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 132 kW
1 x 208, 2	230, 240 V	3 x 400, 440, 460 V						
		1.8 x of rated current for 30 secs 1.5 x of rated current for 60 sec					r 60 secs	
70	70	70	70	120	170	250	300	412
193	218	218	300	300	300	345	550	500
152	177	177	250	250	250	325	305	362
1.6	2.3	2.3	4.4	6.5	7.2	20	31	60
	1 x 208, 2 70 193 152	1,5 kW  1 x 208, 230, 240 V  70 193 218 152 177	1,5 kW 1,1 kW 1,5 kW 2,2 kW  1 x 208, 230, 240 V  1.8 x of rated cu  70 70 70 193 218 218 152 177 177	1,5 kW 1,1 kW 1,5 kW 2,2 kW 4,0 kW 1,5 kW 2,2 kW 1 x 208, 230, 240 V 1.8 x of rated current for 30 secs 70 70 70 70 70 193 218 218 300 152 177 177 250	1,5 kW     1,1 kW     4,0 kW     7,5 kW       1,5 kW     2,2 kW     3       1 x 208, 230, 240 V     3       1.8 x of rated current for 30 secs       70     70     70     70     120       193     218     218     300     300       152     177     177     250     250	1,5 kW     1,1 kW     4,0 kW     7,5 kW     15 kW       1,5 kW     2,2 kW     3 x 400, 440, 460       1 x 208, 230, 240 V     3 x 400, 440, 460       1.8 x of rated current for 30 secs       70     70     70     120     170       193     218     218     300     300     300       152     177     177     250     250     250	1,5 kW     1,1 kW     4,0 kW     7,5 kW     15 kW     30 kW       1 x 208, 230, 240 V     3 x 400, 440, 460 V       1.8 x of rated current for 30 secs       70     70     70     70     120     170     250       193     218     218     300     300     300     345       152     177     177     250     250     250     325	1,5 kW     1,1 kW     4,0 kW     7,5 kW     15 kW     30 kW     37 kW     55 kW       1 x 208, 230, 240 V     3 x 400, 440, 460 V       1.8 x of rated current for 30 secs     1.5 x of rated current for 30 secs       70     70     70     70     120     170     250     300       193     218     218     300     300     300     345     550       152     177     177     250     250     250     325     305

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		1.2 x M <sub>rated</sub>	1:20	< 2 %	integrated
Sensorless Flux Control (SFC)	< 2 ms		1.8 x M <sub>rated</sub>	1:50	< 0.5 %	integrated
Field Orientation Control (FOR)	< 2 ms		2.0 x M <sub>rated</sub>	1:10000	quartz accurate	integrated
Output frequency		0 400 Hz (0,75 kW to 15 kW), 0 200 Hz (from 22 kW to 132 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
Curithing fraguancy			4 0 16 1415 (0.75	ELAN to 1 E LANA A Lalle (from	20 144/ to 120 1440	

Swithing frequency	4, 8, 16 kHz (0,75 kW to 15 kW), 4 kHz (from 22 kW to 132 kW)						
EMC acceptance	Inverter modules 0.37 to 7.5 kW (internal)	Inverter modules from 11 to 132 kW (external)					
Interference transmission radiation/ power line	For public and industrial environments conforming to EN61800-3	For public and industrial environments conforming to EN61800-3					
Acceptances/ Standard		CE, cUL					
Software performance	16 selectable drive solutions for horizontal, vertical and rotational drive	4 user data sets, freely available	38 software functions such as power failure protection, data record switching, etc.				
Ambient temperature	0 45 °C, max. 55 °C						
Motor monitoring	Klixon, PTC and linear PTC						
Protection type	IP20 Inverter, IP54 cooling design						
Motor type	DS standard motor, synchro-motor, reluctance motor, asynchronous servo-motor						

### CLUST ANTRIEBSTECHNIK

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### For more communication

Please mail, phone or fax for additional descriptions and technical details. Phone +49 (0) 64 41/9 66-0 • Fax +49 (0) 64 41/9 66-137

### **Adress:**

Lust Antriebstechnik GmbH • Gewerbestr. 5-9 • D-35633 Lahnau Internet:http://www.lust-tec.de • email: info@lust-tec.de

## DRIVES FOR AUTOMATION

# **CDA3000**

### **Technical Information**

the drive solution, with control from 0.75 kW up to 132 kW

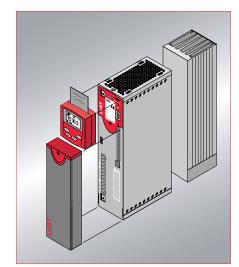


### **Modular Inverter Drive System**



### Modular

### Inverter System CDA3000



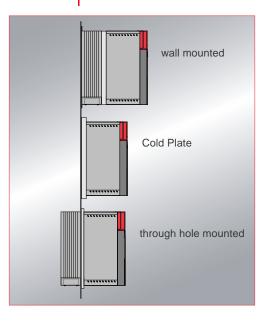
Variable basic module

#### **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

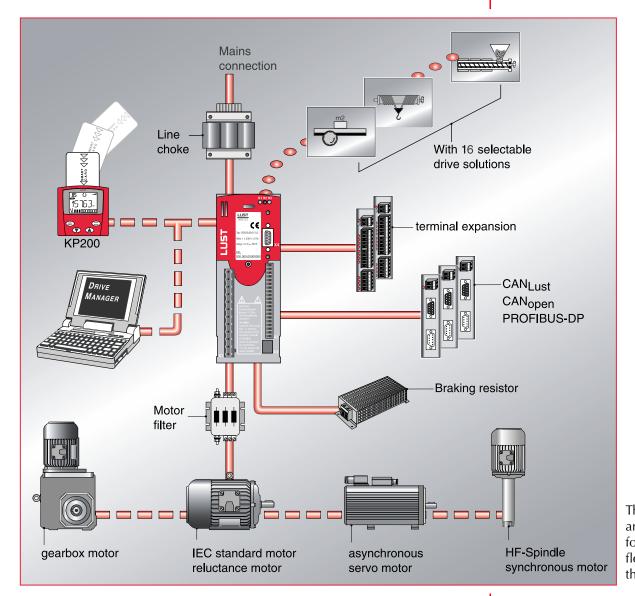
The new inverter system is designed so that in spite of extended functions and extensive system components, the user can configure and implement into operation optimal drive solutions even faster and more simply.

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 750 W to 132 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