Technical data standard System 800 V / 600 A

Nominal power output	kW	75	100	160	250	320	400	500
		Other values on request						
Rectifier type		IGBT, PWM, galvanic isolated						
Power factor at nominal power	λ	> 0.99						
AC-Input voltage / AC-Input frequency	V / Hz	380 / 400 / 440 / 480 / 500 / 690 V ± 10 %, 3-phase, (N), PE, 50 / 60 Hz ±6 %						
Max. output voltage	V	800 (other values on request)						
Typ. min. output voltage	V	5						
Output current	A	±600 (other values on request)						
Measuring resolution [5, 6]	%	voltage: 16 Bit ADC current: 16 Bit ADC						
Control accuracy [5, 6]	%	voltage 0.1 fs current 0.1 fs						
Voltage tolerance dynamic (0 - 100 % I_{Nom} in 5 ms)	% fs	< 3						
Voltage ripple (U > 10 V) [2]	% rms	≤ 0.1 fs						
Current ripple (U > 10 V) [1]	% rms	≤ 0.1 fs						
Typ. current rise time [3]	ms	< 1 (standard system 800 V)						
Short circuit behavior		Short circuit proof (I_k < 5 kA)						
Interface [4]		Analog 0 - 10 V / CAN-Bus Option: Profibus, Modbus, Ethercat, Ethernet						
Overall efficiency at nominal voltage / nominal power	%	94	94	95	95	95	95	95
Permissible ambient temperature	°C	0 bis 40						
Climate class		3K3 according to EN 60721 (85 % relative humidity non condensing with cabinet heating up to 95 % rel. humidity without condensing)						
Cooling		„AF“ forced air cooling / air-water heat exchanger [7]						
Cabinet width [7]	mm	1400	1400	1400 +1000	1400 +1000	1400 +1000	3 x 1200	3 x 1200
Cabinet hight [7]	mm	1800	1800	1800	1800	1800	1800	1800
Cabinet depth [7]	mm	800	800	800	800	800	800	800
Distance from wall min. [7]	mm	200 (standard)						
Distance from ceiling min. [7]	mm	300 (standard)						
Installation		Operating area with restricted access						
Protection class [7]		IP20 (IP53 [7]) according to IEC 60529						
Maximum altitude with nominal load		1000 m a.m.s.l. with nominal load						
Acoustic level at IP20	db (A)	71	71	73	76	78	78	78
Safety		EN ISO 13849-1						
Basic standard		EN 62040						
EMV		EN 61000-2-4 grid disturbances EN 61000-6-2 interference immunity EN 61000-6-4 interference emission EN 61800-3 Kat C2 (A1) variable – speed electrical drives						

fs – full scale

[1] 48 / 96 V-batteries, operation mode „tester“

[2] Resistance as load, operation mode „simulator“ (voltage control)

[3] Measuring the current change 10 - 90 % at half nominal voltage with mit max. 5 % overshoot; operation mode Tester (current controled)

[4] Reaction time CAN-Bus max. 10 ms (sampling frequency 100 Hz)

[5] Read in digital controller with 16 bit (0…600 V / 800 V / 1000 V)

[6] Read in digital controller with 16 bit (± 600 A = 15 bit + sign)

[7] Different dimensions and protection class according manual

Subject to change without notice (tech)

NEUSCHWANSTEIN CASTLE

Innovation and quality from Germany and Austria

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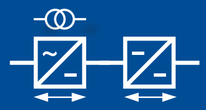
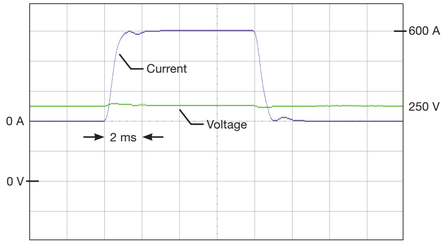
Infeed Test System



