Laserix®

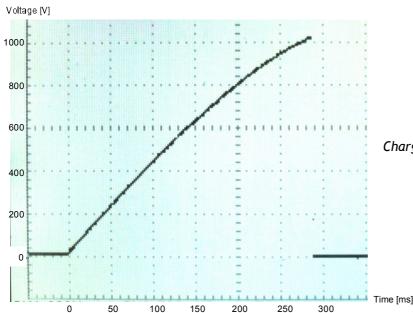
ALM05 high frequency switching current generator



The ALM05 high frequency switching current generator is intended to load the capacitor bank of optically pumped lasers ML05 in a reproducible and adjustable manner.

Spécifications

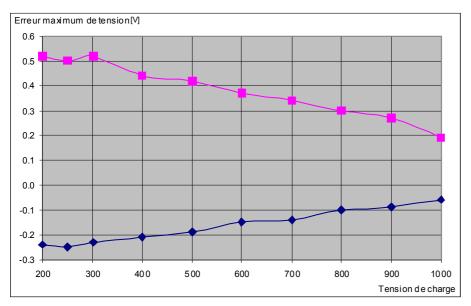
- loading current at OV (capacitor bank discharged): 1.5A
- Maximum charging voltage: 1200V.
- Power: charges a 300uF capacitor bank to 1000V in 0.3s
- Main power supply: three-phases star
- Can be used with in single phase power supply
- Auxiliary power supply (included) 15V 1A
- Cooling: forced ventilation at full continuous power
- Operating temperature: -10°C to 35°C
- input and outputs isolated with opto-couplers
- load control input
- Overheating alarm output
- Discharge of the capacitor bank at shutdown
- Oscillating frequency of the current generator: 70kHz
- Size: 205 x 373mm h = 135mm (with fan)



Charging of a 300mF capacitor bank



The device uses a proprietary digitally controlled circuit to convert the voltage of a main power supply to a nearly constant current with low losses. A separate device shall be used to switch off the current generator when the desired voltage is reached on the capacitor bank. With an adequate circuit the voltage is very stable.



Maximum and minimum voltage error measured on ML05D laser drilling machine No.13

Mains power

inputs 5 poles CN1: neutral, 3 mains phases 230V, earth.

High voltage outputs

CN3 + CN4: + HT, Neutral or OV HT (bridge between neutral and OV possible).

input - output commands

8 CN2 poles

Outputs:

- · overheating alarm
- power supply. 15V

Inputs

- load control
- Capacitor bank discharge interrupt (the high voltage discharge relay is normally closed)

For more information ask: induplan@vtxnet.ch



