Sauermann[®]

DATA SHEET

Probes and accesories for Si-CA 030 / 130 / 230 combustion analyzers

Probe	Reference	Measuring range	Accuracy ⁽¹⁾	Illustration
Flue gas probe Different shaft lengths available : 180, 300 and 750 mm probes and 1 m and 1.5 m probes. 180 mm probe includes 2 m of dual hose with water trap and adjustable fixing cone. All other probes include 3 m of dual hose with water trap and adjustable fixing cone.	27532 (180 mm) 27533 (300 mm) 27534 (750 mm) 27535 (1 m) 27536 (1.5 m)	180 and 300 mm probes: -20 to +800 °C / -4 to +572 °F 750 mm, 1 m and 1.5 m probes: -20 to +1200 °C / -4 to 2192 °F	±2 °C or ±0.5% rdg ±3.6 °F or ±0.5% rdg	
Flexible probe Allows user to insert the probe into flues and pipes that are hard to reach and in tight locations where the typical straight rigid probe is difficult to use. - Bends up to 90° with a radius of 8 cm - Easy return to straight position - 180 mm flexible probe shaft length - 2 m dual hose with water trap	27936	0 to +300 °C 32 to +572 °F	±2 °C or ±0.5% rdg ±3.6 °F or ±0.5% rdg	
Draft probe Allows user to measure the draft into the flue/stack. It allows draft and combustion analysis to be mea- sured simultaneously.	27544	-200 to +200 mbar -80 to +80 inH ₂ 0	$\pm 1\%$ rdg ± 0.03 mbar $\pm 1\%$ rdg ± 0.012 inH ₂ O	10
Smart air temperature probe Allows user to measure the incoming air temperature. Sensor type: K thermocouple. Stainless steel contact tip, 100 mm length and Ø4.5 mm. With a 2 m coiled cable.	24646	-40 to +250 °C -40 to +482 °F	±2 °C ±3.6 °F	
Pt100 temperature probeAllows user to measure the incoming air temperature.Sensor type: Pt100.Stainless steel contact type, 100 mm length andØ4.5 mm.With a 2 m coiled cable.	27865	-40 to 250 °C -40 to 482 °F	±(0.3% rdg ±0.25) °C -40°F to 32 °F: ±(-0.3% rdg +0.6) °F 32°F to 482 °F: ±(0.3% rdg +0.4) °F	
CO probe ²² Allows user to measure the ambient CO. Sensor type: electrochemical.	27547	0 to 500 ppm	0 to 200 ppm: ±3 ppm 200 to 500 ppm: ±1.5% of reading	
CO₂ probe ²²⁾ Allows user to measure the ambient CO ₂ . Sensor type: NDIR.	27548	0 to 5000 ppm	$\pm 3\%$ of reading or ± 50 ppm	

(1)All accuracies indicated in this document were stated in laboratory conditions at 20 °C (68 °F) and can be guaranteed for measurement carried out in the same conditions.

⁽²⁾The CO and CO, probes are compatible with the Si-CA 130 and 230 without modification of the analysers. They are also compatible with the Si-CA 030, but may require the Si-CA 030 to be returned to the factory in order to install an external input for these two probes.

