



Data sheet

Three-phase sine wave inverter IK1808

Flexible inverters.

The three-phase sine wave inverters IK1808.

The IK series of three-phase inverters convert a DC voltage into a three-phase, sinusoidal AC voltage. They are rotary inverters that operate with MOSFET semi-conductors and pulse-width modulated control of the power output stage like the single-phase devices. The modular expansion of the device features and functions as well as adaptations required by the customer can be achieved easily. They are also designed for use in industry and railway vehicles.

The rotary inverter has two freely programmable operating points. This allows for the power supply of two different users.

An example: The inverter supplies laptop connectors in operating point 1. This is changed to operating point 2 when the train stops. Fresh air is now blown into the passenger cabin with the aid of a battery-saving voltage and frequency startup that is adapted to the fans.

Extrem high efficiency

Electrically isolated between
input and output

3-phase output (400 V) and power use
N-access (230V)

U(f)-characteristic, two select able operating
points (example: BP1: 230 V_{AC} / 50 Hz, BP2:
400 V_{AC} / 35 Hz)

Min. no-load loss, optional 0A current
consumption

750 V possible input voltage

Railway design according to EN50155
(Option: D)

Technical data

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Electrical data	IK1808
Input variables	
Input voltage	24V / 36V / 48V / 60V / 110V / 220V (on request: 750V) different values available on request
Under-/ Overvoltage switch off (Option D)	-15% / +20% (-30% / +35%)
Output variables (at 40 °C [Option D: at 70 °C])	
Nominal power	1800 VA
Peak power 30 s	2300 VA
Peak power 1,3 s	3000 VA
Current shut down (Iph) at ambient temperature	15.0 A
Nominal Output Voltage	230V LN (+/-5%) / 400V LL (+/-5%) different values available on request
Nominal Output Frequency	50 Hz (+/-0.1%), two operating points selectable
Current shut down	through electronic current limitation
Crestfaktor	ca. 3
Cos phi	all power factors allowed
Disortion	< 5%
General electrical data	
Rated efficiency	92%
Radio interference (Option D)	EN 55022 (EN 50121)
Remote Control	standard
Indication inverter failure	standard
Design for railway application (Option D)	shock and vibration proofed design / extended temperature range / mounted on rubber-metals extended input voltage range -30% ... -35%
Display	LED Display
Ambient temperature (Option D)	0 °C ... +40 °C (-25 °C ... +70 °C)
Cooling	temperature controled fan
Noise emission	<35dB (fan operating)
Protection class	IP20
H* x B x T***	247 x 370 x 500 mm
LB x LT x d (Fixing)	330 x 454 x 9 mm
Casing	Available on request in 19" case
Color	RAL5002
Weight	39 kg

Dimensional Drawing