TYP I-TS-3870

Infeed Test System – Typ I-TS-3870

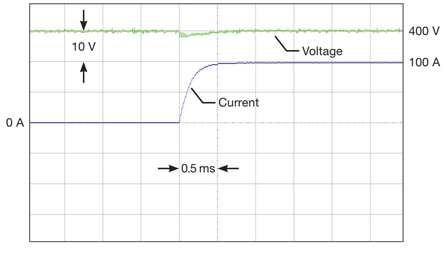
Current at load step



Operation „Battery Test“ DC-sink / source

- Load step from 0 A - nominal current
- Current rise time < 1 ms
- Regulation time < 2 ms

Current / Voltage at load step



Operation „Battery Simulation“ DC-source / sink

- Load step 0 - 100 A in 0.5 ms
- Voltage drop < 2 V
- Voltage tolerance < 0.5 %

General Data

- Power single system up to 500 kW
- Total power parallel system up to 1 MW
- Output voltage single system up to 1000 V
- Output current single system up to 1200 A

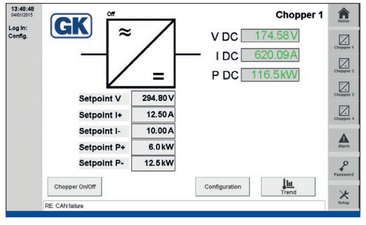
Typical applications

- Testing and simulation of fuel cell
- Testing and simulation of solar panels
- Battery simulation
- Battery test

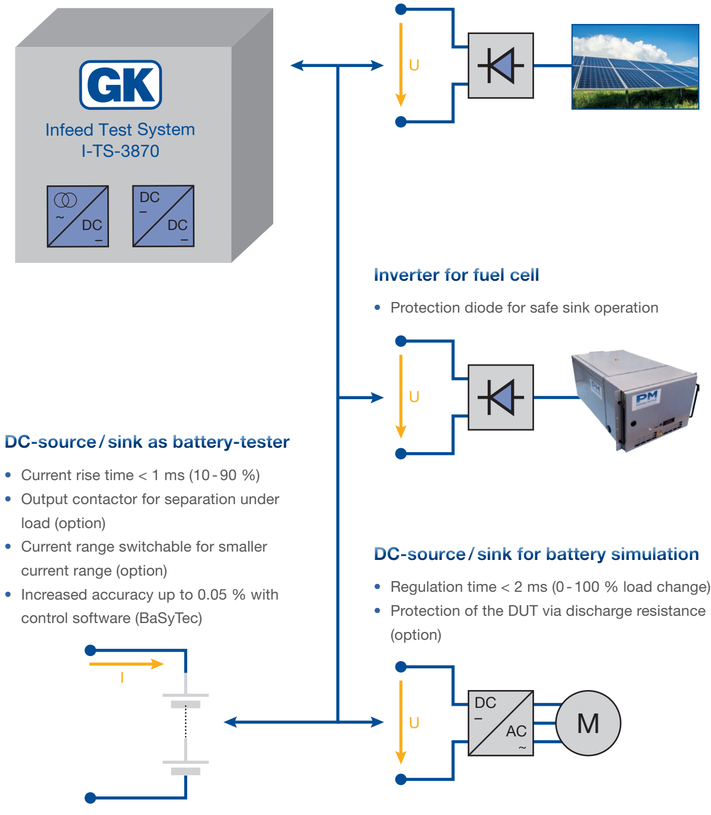
Properties / options

- Highly dynamic inverter
- Short circuit proof I_k < 5 kA
- Insulation monitoring (switchable)
- Voltage regulation at the DUT (sense)
- Electrical isolation to grid
- Main switch
- Safety control unit acc. EN ISO 13849-1
- Safety hardware PL “d”
- Control accuracy 0.1 % fs
- Voltage ripple 0.1 % rms
- Current rise time < 1 ms
- Battery test / Battery simulation
- Air cooled
- High efficiency
- Seamless transition source / sink
- CAN-Bus Interface (others on request)
- LabVIEW Interface (option)
- LC-Display (starting Q4 / 2015 Touch screen)
- Customer specific design

Touch Screen Display from Q4 / 2015



Applications (depending on equipment)



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