Sensors		erence	Measuring	Accuracy ⁽²⁾	Compatible analyzer
	Upgrade ⁽¹⁾	Spare part	range		
O ₂ sensor For O2 measurement. Electrochemical sensor.	N/A	27524	0 to 25%	±0.2% vol	Si-CA 030
O ₂ sensor For O ₂ measurement. Electrochemical sensor.	N/A	27628	0 to 25%	±0.2% vol	Si-CA 130 / Si-CA 230
CO sensor For CO measurement. Electrochemical sensor.	N/A	27525	0 to 8000 ppm		Si-CA 030
CO sensor For CO measurement. Electrochemical sensor.	N/A	27629	0 to 8000 ppm	$\pm 3 \text{ ppm} < 160 \text{ ppm} \\ \pm 5\% \text{ rdg up to} \\ 2000 \text{ ppm} \\ \pm 10\% \text{ rdg} > 2000 \text{ ppm} $ Si-6	Si-CA 130
$CO-H_2$ sensor For CO measurement with H_2 compensation. Electro- chemical sensor.	N/A	27877	0 to 8000 ppm		Si-CA 130
CO sensor For CO measurement. Electrochemical sensor.	N/A	27630	0 to 10000 ppm (up to to 50000 ppm with dilution)		Si-CA 230
NO sensor For NO measurement. Electrochemical sensor.	27647	27506	0 to 5000 ppm	$\pm 5 \text{ ppm} < 100 \text{ ppm}$ $\pm 5\% \text{ rdg} > 100 \text{ ppm}$	Si-CA 030
NO sensor For NO measurement. Electrochemical sensor.	27520	27631	0 to 5000 ppm	$\pm 5 \text{ ppm} < 100 \text{ ppm}$ $\pm 5\% \text{ rdg} > 100 \text{ ppm}$	Si-CA 130 / Si-CA 230
Low NO sensor For low NO measurement. Electrochemical sensor.	27521	27632	0 to 300 ppm	±1.5 ppm < 30 ppm ±5 % rdg > 30 ppm	Si-CA 130 / Si-CA 230
NO ₂ sensor For NO ₂ measurement. Electrochemical sensor.	27526	27633	0 to 1000 ppm	$\pm 5 \text{ ppm} < 100 \text{ ppm}$ $\pm 5 \% \text{ rdg} > 100 \text{ ppm}$	Si-CA 230
Low NO ₂ sensor For low NO ₂ measurement. Electrochemical sensor.	27527	27634	0 to 100 ppm	$\pm 1.5 \text{ ppm} < 30 \text{ ppm}$ $\pm 5\% \text{ rdg} > 30 \text{ ppm}$	Si-CA 230
SO_2 sensor For SO_2 measurement. Electrochemical sensor.	27528	27635	0 to 5000 ppm	$\pm 5 \text{ ppm} < 100 \text{ ppm}$ $\pm 5\% \text{ rdg} > 100 \text{ ppm}$	Si-CA 230
Low SO₂ sensor For low SO ₂ measurement. Electrochemical sensor.	27529	27636	0 to 100 ppm	$\pm 1.5 \text{ ppm} < 30 \text{ ppm}$ $\pm 5\% \text{ rdg} > 30 \text{ ppm}$	Si-CA 230
CxHy sensor For CxHy measurement. Pellistor sensor.	27530	27637	0 to 5%	$\pm5\%$ of full scale	Si-CA 230
H ₂ S sensor For H ₂ S measurement. Electrochemical sensor.	27531	27638	0 to 500 ppm	$\pm 5 \text{ ppm} < 100 \text{ ppm}$ $\pm 5\% \text{ rdg} > 100 \text{ ppm}$	Si-CA 230

⁽¹⁾Upgrading the analzer with the addition of a sensor requires the analyzer to be returned to the factory. ⁽²⁾All accuracies indicated in this document were stated in laboratory conditions at 20 °C (68 °F) and can be guaranteed for measurement carried out in the same conditions.

Accessories	Reference	Illustration
Sintered filter Sintered pre-filter easily mounts to all rigid flue gas probes and is removable.	27552	
Remote wireless printer	27546	
Set of 5 paper rolls for remote wireless printer	23491	I.I.I.
3 m dual hose extension For Si-CA 030/130/230 flue gas probes.	27537	
Differential pressure hose kit including 2 x 1m hoses with fittings for Si-CA 030/130/230 For differential pressure measurements and also for stack gas velocity with optional Pitot tube.	27538	

Accessories	Reference	Illustration
Gas network leakage test kit Supplied with various accessories for pressurisation and connection to the gas network	27550	
Manual smoke/soot pump kit. Supplied with 50 filters and a table of comparison.	11994	J
Filters for smoke/soot pump Set of 50 filters for manual smoke pump	12052	
SCU (Sample Conditioning Unit) For removal of condensation from flue gas at the probe handle in addition to the standard water trap.	26811	
Water trap Supplied with filter. Without hose and without connection.	27555	
Water trap Supplied with filter, hose and connection.	27556	
Filters for water trap Set of 5 filters for water trap	27729	
Internal dust filter For Si-CA 230 only	27724	•
Protective shell Rubber protective shell for Si-CA 030 and Si-CA 130	27553	
Protective shell Rubber protective shell for Si-CA 230	27554	
Charger Mains charger with various international sockets	27557	
USB cable Type C USB cable for charging and communications.	27558	
Vinyl carrying case Soft vinyl carrying case with shoulder strap. Compatible with 180 and 300 mm probes.	27539	Cstauermann-
Rigid transport case Rigid ABS transport case. Compatible with 180 and 300 mm probes.	27540	Offernance Constraints

