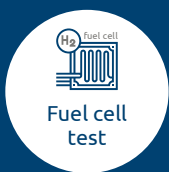


DC source / sink standard: I-TS-3872 / I-TS-3872-SiC:

State-of-the-art, liquid-cooled DC source/sink. Depending on requirements, the system can be used in various operating modes, and selected options are also available to support the application.

Typical applications

- Battery testing
(battery charging and discharging tests)
- Battery simulation / battery emulation
- Test power supplies for contactors, fuses and circuit breakers
- EV / EVSE testing
- Power supply for trains for maintenance purposes
- Load for fuel cells



Fuel cell test



Electrolyser test



Battery test



Battery simulation



Powertrain test

Basic-Equipment

- Main switch (load-break switch on the AC connection; lockable in the OFF position)
- Safety control system for Performance Level d (PLd) in accordance with ISO 13849-1 / EN 60204-1
- 1x terminal block for external "Emergency Stop" (2-channel with cross-short detection)
- 2x terminal blocks for external "Stop" (for the output channel, 2-channel with cross-short detection)
- 1x terminal block for external "operating mode selection" (2-channel with cross-short detection)
- 2x DC contactors per output channel
- Voltmeter and standby indicator in cabinet door
- Terminal blocks for external DC voltage measurement (sense lines)
- 2x insulation monitors (separately switchable)
- Touchscreen display
- Switchable battery tester / battery simulator configuration
- Ethernet interface for Modbus TCP and VNC
- CAN bus interface
- Plug-and-play parallel operation of two I-TS-3872 units with identical technical specifications



Advantages of SiC (silicon carbide) technology

- Higher power output without increasing the size
- Up to 1200 V output voltage per channel
- Optimised efficiency
- Significantly reduced noise levels
- Reduced losses

Options (selection)

- I-TS 3872 Parallel / Cable for parallel operation
- I-TS 3872 Funct-gen / Function generator for superimposed AC signals at the DC output
- I-TS 3872 IF-EtherCAT / EtherCAT interface
- I-TS 3872 IF-PROFIBUS / Profibus interface
- I-TS 3872 IF-PROFINET / Profinet interface
- I-TS 3872 IF-2x CAN / CAN bus 2 interface
- I-TS 3872 Float-S / Potential-free contact
- I-TS 3872 STIME / Adjustment of "safe shutdown time"
- I-TS 3872 Control cabinet door lock
- I-TS 3872 MARK-PH / Single-core marking, Phoenix version
- I-TS 3872 Special lacquer finish

	I-TS-3872- 1500-300- 1000	I-TS-3872- 1500-440- 1000	I-TS-3872- 1500-600- 1000	I-TS-3872- 1500-880- 1000	I-TS-3872-SiC- 1200-375- 1000-2	I-TS-3872-SiC- 1200-750- 1000-2
DC output parameters						
Power	300 kW	440 kW	600 kW	880 kW	375 kW (planned)	750 kW (planned)
Overload capacity (30 sec., every 5 minutes)	345 kW	–	690 kW	–	–	–
DC voltage (single / parallel / series operation)	2x 5 – 750 V / 1x 5 – 750 V / 1x 10 – 1500 V	2x 5 – 750 V / 1x 5 – 750 V / 1x 10 – 1500 V	2x 5 – 750 V / 1x 5 – 750 V / 1x 10 – 1500 V	2x 5 – 750 V / 1x 5 – 750 V / 1x 10 – 1500 V	2 x 10 – 1200 V / 1 x 10 – 1200 V / –	2 x 10 – 1200 V / 1 x 10 – 1200 V / –
DC power (single / parallel / series operation)	2x ± 1000 A / 1x ± 2000 A / 1x ± 1000 A	2x ± 1000 A / 1x ± 2000 A / 1x ± 1000 A	2x ± 1000 A / 1x ± 2000 A / 1x ± 1000 A	2x ± 1000 A / 1x ± 2000 A / 1x ± 1000 A	2x ± 1000 A / 1x ± 2000 A	2x ± 1000 A / 1x ± 2000 A
Current rise time	≤ 1,3 ms				≤ 1,3 ms	
Internal resistance	-10 mΩ to +1000 mΩ				-10 mΩ to +1000 mΩ	
Ripple voltage residual	< 0,1 % fs RMS				< 0,1 % fs RMS	
Ripple current residual	< 0,1 % fs RMS				< 0,1 % fs RMS	
Accuracy						
Voltage Control CV	0,1 % fs				0,1 % fs	
Current Control CC	0,1 % fs				0,1 % fs	
Power Control CP	0,2 % fs				0,2 % fs	
Voltage measurement	0,1 % fs / 16 bit				0,1 % fs / 16 bit	
Current measurement: 1000 A or 350 A	0,1 % fs / 16 bit				0,1 % fs / 16 bit	
AC Input Parameters						
Voltage	3/PE AC 400 V / 380 V ± 10 %				3/PE AC 400 V / 380 V ± 10 %	
Frequenz	50 Hz ± 5 %				50 Hz ± 5 %	
Power factor at rated power	> 0,99 ind.				> 0,99 ind.	
Rated short-circuit current	15 kA				15 kA	
Power consumption (rated power / maximum power)	326 kVA / 375 kVA	468 kVA / –	2x 326 kVA / 2x 375 kVA	2x 468 kVA / –	tbd	tbd
AC current (max. at rated power / max. RMS / max. power)	523 A / 532 A / 602 A @ 400 V -10 %	753 A / - / - @ 400 V -10 %	2x 523 A / 532 A / 602 A @ 400 V -10 %	2x 753 A / - / - @ 400 V -10 %	tbd	tbd
Electrical isolation between AC & DC / DC & DC	By default, the DC side is isolated from earth				By default, the DC side is isolated from earth	
Mechanical details for IP 54 protection rating						
Dimensions (W x D x H) in mm	(1600 + 800) x 800 x 2200	(2000 + 800) x 800 x 2200	2x (1600 + 800) x 800 x 2200	2x (2000 + 800) x 800 x 2200	(1600 + 800) x 800 x 2200	2x (1600 + 800) x 800 x 2200
Weight in kg	2150 + 400	2800 + 400	2x (2150 + 400)	2x (2800 + 400)	Tbd	Tbd
Minimum distance from the ceiling	100 mm				100 mm	
Minimum distance from the rear wall	0				0	
Door hinge	Hinged doors, swing-open, 180 degrees				Hinged doors, swing-open, 180 degrees	
General information						
Operating conditions	3K22 / 3M11: +5 to 40°C; 5 – 85% relative humidity, non-condensing				3K22 / 3M11: +5 to 40°C; 5 – 85% relative humidity, non-condensing	
Maximum installation height based on rated specifications	1,000 m above sea level; air pressure ≥ 870 hPa				1,000 m above sea level; air pressure ≥ 870 hPa	
Cable entry	from below				from below	
Color	RAL 7035; textured paint				RAL 7035; textured paint	

This is just a sample of our product range; we would be happy to assist you in developing a customized project.

Subject to technical changes.