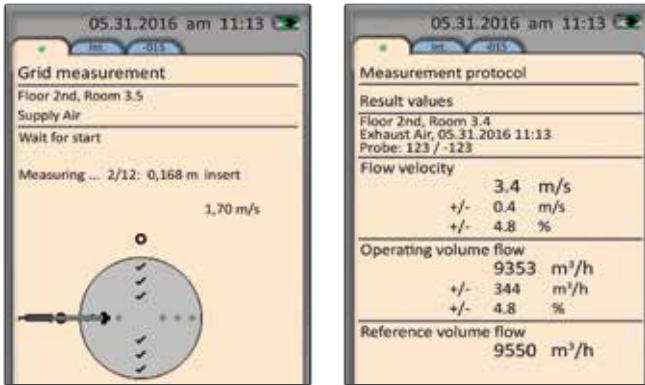


Carry out norm-compliant VAC grid measurements – with the multi-function measuring instrument **testo 480**.



In order to be able to guarantee the error-free and energy-efficient performance of a VAC system, the correct adjustment of the total volume flow must be proven. In an incorrectly adjusted system, the indoor air quality deteriorates, which can negatively influence the health of the staff or production quality. This is why it is important that in approval testing or when servicing a system, VAC technicians carry out a reliable, but also very complex VAC grid measurement according to EN 12599.

With the multi-function measuring instrument testo 480, Testo greatly simplifies VAC grid measurement – offering VAC constructors, assessors and facility managers a guided measurement program for norm-compliant results, as well as a large selection of highly accurate probes for the various requirements of the measurement.



Integrated menu guide according to EN 12599.



Flow velocity probes with a scale simplify the determination of the immersion depth in the duct.

The challenge.

Whether a VAC system fulfils the prescribed total volume flow, thus guaranteeing the required indoor climate, must be tested and proven according to the extensive guidelines of EN 12599 in approval testing and when servicing. As the flow profile in the duct rarely corresponds to the ideal shape (laminar/turbulent), and since the velocity profile can be extreme depending on the distance to the next source of interference, a grid measurement offers the safest method of correctly calculating volume flow. However, this form of measurement is very complex, and depending on the shape size of the duct, requires different measuring instruments and procedures – in rectangular ducts the trivial method, for example, and in round ducts the centroidal axis method. In addition to this, errors are more likely in grid measurement. There are various causes for this, ranging from influences at the measurement location up to errors in the conversion calculations of results.

The solution.

With the multi-function measuring instrument testo 480, you conduct VAC grid measurements norm-compliantly according to EN 12599. With an integrated measurement program, the instrument guides you step by step through the entire measurement process, and offers a number of highly accurate probes such as thermal probes, vane probes or Pitot tubes – for low, medium or high flow velocities and different duct shapes. Thanks to the intelligent calibration concept, the probes notify the measuring instrument as soon the next calibration is due. Digital probes can even be calibrated without the hand instrument, allowing the uninterrupted use of the testo 480.

The measurement procedure is structured and simple:. First you enter the necessary parameters, such as duct geometry, distance from the edge or aperture position of the measurement location, into the menu. You then start the measurement program, whose graphic support guides you reliably and quickly through the measurement. The different measurement points in the duct are approached sequentially according to their coordinates. After the end of the measurement, the mean values as well as the uncertainties for flow velocity and volume flow are automatically calculated and displayed. This allows the total uncertainty to be directly evaluated without any additional measurements. With the testo 480, you are prepared for everything, you work quickly, obtain error-free measurement results, and can present them to your customers directly on site.

testo 480 – all the advantages at a glance:

- Guided measurement program for norm-compliant measurements according to EN 12599
- Complete probe range for the various requirements of VAC grid measurement
- Intelligent calibration concept for maximum efficiency

More information.

For more information and answers to all your questions concerning VAC grid measurements with the testo 480 at www.testo.com