

406 495

# Lenze



## SMALL SIZE FOR

## SOLUTIONS

*Frequency inverter  
for system solutions  
0.25 - 7.5 kW, 230 V  
0.55 - 11 kW, 400 V*



**8200**  
vector



**8200**  
vector

# A new generation of vector inverters

## The frequency inverter for system solutions

The large number of electronically controlled drives, as well as their increasing scope for application, results in the most variegated demands on one essential component – the inverter.

This situation calls for standard products, flexible applications, simple and rapid commissioning, uniform interfaces, reliability, quality, short delivery times, . . .

The 8200 vector inverter of the Global Drive system – the partner for a variety of drive tasks.



*Original size*

**Lenze**



### ***With the 8200 vector, Lenze offers market-oriented system solutions:***

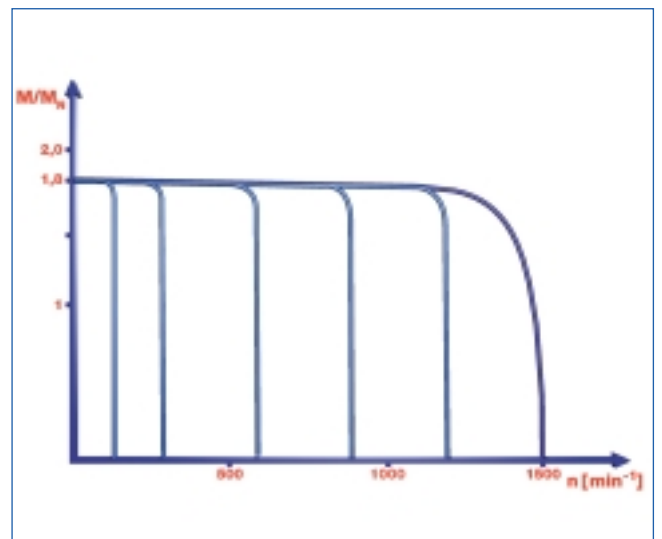
**A variety of applications through a wide speed and torque setting range:**

- 180 % torque – also for field frequencies smaller than 1 Hz, but with excellent smooth-running characteristics – within the entire speed setting range up to  $\pm 0.1$  Hz
- high speed constancy – in the entire load range smaller than 1%  $n/n_r$  without external feedback
- wide speed setting range – up to 1:50 without external feedback
- wide torque setting range – up to 1:10
- extremely rapid torque rise times on load surges (approx. 200 msec) – hence rapid speed stabilization over the entire load range.

**In addition to its outstanding drive characteristics, the 8200 vector inverter offers the user further benefits:**

- easier assembly and installation through integrated filters
- flexible application thanks to clip-on modules
- can be integrated into automation systems
- quick and simple commissioning through pre-set standard configurations
- compact and close-mounting inverters save space in the control cabinet
- service-friendly thanks to clip-on modules
- compatible drive system with 8200 vector and G-motion geared motors from Lenze.

***Wide torque and speed setting range thanks to innovative inverter technology***



### ***Interested?***

***You'll find more information on the numerous possibilities of our modular system on the following pages.***

## The small partner with the big potential

The 8200 vector inverter is at the heart of a completely harmonized system solution of electronically controlled drives.

The different combination possibilities for frequency inverters and application-specific modules which can be used on two interfaces guarantee a high degree of flexibility for each drive task.

## Nearly everything is possible, not much is needed



***Different components are available for the most diverse application tasks.  
This opens up numerous possibilities:***

- **Operation in networked systems**

I/O and bus modules for versatile integration of the 8200 vector into automation systems

