



PowerSWing UNZ

Universal power supply source

- Failsafe and reliable system meeting SIL4 requirements according to CENELEC
- Suitable for important technological processes, airports, metro, in medicine, etc.
- Effectiveness higher than 96 %
- High reliability and resistance against storms
- Modular design of standby power supply source
- Maintenance-free system



GENERAL DESCRIPTION

Universal power supply source
PowerSWing UNZ (further UNZ)



is designed as system of sources for reliable and failsafe power supply of signalling systems or other systems requiring backed up power supply.

UNZ replaces 50 Hz individual sources with uninterruptible power supply, 24 V DC battery and also 75 Hz and 275 Hz frequency converters.

UNZ uses railway catenary as primary feeder (e.g. DC 3 kV, single-phase AC 25 kV, 50 Hz or others).

As another feeder a public or local (e. g. 6 kV, 50 Hz) power supply network or diesel generator can be used.

UNZ technology is embedded in indoor cabinets.

BASIC TECHNICAL DESCRIPTION

UNZ provides long term power supply for important parts of signalling systems with a high backup level.

UNZ provides short term power supply for other parts of the signalling system.

UNZ provides power supply with UPS character.





Three-stage over-voltage protection.

UNZ supplies signalling systems with 230/400 V, 50 Hz.

UNZ supplies open-line track circuits with 2 × 230 V, 75 Hz.

Input voltage:

- 1 × or 3 × 400 V / 230 V AC
- 1 × 460 V DC

UNZ supplies station track circuits with 2 × 230 V, 275 Hz.

UNZ supplies signalling systems with 24 V DC.

BASIC TECHNICAL PARAMETERS

Input voltage	UTS single-phase voltage	400 V, 50 Hz
	UTE voltage	460 V DC
	UV1 three-phase voltage	3 × 230/400 V, 50 Hz
	UV2 three-phase voltage	3 × 230/400 V, 50 Hz
	UK three-phase voltage	3 × 230/400 V, 75 Hz
Output voltage	U50 three-phase voltage	3 × 230/400 V, 50 Hz
	U75 two-phase voltage	2 × 230 V, 75 Hz
	U275 two-phase voltage	2 × 230 V, 275 Hz
	U0 DC voltage	24 V
Output Power	UNZ-1 and UNZ-2 converter	35 kW
	UNZ-3 converter	10 kW
Temperature range	+5 °C to +55 °C	
Humidity	up to 80 %	
Service life	more than 25 years	

