

915 MHz, 5 kW MICROWAVE GENERATOR Ref. GLP50KSM56T400FST3IR



The 5 kW 915 MHz generator integrates in one cabinet a water-cooled magnetron and a complete power supply.

The power supply is based upon the latest switch mode power supply technology, offering size reduction (smallest 5 kW available on the market), good power stability and significantly reduced electrical losses. The efficiency of the switch mode power supply is higher than 94 %. A real interlock is available for safety.



Technical specification

REF	GLP50KSM56T400FST3IR
Presentation	One cabinet integrates microwaves components (ie magnetron, isolator, reflected power measurement), the power supply and the HMI (human machine interface)
Frequency	915 MHz \pm 10 MHz or 896 MHz \pm 10 MHz (to be specified on ordering)
Output power	Adjustable from 800 W to 5000 W with 10 W increment
Power stability	Better than 1 % between 500 W and 5000 W
Ripple	2 % RMS at full power
Rise & fall times	< 1 ms
Microwave output	WR975, flange CPR 975 On serial link and / or on analogue interface
Display of forward & reflected powers	On blue LCD screen. Details on next page
Operating mode	Standard: continuous wave (SM)
Maximum SWR	Infinite at any phase (integrated isolator)
Control mode	Continuous, plasma starting, slope, timer
Remote control	Standard: RS232 and analogue Optional: Profibus, CanOpen
Mains	Power supply: 400 V, 3 phases + earth, 10 kVA, integrated coil and filters
Consumption	10 kVA
Weight	160 kg (with isolator)
Cooling	By water, flow min. 8 L/min , $T = 18 - 22 ^{0}\text{C}$
Safety interlock	Safety relay and free contact to be shunted
A.R.F	Automatic Restart Function allowing to detect magnetron arcing and its immediate automatic restart up to 3 times
Designed to comply with norms	Safety EN 61010-10; EMC: EN 61000-6-4 and EN 61000-6-2



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.

At the front panel there is 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 shuts down the power supply through 2 points. The safety relay, 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
- Ramp mode (0 to 30 s)

Control mode

- Standard: Local & analogue & RS232
- or CanOpen
- or PROFIBUS®
- or ModBus RS485 & RS422

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 adjustable in seconds or milliseconds

Configuration

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

Others

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