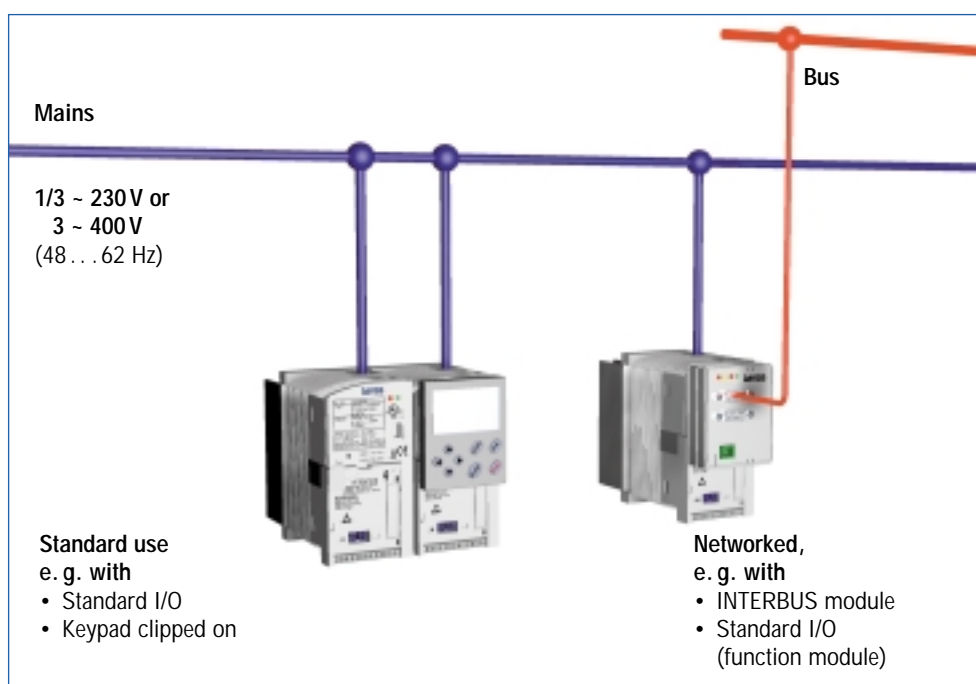
- **Versatile functions**

Performance coupled with intelligent drive characteristics – the 8200 vector is used wherever applications have to be controlled in a simple way that is optimized for the process. To this end, different functions and characteristics are available: High starting torque, integrated brake transistor, freely programmable digital / analog inputs / outputs, chopping frequency up to 16 kHz, selectable operating mode: linear or square V/f characteristic, vector control, programmable relay output (can be operated via bus), frequency input / output, level inversion, PID controller, ramp generator S-form,

4 parameter sets selectable on-line, 12 fixed speeds, bipolar setpoint, additional setpoint (can be switched off), output of process signals, motor parameter identification and tracking, etc. . .

- **Quick and easy adaptation of the operating parameters**

The drive parameters can be adapted on-site – with simultaneous bus operation – quickly and directly to the altered operating conditions (with one function module) from the user-guided keypad. An optional password protection for the keypad prevents unauthorized access to the selected parameters. The keypad can be used either clipped directly on to the inverter, in an ergonomic hand terminal, or built into the door of a control cabinet.



