

DIEHL

AKO

**3 phases –  
transformerless**

**PLATINUM**  
INVERTER TL3



**17000 TL3**

**13000 TL3**

**12000 TL3**

**Transformerless 3-phase high-performance inverters**

# PLATINUM

## INVERTER TL3



### Award-winning class PLATINUM TL3 – $\eta$ 98 %

#### 3 phases – between 12 and 17 kW

Overwhelming 3-phase efficiency – one step above compact

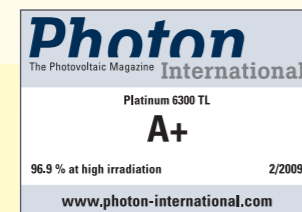


Based on the top REFU technology, which has been awarded an "EXCELLENT +" when it was tested by the trade magazine Photon, Diehl AKO offers a new inverter series in state-of-the-art technology.

The new TL3 combines the innovative advantages of both products.



Photon test result for 6300 TL



- 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 are designed for current market requirements Energy management (\$6 EEG) and the current Medium voltage directive as of 2010.

Photon test result Refusol



#### Consistently PLATINUM:

- lightweight under 40 kg
- convection ventilation only
- outdoor-proof IP 65



17000 TL3  
13000 TL3  
12000 TL3



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

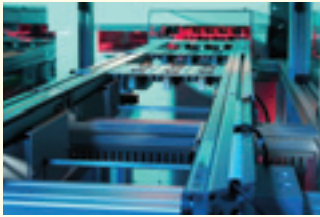
- Superior – the integration into the PLATINUM network. The exceedingly high-capacity PLATINUM datalogger stores events, measured values, yield and performance data for up to 30 years.

- 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	12000 TL3	13000 TL3	17000 TL3
Max. PV power	12,500 Wp	14,300 Wp	19,000 Wp
Max. DC power	11,300 W	12,700 W	16,900 W
PV voltage range MPPT	380 V–800 V	410 V–800 V	460 V–800 V
Max. DC voltage	900 V		
Max. input current	29.0 A	30.0 A	36.0 A
Number of string inputs	4		
Number of MPP trackers	1		
DC section switch device	DC disconnect, integrated in the device		
Reverse voltage protection	yes		
Output characteristics			
Nominal AC power	10,000 W	12,000 W	15,000 W
Nominal AC current	3 x 14.5 A	3 x 17.4 A	3 x 21.7 A
Max. AC power	11,000 W	12,400 W	16,500 W
Max. AC current	3 x 18.0 A	3 x 18.0 A	3 x 25.0 A
Power feed starts at	20 W		
Mains output voltage range	3 AC 400 V + N (+/-20 %) 3-phase power feed		
Internal consumption at night	less than 0.2 W		
Mains frequency	47.5 Hz - 52.5 Hz		
Short-circuit proof	yes		
Interfaces			
DC input	DC plug connector, Lumberg LC3		
AC output	Plug connector (provided)		
PLATINUM network	EIA 485, 2 x Phoenix plug connector (provided)		
Service interface	USB, Phoenix plug connector (provided)		
Potential-free relay contact	1 Normally open contact (NO), max. 230 V <sub>AC</sub> / 2 A, plug connector (provided)		
Device data			
Max. conversion efficiency	97.8 %	98.0 %	98.0 %
European conversion efficiency	97.4 %	97.5 %	97.7 %
Weight	39 kg		
Dimensions	L 560 x W 520 x H 310 mm		
Ambient temperature specification	-25 °C to +55 °C		
Max. temperature at nominal power output	+45 °C		
Storage temperature	-20 °C to +70 °C		
Protection type	IP 65 (DIN EN 60529)		
(excluding digital interface)			
Display	full graphic LCD 170x76 pixels		
Datalogger integrated	memory capacity sufficient for 30 years of operation		
Circuit concept	transformerless, 3-phase high performance topology, ENS according to VDE 0126-1-1		



## 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

**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 inverters** are rated „**Made in Germany**“. Owing to our **PLATINUM inverters'** excellent industrial quality, we offer not only the standard 5-year guarantee, but also an optional warranty extension to 20 years.



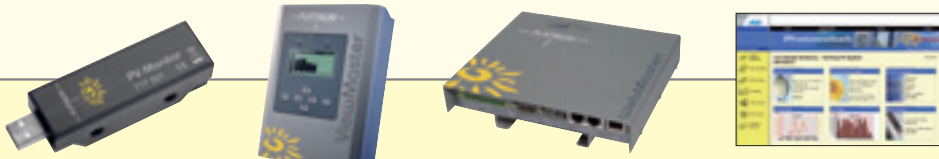
## Environmental protection

*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 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.*



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