TRANSOKRAFT

INVERTER

Transokraft 3 220V GS
30, 50, 80, 120, 170, 200kVA

Transokraft 1 220V GS
10, 20, 40, 60, 80kVA

Secure independent AC supply

The analog Transokraft inverters are suitable for secure, uninterrupted supply to critical loads which require an AC voltage supply independent of the mains power system and the faults which may occur.

This independent supply avoids interruptions to the connected loads caused by mains power failures, mains voltage deviations or mains frequency deviations, any of which may result in considerable financial costs and physical danger.

Key features

- Analog technology, no need for software certification
- High efficiency (even at low output power); lowers operating costs
- Fans in redundant configuration via additional vacuum chamber at top of unit
- Fast dynamic response
- Short circuit proof constant current source
- High short circuit resistance (up to 600% of nominal current possible)
- Fast overload response
- Offers high start-up current for starting electric motors
- 100% asymmetric load
- KTA design including seismic test certificate according to IEC 60068-28 standards
- Easy-to-maintain
- Stationary use which meets DIN-EN 60721-3-3 standards: 3K3; 3Z1 (3Z4); 3B2; 3C2; 3S2; 3M4

AEG
POWER SOLUTIONS

TRANSOKRAFT INVERTER

Core business

Engineered by AEG Power Solutions, UPS solutions have been protecting oil & gas infrastructure, power stations and other industrial installations for over 60 years.

More than 60 years of experience in power plant technology help us to provide the perfect solution for your application.

Why is AEG Power Solutions your ideal partner?

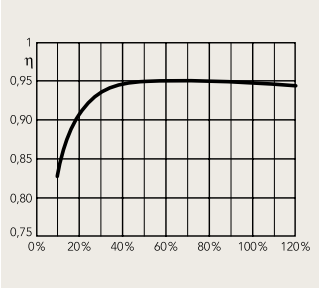
- Over 60 years of experience in power plant technology
- Product life time >30 years
- 100% development and production "Made in Germany"
- Analog design, no need for software qualification
- Lifelong spare parts delivery for the entire power plant product range
- Products engineered according to international standards such as IEEE, KTA, RCC-E, CSA …
- Products designed for 100% power at 40°C ambient temperature
- Products designed for all seismic standards
- Worldwide references
- Easy-to-maintain by AEG PS diagnostic devices
- Worldwide service

Design

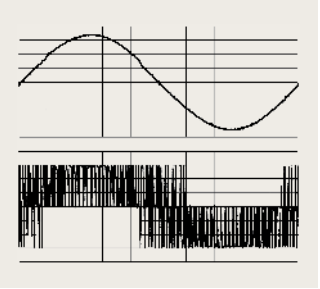
- Transokraft as single system
- Transokraft as parallel system up to 510 kVA and central SBS
- Transokraft inverter and AEG PS rectifier Profitec as complete power supply system in KTA design
- Special configurations on request

Range of applications

- Nuclear power plants
- Hydropower plants
- Fossil energy plants
- Chemical industry



Inverter efficiency of the 170kVA Transokraft UPS



One phase of the load voltage (top) and the inverter set voltage (bottom)

Overview

Transokraft inverters are pre-wired units that form part of an uninterruptible power supply system (UPS). They are used where there is already a secure DC supply or as a system with a Profitec S rectifier. The following components and equipment are grouped together in a cabinet:

- Inverter
- Static Bypass Switch SBS (Thyrostat)
- Manual bypass
- Control equipment
- Protection and monitoring equipment
- Controls and indicators
- Interface for diagnostic device

Decades of experience

Since 1947, AEG has been a well-respected and recognized manufacturer of equipment for all types of power generation plants including conventional, nuclear, wind and solar as well as for power transmission and distribution. Naturally, this has led us to adapt our solutions and to afford our strong expertise to the growing CSP applications market and to other renewable energy solutions.

Functional description of the components

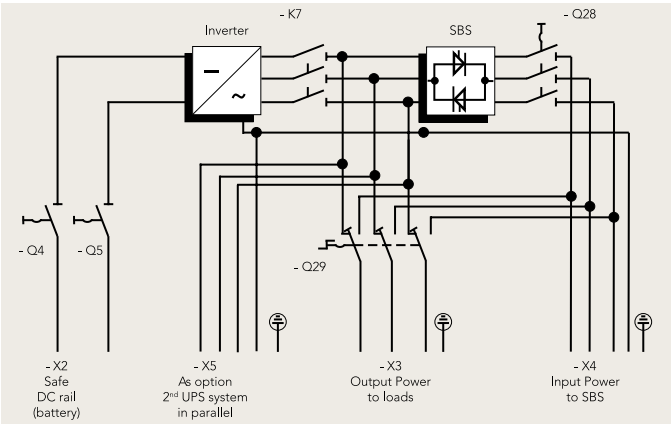
Inverter

The inverter converts the incoming DC voltage into an AC voltage which supplies the connected loads with a regulated, sinusoidal AC voltage. The principal components of the inverter are the direct current filter capacitor, the inverter module (which is set up as a three-phase current bridge circuit with 6 transistor switches (IGBTs)), the transformer and the alternating current filters.

