

915 MHz MICROWAVE GENERATOR

MAXIMUM OUTPUT POWER 18 OR 36 OR 54 kW

Ref. GLP180 / GLP360 / GLP540 KSM IP54

MK145EN-A

SAIREM's GLP range of microwave generators provide continuous wave (CW) output power adjustable **from 5 to 18 kW or 5 to 36 kW or 5 to 54 kW.**

High reliability for your applications:

- **Stable** power output, even at low power
- Designed for long processes
- **Precise** frequency spectrum
- Low ripple
- Automatic Restart Function (ARF)
- **Air tight** design
- Extended magnetron lifetime

The GLP is a continuous wave microwave generator composed of a single cabinet with a switch mode power supplies and a magnetron. For a better efficiency, a PLC drives simultaneously the magnetron anodic power, electromagnet field and filament current.

The result is a very low power setting possibility (5 kW, lower setting power optional), maximum efficiency, reduced ripple and increased magnetron life time.

Full water cooling (no air cooling) to function in **dusty, wet, and warm environment. Can be installed in closed space.**



MAIN APPLICATIONS

INDUSTRIAL APPLICATIONS

- Industrial heating: liquids, essential oils, wood, rubbers, thermoplastics, biomass ...
- Industrial drying: ceramics, powders ...

PLASMA APPLICATIONS

- Lab-grown mono and polycrystalline diamonds
- Various plasma generation applications: PECVD, gasification, gas abatement ...



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KEY BENEFITS

COMPACT AND STURDY DESIGN

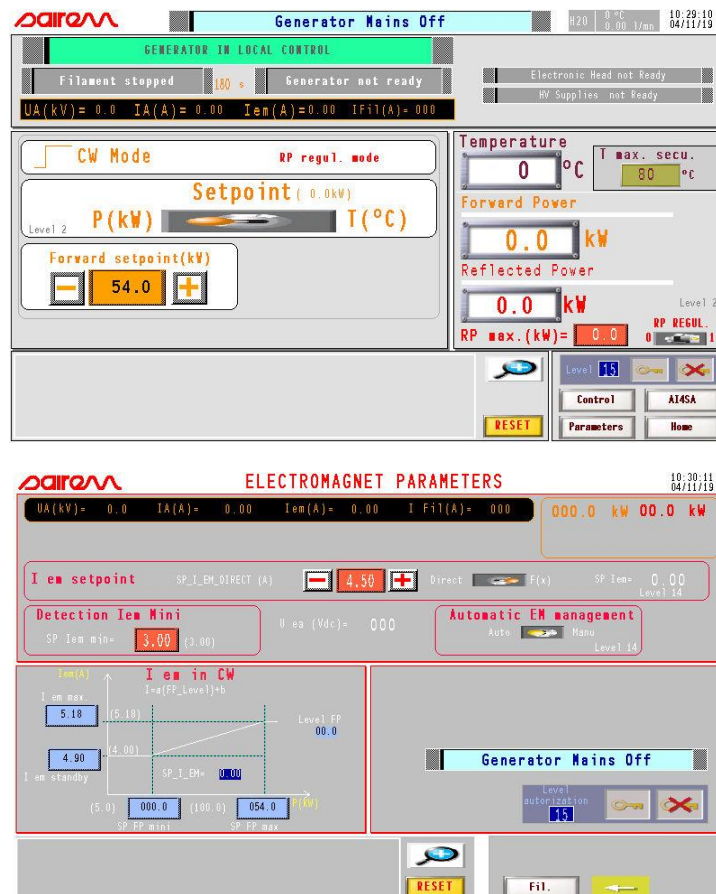
- All-in-one design: controls, power supply, microwave generator, isolator, in the same cabinet
- Stainless steel 304L, air-tight construction

HIGH RELIABILITY

- Switch mode allows to get a very precise control of the power
- Automatic Restart Function (ARF), in less than 5 ms, to avoid production stop or loss¹
- Smart controls that allow maximum efficiency and extended magnetron lifetime
- IP54 protection for installation in dusty, wet, and warm environments

CONTROLS

- All operational parameters and faults are available on the color touch screen



¹ ARF after Magnetron default: arcing, voltage issue ...



