

testo 560 and 556

The new refrigeration system analyzers are the professional solution for service and maintenance. 2 temperature-compensated pressure sensors calculate in real time superheating and subcooling in a refrigeration system or heat pump using a probe which is attached externally. Using a high-quality sensor to measure vacuum, testo 560 is also ideal for system evacuations. This means commissioning can also be carried out.

“EasyKool” PC software offers you convenient data management on your PC: data overviews of all measurements, readings in table and graph form as well as optimum refrigerant management. On account of non-stop data documentation over a defined time period, the causes of downtimes can be diagnosed.

Additional accessories make the refrigeration technician's work easier.

Using the attachable electronic scales it is ensured that the amount of refrigerant filled corresponds to the amount actually required. The attachable switchable current probe (0 to 20 A / 200 A) monitors the compressor's power consumption. The oil pressure probe measures oil pressure in the compressor. The service life of the compressor is extended considerably if the oil level is kept at a sufficiently high level.



Large, backlit display and easy operation using menu buttons



Robust design: Absorbent protective sleeve and concealable valve actuator



Newly designed snap hook with built-in instrument protection (lock optional)



Temperature probe socket and interface for additional sensors



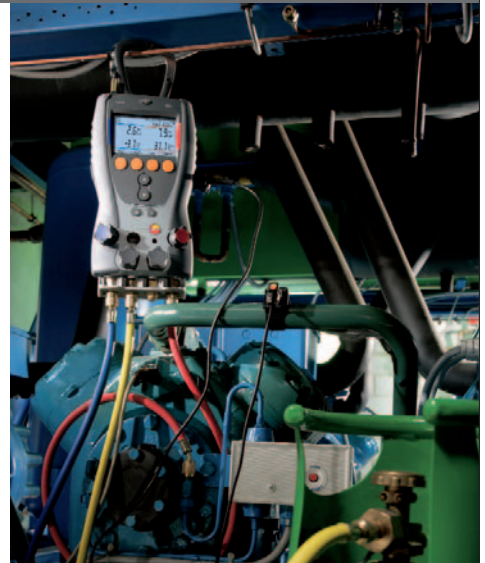
System and error analysis using “EasyKool” PC software



The Professional Solution for Service and Maintenance

testo 556

- On-site printout with Testo printer (optional)
- High-quality sensors measure high/low pressure and temperature
- Calculation of superheating and subcooling in real time
- 4-way valve block with sight glass
- 4 temperature probe connections
- Wireless temperature measurement up to 20 m distance (without obstruction)
- 30 refrigerants are stored in the instrument, more refrigerants can be downloaded free of charge from the Testo website using the software "EasyKool"
- 60,000 measurement values can be stored
- Further functions:
 - Current measurement
 - Differential pressure measurement
 - Stock management of refrigerants when filling and evacuating refrigeration systems



Filling a refrigeration system with testo 556 and 560

testo 556-1

testo 556-1, electronic refrigeration unit analyzer, brass connections, calibration protocol and batteries included

Part no. 0560 5563

testo 556-2

testo 556-2, electronic refrigerant unit analyzer, stainless steel connections, calibration protocol and batteries included

Part no. 0560 5564

testo 556-1 Set

Refrigeration system analyzer testo 556-1, Velcro surface probe, software with USB data cable, mains unit, lock to secure analyzer, incl. system case for extensive accessories

Part no. 0563 5561

testo 556-2 Set

Refrigeration system analyzer testo 556-2, Velcro surface probe, software with USB data cable, mains unit, lock to secure analyzer, NH3 adapter, incl. system case for extensive accessories

Part no. 0563 5562

The professional solution for commissioning, service and maintenance

testo 560

Over and above testo 556:

- Vacuum sensor/Evacuation
- The sensor measures absolute pressure and displays the corresponding evaporation temperature of water.
- The vacuum cell is protected from high pressures by a special valve.