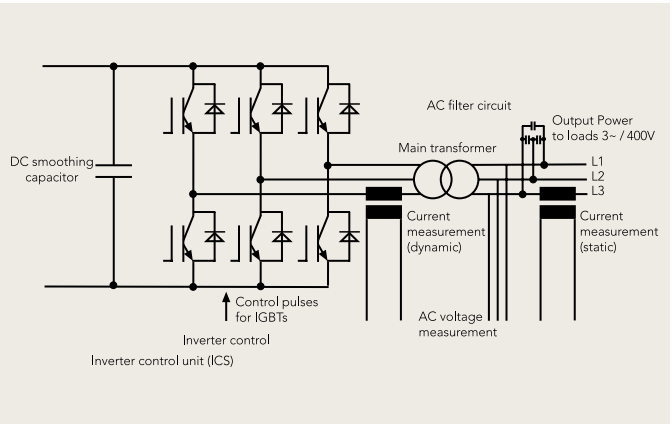
Appropriate activation of the IGBTs produces square-wave pulses at the module's output. These are converted into a sinusoidal voltage by means of filtering. The filter capacitor ensures that the voltage ripple and the superimposed alternating current portion remain within the permitted limits.

Controlling the output voltage

The value of the output voltage at any given time is continuously compared with the specified sinusoidal set value. Any deviations trigger an immediate response from the inverter because of the high-frequency pulses within a half-wave. As well as a static voltage tolerance of ±1%, this results in excellent dynamic properties. The frequency of the phase conductor voltage at the inverter output is kept stable by means of a quartz oscillator so that no deviation can occur even when the load suddenly changes.



Circuit layout of the main components Transokraft 3

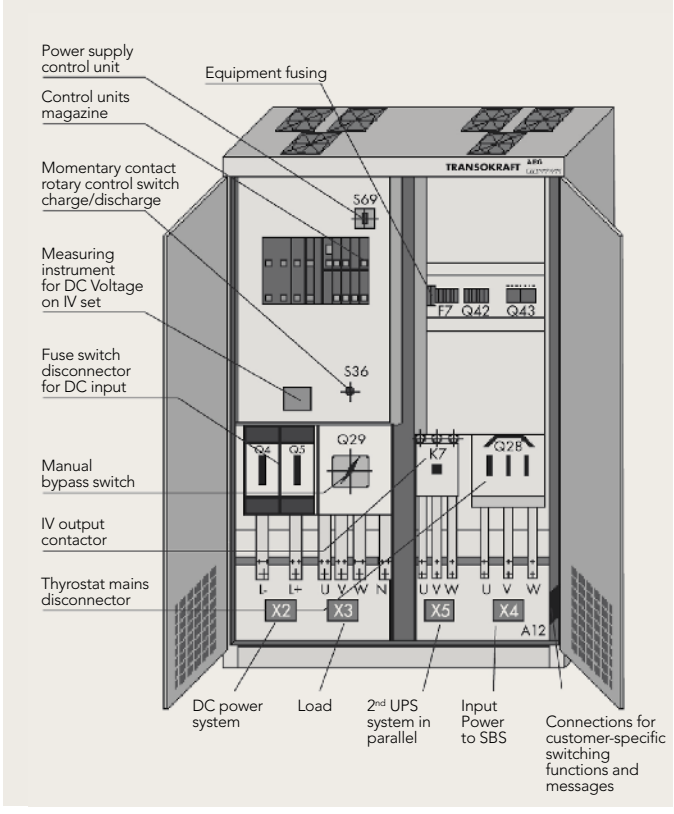


Circuit layout of inverter control within the UPS system

TRANSOKRAFT INVERTER MALFUNCTION MANAGEMENT

Mechanical structure of the Transokraft units

The cable cross sectional areas should be selected in accordance with the connection diagram. The cooling air openings on both the front and the rear of the unit must always be kept clear for the purposes of optimum ventilation and optimum operational readiness.



Static Bypass Switch SBS (Thyrostat)

The SBS is used for changing the source of the protected alternating current for the load from the inverter supply to the mains supply without any interruption whatsoever.

