Kraftelektronik AB

DC/DC Converter 440/24V 50W



- Rugged design for use in UMD (Uninterruptible Motor Drive) applications
- Wide input voltage range
- 4kV input/output separation
- Alarm relay and LED indication
- **Redundancy diode** for parallel operation



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SAFETY INSTRUCTIONS



This product is designed for indoor use, in dry premises free from conductive dust. A qualified personnel is required for safe installation. Check the product for visible damage before installation. Make sure that protective earth is properly connected. Allow the product to reach room temperature before commissioning.

DESCRIPTION

The DC/DC converter is used to supply uninterruptible 24V DC power to components of a UMD system that cannot be supplied directly from the 440V battery. Typical load objects are PLC systems, thermistor and auxiliary relays etc. The converter is designed for maximum reliability and availability, low power density results in long life expectancy and a high MTBF value. The unit is DIN-rail mounted and all connections are made to plug-in terminals. The input is reverse-polarity protected and the output is short-circuit proof.

By connecting two or more units in parallel the available output power can be increased. For this purpose one of the output terminals is provided with a redundancy diode.

The output voltage can be adjusted through a hole in the right-hand side cover. A green LED at the front indicates that the output voltage is within 24V±10%, voltage failure is indicated with a red LED. The DC/DC converter is provided with an alarm relay for remote monitoring, offering a potential free changeover contact.

TECHNICAL DATA

Input voltage	300-750V	Safety	SS-EN 50178
Input/output insulation	4kVDC	Impulse withstand voltage	6kV
Output voltage, nominal	24V	EMC, Emission	EN 55022 Class B
Output voltage, setting range	22.9-27.0V	EMC, Immunity	EN 61000-4
Line/load regulation	±1%	Dimensions	65x185x125mm
Output ripple	$<10 \text{mV}_{\text{RMS}}$	Weight	1,0kg
Efficiency	80%	Protection degree	IP30
24V OK indication	$21.6 < V_{out} < 26.5$	Connection, input	0.2-4mm ²
Ambient temperature	0-50°C	Connection, output and alarm	0.2-2.5mm ²

DIMENSIONS AND CONNECTION DIAGRAM