4-way valve block in testo 556 and 560



Service and maintenance on a refrigeration system using testo 556 and 560, commissioning included

testo 560-1

testo 560-1, electronic refrigeration unit analyzer with vacuum sensor, brass connections, calibration protocol and batteries included

Part no. 0560 5603

testo 560-2

testo 560-2, electronic refrigeration units analyzer with vacuum sensor, stainless steel connections, calibration protocol and batteries included

Part no. 0560 5604

testo 560-1 Set

Refrigeration system analyzer testo 560-1, Velcro surface probe, software with USB data cable, mains unit, lock to secure analyzer, incl. system case for extensive accessories

Part no. 0563 5602

testo 560-2 Set

Refrigeration system analyzer testo 560-2, Velcro surface probe, software with USB data cable, mains unit, lock to secure analyzer, NH3 adapter, incl. system case for extensive accessories

Part no. 0563 5603

The Starter for Service and Maintenance

testo 523

The starter refrigeration system analyzer for service and maintenance on refrigeration systems and heat pumps. The pressures measured with the two pressure sensors are immediately converted into temperature values according to the selected refrigerant, and displayed in the large, backlit display.

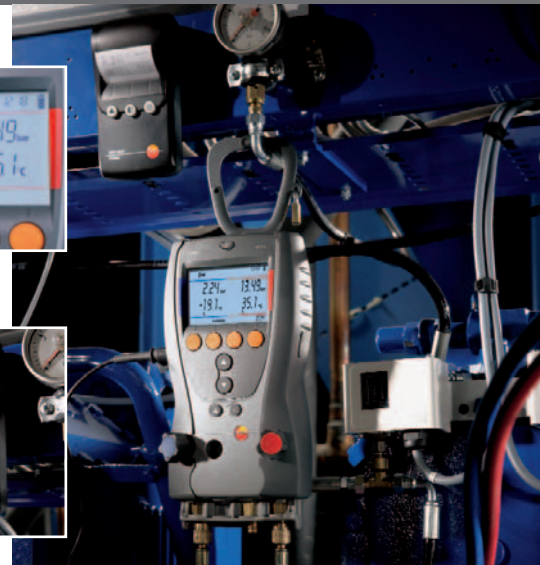
- Calculation of superheating and subcooling in real time
- Display and sightglass illumination
- 2-way valve block
- 1 temperature probe connection
- 30 refrigerants stored in the instrument



Large, backlit display



On-site printout of measurement data on infrared printer



Refilling refrigerant with the testo 523

testo 523

testo 523, electronic refrigeration system analyser, brass connections, calibration protocol and batteries included

Part no. 0560 5231

testo 523 Set 1

testo 523 refrigeration system analyser, Velcro surface probe

Part no. 0563 5234

testo 523 Set 2

testo 523 refrigeration system analyser, Velcro surface probe, incl. transport case

Part no. 0563 5235

Technical data testo 523, 556, 560

	testo 523	testo 556	testo 560
Low pressure/High pressure			
Meas. range	25 bar / 50 bar		
Overload	50 bar / 100 bar		
Accuracy ±1 digit	±0.5% fs (Class 0.5)		
Conn.	3 x 7/16" UNF	3 x 7/16" UNF 1 x 5/8" UNF	
Resolution	0.1 bar / 10 kPa		
Vacuum			
Meas. range	—		0 to 200 hPa
Overload	—		3 bar*
Resolution	—		0.1 bar / 10 kPa
Temperature			
Meas. range	-100 to +200 °C		
Accuracy	Class B ±(0,3 +0,005 t)		
Resolution	0.1 °C		
Probe connections	1 x plug-in	2 x plug-in (Pt100) 2 x wireless (TC)	
General technical data			
Pressure media	CFC, HFC, N, H ₂ O, CO ₂ (Stainless steel versions: NH ₃)		
Oper. temp.	-20to +60 °C		
Storage temp.	-20to +60 °C		
Battery type	4 AA batteries		
Battery life	40 h (no light)		
Dimensions	260 x 130 x 70 mm		
Data store in instrument	—	60,000 readings	
Protection class	IP54		
Weight	1250 g	1400 g	

*Sensor protected from high pressures

Refrigerants permanently stored in instruments

R-12	R403B	R414b*
R1270	R404A	R417A
R134a	R406a*	R422a*
R22	R407A	R500
R23	R407B	R502
R290	R407C	R507
R401A	R407D	R508**
R401B	R408A	R717**
R401C	R409A	R723**
R402A	R410A	R744
R402B	R413A	R718

* only testo 523 / 556-1 / 560-1 (brass)

** only testo 556-2 / 560-2 (stainless steel)

In the case of testo 556 and testo 560, additional refrigerants can be downloaded free of charge using the Testo website and "EasyKool software".