Triggering occurs in the event of

- Inverter overload
- Load short circuit
- Inverter malfunction
- Load transfer from mains to inverter when the unit is switched on
- Load transfer from inverter to mains when the unit is switched off

The principal components that make up the SBS are a thyristor contactor and a synchronization unit which ensures that the inverter voltage remains in frequency and phase synchronicity (synchronization range f_{nom} ±1% of normal value) with the power system.

The thyristors, in an inverse-parallel connection (thyristor contactor in W3C/W1C circuit) in the mains line, switch the loads over to the mains without any interruption within only a few microseconds whenever there is a malfunction in the inverter or as a result of an overload or load short circuit.

The changeover command is issued by the inverter monitoring system or the load voltage monitoring system.

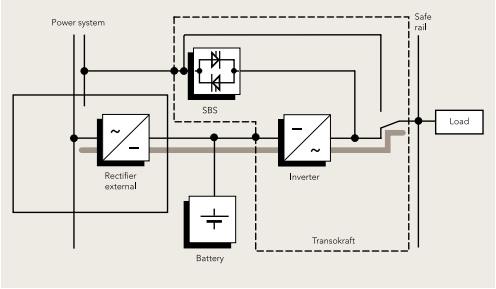
The SBS has an automatic retransfer facility. This carries out a transfer without interruption a few seconds after the change over to the mains, provided the inverter is operational and its output voltage is within the required tolerances.

SBS monitoring facilities

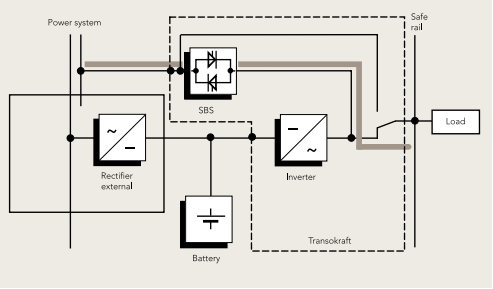
- Mains voltage watchdog (undervoltage or overvoltage) inhibits the SBS
- Load voltage monitor (undervoltage or overvoltage) causes the loads to switch over to the mains

Manual bypass

The manual bypass makes it possible to check the interactions between the inverter, thyrostat and power system without influencing the connected alternating current loads. A suitable means of doing this involves using the optional diagnostic unit. The unit must be de-energized whenever it is necessary to perform work on the Transokraft. The loads can be powered via the mains during this period by means of the manual bypass switch (Q29). The changeover occurs without interruption.



Power flow from the mains supply to the rectifier

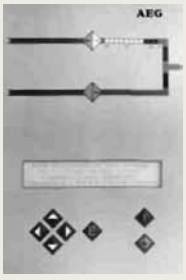


Power flow if the inverter is malfunctioning

Inverter display and control unit Transokraft 3

The display and control unit is integrated into the front of the inverter. Changes to settings can be made using the user friendly control unit. The top half of the inverter DCU contains a pictogram (symbol field) displaying the various operating states of the system. The illuminated indicators representing the various modules are triangular and also show the power flow direction. Alarm indicators remain continuously lit in the event of a malfunction which leads to a cut-out. These indicators flash in the event of malfunctions which do not lead to a cut-out or to messages (e.g. inverter is overloaded, fans have failed, etc.).

These detailed messages, measurement values and fault messages are displayed in the 4-line alphanumeric display located underneath. The row of LEDs – bar graph – shows the effective utilization level (linear and nonlinear loads are summed) of the system.



Transokraft 3

Inverter display and control unit

Q4, (Q5)* Switch for DC current input

Q28 Switch for circuit-entering of SBS and Load

Q29 Switch for SBS (Bypass zero transfer)

S36 Sensing device for charge and discharge of capacitor C42

S1 Inverter Interlock (Option)

* for units >120kVA

Signaling on printed circuit boards

Error codes are stored and displayed numerically. A look-up table for these numbers is shown inside the unit. Detailed signal by LEDs for rapid fault registration on the individual cards, for example:

Inverter mode

- DC and AC voltage monitoring systems
- Detailed fault messages
- Detailed operating messages

SBS (Thyrostat)

- Load voltage monitoring
- Mains voltage monitoring
- Detailed fault messages
- Detailed operating messages

The relays satisfy the requirements of protection class II for safe electrical isolation (as per VDE 0631/0700). The contacts are rated for 5VDC/1mA and 24VAC/100mA.