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KEY SPECIFICATIONS

Reference	GLP180KSM IP54	GLP360KSM IP54	GLP540KSM IP54
Output Power	Adjustable from 5 to 18 kW	Adjustable from 5 to 36 kW	Adjustable from 5 to 54 kW
Power Supply	Modular switch mode units		
Frequency	915 MHz \pm 10 MHz or 896 MHz \pm 10 MHz (to be specified) Central frequency is imposed by the magnetron		
HMI Display	7" colour touch screen, all controls & functions accessible, PRO-FACE PLC, fault history...		
Ripple (RMS)	2 % between 5 and 18 kW	2 % between 5 and 36 kW	2 % between 5 and 54 kW
Rise time	5 s to full power in standard KSM (continuous wave) version		
Power Consumption	28 kVA at full power	53 kVA at full power	70 kVA at full power
Operating mode	Continuous wave (KSM), Automatic Restart Function on over current (ARF)		
Reflected power protection	Protection against 100 % RP		
Max. continuous reflected power	Integrated isolator, SWR = ∞ any phase, and thermal limitation at 27 kW RP (reflected power) by forward power limitation or stop by fault (software choice)		
Remote Control	Analog or Ethernet Modbus. Profibus and CanOpen optional		
Mains	380/415 V, 50 Hz or 60 Hz, 3 phases + ground		
Cooling & Operation Requirements	35 L/min @ 4 bar differential pressure (for max. 15 kW RP dissipated heat), water temperature (18 °C to 23 °C) monitored, each water flow circuit monitored, max. inlet pressure 6 bars. Cooling capacity requirement at full power and maximum reflected power: 22 kW	45 L/min @ 4 bar differential pressure (for max. 15 kW RP dissipated heat), water temperature (18 °C to 23 °C) monitored, each water flow circuit monitored, max. pressure 6 bars. Cooling capacity requirement at full power and maximum reflected power: 30 kW	60 L/min @ 4 bar differential pressure (for max. 25 kW RP dissipated heat), water temperature (18 °C to 23 °C) monitored, each water flow circuit monitored, max. pressure 6 bars. Cooling capacity requirement at full power and maximum reflected power: 36 kW
Microwave Output	WR975, flange CPR 975		
Cabinet	Stainless steel 304L		
Dimensions	1740 x 1496 x 950 mm (H x W x D)		
Weight	530 kg	570 kg	610 kg
Protection	IP 54		
Safety	Interlock, safety relay, emergency stop, microwave leak detector (optional)		



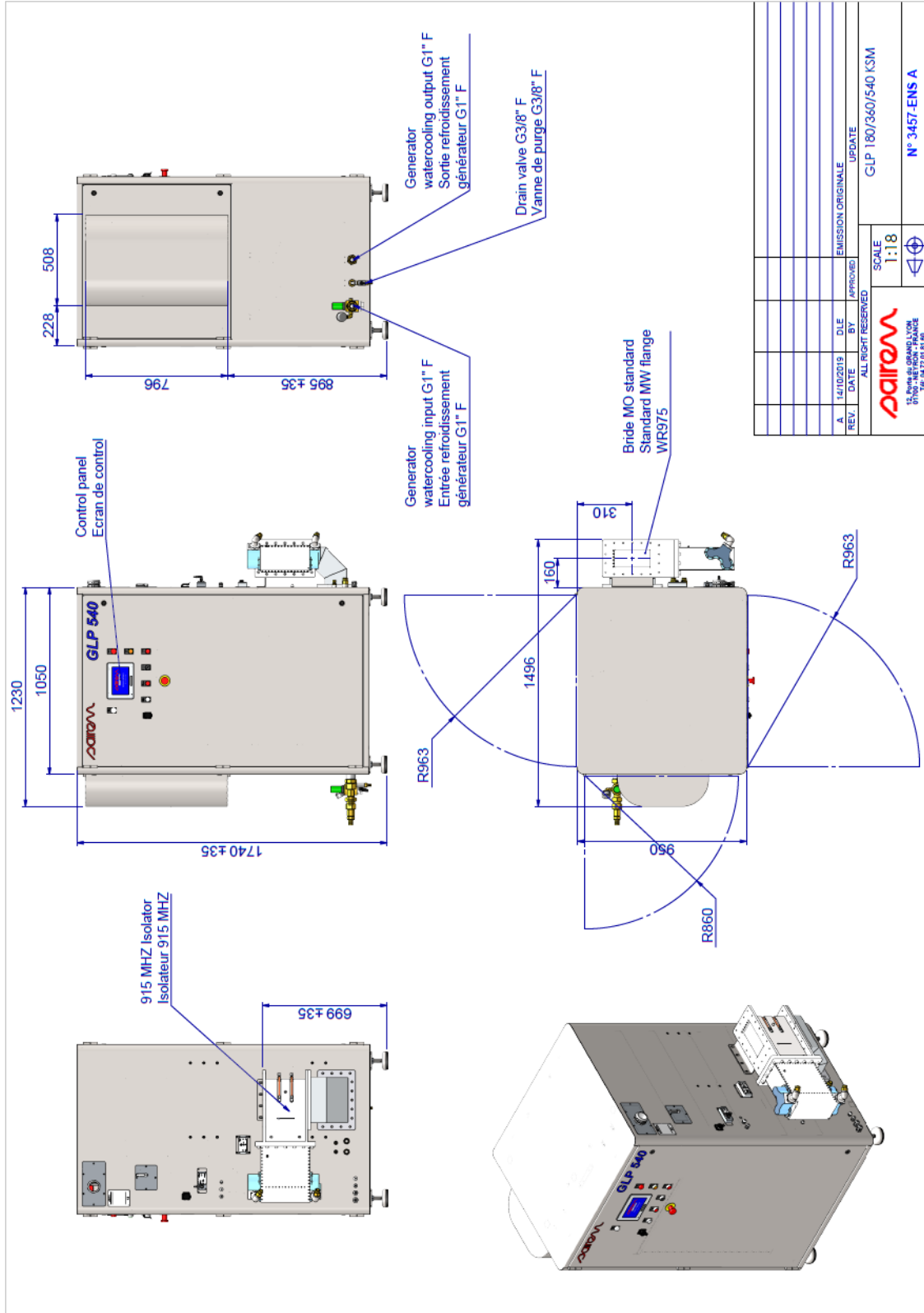
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