

The Positioning Experts
in the Economy Class
CDE/CDB3000



 c-line _ positioning system

LUST

CDE/CDB3000 _ Your search is over!

The control performance of an advanced PLC, complex state regulating structures, numerous simultaneous position measurement systems at very high resolution, clock synchronism for up to 256 axes accurate to the microsecond, fantastic features of today's high-performance drive controllers.

But – do you really need all that? If you do, then our new CDE/CDB3000 positioning system probably won't be able to help you.

But if progress for you primarily means improving cost-effectiveness while retaining current levels of performance and functionality, then LUST has just the right solution for you. Our CDE and CDB position controllers offer you identical functionality in two design variants for your positioning applications. The CDE is optimized for interaction with synchronous servomotors. The CDB is best suited to the control of asynchronous gear motors. And we have fitted both units with exactly the features you need for your applications – no more and no less. CDE and CDB – two positioning experts to aid cost-cutting on your machine or line.





CDE/CDB3000 _ A wealth of top-class functionality

If you're worried that cost consciousness in system design leads to penny-pinching functionality, we can assure you it doesn't. This document demonstrates the surprising breadth of functionality we are able to offer based on state-of-the-art component and manufacturing technology, without stretching those tight cost limits.

It would not have been enough simply to concentrate on the componentry in our efforts to optimize costs. You can of course also expect to receive our usual standards of sound, targeted advice, expert support in commissioning, an advanced, needs-oriented order and delivery logistics system, outstanding service and diagnostic capability and, not least, top product quality. But that is doubtless no surprise to you. After all, CDE and CDB are members of the successful c-line DRIVES series from LUST.



Safe stopping to category 3 EN 954-1
to save on external safety components



CANopen inside
with DSP402 Position, Interpolated Position, Velocity and Homing modes and scaling of units by Factor Group



Evaluation of two encoders
for precision positioning operations with backlash mechanism



Evaluation of multi-turn encoders
for positioning operations without referencing



Sequenced driving set positioning
with sequential job logic, graphically operated



PLCmotion
for process-oriented additional tasks and coordination of movement sequences



Cam-contactor group
for generation of position-dependent control signals to control connected machine peripherals



Online position profile generator
for real-time position profile generation with 250 μ s fine interpolation

The CDE/CDB drive controllers are available in power classes from 375 W/2 A up to 90 kW/170 A. You can also select from a wide range of innovative synchronous and asynchronous gear motors. So cut your costs further by employing a complete system solution from LUST.



The new LSH servomotor _ the compact power pack

We have become accustomed to regular innovations in drive controllers in recent years. But what about servomotors? The answer is surprising!

Would you have thought that the power density of good servomotors – and of course by that we mean those with NdFeB magnets – could have been substantially enhanced any more? The latest winding technologies have made it possible: 30 to 70 % more power density, at a much lower price, and with an up to 100 % improvement in dynamics.

Moreover, the soundly-based design and manufacturing technology underlying the new LSH generation of servomotors ensures maximum operational reliability.