Inverter mode

The inverter mode provides for a sustained load via the inverter, irrespective of whether there is mains power or not. The following functional sequences may occur depending on the specific operating circumstances:

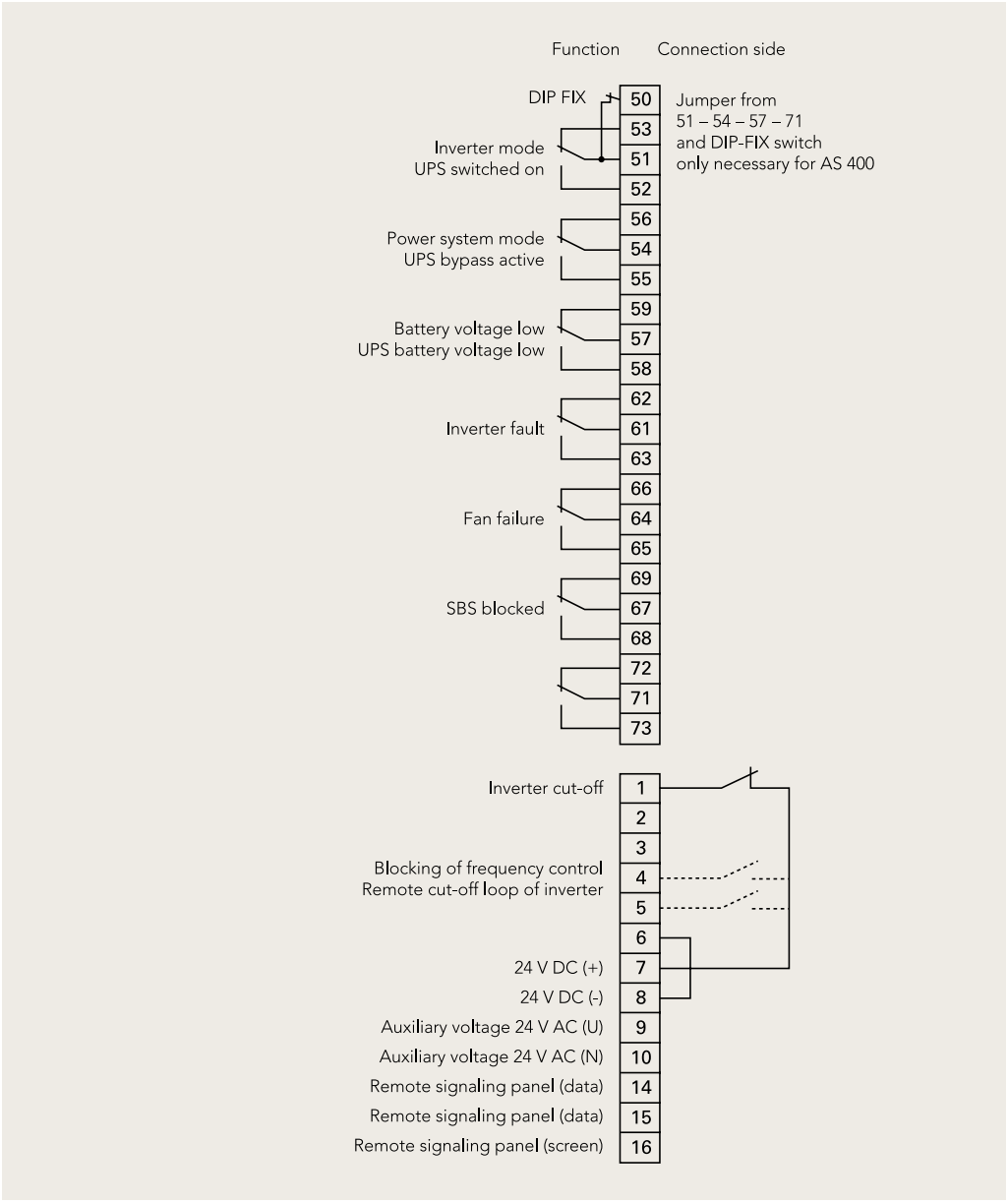
With existing mains power supply to the rectifier (rectifier not included in the unit)

The rectifier takes over the inverter input current and charges the battery at the same time, so the battery is always fully charged. The inverter supplies the connected loads. If the rectifier supplying the inverter fails, the battery takes over the power supply to the inverter without any interruption. The bridging time is dependent on the size of the specific battery used and the degree of utilization of the inverter.

The rectifier resumes supplying power to the inverter and charging the battery when the mains power returns.

In the event of system malfunction

In the event of an internal system malfunction, the loads are switched from the inverter supply to mains supply without any interruption by means of the SBS. Once the malfunction has been rectified, the loads are once more switched from the mains to the inverter power supply by the SBS. This occurs automatically and without any interruption whatsoever.



