Three-phase DC high-voltage power supplies

Adjustable and constant voltage supplies

This three-phase DC high-voltage power supply is suitable for the development and testing of frequency converters for railway engineering. It is situated in development laboratories, proving grounds, test institutes, schools and universities. Because of the high DC output voltage, appropriate safety measures have been taken, such as:

- Emergency-off circuit with external inputs and outputs as double-pole potential-free contacts for emergencyoff circuits and safety circuits
- Warning lights and additional connections for external warning systems.
- Discharge circuit for the intermediate-circuit capacitor
- Earth trip with compressed-air drive to short out and earth the DC output

To ensure safety, in the event of mains failure, the DC output is shorted out and earthed by the compressed-air drive.

Description

Three-phase DC high-voltage power supplies with separate windings, motor drive and electronic control of the output voltage to approx. 1.0%, with short-circuit proof DC output.



Technical data

REOLAB 420*	
Input voltage	3 x 400 V L/L or 3 x 230 V L/N
Output voltage	0 - 12000 VDC
Output current	2 x 20 - 300 A
Output power	100 kW - 800 kW as standard version
Vector group	Delta/Star/star/2 x B6U
IP Code	IP 20
Frequency range	50/60 Hz

REOLAB 520*

REOLAB 520 supplies have the same design as REOLAB 420 supplies, but with an additional separately regulated DC output of 0 - 150 VDC, 30 AC or 50 ADC for the control voltage of power semiconductors. This can be augmented with an optional uninterruptible power supply (UPS) so that, even in the event of a mains failure, the power semiconductors still receive control voltage for a certain period to ensure that they can be safely shut down.

^{*}Other voltages and loads are also available on request. Different operating modes/concepts and industry interfaces are also possible.