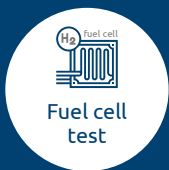


DC source/sink standard: I-TS-3840

The I-TS-3840 is a DC source/sink with one channel that can be supplemented with selected options. The design is standardized, the available options are provided in the already created designs.

Typical applications

- Battery tests (charge and discharge tests of batteries)
- Battery simulation / battery emulation
- Load for fuel cells
- Test power supply for contactors, fuses and circuit breakers
- Test of DC motors (drive train)
- EV / EVSE testing



Fuel cell test



Electrolyser test



Battery test



Battery simulation



Powertrain test

Basic-Equipment

- Input voltage (standard): 3x400V, 3x380V, 50/60 Hz
- Main switch (switch disconnecter with fuses at AC terminal; lockable in Off-Position)
- Safety control for Performance Level d (PLd) in accordance with ISO 13849-1 / EN 60204-1
- Display with touch operation
- Model: Battery tester / battery simulator (switchable)
- Analogue voltmeter in cabinet door
- DC output contactors with increased short-time current carrying capacity
- DC current measurement with 0.1 % fs accuracy
- Connection terminals for DC voltage measurement (0.1 % fs accuracy with sense lines)
- Connection terminals for external "Emergency Stop"
- Connection terminals for external "Stop"
- Connection terminals for calibrating case
- Interface Modbus TCP-IP
- Interface CAN-bus ("100 Hz" with dbc file)
- Interface VNC over Ethernet
- Protection type IP 20 alternative IP54
- Noise-reduced version (rubber buffer, fan control)
- Rittal cabinets Type VX



Options

- (M)I-TS-ISO-3.0, Insulation monitoring device DC
- I-TS-Parallel 3.0, Parallel control device
- I-TS-Stopp, Stop button (black) installed in cabinet door
- (M)I-TS-E-Stopp, Emergency stop button (yellow / red) installed in cabinet door
- (M)I-TS-IF-ANALOG-IN, Interface "Analogue - input"
- (M)I-TS-IF-ANALOG-OUT, Interface "Analogue - output"

	I-TS-3840- 1500-260-800	I-TS-3840- 1500-400-800	I-TS-3840- 1200-320-1200	I-TS-3840- 1200-650-1200
DC output parameters				
Power	260 kW	400 kW	320 kW	650 kW
DC voltage	10 – 1500 V	10 – 1500 V	10 – 1200 V	10 – 1200 V
DC current	± 800 A	± 800 A	± 1200 A	± 1200 A
Current rise time	< 1,4 ms	< 1,4 ms	< 1,0 ms	< 1,0 ms
Internal resistance	-19 mΩ to +1875 mΩ	-19 mΩ to +1875 mΩ	-10 mΩ to +1000 mΩ	-10 mΩ to +1000 mΩ
Ripple voltage residual	< 0,1 % fs RMS			
Ripple current residual	< 0,1 % fs RMS			
Accuracy				
Voltage Control CV	0,1 % fs			
Current Control CC	0,1 % fs			
Power Control CP	0,2 % fs			
Voltage measurement	0,1 % fs / 16 bit			
Current measurement	0,1 % fs / 16 bit			
AC Input Parameters				
Voltage	380 V 3/PE ± 10 %; 400 V 3/PE ± 10 %			
Frequenz	50 Hz ± 5 %; 60 Hz ± 5 %			
Power factor at rated power	> 0,99 ind.			
Rated short-circuit current	50 kA			
Power consumption	285 kVA	431 kVA	342 kVA	685 kVA
Max. AC current @ 400 V - 10%	457 A	693 A	549 A	1100 A
Electrical isolation between AC and DC,	By default, the DC side is isolated from ground			
Mechanical details for IP 20 protection class (AF air cooling)				
Dimensions (W x D x H) in mm	(1400 + 1200) x 800 x 2200	(1200 + 1200 + 1200) x 800 x 2200	(1400 + 1200) x 800 x 2200	(1600 + 1200 + 1200) x 800 x 2200
Weight in kg	1500 + 1150	1540 + 1080 + 1150	1600 + 1150	2200 + 1080 + 1150
Minimum distance from the ceiling	300			
Minimum distance from the rear wall	0			
Door hinge	on both sides			
Mechanical details for IP 54 protection rating (WF water cooling via a heat exchanger on the roof)				
Dimensions (W x D x H) in mm	(1400 + 1200) x 900 x 2555	(1200 + 1200 + 1200) x 900 x 2555	(1400 + 1200) x 900 x 2555	(1600 + 1200 + 1200) x 900 x 2555
Weight in kg	1650 + 1300	1690 + 1230 + 1300	1750 + 1300	2350 + 1230 + 1300
Minimum distance from the ceiling	0			
Minimum distance from the rear wall	0			
Door hinge	on both sides			
General information				
Operating conditions	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			
Cable entry	from below			
Color	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.