

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.	-20 to +60 °C		
Storage temp.	-20 to +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	280 mm 20 mm	-100 to +400 °C	Class A	5 s	0609 5602
Robust, waterproof Pt100 immersion/penetration probe	114 mm Ø 5 mm 50 mm Ø 3.7 mm Fixed cable 1.2 m	-50 to +400 °C	Class A (-50 to +300 °C), Class B (remaining range)	12 s	0609 1273
Robust, waterproof surface temperature probe, Pt100	114 mm Ø 5 mm 50 mm Ø 9 mm Fixed cable 1.2 m	-50 to +400 °C	Class B	40 s	0609 1973
Efficient, robust air probe, Pt100	114 mm Ø 5 mm 50 mm Ø 4 mm Fixed cable 1.2 m	-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	Fixed cable	-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	Fixed cable	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	Fixed cable	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