

18 kW, 915 MHz MICROWAVE GENERATOR REF. GLP 180 KSM NUM

This generator uses a compact switch mode power supply. The numeric electronic control drives simultaneously the anodic current, the electromagnet (HV) and the filament. The result is very stable operation even at low power level setting, maximum efficiency at any output power, reduced ripple and increased magnetron life time.



Fig. 1. Microwave generator 18 kW, 915 MHz – power supply and microwave head & isolator

REF	GLP 180 KSM NUM
Presentation	Power supply and separate head, RF switching power supply ($\eta > 94\%$), 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 18 kW
Power stability	Better than 1 % between 2 kW and 18 kW
Ripple	$\pm 2\%$ at full output power
Rise and fall times	100 ms
Microwave output	WR975, flange CPR 975
Operation & control	On blue LCD screen 240 x 128 displays of forward & reflected powers, set point, status, faults list....
Operating mode	Continuous
Maximum SWR	Infinite any phase, integrated isolator. Limitation or switch off if maximum level of reflected power (adjustable level)
Control mode	Continuous, plasma starting, slope, timer...
Remote control	Analogue, RS232, RS485 daisy chaining possible
Mains	380/415 V, 50 Hz or 60 Hz, 3 phase + ground
Consumption	25 kVA at full power
Weight	Power supply 89 kg & power head 90 kg + isolator 140 kg
Cooling	By water, 15 L/min (head) + 10 L/min (power supply). Water temperature between 18 °C and 23 °C. 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

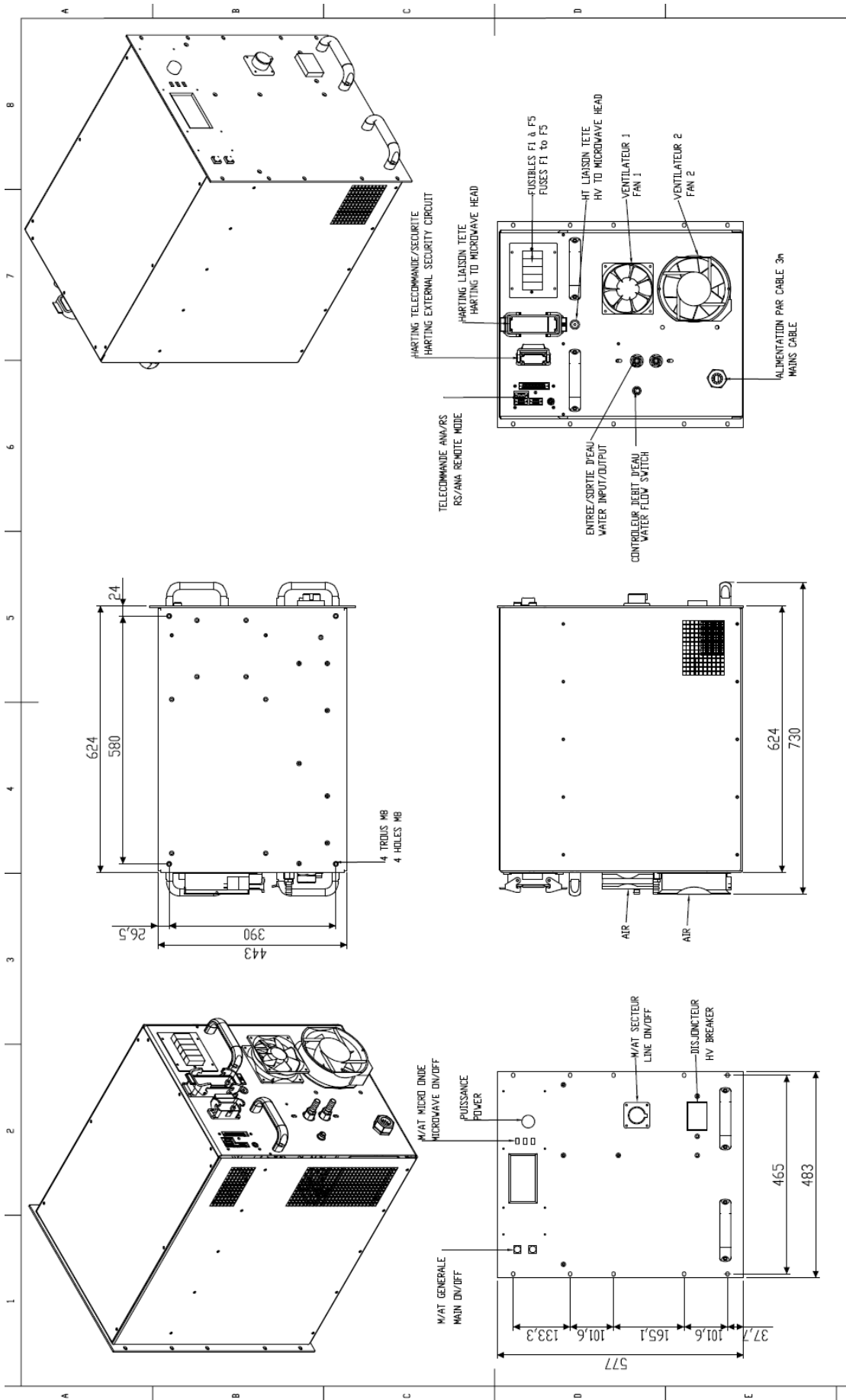
- If ON, adjustable from 1 s to 24 h
- Stop mode: re-start of timer after a microwave stop
- Pause mode: pause of timer during a microwave stop

Others

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

Configuration

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



REPRODUCTION INTERDITE - INDITS RESERVES		ALIMENTATION GMP150KSNNUM / GLP250KSNNUM	
FORMAT: A3		GMP150KSNNUM / GLP250KSNNUM POWER SUPPLY	
ECHELLE 1:10		INDEXE DU DOCUMENT	
WEIGHT:		3194-ENSA	
12, Porte du GRAND LYON Neyron --0707 MIREBEL--FRANCE tél: 04 72 01 81 60		REVISION NO. 3194-ENSA	
SAIREM		GLP250KSNNUM	
12, Porte du GRAND LYON Neyron --0707 MIREBEL--FRANCE tél: 04 72 01 81 60		GLP250KSNNUM	
INDICE DATE		INDICE DATE	
B	21/07/09	JMJ	
A	21/02/05	ML	
VERIFICATION APPROUVEE		MODIFICATION DU DESSIN	
traitement :		2	
1		3	
4		4	

