

AGRAMKOW



SARAtronic

Value-adding charging performance. Every day.

More uptime. Less downtime.

Maximum value for you.

Rugged workhorse design

SARAtronic is the perfect match for small to mid-sized manufacturers in the refrigeration and air conditioning industry. Its robust design and multi-high pressure refrigerant capability makes it especially well-suited for delivering best performance under all operating conditions for cell or low to medium volume production settings.

Easy to install. Easy to use

SARAtronic starts working for you from the minute we help you integrate it into your production line. AGRAMKOW provides installation support and hands-on training. And it is designed with operator-friendly controls on the top panel for everyday ease of use. And thanks to the most advanced barcode system and a printer, you can quickly control quality parameters as well.

150 grams in a single stroke

SARAtronic has a charging speed of up to 40 gram per second and charges up to 150 grams in one stroke. It even has a programmable refrigerant independent empty bottle alert that secures high charging quality and helps you increase throughput for a leaner operation.

Consistent accuracy

The SARAtronic charging gun is engineered to assure consistently high levels of accuracy. With a Positive Displacement Cylinder (PDC) and Dynamic Flow Control (DFC), you can achieve constantly high accuracy. Consistency is key and is, once more, why you can trust SARAtronic to deliver consistently predictable charging levels.

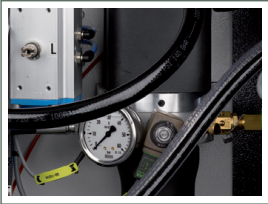


Online control with AGRAMKOW Multi Purpose Controller (MPC)

MPC is the feature that gives you online access to SARAtronic. The WEB connection makes it easy to set parameters, control traceability, document data and benchmark trends. SARAtronic is also fully compatible with Production Line Information System (PLIS), making it even more convenient to monitor and control charging processes—24/7 if needed—in accordance with ISO 9000 quality standards.



SARAtronic features AGRAMKOW's Positive Displacement Cylinder design for maximum uptime and minimum maintenance



Shorter Mean Time to Repair

SARAtronic's robust design means it will require less maintenance over a long lifetime of service. Important details like no seals the between piston and cylinder minimizes the risk of failures and repairs. There's a built-in sensor check diagnostic and service-friendly touch control. Total Preventive Maintenance (TPM) ensures maximum asset utilization capabilities. If SARAtronic require service, it's good to know that its mechanical and electrical components can be easily accessed for fast repairs and minimum downtime.

Flexibility and reliability for many applications

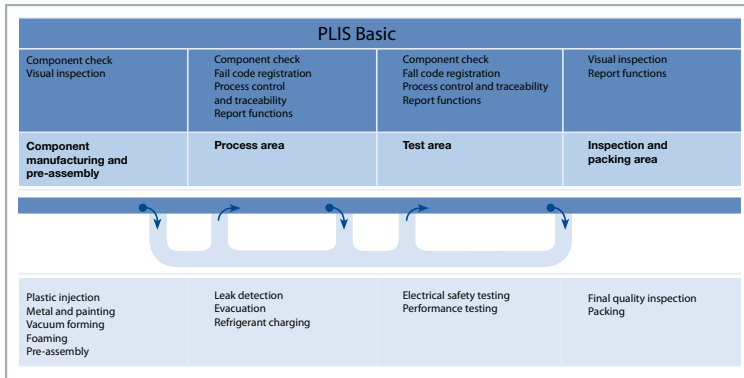
- Higher installation flexibility: the outlet of the hoses can be placed on right or left side, floor vice or in an overhead

direction. With convenient access for service from either the front or right side, SARAtronic has the advantage of a small footprint.

- Guaranteed high accuracy thanks to heated charging gun with DFC.
- The most advanced bar code system/interface on the market.
- Refrigerant independent empty bottles alert secures high charging quality.
- Last channel, top ten channels and 9 quick channels.
- Sensor check diagnostic and improved service interface with touch control helps reduce Mean Time To Repair (MTTR).
- High pressure refrigeration capability: 404A/R407C/410A/R22/ISCEON 89.
- TPM maximizes asset utilization and lean operations.
- Emergency stop is built as 2 Channel cat 3 in accordance with EN954.
- SARAtronic is designed according to CE regulation and EN60240-1.
- Full PLIS compatibility for easy set-up of parameters and management of documentation, traceability, trends and benchmark insights that allow you to drive out waste and improve productivity.
- The TPM and WEB based email system secures a traceable and immediate alert for the maintenance.



Choose PLIS for quality and productivity enhancement



SARAtronic enables important process data to be edited according to the requirements of ISO9000 to support quality and traceability documentation.

It also enables you to integrate your charging stations into the AGRAMKOW Production Line Information System (PLIS).