Connector pin assignment of printed circuit board A12

Mains mode/ test mode

In this operating mode, the loads are switched over to mains supply by means of the SBS. At the same time, the loads are electrically isolated from the inverter by means of the inverter output contactor. This mode is also suitable for testing and performing measurements on the inverter without affecting the loads. This mode should be selected for an attempted restart if the inverter has switched off due to a malfunction, in order to avoid changing back to inverter mode inadvertently. There is no supply to the loads if there is a mains power failure during this mode.

Remote signals and remote control

Each of the following remote signals is a volt free changeover contact on the terminals:

- Inverter mode
- Mains mode
- Battery (DC-voltage – undervoltage premonition at 2.1 V/per cell)
- Inverter malfunction
- SBS blocked
- Connection options for remote operation of the inverter:
  - Remote switch-on of the inverter
  - Blocking of frequency control by the power system (standby generating set)

TRANSOKRAFT INVERTER DIAGNOSTIC DEVICE

The Transokraft diagnostic device provides important data for annual checks as required by NPP's. It is designed to carry out the diagnosis for the Transokraft inverter. It supports at commissioning and at failure indication.

The Transokraft diagnostic device shows values for:

- SBS voltage and voltage of auxiliary Inverter
- Inverter input voltage
- Inverter output voltage
- Rectifier output voltage
- Rectifier input voltage

Additionally the Transokraft diagnostic device supports voltage monitoring in case of overvoltage or undervoltage.

Valid certifications

DIN EN ISO 9001:2000 certificated since 1994 TÜV München

UL 1778 UL 508 UPS Products Power Controller

Certified Europe CE certificated since 1995

KTA 1401 German Nuclear Power Plants certificated since 1992

Deutsche Telekom / Deutsche Bahn / Canada Nuclear Power Plants (CSA Z299.2) / Sweden Nuclear Power Plants / Belgium Nuclear Power Plants / Spain Nuclear Power Plants / Finland Nuclear Power Plants / German Nuclear Power Plants / Czech Rep. (Slovenia) Nuclear Power Plants

TECHNICAL DATA

TRANSOKRAFT 3 220V GS

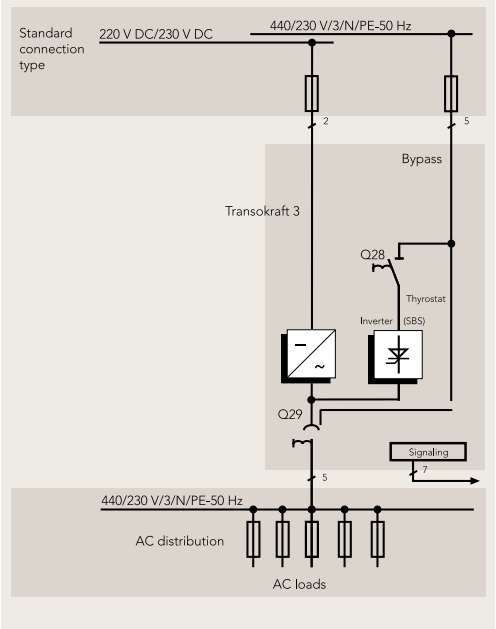
CROSS SECTIONAL CONFIGURATIONS ACC. TO DIN 0298, PART 4, TABLE 3, ROUTING TYPE B1 / B2

Type power (kVA)	30 kVA	50 kVA	80 kVA	120 kVA	170 kVA	200 kVA
Fusing of direct current input (A)	160	250	400	630	800	1000
Min. cross section (mm²)	70	120	240	2 x 185	2 x 240	3 x 240
Max. cross section (mm²)	2 x 185	2 x 185	2 x 185	2 x 185	2 x 240	4 x 240
Direct current input X1	Terminals					
Fusing of bypass (A)	100	160	250	315	500	630
Min. cross section (mm²)	35	70	150	2 x 95	2 x 150	2 x 185
Max. cross section (mm²)	2 x 150	2 x 150	2 x 150	2 x 150	2 x 185	2 x 185
SBS (Thyrostat) input X4	Terminals					
Load output X3	Terminals					
Max. fusing of loads (A)	40	63	80	125	160	160
Min. cross section (mm²)	35	70	150	2 x 95	2 x 185	2 x 185
Max. cross section (mm²)	2 x 150	2 x 150	2 x 150	2 x 150	2 x 185	2 x 185
Max. cross section of signal cabeling X1 – A12 (mm²)	0.5 – 2.5					

