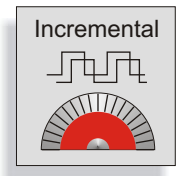
CDS22

Compact Drive System

- Complete Controller in Desktop Housing with integrated amplifier for AC Servo Motors up to 5 Nm
- Compact size tabletop unit
- Special functions for rotary tables and indexing attachments
- Menu Controlled Operation
- Easy Programming of Pitch Distances, Angles, Segments and Absolute Positions
- Automatic Work Cycle for Clamping and Indexing
- Language selection German/English/French
- Options:
  - Hand Wheel Connection
  - Serial Interface RS232
  - Interpolation electronics



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CDS 22 Circular Table/Indexing Attachment Controller

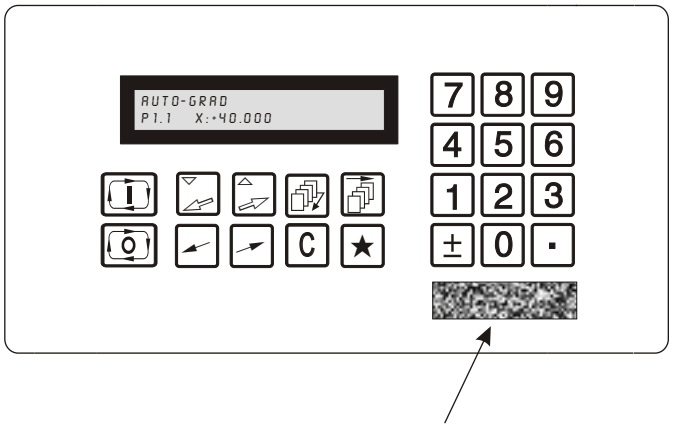
Programmable CNC positioning controller providing special functions adapted to circular tables or indexing attachments with position-controlled driving systems.

Sinusoidal acceleration curves considerably reduce the load of mechanical components.

Adaption of the CDS 22 controller to different tables/ indexing attachments by parameter settings (decoded text on illuminated LC-display).

Easy and comfortable programming and operation due to menue assisted sequences.

Automatic clamping and control processing.



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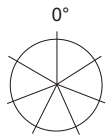
The following operating modes are available:

• Reference run:	Automatic searching for the machine reference position.
• Automatic:	Execution of the selected program or the programmed pitch increments using the appropriate speeds. Start at any pitch possible.
• Program input:	1. For constant pitch distances, the input of the pitch is sufficient. 2. For irregular pitch distances, the programming is realized in degrees. Absolute and incremental as well as nearest direction and segment programming is feasible.
• Jog mode:	Run to any position by means of arrow keys or definite motion to a previously entered angular position or infinite rotation. Zero point setting is also possible.
• Parameter input:	Password protected parameter input of machine specific parameters in different parameter levels.
• Startup assistance:	Test function is used for testing the inputs and outputs during startup or in case of faults.
• RS232 Interface (Option):	External creation of programs with PC-software "WinCPS". Storage and reading of program data on PC.

Example for Pitch Programming

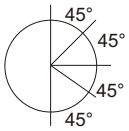
Ptitch with divisor 7mit einem Teilungsfaktor von 7



Program input Divisor: 7

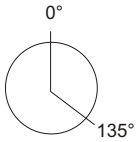
The CDS 22 calculates automatically the angular pitch:
360 degrees / 7 = 51.4285 degrees

Example for Programming in Degrees



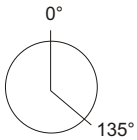
1.1 I:+45.0000 F:1.12 R: 3

Incremental angle of 45 degrees with 3 repetitions (R: 3).



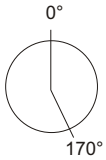
1.2 A:+135.0000 F:12.0

Absolute positioning to 135 degrees with positive travel direction.



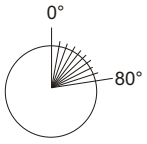
1.3 A:-135.0000 F:12.0

Absolute positioning to 135 degrees with negative travel direction.



1.4 A: 170.0000 F:3.23

Absolute positioning using the nearest direction (programming without sign).



1.5 S:+80.0000 F:1.00 T: 9

Programming a segment of 80 degrees with a divisor of 9 (80/9 = 8.8888 degrees).

General Information:

The switch over between the positioning modes happens by striking a key (menue key).

In addition, it is possible to program machine functions (M:) and the travel speed (F:) in each record. FS: is used to define whether a subsequent record / repetition without start signal is to be executed.

The clamping is always processed automatically. Clamping can be switched off temporary for each record inside a program.

Inputs and Outputs

Signal inputs:	
Standard: Reference switch Clamping clamped Clamping released Negative limit switch Positive limit switch Automatic/Jog mode Release Start	Extended: Jog forward Jog backward Jog fast Activate Handwheel Handwhell x10

Signal outputs:
Ready for operation Program end In position/positioning Clamping M-function 2/quantity end M-function 1

Technical Data CDS 22 Circular Tables/Indexing Attachments

Programming system	Absolute, increm., segment	Software travel limit	adjustible
Minimum input angle	0.0001 degree	Autom. clamping	adjustable by parameters
Maximum input angle	+/- 999.9999 degrees	Drift compensation	yes
Max. equal pitch range	1 - 9999 pitches	Acceleration and deceleration ramp	10 - 10.000ms
Number of axles	1	Progr. speed	0.01-649 table rev./min
Input	Membrane keyboard with tactile acknowledgement	Max. pulse encoder frequency	250kHz (quadruplication 1MHz)
Display	LC - Display (decoded text) 2 x 24 characters, illuminated	Position detection	incremental
Programs to be stored	1 - 90	Signal inputs	8 inputs; 24V; 10mA 15 with opt. expansion
Programmable records	760 (stored power fail save)	Signal outputs	6 outputs; 24V; 1A
Resolution	up to 7.200.000 Incr./rev.		
Reference zero run	yes	Connections	Clamping connector
Pulse start	yes	Supply voltage	230 V; 50-60 Hz
Starting curve monitoring	yes		
Stop with residual dist.run	yes	Ambient temperature	0 to + 45° C
Diagnostics	with decoded text display	Dimensions w x h x d	361 x 155 x 390 mm
Linear ramp	yes		
Sin ^{2} ramp	yes		

Versions:

- CDS 22/3: Motor current up to 3 A, Motors up to ca. 3 Nm
- CDS 22/5: Motor current up to 5 A, Motors up to ca. 5 Nm

Options:

- Hand wheel connection
- Serial interface RS232
- Interpolation electronics IBV, up to 50x

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