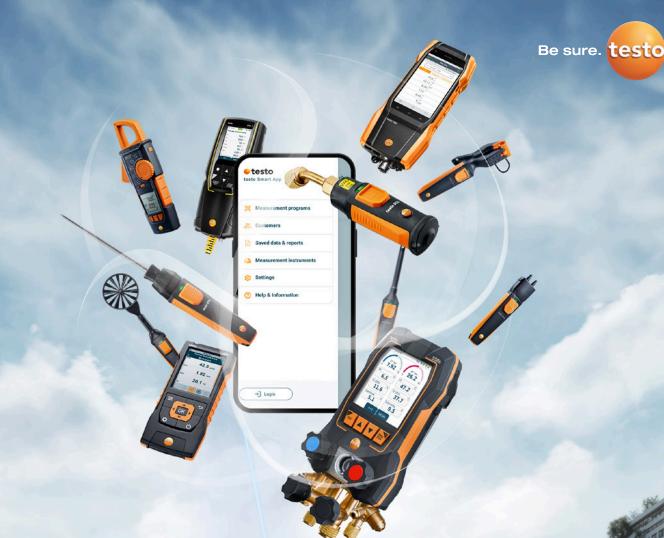
Donwload on the App Store

Get IT ON Google Play

SMAR



Air conditioning & ventilation technology



## You too can become part of the testo Smart World.

12.2 bar 47,3 °



Visit us online and experience what else the Testo HVAC/R world makes possible



Subscribe to our newsletter for even more exciting updates from Testo's Smart World



2981 XXX4/BBS/msp/01.2025 - Subject to change, including technical changes, v

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