

20 kVA LR POWER SUPPLY AND DISTRIBUTION SET

DESCRIPTION:

The 20 kVA power supply and distribution set on the LAND ROVER DEFENDER 130 chassis with the rated output power of 20 kVA (16 kW) represents a mobile, independent electrical energy source for general use, which enables the supply of the both three-phase and one-phase appliances in the 3 x 230/400 V, 50 Hz voltage system and together, it enables the accumulators charging or to supply the extra-low voltage appliances up to the 1000 W from the 28 V DC voltage system. It is intended for operation in the field conditions to ensure the electrical energy delivery immediately after the unit coming to the operational area.

The ZRS-20 kVALR is not intended for the parallel operation with a similar device or with the low voltage distribution mains and it is not intended for the operation during the transport.

OPERATIONAL CONDITIONS:

The ZRS-20 kVA LR is intended for continuous operation in the field conditions in the areas with mild climate:

- Ambient temperature from $-30\text{ }^{\circ}\text{C}$ až $+44\text{ }^{\circ}\text{C}$;
- Relative humidity up to 90 % at the temperature $+30\text{ }^{\circ}\text{C}$;
- Rain intensity up to 3 mm per minutes falling under the angle 30° ;
- Air dustiness up to $0,5\text{ g/m}^3$ for at least 1h;
- Airflow up to 20 m/s.

The set is not intended for the operation during the mass destruction weapons using.

BASIC TACTICAL AND TECHNICAL DATA:

Vehicle type:	LAND ROVER DEFENDER 130
Motor	Compression ignition, supercharged, 5 cylinders
Stroke volume	$2\,498\text{ cm}^3$
Maximal power	$90,0\text{ kW at }4\,200\text{ min}^{-1}$
Fuel consumption	$12,7\text{ l/100 km}$
Dimensions (l x w x h)	$5\,130 \times 1\,930 \times 2\,330\text{ mm}$
Total weight	$3\,500\text{ kg}$
Generating set type:	Č-EDM 16-T400/230-2V
Rated voltage, frequency	$3 \times 230/400\text{ V, }50\text{ Hz}$
Motor EC	Compression ignition, supercharged, 4 cylinders, air cooling
Fuel consumption at the rated power	5 l.h^{-1}
Fuel tank capacity	40l
Alternator	synchronous, brushless
Total length of the distribution set cables	225 m

