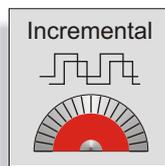




CDS22

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



CDS 22 Circular Table/Indexing Attachment Controller

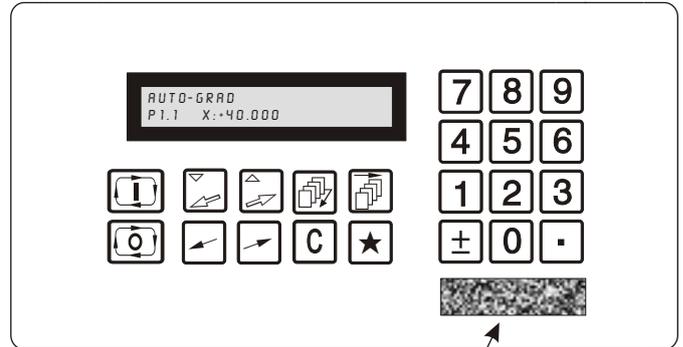
Programmable CNC positioning controller providing special functions adapted to circular tables or indexing attachments with position-controlled driving systems.

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 menu assisted sequences.

Automatic clamping and control processing.



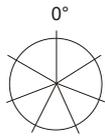
insertion type plate for own company logo or product code

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

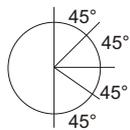
Ptitch with divisor 7 mit einem Teilungsfaktor von 7



Program input
Divisor: 7

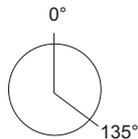
The CDS 22 calculates automatically the angular pitch:
 $360 \text{ degrees} / 7 = 51.4285 \text{ degrees}$

Example for Programming in Degrees



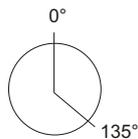
1.1 I:+45.0000 F:1.12
R: 3

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



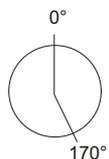
1.2 A:+135.0000 F:12.0

Absolute positioning to 135 degrees with positive travel direction.



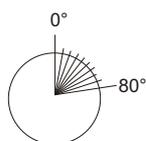
1.3 A:-135.0000 F:12.0

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
($80/9 = 8.8888 \text{ degrees}$).

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

| 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 | adjustable |
| 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 axes | 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. | Connections | Clamping connector |
| Reference zero run | yes | Supply voltage | 230 V; 50-60 Hz |
| Pulse start | yes | Ambient temperature | 0 to + 45° C |
| Starting curve monitoring | yes | Dimensions w x h x d | 361 x 155 x 390 mm |
| Stop with residual dist.run | yes | | |
| Diagnostics | with decoded text display | | |
| 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

All data in this brochure have an informative character without warranty of characteristics. Changes without previous announcement reserved.

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