CDE3000

So similar and yet so different



Braking resistor built into heat sink

TTL encoder, SSI multi-turn encoder

Resolver

CANopen DSP402

SMARTCARD for data backup and commissioning

Safe stopping with relay output

Inputs:
8 dig., 2 analog 12-bit

Outputs:
2 dig., 1 relay

Brake driver 2 A

CAN address

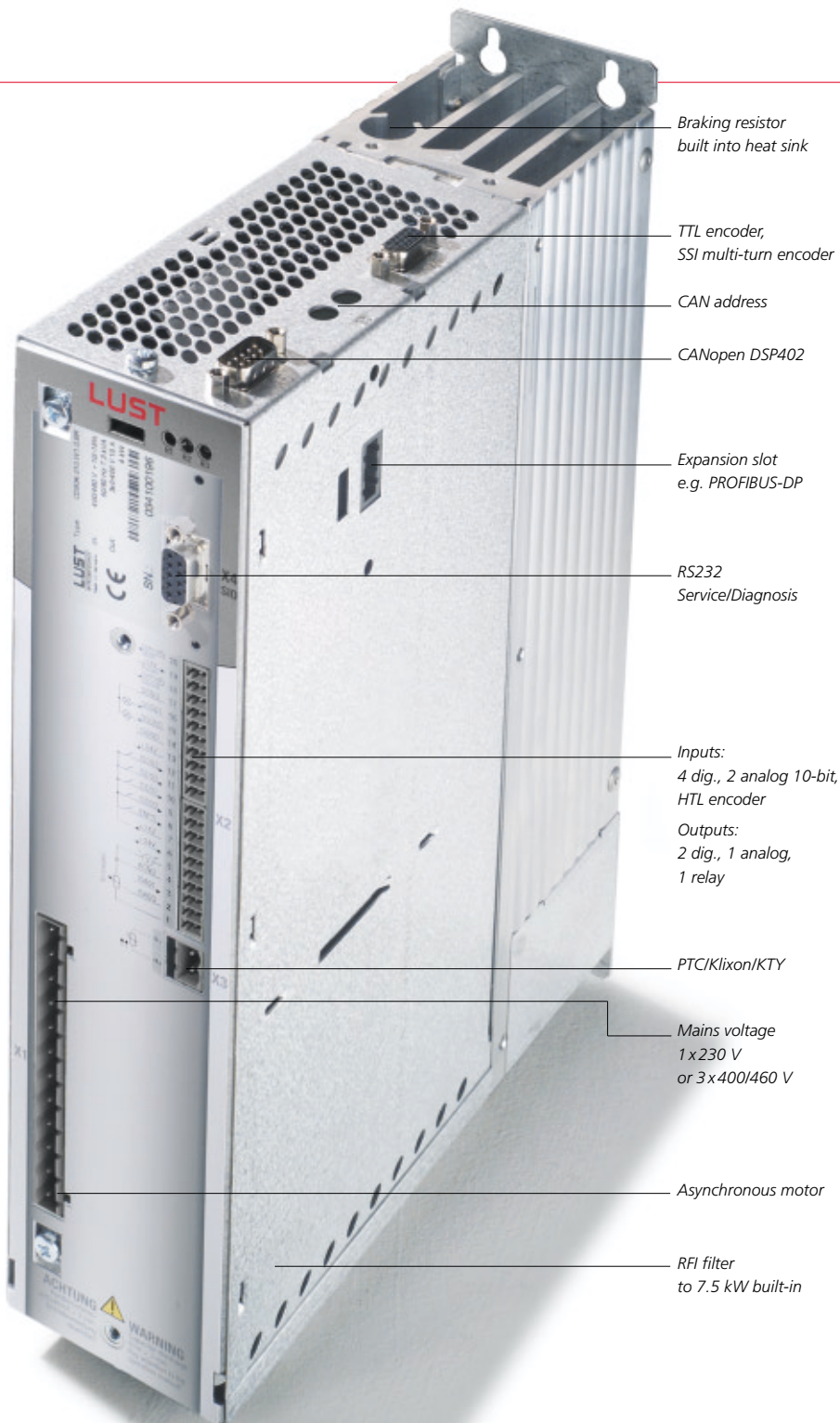
Mains voltage
1 x 230 V
or 3 x 400/460 V

Synchronous motor
or
Asynchronous motor

PTC/Klixon/KTY

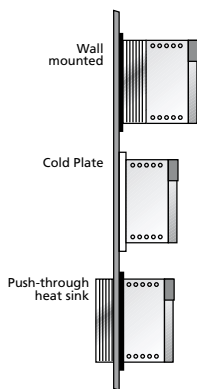
RFI filter
up to 7.5 kW built in

CDB3000





Position controllers _ CDE/CDB3000



	BG1	BG2	BG3	BG4	BG5	BG6
Rated current [A] (1 x 230 V mains) (3 x 400/460 V mains)	2.4/4	5.5/7.1	–	–	–	–
Motor power [kW] _{1.)}	0.375/0.75	1.1/1.5/2.2	3/4	5.5/7.5	11/15	
Peak current [A]	1.8 times rated current for 30 s					
Wall mounted	x	x	x	x	x	x
Cold Plate	x	x	on request, as required also version with water cooling			
Push-through heat sink			x	x	x	x
Certification	CE, cUL					
Dimensions (W x H x D) in mm	70 x 193 x 152	70 x 218 x 177	70 x 303 x 250	120 x 303 x 250	170 x 303 x 250	

The braking chopper electronics are built into all controllers. A mains filter to comply with EN61800-3 is built into all controllers up to 17 A.
1.) Referred to 4-pole asynchronous motor



Synchronous servomotors _ LS

	LST-037	LSH-050	LSH-074	LSH-097	LSH-127
Standstill torque [Nm]	0.1–0.2	0.25–0.7	0.8–2.7	3.7–7.8	10.5–25
Rated torque [Nm]	0.1–0.2	0.2–0.6	0.7–2.2	3.0–5.5	7.8–20
Rated speed [min ⁻¹]	6000	4500	3000	3000	3000
Installation window [mm]	37	55	86	98	142
Design length [mm]	83–98	87–117	95–149	125–185	173–291
Moment of inertia [kgcm ²]	0.06–0.12	0.06–0.1	0.5–1.1	1.7–3.5	6.8–15.3

The new generation of motors impresses by its high power output combined with a compact design.



BG7



Accessories

DRIVEMANAGER PC operator control software	For user-friendly commissioning, diagnosis and operation
Control unit, memory card	KEYPAD KP300, SMARTCARD SC-XL
Operator Panel via RS232, CANopen	Text display or LCD touch-panel
Communication module, user module	PROFIBUS-DP, I/O expansion
Line chokes, mains filters	4 A – 210 A
Braking resistors	35 W – 8 kW
Cables	Motor and encoder cables for all preferred motors

BG6	BG7
–	–
45/60/72	90/110/143 (170)
22/30/37	45/55/75 (90)
2.0 times rated current for 30 s	
x	x
on request	on request
190 x 345 x 230	280 x 550 x 240 (280 x 550 x 320)

PC _ user software „DRIVEMANAGER“

Software performance	Comfortable windows for commissioning
	Comfortable 4-channel digital scope
	Status display for actual value and reference
	Direct controlling of drive controller via PC
	Comparison function for data base management with printing function
Software condition	Microsoft Windows®, 95/98/ME
	Windows®, NT, 2000, XP



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