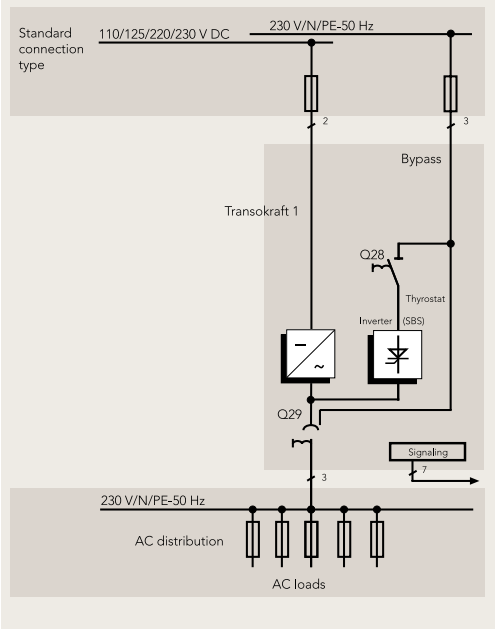
TRANSOKRAFT 1 220V GS

CROSS SECTIONAL CONFIGURATIONS ACC. TO DIN 0298, PART 4, TABLE 3, ROUTING TYPE B1/ B2

Type power (kVA)	10 kVA	20 kVA	40 kVA	60 kVA	80 kVA
Fusing of direct current input (A)	63	100	200	315	400
Min. cross section (mm²)	10	35	95	2 x 70	2 x 95
Max. cross section (mm²)	2 x 95	2 x 185	2 x 185	2 x 185	2 x 185
Direct current input X1	Terminals				
Fusing of bypass (A)	50	160	315	500	630
Min. cross section (mm²)	10	70	2 x 70	2 x 120	2 x 185
Max. cross section (mm²)	2 x 95	2 x 185	2 x 185	2 x 185	2 x 185
SBS (Thyrostat) input X4	Terminals				
Load output X3	Terminals				
Max. fusing of loads (A)	10	25	50	63	100
Min. cross section (mm²)	10	70	2 x 70	2 x 120	2 x 185
Max. cross section (mm²)	2 x 95	2 x 185	2 x 185	2 x 185	2 x 185
Max. cross section of signal cabeling X1 – A12 (mm²)	0.5 – 2.5				



Transokraft 3



Transokraft 1

TRANSOKRAFT 3
TECHNICAL DATA

TRANSOKRAFT 3

Power at cos φ = 0.8 lag (kVA)	30 kVA	50 kVA	80 kVA	120 kVA	170 kVA	200 kVA	220 kVA
Rated DC voltage	220V +20%, -20%						
Current consumption at Ug_{nom} (A) cos φ = 0.8 lag	118 A	199 A	313 A	471 A	671 A	774 A	850 A
Permissible voltage ripple (Urms)	<5% of Ug_{nom}						
Voltage ripple produced by inverter Irms at Pnom	<10% of Ug_{nom}						
Required DC fuse 500 V	160 A	250 A	400 A	630 A	800 A	1000 A	1250 A
Rated AC voltage	400 V (380 V–420 V adjustable) other voltages on request						
Deviation stat.	±1%						
Deviation dyn. (at load surge 0 – 100% – 0 without mains support)	voltage dip <3%						
Settling time	2 ms						
Setting range of the output voltage	±5%						
Frequency without mains synchronization	50 Hz ±0.1%; (60 Hz on request)						
Synchronization range	49.5 ... 50.5 Hz, ±1% (other upon request)						
Power factor range	0 ind. – 1 – 0 cap.						
Nominal current output per phase	43 A	72 A	116 A	173 A	245 A	289 A	317 A
Voltage curve	sinusoidal						
Permissible non-linear load	100%						
Voltage THD factor	<3% in the entire load and DC voltage range also with non-linear load						
Interference suppression	EN62040 part 2 class C2						
Crest factor	2.5 at full load, higher with part load						
Overload behaviour/performance	150% for 1 min; 125% for 10 min						
Short circuit performance without mains support. Short circuit current / nominal current (I_{SC}/I_{NOM})	4.6 dyn. for 10 ms 3.4 stat. for 55 s	6.2 dyn. for 5 s 3.4 stat. for 55 s	5.4 dyn. for 2 s 1.5 stat. for 55 s	5.1 dyn. for 1 s 1.5 stat. for 55 s	4.8 dyn. for 5 s 1.5 stat. for 55 s	5.2 dyn. for 5 s 3.1 stat. for 55 s	4.7 dyn. for 5 s 2.8 stat. for 55 s
	higher inverter short circuit current upon request						
Max. load fuse gL-gG inverter operation/tripping time inverter for 1-ph short circuit	16 A/ 25 ms	50 A/ 280 ms	63 A/ 250 ms	63 A/ 110 ms	100 A/ 160 ms	100 A/ 140 ms	100 A/ 140 ms
Efficiency at 100% nominal load	90.5%	90.5%	93.2%	93.3%	93.6%	94%	94.1%
Efficiency at 50% nominal load	92%	92%	94%	94.4%	94.4%	94.6%	94.6%
Noise level at a distance of 1 m	<72 dB(A)						
Type of cooling	forced natural air cooling with integrated underpressure chamber with redundant fans on top						
Coating	Powder-coated RAL 7035 (different color on request)						
Protection class	IP 20 (DIN 40 050) bottom open						
Dimensions, width	1200 mm	1200 mm	1200 mm	1200 mm	1200 mm	1200 mm	1200 mm
Dimensions, depth	800 mm					1000 mm	1000 mm
Dimensions, height	2200 mm						
Weight	600 kg	800 kg	850 kg	1100 kg	1150 kg	1300 kg	1500 kg
Diagnosis plug for annual check for connection of diagnostic device installed							
Operating temperature range	-5 °C to +40 °C rel. humidity 20 – 80% according IEC/EN 62040-3						
Storage temperature range	-30 °C to +75 °C rel. humidity 20 – 95%, non-condensing according IEC/EN 62040-3						
Installation height	up to 1000 m above sea level, without de-rating						
Cable entry	bottom, top-entry on request						