PLIS is designed to help you measure and improve every process in the production line while at the same time providing new insight into how to make your line more productive. PLIS is built around three core modules, which can be implemented step by step or all at the same time – PLIS Basic – PLIS Productivity and PLIS Data Mining.

*Optional:
Mobile version
with space for
refrigerant bottle*



SARAtronic



SARAtronic is available for refrigerant bottles and central supply capabilities.

DUTIES:

SARAtronic carry out Evacuation, Vacuum Check and Charging automatically.

MEDIA TYPE:

All common refrigerants: R134a, R404A, R407C, R410A, ISCEON 89 and R22.

FEATURES:

Enhanced manual channel selection mode, e.g. 1 Last channel selection and 9 Quick channel selection

Start/Stop keypad on gun

Installation flexibility

Built-in interface and user program for bar code scanner and printer

Sensor diagnostics (pressure, vacuum, temperature, piston position)

Self evacuation for easy start-up

Programmable alarm alert for empty bottle; process can be continued after bottle change

Time or pressure based evacuation

Gas to liquid converter

Outlet of hoses can be on the right or left side

Disposable filter – no cleaning of filter housing

OPTIONS:

Bar code scanner incl. configurable bar code

2 sided evacuation

6 m charging hose

Pass/fail interface

Light tower

Welding interface

16 m³/h basic vacuum pump

Printer including standard print out format

Mobile version

PLIS 4™ compliant

Gunparking

Fixed arm with balancer



SARAtronic

Leading the charge in performance and easy handling

AGRAMKOW has engineered SARAtronic to improve the productivity of a variety of evacuation and charging applications. It is easy to install and easy to use. It also has a versatile design to give you the flexibility to use it on different production lines, making it perfect for cell or low to medium volume production lines. And because it is durable and built to last, you can look forward to a long lifetime of low maintenance cost.

Easy Installation and Maintenance. Maximum support.

AGRAMKOW makes it easy to integrate SARAtronic into your production line with installation support and hands-on training.

The Service Mode of the MPC™ ensures easy maintenance by enhanced force control of internal components where the functionality can be simulated.

The Total Preventive Maintenance (TPM) together with the integrated Email functionality, secures a traceable and immediate alert for the maintenance department and a high OEE.

AGRAMKOW provides local support wherever our products are sold.

We have regional offices and service partners around the globe to ensure our customers get the backup and assistance they need.

Put our experience to the test

AGRAMKOW designs, develops, and markets state-of-the-art charging systems, test systems and production line information systems that are deployed in leading manufacturing facilities around the globe. Always on the vanguard of new performance technology, AGRAMKOW has continually pioneered the development of new capabilities in response to the rapidly changing needs of the refrigeration and air conditioning industry.

AGRAMKOW has subsidiaries in Asia, Latin America, and Europe as well as Service partners worldwide.

AGRAMKOW

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Technical specifications

SARAtronic

Refrigerants	R134a, R404A, R407C, R410A, ISCEON 89 and R22, others on request
Charging capacity	20g – 99999g
Charging speed	40g/sec *
Accuracy	20-100g: ± 1g > 100g: ± 1 %

General

Display	320x240 TFT w. touch, colour
Language support	English, German, Italian, Spanish, Portuguese, Chinese, Korean others on request
Gun	One charging gun
Charging hose	3 m length others on request
Coupling	Hansen: HK2 or HK3 PCU: 1/4", Nitto: 2S-V, 3S-V, 2S-V-GN, 3S-V-GN,
Vacuum pump	16 m³/h with oil mist filter others on request
Vacuum gauge	Active Pirani sensor
End Vacuum	0,02 mbar
Channels	990 Programmable channels 9 Quick channel selection 1 Last channel selection Top 10 channel selection
Charging technology	AGRAMKOW PDC with DFC

Interfaces/Communication

	Support for 10/100Mbit Ethernet with PLIS4 protocol Support for RS485 with PLIS3 protocol Support for local and network PCL printing Firmware update via USB flash disc Scanner support through RS232 channel including power supply for scanner I/O Interface for UPS and Scada system
Operation temperature	12-50°C
Max relative humidity	90 % nc
Protection	IP 43
Refrigerant supply	Bottles or Central supply (15 to 35 bar)
Compressed air supply	Min. 5 bar, non lubricated, dry air
Supply voltage	1 ph. 220-255 VAC, 50/60Hz, ±5% + N + PE others on request
Power consumption	Max 2kVA
Dimensions (L x W x H)	550 x 700 x 1400 mm
Weight	180 kg (excl. bottles)
Noise level	< 70 dB(A)
Code no	171-000150A

Accessories

	Test bottle 0,8-2,6 ltr. Scale Set of spares: 171-000150A-R
*	<150g R134a Alterations reserved