



## 50 kW, 915 MHz MICROWAVE GENERATOR REF: GLP 500 K/SM NUM

This generator consists of two switch mode power supplies in parallel. The digital electronic control drives simultaneously anodic current, electromagnet (HV) and filament. The result is a very low power setting possibility, maximum efficiency, reduced ripple and increased magnetron life time.

The filament soft start function also contributes to increase magnetron life time.



REF	GLP 500 K/SM NUM
Presentation	Power supply and separate head, RF switching power supply ( $\eta > 93\%$ ), length of connecting cable 4 m (possibility up to 20 m)
Frequency	915 MHz $\pm$ 10 MHz or 896 MHz $\pm$ 10 MHz (to be specified)
Output power	Adjustable from 2 to 50 kW
Power stability	Better than 1 % between 5 kW and 50 kW
Ripple	$\pm$ 2 % at full output power
Rise and fall times	100 ms
Microwave output	WR975, flange CPR 975
Display of forward & reflected powers	On LCD screen
Operating mode	Continuous
Maximum SWR	integrated isolator, 20 kW any phase by forward power limitation or stop by fault (choice in menu)
Operation & control	On blue LCD screen 240 x 128
Control mode	Continuous, plasma starting, slope, timer...
Remote control	Analog, RS232, RS485 daisy chaining possible
Mains	380/415 V, 50 Hz or 60 Hz, 3 phase + ground
Consumption	66 kVA at full power
Weight	Power supply 450 kg Power head 90 kg + isolator 140 kg
Cooling	By water, minimum 40 L/min (supply & head). Air/water exchanger inside the head (industrial application).
Safety interlock	Safety relay and free contact to be shunted

## **CONTROL AND OPERATION OF MICROWAVE GENERATORS WITH NUMERIC DISPLAY**

The generators are completely operated in local mode from the control desk located on the front panel of the power supply rack.

You can find the indicator, 3 function buttons and a turn and push system; they allow to entirely control the generator. Please note that the “stop” button physically cuts a safety relay locking the power supply at zero through 2 points. This system, also accessible by the external «interlock » safety, guarantees the safety norm of the system and the staff protection.

Display is realized on blue graphic LCD screen 240 x 128 pixels. All operating and control status, as well as any possible fault, are displayed in clear on the screen. In addition to forward and reflected powers (numeric display and bar graph), the power set point is pre-displayed before starting.

Main operating functions:

### Starting mode

- Standard mode ON/OFF
- Overshoot mode
- Slope mode (0 to 30 s)

### Control mode

- Local
- RS 232 (baud rate, adjustable parity...)
- RS 485 (address, baud rate, adjustable parity...)
- Analog

### Control of reflected power

- Adjustable from 0 to 100 % of forward power if generator with isolator
- Disjunction mode or limit mode of forward power (sound signal)