TRANSOKRAFT 1
TECHNICAL DATA

TRANSOKRAFT 1

Power at cos φ = 0.8 lag (kVA)	10 kVA	20 kVA	40 kVA	60 kVA	80 kVA
Rated DC voltage	220 V +20 %, -20 %				
Current consumption at Ug_{nom} (A) cos φ = 0.8 lag	41 A	80 A	158 A	235 A	316 A
Permissible voltage ripple (Urms)	<5 % of Ug_{nom}				
Voltage ripple produced by inverter Irms at Pnom	<10 % of Ug_{nom}				
Required DC fuse 500 V	63 A	125 A	200 A	315 A	400 A
Rated AC voltage	230 V (220 V – 240 V adjustable) other voltages on request				
Deviation stat.	± 1 %				
Deviation dyn. (at load surge 0 – 100 % – 0 without mains support)	voltage dip <3 %				
Settling time	2 ms				
Setting range of the output voltage	±5 %				
Frequency without mains synchronization	50 Hz ±0.1 %; (60 Hz on request)				
Synchronization range	49.5 ... 50.5 Hz, ±1 % (other upon request)				
Power factor range	0 ind. – 1 – 0 cap.				
Nominal current output per phase	43 A	87 A	174 A	261 A	348 A
Voltage curve	sinusoidal				
Permissible non-linear load	100 %				
Voltage THD factor	<3 % in the entire load and DC voltage range also with non-linear load				
Interference suppression	EN62040 part 2 class C2				
Crest factor	2.5 at full load, higher with part load				
Overload behaviour/performance	150 % for 1 min; 125 % for 10 min				
Short circuit performance without mains support. Short circuit current/ nominal current (I_{SC}/I_{NOM})	3.1 dyn. for 2 s 2.6 stat. for 50 s	3.1 dyn. for 2 s 2.6 stat. for 50 s	4.2 dyn. for 2 s 3.2 dyn. for 54 s	3.0 dyn. for 3 s 2.4 stat. for 55 s	3.2 stat. for 5 s 2.5 stat. for 55 s
	higher inverter short circuit current upon request				
Max. load fuse gL-gG inverter operation/tripping time inverter for 1-ph short circuit	10 A/30 ms	25 A/30 ms	50 A/30 ms	63 A/40 ms	100 A/120 ms
Efficiency at 100 % nominal load	90 %	91 %	91.5 %	92 %	92 %
Efficiency at 50 % nominal load	90.5 %	91.5 %	92 %	93.5 %	93.5 %
Noise level at a distance of 1 m	<70 dB(A)				
Type of cooling	forced natural air cooling with integrated underpressure chamber with redundant fans on top				
Coating	Powder-coated RAL 7035 (different color on request)				
Protection class	IP20 (DIN 40 050) bottom open				
Dimensions, width	900 mm	900 mm	900 mm	1200 mm	1200 mm
Dimensions, depth	800 mm				
Dimensions, height	2200 mm				
Weight	550 kg	650 kg	750 kg	900 kg	1000 kg
Diagnosis plug for annual check for connection of diagnostic device installed					
Operating temperature range	-5 °C to +40 °C rel. humidity 20 – 80 % according IEC/EN 62040-3				
Storage temperature range	-30 °C to +75 °C rel. humidity 20 – 95 %, non-condensing according IEC/EN 62040-3				
Installation height	up to 1000 m above sea level, without de-rating				
Cable entry	bottom, top-entry on request				