Probes testo 523, 556, 560

Probes testo 523 / testo 556 / testo 560	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Pipe wrap probe with Velcro for pipes from Ø 6 mm to Ø 120 mm, Pt 100, 2.9 m cable length		-100 to +400 °C	Class A	5 s	0609 5602
Robust, waterproof Pt100 immersion/penetration probe		-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range)	12 s	0609 1273
Robust, waterproof surface temperature probe, Pt100		-50 to +400 °C	Class B	40 s	0609 1973
Efficient, robust air probe, Pt100		-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range)	70 s	0609 1773
Pipe wrap probe for pipe diameter 5 to 65 mm		-50 to +120 °C	Class B	5 s	0609 5605
Probes testo 556 / testo 560	Illustration	Meas. range	Accuracy	Part no.	
Current probe for measuring current consumption of compressors, with switchable measuring range		0 to 20/200 A	0 to 9.9 A 4% 10 to 49.9 A 3% 50 to 200 A 2%	0554 5607	
Oil pressure probe for checking oil level in the compressor		0 to 15 bar rel	0,5 % of fsv Overload 50 bar	0638 1742	

Accessories testo 523, 556, 560

Accessories testo 523 / testo 556 / testo 560	Part no.
Testo printer with wireless IRDA and infrared interface, 1 roll of thermal paper and 4 AA batteries	0554 0547
Spare thermal paper for printer (6 rolls)	0554 0568
Lock for wall holder	0554 1747
External fast charger for 1-4 AA rech. batteries, incl. 4 Ni-MH rech. batteries with individual cell charging and charge control display, incl. impulse trickle charging, integrated discharge function, with built-in international mains plug, 100-240 V, 300 mA, 50/60 Hz	0554 0610
Scales incl. transport case and batteries (0 to 80 kg), incl. data cable, directly connectable to testo 556/560, overload 120 kg, resolution: 0.01 kg	0554 5606
Transport case for measuring instrument and accessories	0516 5013
System case for measuring instrument and extensive accessories	0516 5602
Accessories testo 556 / testo 560	Part no.
Plug-in mains adapter, 5 VDC 500 mA with European adapter	0554 0447
USB connection cable, instrument to PC	0449 0047
"EasyKool" software with measurement data management, USB data cable included	0554 5604
Stainless steel adapter for NH3 (ammonia), 3 connection hoses with 7/16" to 1/2" and 1 connection hose 5/8" to 1/2", hose length 24 cm	0554 5561

Calibration Certificates	Part no.
ISO calibration certificate relative pressure, 3 measurement points distributed over the measurement range	0520 0085
ISO calibration certificate/absolute pressure, 3 meas. points distributed over meas. range	0520 0185
ISO calibration certificate/temperature, meas. instr. with surface probe; calibration points +60°C; +120°C; +180°C	0520 0071
ISO calibration certificate/temperature, for air/immersion probes, calibration points -18°C; 0°C; +60°C	0520 0001
ISO calibration certificate current probe, 3.5-figure	0520 3105
ISO calibration certificate/scales	0520 2620


Note: Calibration certificates apply only to one sensor

Option: Radio testo 556 / testo 560

Radio module for upgrading measuring instrument with radio option


Country versions	Radio freq.	Part no.
Radio module for measuring instrument, 869.85 MHz, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	869.85 MHz FSK	0554 0188
Radio module for measuring instrument, 915.00 MHz FSK, approval for USA, CA, CL	915.00 MHz FSK	0554 0190

Radio probes for immersion/penetration measurements


Radio immersion/penetration probes	Meas. range	Accuracy	Resolution	t ₉₉
Radio immersion/penetration probe, NTC 	-50 to +275 °C	±0.5 °C (-20 to +80 °C) ±0.8 °C (-50 to -20.1 °C) ±0.8 °C (+80.1 to +200 °C) ±1.5 °C (remaining range)	0.1 °C	t ₉₉ (in water) 12 s

Country versions	Radio freq.	Part no.
Radio immersion/penetration probe, NTC, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	869.85 MHz FSK	0613 1001
Radio immersion/penetration probe, NTC, approval for USA, CA, CL	915.00 MHz FSK	0613 1002