### Timer

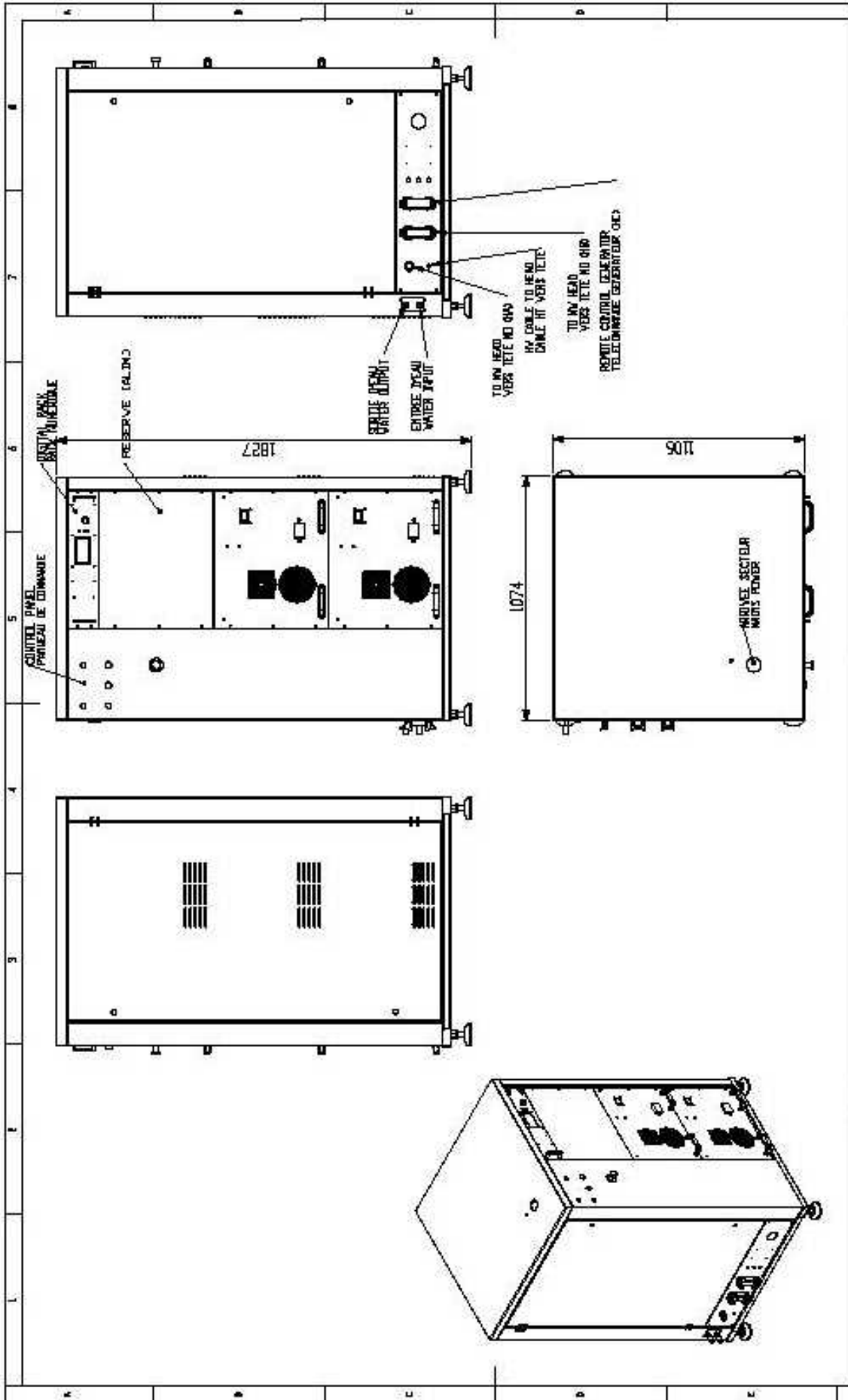
- If ON, adjustable from 1 s to 24 h
- Stop mode: re-start of timer after a microwave stop
- Pause mode: pause of timer during a microwave stop

