DIEHL AKO

3 phases – transformerless

PLATINUM
INVERTER TL 3

20000 TL3
17000 TL3
13000 TL3
11000 TL3

Transformerless 3-phase high-performance inverters

our common future

PLATINUM
INVERTER TL3

Award-winning class PLATINUM TL3 – η 98,2 %

3 phases – between 11 and 20 kW

Overwhelming 3-phase efficiency – one step above compact

Based on the winning technologies that got the **best results** in the most thorough Photon test, a **new device family** featuring top-class state-of-the-art inverter technology has been designed.

- **Transformerless top technology** to the core. With 3-phase feed, phase imbalances are impossible.
- The new high-efficiency circuit topology provides **very high degrees of efficiency** throughout an extremely broad input voltage range.
- All inverters comply with the current market requirement **Energy management** (§6 EEG) and the current **Medium voltage directive 2010.**

*Photon test result for **6300 TL***

Photon The Photovoltaic Magazine International
Platinum 6300 TL
A+
96.9 % at high irradiation 2/2009
www.photon-international.com

Consistently PLATINUM:
- *lightweight under 40 kg*
- *convection ventilation only*
- *outdoor-proof IP 65*

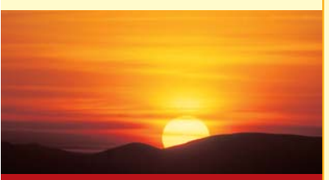
***PLATINUM TL3** – state-of-the-art inverter technology*

- Superior – the integration into the **PLATINUM network.** The exceedingly high-capacity **PLATINUM datalogger** stores events, measured values, yield and performance data for up to 30 years.
- The gateway to the world – the **PLATINUM network.** With separately available PLATINUM monitoring devices, you can integrate the inverters in your plant monitoring system via the EIA 485 interface.

Technical data

Input characteristics	11000 TL3	13000 TL3	17000 TL3	20000 TL3
Max. PV power	11,000 Wp	13,600 Wp	18,100 Wp	21,200 Wp
Max. DC power	10,300 W	12,800 W	16,900 W	19,650 W
PV voltage range, MPPT	380 V–850 V	420 V–850 V	445 V–850 V	480 V–850 V
Max. DC voltage	1000 V			
Max. input current	29.0 A	30.0 A	38.5 A	41.0 A
Number of string inputs	4		6	
Number of MPP trackers	1			
DC disconnect	integrated			
Reverse voltage protection	yes			
Earth fault monitoring	Isolation control			
Output characteristics				
Nominal AC power (Cos Phi=1)	10,000 W	12,400 W	16,500 W	19,200 W
Nominal AC current	14.5 A	18.0 A	23.9 A	27.8 A
Max. AC power (Cos Phi=1)	10,000 W	12,400 W	16,500 W	19,200 W
Max. AC current	18.0 A	18.0 A	29.0 A	29.0 A
Feed operation starts at	20 W			
Mains output voltage range	3 AC 400 V + N (+/-20 %)			
Internal consumption at night	lower than 2.5 W			
Mains frequency range	50.0 Hz/60.0 Hz (+/-5 %)			
Short-circuit proof	yes			
Cos Phi (Medium voltage directive)	0.9 i to 0.9 c			
Earth fault monitoring	RCD			
Interfaces				
DC input	Multicontact MC4			
AC output	Phoenix plug connectors (included)			
PLATINUM network	EIA 485, 2 x RJ45 Western Modular add. plug connector with screw terminals			
Service interface	EIA 232, SubD 9-pole socket, USB			
Potential-free relay contact	1 normally open contact, max. 24 V_{AC} / 2 A, plug connector with screw terminals			
Device data				
Max. conversion efficiency	98.0 %	98.0 %	98.2 %	98.2 %
European efficiency	97.4 %	97.5 %	97.8 %	97.8 %
Weight	39 kg		40 kg	
Dimensions	H 626 x W 543 x D 281 mm			
Working temperature range	-25 °C to +55 °C			
Max. temperature during operation at nominal power	+50 °C		+40 °C	
Storage temperature	-20 °C to +70 °C			
Protection type (except digital interface)	IP 65 according to DIN EN 60529			
Optical display	Full graphic 170x76 pixels			
Integrated datalogger	Storage capacity sufficient for 30 yrs operating time			
Circuit concept	Transformerless, 3-phase high-performance topology, ENS according to VDE 0126-1-1			

Brochure_WR_TL3_EN1007_737066_AF.pdf Subject to changes



our common future

DIEHL AKO

Diehl AKO

is an internationally leading electronics company which specializes in the development and production of industrial control and regulating systems.

As the market leader, every year we manufacture more than 2 million frequency inverters for power drive systems alone.

Innovation & quality

Optional Warranty 20 years DIEHL Controls

Diehl AKO sets standards for the development of **innovative concepts** for electronic systems and appliances by established know-how, the selection of component parts and the latest technologies of excellent production and test engineering. From the electronics to the complete appliance, the manufacturing process of our products is certified according to the **Quality and environment standards** ISO 9001-2000 and ISO 14000. All **PLATINUM string inverters** are rated „Made in Germany". Owing to our **PLATINUM string inverters'** excellent industrial quality, we offer not only the standard 5-year guarantee, but also an optional warranty extension to 20 years.

Environmental protection

Pb Lead-free

*Environmental protection has top priority for **Diehl AKO.** In order to live up to this standard, **Diehl AKO** continually improves manufacturing processes and optimizes the use of resource-friendly materials. The products are manufactured in compliance with the new RoHS standard and the environment standard DIN EN 14001. **PLATINUM string inverters** were the first appliances on the market to be produced using **lead-free** technology.*

PLATINUM plant monitoring –

much more than just access to your data.

our common future

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