TRANSOKRAFT 1
TECHNICAL DATA

TRANSOKRAFT 1

Power at cos φ = 0.8 lag (kVA)	10 kVA	20 kVA	40 kVA	50 kVA
Rated DC voltage	110V +20% -20% 125V +15% -29% other voltages on request			
Current consumption at Ug_{nom} (A) cos φ=0.8 lag	84 A	167 A	328 A	409 A
Permissible voltage ripple (Urms)	<5% of Ug_{nom}			
Voltage ripple produced by inverter Irms at Pnom	<10% of Ug_{nom}			
Required DC fuse 500V	125 A	250 A	400 A	500 A
Rated AC voltage	230V (220V – 240V adjustable) other voltages on request			
Deviation stat.	±1%			
Deviation dyn. (at load surge 0 – 100% – 0 without mains support)	voltage dip ±3%			
Settling time	2 ms			
Setting range of the output voltage	±5%			
Frequency without mains synchronization	50 Hz ± 0.1%; (60 Hz on request)			
Synchronization range	49.5 ... 50.5 Hz, ±1% (other upon request)			
Power factor range	0 ind. – 1 – 0 cap.			
Nominal current output per phase	43 A	87 A	174 A	261 A
Voltage curve	sinusoidal			
Permissible non-linear load	100%			
Voltage THD factor	<3% in the entire load and DC voltage range also with non-linear load			
Interference suppression	EN62040 part 2 class C2			
Crest factor	2,5 at full load, higher with part load			
Overload behaviour/performance	150% for 1 min; 125% for 10 min			
Short circuit performance without mains support. Short circuit current / nominal current (I_{SC}/I_{NOM})	3.1 dyn. for 5s 2.6 stat. for 55s	3.1 dyn. for 5s 2.6 stat. for 55s	3.2 dyn. for 5s 2.8 stat. for 55s	3.3 dyn for 5s 2.6 stat. for 55s
	higher inverter short circuit current upon request			
Max. load fuse gL-gG inverter operation/tripping time inverter for 1-ph short circuit	10 A / 100 ms	25 A / 100 ms	50 A / 130 ms	63 A / 180 ms
Efficiency at 100% nominal load	87%	88%	88.5%	89%
Efficiency at 50% nominal loa	88%	89%	90%	90%
Noise level at a distance of 1 m	<70 dB(A)			
Type of cooling	forced natural air cooling with integrated underpressure chamber with redundant fans on top			
Coating	Powder-coated RAL 7035 (different color on request)			
Protection class	IP20 (DIN 40 050) bottom open			
Dimensions, width	900 mm	900 mm	900 mm	1200 mm
Dimensions, depth	800 mm			
Dimensions, height	2200 mm			
Weight	550 kg	650 kg	700 kg	900 kg
Diagnosis plug for annual check for connection of diagnostic device installed				
Operating temperature range	-5 °C to +40 °C rel. humidity 20 – 80% according IEC / EN 62040-3			
Storage temperature range	-30 °C to +75 °C rel. humidity 20 – 95%, non-condensing according IEC / EN 62040-3			
Installation height	up to 1000 m above sea level, without de-rating			
Cable entry	bottom, top-entry on request			

AEG POWER SOLUTIONS

Batteries

AEG Power Solutions has considerable in-house knowledge in battery technology and is able to offer expert advice on the specifying, selection, operation and testing of batteries. Our total systems solutions include a wide range of products using lead acid and nickel-cadmium batteries in vented and gas recombination technologies. Replacement batteries can be supplied and installed by our global service team.

Services

With over 60 years of expertise in power systems and solutions, AEG Power Solutions is renowned for its unparalleled services and technical support in critical application environments. As a world class system provider, you can rely on a global network of 20 services centers supported by over 150 field engineers and more than 100 certified service partners around the world. From the power solution selection to your process installation and commissioning, our certified experts go beyond your expectations by offering service excellence that will ensure the lowest operational cost for your mission-critical equipment. The reliability of your installed power solution is supported by a global service team renowned for its short response time and trouble shooting efficiency. Choosing one of the Pro Care™ preventive maintenance options gives you the ultimate peace of mind reassuring complete cost control, security and uninterrupted power supply in utmost critical situations.

You can also benefit from a full range of professional services that will protect and ensure the durability of your investment and will take over when you need it most:

- Pro Care™ preventive maintenance options
- Turnkey solutions
- Installation and commissioning
- Maintenance services
- E-Service/remote monitoring
- 24/7 hotline
- Onsite training
- Hot swapping
- Onsite battery replacement
- Battery monitoring
- Facility and equipment management
- 24/7 global onsite contracts
- Power quality assessment
- Load bank and site capacity analysis
- Trouble shooting and repair

AEG Power Solutions

Approach your local AEG Power Solutions representative for further support.
Contact details can be found on:

www.aegps.com

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