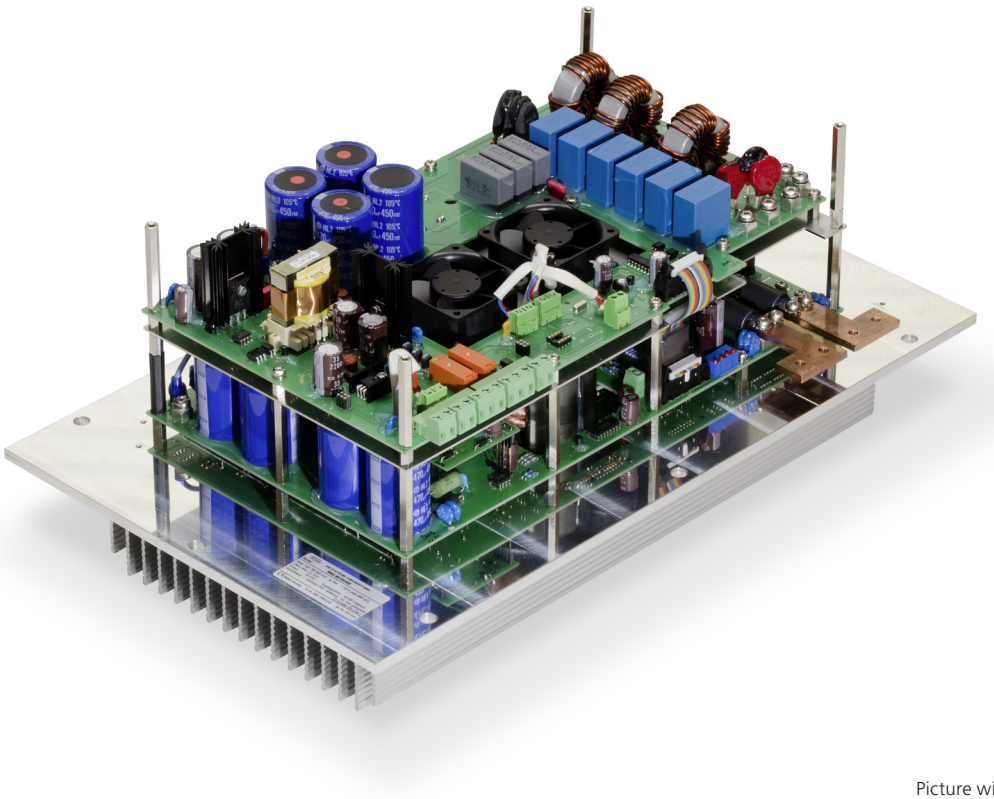
WNG II-Series

Switched Mode Power Supply for High Peak Currents



Picture without cover

- **Input voltage range:**
  360 ~ 440 VAC, 3 Ph 47 ~ 63 Hz
- **Output voltage:**
  90 VDC, customizable
  from 75 ~ 120 VDC
- **Output power:**
  5 kW continuous, 10 kW for 10 s
- **Designed for rough environments**
- **Continuous short circuit protection**
- **Designed to meet TAR High Voltage and Medium Voltage (2019)**
- **High Voltage Ride Through proof**
- **Maintenance-free**
- **Customizable for your application**

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RSG.

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Technical Data

Input	
Input voltage	360 ~ 440 VAC (nom. 400 VAC) / 47 ~ 63 Hz / 3 phase + PE
Input current	Max. 24 A @ 10 kW
Hold up time	> 10 ms @ 400 VAC & 5 kW
Power factor	0.75 typ.
Efficiency	> 90 % typ.
Inrush current	< 200 A_{peak}
Leakage current	< 3.5 mA

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Output	
Output voltage	90 VDC (customizable from 75 ~ 120 VDC)
Output current	55 ADC cont. / 100 ADC for 10 s @ 90 VDC
Output power	5 kW cont. / 10 kW for 10 s
Initial tolerance	± 1 %
Voltage accuracy	1 % typ.
Dynamic Load regulation	1.2 V_{peak} (I = 90 % I_N ~ 10 % I_N)
Transient time	2 ms max. up to initial tolerance
Ripple & noise (20 MHz BW)	< 500 mV
Static Line regulation	± 0.5 % max. (360 ~ 440 VAC)
Static Load regulation	± 0.5 % max. (I = 0 ~ 100 %)

Environmental Specifications	
Operating temperature range	–20 ~ +65 °C internal air temperature
Operating heat sink temp range	–20 ~ +85 °C maximum temp provided by customer's fan
Storage temperature range	–40 ~ +40 °C
Cold start condition	> –20 °C
Cooling	Heatsink (117 m^3/h forced air required)
External fan dimensions (L x W x H)	119 x 119 x 25 mm
Altitude	2,000 m

Safety	
Protection class	I
Protection category	IP20
Isolation Voltage Input / Output	3,000 VAC (only if output not connected to PE)
Isolation Voltage Input / Frame Ground	2,000 VAC
EMC	EN61204-3 / EN 61000-4-2,-3,-4,-5,-6 EN61204-3 Kl. A / EN55011 / EN55022 / CISPR 11 / CISPR 22
Input filter	Acc. EN55022 Level A
Safety standards	EN 62368-1
Options	Overtemperature with shutdown. (All options and modifications on request.)
Short circuit protection	Continuous Voltage characteristic, 10 s 200 % nominal current @ V_o/2
Fuse	As device protection use external 3-phase combined circuit breaker (3 x 25 A / 400 VAC) with characteristic C

General Specifications	
Relay outputs	Potential-free
Signal level	0 ~ 24 VDC
Contact load	Min. 0.5 mA, max. 2 A
Vibrations	Maximum vibration velocity V_{max} <= 2 mm/s
Maintenance	Maintenance-free
Dimensions	50 x 30 x 22 cm (L x W x H, approx.)
Weight	15.3 kg (incl. cover)

All specifications typical at nominal line, full load and 25 °C, unless otherwise noted. All data specified is believed to be correct at time of publication. However, we accept no responsibility for printing errors or inaccuracies. Subject to change without notice.

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