MCB POWER-FLOW

AC-AC & AC-DC Current Generators (high-current output) suitable for low-impedance loads

as we base our approach on tailor-made solutions the mechanical enclosures vary according to the set of the required power, current and voltage values

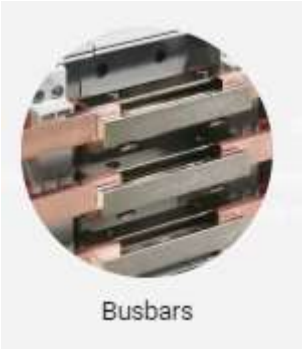
Input / Output configurations:

- ✓ AC input AC output
- ✓ AC input DC output

Main Features:

- tailor-made [very high] current and [very low] voltage ranges
- power range from 1.5kVA/kW to 150kVA/150kW
- current up to 40kA within the 150kVA/kW max power allowance
- voltage output usually below 10Vac/Vdc
- Custom output frequency range in AC/AC configuration
- Fast current rise time with customised stabilization time (from 5/6ms to 100ms)

Main Applications


Busbars


Magnetothermic Switches


Testing Current and Winding Transformers


Shunt Calibration


Electric Motors Testbench

Case History: AC magnetothermic switches

- ✓ 10kVA 3-phase input 1-phase output
- ✓ 1 – 4Vac
- ✓ 30 – 2500A
- ✓ 40-80Hz adjustable
- ✓ Needs the current to stabilize in a quarter of cycle (30-35ms)
- ✓ Magnetic test with 100ms current flick
- ✓ RS232/Ethernet with SCPI

Test consists in two stages:

• Thermic test: 30 seconds test at maximum current
• Magnetic test: two quick flicks of maximum and minimum current of 100ms duration each for 5 times

Please Note: thermic tests are usually performed at 3.5 times the nominal current while those in magnetics also at 20 times the nominal current; from this assumption it's easy to understand why there are high current values involved.

Within the magnetothermic circuit breakers industry, there are two different products lines to be tested:

1. current from 0A to 60A nominal and from 10A to 125A nominal
2. current over 125A nominal