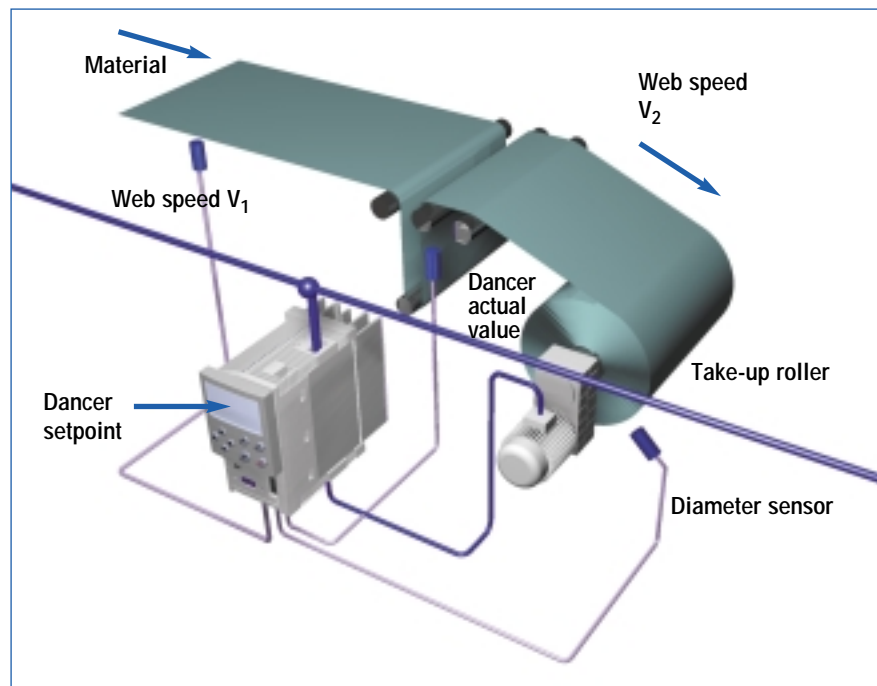


8200  
vector

# The small one for the big job

## Applications

- material-handling technology (e.g. use of skip frequencies, S-curves for soft starting and stopping, additional setpoint (can be switched off) for base-load and overload operation, etc, . . .)
- pump and fan operation (such as use of flying restart circuit, etc, . . .)
- control tasks, e. g. pressure, through-flow, dancer control, . . . (integral PID controller as standard)
- torque control



Dancer control with function module application-I/O

## Advantages

Operating safety

System solution

Status display

Process-optimized control

- jolt-free start
- motor PTC
- integral filter
- integral brake transistor
- display of process variable via keypad
- "warning" output via relay
- PID controller



## Technical data / Dimensions

Type	Power [kW]	Supply voltage [V] ± 0 %, (48 - 62 Hz)	Dimensions (H x W x D) [mm]
E82EV251_2B	0.25	240 V (1 - 100 - 264 V)	120 x 60 x 140
E82EV371_2B	0.37		
E82EV551_2B	0.55		
E82EV751_2B	0.75	240 V (1/3 - 100 - 264 V)	180 x 60 x 140
E82EV152_2B	1.5		
E82EV222_2B	2.2		
E82EV302_2B	3		
E82EV402_2B	4	240 V (3 - 100 - 264 V)	240 x 100 x 140
E82EV552_2B	5.5		
E82EV752_2B	7.5		
E82EV551_4B	0.55		
E82EV751_4B	0.75	240 V (3 - 320 - 550 V)	180 x 60 x 140
E82EV152_4B	1.5		
E82EV222_4B	2.2		
E82EV302_4B	3		
E82EV402_4B	4		
E82EV552_4B	5.5		
E82EV752_4B	7.5		
E82EV112_4B	11		
			240 x 125 x 140

## Functionality / Characteristics

Chopping frequency	2, 4, 8, 16 kHz						
Protection	IP20						
EMC (interference suppression A and B to EN55011)	integrated as standard						
Ambient temperature	-10 to + 55 °C						
Standard characteristics	PTC input, PID controller, integral brake transistor, motor parameter identification and tracking programmable relay output, S-curves, skip frequencies, fixed speeds, 4 parameter sets selectable on-line, bipolar setpoint processing, ...						
Drive characteristics	1.8 x M <sub>rated</sub> (60 sec), torque setting range 1:10 for 3 - 50 Hz, speed setting range 1:50 with M <sub>rated</sub> (50 Hz), speed constancy ± 0.1 Hz						
Modules	Function modules		Analog IN	Analog OUT	Digital IN	Digital OUT	Freq. OUT
	I/O modules	Standard-I/O	1	1	4*	1	-
		Application-I/O	2	2	6*	2	1
	Bus modules	* includes 1/2 (application-I/O) frequency inputs					
		INTERBUS, PROFIBUS, LECOM-B (RS485), Systembus (CAN), DeviceNet (in preparation)					
Communication modules	LECOM-A/B (RS232/485), LECOM-LI (optical fibre), System bus (CAN), INTERBUS, INTERBUS-Loop, PROFIBUS, keypad						
Standards	UL, cUL, CE, VDE, DIN, EN, GL						