

K1305 Automated Kjeldahl Nitrogen Analyzer

K1305 — Automated Kjeldahl Nitrogen & Protein Analyzer

Overview

The distillation procedure could be finished automatically: automatically add water, add alkali and distill, and automatically power-off and give sound reminder when the operation is finished.

Features

- Meet international / national standard, adopt national standard Kjeldahl method: digest sample in concentrated sulphuric acid environment, steam distillation in alkaline environment, boric acid absorption, indicator titration end-point color determinate method.
- In June, 2007, Sonnen successfully developed the unique auto determining module for nitric nitrogen.
- Sonnen is one of the drafters of China's national standard GB/T22923-2008.
- Sonnen is one of the drafters of the China's official standard JJF 109-2012 "Calibration Specification for Nitrogen Analyzer".
- The true color LCD touch screen is equipped for the control of alkali adding and distillation, and the condition can be stored once distillation is finished there will be sound reminder.
- Regular nitrogen determining module is equipped, and upgrade interface for auto titration and inducted interface for reagent barrel are reserved.
- Water-saving design, warning reminder of low water pressure and auto power-off reminder for water supply cut-off are available.
- pre-heating, water supplying, steam pressure controlling, dry burning prevention, and cleaning can all be realized automatically.
- Built-in nitrogen content calculator, the content of nitrogen or protein shall be displayed once the sample amount and standard titration solution consumption amount are input.
- Meticulous fault self-diagnosis and control function.
- Not-in-position prompt of security door and digestion tube.
- It is guaranteed that the circulating water flow-limiting valve open only during the distillation, which is save water, free from worry, , automatically control circulating water flow; Reserved interface for automatic circulated cooling water machine, apply to dry conditions or water-saving laboratory.
- Warning reminder of low water pressure and auto power-off reminder for water supply cut-off are available.
- Mature and stable steam generator technology is applied, automatic preheating, water supplying, steam pressure controlling, dry burning prevention, and cleaning can all be realized automatically.
- Steam generator is equipped with pressure sensor, temperature sensor, temperature protection switch, water level double detection, and other protections like these.
- The separated specialized bellows pump is resistance to the erosion and particle plugging. accurate measuring of the added acid and lye, interior is made of PTFE (Teflon). The added reagent is measured by volumetric, no need calibration. long lifetime up to 5-10 years(by end-users' verification).
- Distillation system is specially designed according to the rule of ammonia escape, ensure high reliable recovery rate. get unanimous approval from national testing institution, and invited to draft national standard.

- Double distillation modes are optional.
- Auto nitrate nitrogen determining module is available, for easy machine operation of the nitrate nitrogen.
- Upgrade interface for auto titration and inducted interface for reagent barrel are reserved.
- The digestive tube is specially designed surrounded with intelligentized facilities, and the transparent acrylic cover is equipped for total protection.
- The panel is with the material of ABS engineering plastic, which is waterproof, electricity-proof and corrosion-proof.

Specifications

Analysis time	5–7 min
Distillation capacity	~40 ml/min
Measuring range	0.1–240 mg N
Sample size	≤6 g (solid) / ≤25 ml (liquid)
Repeatability	≤0.5%
Recovery	≥99.5%
Water consumption (during distillation only)	1 L/min (15 °C), 2 L/min (30 °C)
Time range	0–99 min
Dimensions (W×D×H)	420×365×720 mm
Net weight	30 kg
Power supply	AC 220 V ±10%, 50 Hz
Power consumption	1800 W

Compiled from the manufacturer's datasheet — request the full specification sheet for this model.

Applicable standards

GB/T22923-2008 · JJF 109-2012 · EN ISO 5983-2 · AOAC 2001:11 · ISO 20483 · ISO 8968-2 · IDF/FIL 20-2 · ISO 8968-3 · IDF/FIL 20-3 · ISO 8968-4 · IDF/FIL 20-4 · ISO 937 · AOAC 981.10 · ISO 1871 · ISO 3332 · ISO 3188 · ISO 5663/DIN 38409H11 · EN ISO 5664 · ISO 1656

Application fields

Food & feed, dairy, soil & agriculture, fertilizer, environmental monitoring and the chemical industry — any method built on Kjeldahl nitrogen / protein determination, across research, teaching and quality-supervision laboratories.

Specifications as published at www.sino-sonnen.com. Final configuration is confirmed per order — request a quotation: info@sino-sonnen.com · R&D: Jiading District, Shanghai · Manufacturing: Luoyang, Henan, China