## Data + facts Invertersystem CDA3000

Inverter power range	0,37 kW 0,75 kW	1,1 kW 1,5 kW	0,75 kW 1,1 kW 1,5 kW 2,2 kW	3,0 kW 4,0 kW	5,5 kW 7,5 kW	11 kW 15 kW	22 kW 30 kW 37 kW	45 kW 55 kW	75 kW 90 kW
Mains voltage	1 x 208, 230, 240 V 3 x 400, 440, 4					x 400, 440, 460	٧		
Output current	1.8 x of rated current for 40 secs						1.5 x of rated current for 60 secs		
Width [mm]	70	70	70	70	120	170	250	300	412
Height [mm]	190	215	215	300	300	300	345	550	500
Depth [mm]	120	145	145	150	150	150	325	305	362

Drive features	Torque control time		Separation force at 0 Hz	Rotational control range	Rotational accuracy	Automatic motor identification			
Voltage Frequency Control (VFC)	20 - 30 ms		-	1 : 20	2 - 3 %	integrated			
Sensorless Flux Control (SFC)	< 2 ms		1.8 x M <sub>rated</sub>	1 : 100	< 0.5 %	integrated			
Field Orientation Control (FOR)	< 2 ms		2.0 x M <sub>rated</sub>	1 : 10000	quartz accurate	integrated			
Output frequency	rom 22 kW to 90 kW)								
Invertersystem	Analog IN/OUT	Digital IN/OUT	Encoder- evaluation	Brakechopper- electronics	User Modul IN/OUT	Communication Modul			
Inputs/outputs	2/1	5/3	Optical Encoder	integrated	8/4	CAN <sub>Lust</sub> CAN <sub>open</sub> PROFIBUS-DP			
Swithing frequency				4, 8, 16 kHz					
EMC acceptance	Inverter mod	lules 0.37 to 7	7.5 kW	Inverter modules from 11 to 90 kW					
Interference transmission radiation	For public a	nd industrial e	nvironments	For public and industrial environments					
Interference transmission, Classe B (integated) power line				Classe B (external filter)					
Acceptances/ Standard CE, cUL									
Software performance		ble drive solut tal, vertical ar	ions for nd rotational drive	4 user data sets, freely available	38 software functions such as power failure pro- tection, data record switching, etc.				
Ambient temperature				0 45 °C, max. 55 °C					
Motor monitoring	;								
Protection type		IP20 Inverter, IP54 cooling design							
Motor type	DS standard	DS standard motor, synchro-motor, reluctance motor, asynchronous servo-motor, high-frequency motor up to 1600 Hz							



#### For more communication

Please ask for additional descriptions and technical details by e-mail, phone or fax. We will be happy to keep you abreast of the latest developments in CDA systems.

### LUST sales:

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### DRIVES FOR AUTOMATION

# **CDA3000**

### **New Presentation**

The drive solution, with control from 0.37 kW up to 90 kW

## The New Inverter System





## **Modular Inverter System CDA3000**



Variable basic module

**Experience and vision** 

The CDA3000 is the result of years of practical experience in drive technology for automating machines and systems. This inverter system is suitable for the new millennium and for innovation cycles that are growing ever tighter and faster in machine automation.

#### Tradition

We have continued our tradition that dates back many years, and in addition have established technical feedback and control standards in drive technology, along with creating important and essential building blocks for future-oriented flexibility in machines and systems.



Cool in any situation

### **Right for the future**

The inverter module is the central unit in the system and the information carrier for the various interface, user and communication modules. All modules are independent components, each of which have the necessary certifications and have been tested combinatorially with the others. The interfaces to the docking modules are open for future new automation concepts.

### Increased force automatically

Bringing new technologies to maturity has produced functional improvements with reliable specifications. Thus the Sensorless Flux Control (SFC) from LUST has resulted in attributes such as higher force outputs, dynamic disturbance control, and a greater rotational control range becoming more secure and reproducible. The whole thing is remarkably easy to adjust with automatic identification of the motor and automatic internal setting of all control loops. The motto "turn it on, and it runs" is a daily fact of life with the CDA3000.

### Keep cool

Inverters need to stay cool for the output components to be used to their full potential. Only the modular cooling concept has been able to ensure a free selection of whatever installation situation happens to be present. Whether it is a cold plate or with heat sink inside or outside the installation area, it is possible to make a situation-based decision.

### Fast and simple

The new inverter system is designed so that in spite of extended functions and extensive system components, the user can configure and implement into operation optimal drive solutions even faster and more simply. The extensive

project planning provides seamless information and help for the user. The KEYPAD and the DRIVEMANAGER PC user software provide convenient options for setting and analyzing all LUST drive controllers. They claim the role of leader because of their stability and didactic maturity.

Preset solutions for horizontal, vertical and rotational drives provide only the most important parameters in the foreground. Intrinsic complexities can only be simulated.





### EMC with safety



All devices from 375 W to 90 kW have a sheet steel case with an aluminum-zinc surface. The case thus offers a high level of protection from interference radiation in the immediate environment. To reduce interference transmissions, radio wave anti-interference filters are integrated directly into the inverter module (up to 7.5 kW). This reduces the time and expense of the complete installation noticeably.

> The system architecture for the solution flexibility of the future