Assembled for you: Radio handles with probe head


Radio handles with probe head for air-/ immersion-penetration-meas.	Meas. range	Accuracy	Resolution	t ₉₉
Radio handle for attachable probe heads with T/C probe head for air and immersion/penetration measurement 	-50 to +350 °C Short-term to +500 °C	Radio handle: ±(0.5 °C +0.3% of mv) (-40 to +500 °C) ±(0.7 °C +0.5% of mv) (remaining range) T/C probe head: Class 2	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	t ₉₉ (in water) 10 s

Country versions	Radio freq.	Part no.
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	869.85 MHz FSK	0554 0189
T/C probe head for air/immersion/penetration measurement, attachable to radio handle, T/C Type K		0602 0293
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL	915.00 MHz FSK	0554 0191
T/C probe head for air/immersion/penetration measurement, attachable to radio handle, T/C Type K		0602 0293

Radio handles with probe head for surface measurement	Meas. range	Accuracy	Resolution	t ₉₉
Radio handle for attachable probe heads with T/C probe head for surface measurement 	-50 to +350 °C Short-term to +500 °C	Radio handle: ±(0.5 °C +0.3% of mv) (-40 to +500 °C) ±(0.7 °C +0.5% of mv) (remaining range) T/C probe head: Class 2	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)	5 s

Country versions	Radio freq.	Part no.
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	869.85 MHz FSK	0554 0189
T/C probe head for surface measurement, attachable to radio handle, T/C Type K		0602 0394
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL	915.00 MHz FSK	0554 0191
T/C probe head for surface measurement, attachable to radio handle, T/C Type K		0602 0394

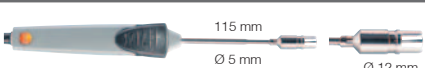

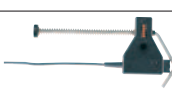

Radio handles, separate

Radio handles for attachable T/C probes	Meas. range	Accuracy	Resolution
Radio handle for attachable probe heads incl. adapter for attaching T/C probes (Type K) 	-50 to +1000 °C	±(0.7 °C +0.3% of mv) (-40 to +900 °C) ±(0.9 °C +0.5% of mv) (remaining range)	0.1 °C (-50 to +199.9 °C) 1.0 °C (remaining range)

Country versions	Radio freq.	Part no.
Radio handle for plug-in probe heads, incl. T/C adapter, approval for the countries: DE, FR, UK, BE, NL, ES, IT, SE, AT, DK, FI, HU, CZ, PL, GR, CH, PT, SI, MT, CY, SK, LU, EE, LT, IE, LV, NO	869.85 MHz FSK	0554 0189
Radio handle for plug-in probe heads, incl. T/C adapter, approval for USA, CA, CL	915.00 MHz FSK	0554 0191

Radio probes: General technical data

	Radio immersion/penetration probe, NTC	Radio handle	Measuring rate	0.5 s or 10 s, adjustable on handle	Radio transmission	Unidirectional
Battery type	2 x 3V button cell (CR 2032)	2 AAA micro batteries				
Battery life	150 h (meas. rate 0.5 s) 2 months (meas. rate 10 s)	215 h (meas. rate 0.5 s) 6 months (meas. rate 10 s)			Oper. temp.	-20 to +50 °C
			Radio coverage	Up to 20 m (without obstructions)	Storage temp.	-40 to +70 °C
					Protection class	IP54

Probe for probe handle	Illustration	Meas. range	Accuracy	t ₉₉	Part no.
Fast-action surface probe with sprung thermocouple strip, also for uneven surfaces, measurement range short-term to +500°C, TC Type K 	115 mm Ø 5 mm Ø 12 mm	-60 to +300 °C	Class 2	3 s	0602 0393
Pipe wrap probe with Velcro strip, for temperature measurement on pipes with diameter up to max. 120 mm, T _{max} +120°C, TC Type K 	395 mm 20 mm	-50 to +120 °C	Class 1	90 s	0628 0020
Pipe wrap probe for pipe diameter 5 to 65 mm, with exchangeable measuring head. Meas. range short-term to +280°C, TC Type K 		-60 to +130 °C	Class 2	5 s	0602 4592
Spare meas. head for pipe wrap probe, TC Type K		-60 to +130 °C	Class 2	5 s	0602 0092
Clamp probe for measurements on pipes, pipe diameter 15 to 25 mm (max. 1"), meas. range short-term up to +130°C, TC Type K 		-50 to +100 °C	Class 2	5 s	0602 4692