Gen70 Experimental Edition Serie
General description

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General details:

The Stirling Generator Gen70 is a highly efficient alphagamma® Stirling engine with 1000 watts of DC power. It converts heat energy into electrical energy in the simplest way.
The Experimental Edition series has been developed in response to numerous requests for the following applications:

- Operation with hot flue gasses obtained from combustion processes (solid biomass, biogas, pyrolysis gas etc.)
- Operation with hot air (from thermal batteries, from furnaces by means of heat exchangers.)
- Operation using radiation energy (e.g. solar energy – concentrators)
- Mixed operation through radiation and convection (e.g. in a combustion chamber etc.)
- Operation through heat conduction and thermosiphon effect (e.g. metal melting in thermal batteries)

All operating variants generate a direct voltage to charge a battery system (lead or Li-ion version). All other possibilities of use are potentially available from the DC voltage rail, for example, a grid feed, an emergency power supply or for the hybrid drive of a heat pump or all put together.

The expression “Experimental Edition” has been chosen because the thermal energy feed is on customer-side and is challenging in many cases. Frauscher Motors provides support based on previous experience.
If the tests indicate a need for series production, customer-specific system optimization, aimed at more cost-effective units, can be examined, for example, by integrating the controlling functions into the currently available controller systems.

Equipment variants:

- Stirling Generator Gen70T, with transfer heater heat exchanger, 24V system (standard)
- In series with control module for battery connection, including starter, rectifier and data display
- Optionally with disk heat exchanger, Gen70D, Code “D”
- Optionally with cooler device (with radiator and circulation pump), Code “II”
- Optionally for a 48V system, Code “48”
- Optionally with connector for the turbo-blower, code “B”
- Optionally as a split version (control module and Stirling unit separated), Code “S”

Device code:

Exed[Code1,2,3,4,5]	Experimental Edition[Codes]
Code1	“T” = Transfer heat exchanger, “D” = Disk heat exchanger
Code2	“I” = without cooler device, “II” = with cooler device
Code3	Battery voltage, 24 or 48
Code4	B” with turbo-blower
Code5	“S” Special design: Split version (isolated installation of generator and controls)