### Configuration

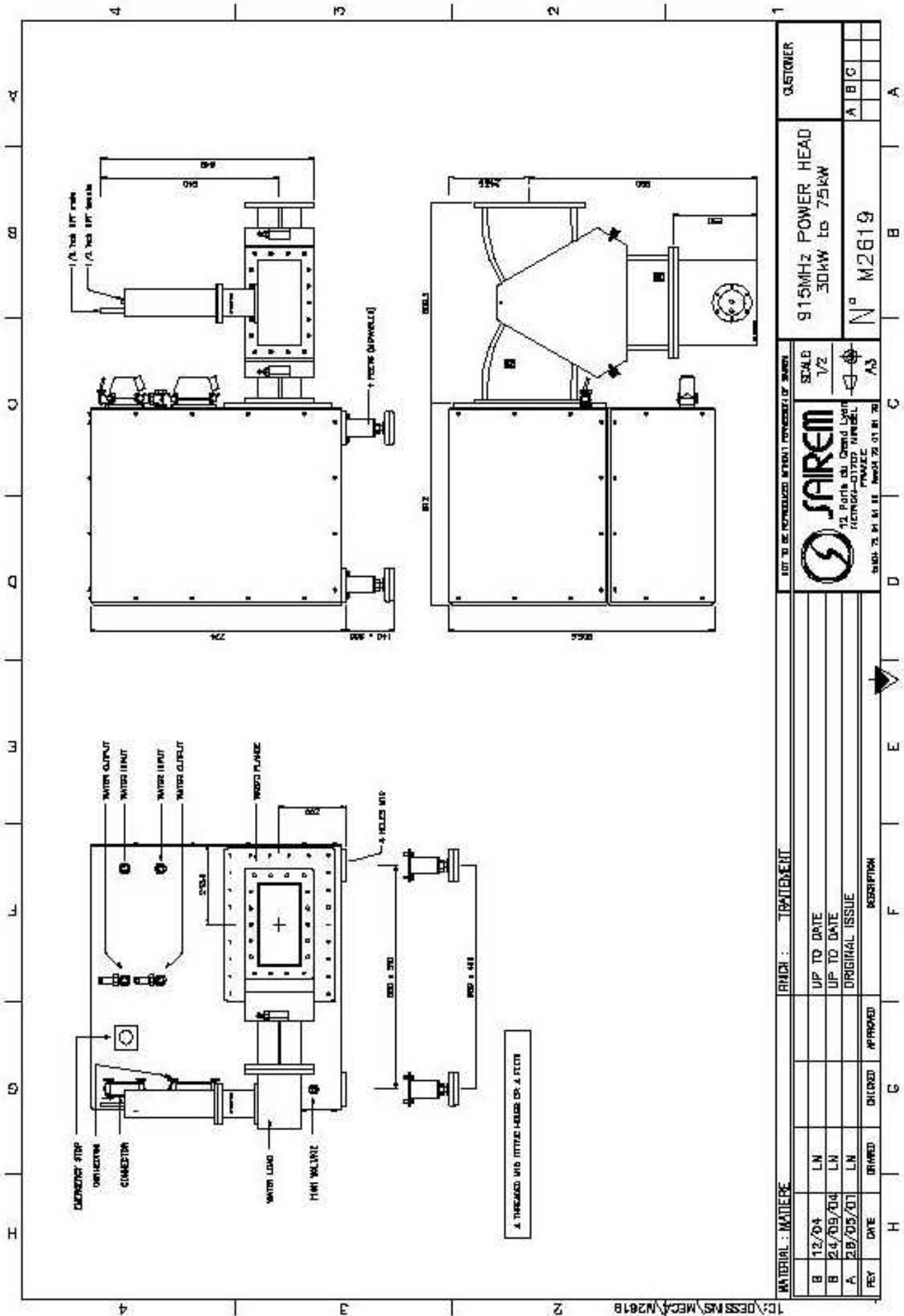
- Preset and load configuration
- Language (English or French)

### Others

- Contrast adjustment
- Fault list
- Filament hour counter
- PIN code (if restricted access)



REMARQUE 1	Traitement 1		CONSTRUCTION METALIC - COUPE GENESIS	TYPE	GLP 500 KSN/HUM	TYPE	3232-50KW-ens general
F	FORMA	A3	ESSELLE 018	VECTRI			
	SAIREM		SAIREM				
	12 porte du Grand Lyon		SAIREM - 01702 NEYRON - FRANCE				
	TELEPHONE : +33 (0)4 72 01 81 79		FAX : +33 (0)4 72 01 81 79				
	TYPE	GENERATEUR	GENERATEUR	GENERATEUR			
	DATE	MESSURE	VERIFICATION	MODIFICATION			



MATERIAL : MATIERE		FINISH : TRAPÈZÉENT		NOT TO BE REPRODUCED WITHOUT PERMISSION OF SAIREM		CUSTOMER	
B	12/04	LN	UP TO DATE	915MHz POWER HEAD		A B C	
B	24/09/04	LN	UP TO DATE	30kW to 75kW		A B C	
A	28/05/01	LN	ORIGINAL ISSUE	N° M2619		A B C	
REV	DATE	DRAWN	CHECKED	APPROVED	DESCRIPTION	A B C	
				<b>SAIREM</b> 12 Porte du Grand Lyon 69100 Neyron - FRANCE TEL: 33 472 01 81 79 FAX: 33 472 01 81 78			
				SCALE 1/2 1/2 inch 1/2 inch A3			