

## THESI 320 – Two-axis position controller

**New**

- **THESI 320** position controller can control shifting and positioning of two axes in 3 different operating modes:
  - MANUAL or SEMI-AUTOMATIC by keyboard.
  - AUTOMATIC on the basis of a memorized program.
- End of program output.
- Independent axes as for configurations and parameters.
- 3 generic auxiliary inputs.
- Memorization of up to 99 PROGRAMS with 20 positions each. Up to 99 repetitions can be matched to each position (the program cycle is composed by the position and its respective repetitions).
- 90 Vac to 230 Vac power supply or 24 Vac power supply with selector.
- Manufactured with 16 bit microcontroller, 256K FLASH and 8K RAM memory in single-chip mode.
- Optoisolated inputs  
START, STOP, INCREASE CYCLE, DEVIATION, PRESET.
- Voltage-free contact outputs  
OK POSITION, ENABLING WITH CONTROL INTERLOCK  
FEED / BACK, SLOW / FAST.
- $\pm 10$  Vdc analog output  
FEED / BACK, SLOW / FAST.
- Can be installed on bench or built in.

### THESI 320 DI

With relay outputs (digital)

<b>Display</b>	POSITION: 6 high-efficiency digits h = 13 mm and negative sign
	CYCLES: 2 high-efficiency digits h = 13 mm
	PROGRAMS: 2 high-efficiency digits h = 13 mm
<b>Signal input per axis</b>	2 square waves out of phase $90^\circ \pm 10^\circ$ and zero ref.
<b>Axis input frequency</b>	20 kHz <sub>MAX</sub>
<b>Linear resolution</b>	200 - 100 - 50 - 20 - 10 - 5 - 2 - 1 $\mu$ m
<b>Protection class</b>	keyboard IP 65 rear panel IP 40
<b>Encoder power supply</b>	5 Vdc or 12 Vdc 120 mA <sub>MAX</sub>
<b>Power</b>	10 W <sub>MAX</sub>
<b>Power supply</b>	90 to 230 Vac $\pm 10\%$ - 50/60 Hz
	24 Vac $\pm 10\%$ - 50/60 Hz
<b>Digital outputs</b>	N.O. relay contacts
<b>Inputs</b>	optoisolated
<b>Connections</b>	by removable terminal block
<b>Dimensions</b>	front panel: 100x193 mm – depth: 135 mm



### THESI 320 AN

With analog output

<b>Display</b>	POSITION: 6 high-efficiency digits h = 13 mm and negative sign
	CYCLES: 2 high-efficiency digits h = 13 mm
	PROGRAMS: 2 high-efficiency digits h = 13 mm
<b>Signal input per axis</b>	2 square waves out of phase $90^\circ \pm 10^\circ$ and zero ref.
<b>Axis input frequency</b>	20 kHz <sub>MAX</sub>
<b>Linear resolution</b>	200 - 100 - 50 - 20 - 10 - 5 - 2 - 1 $\mu$ m
<b>Protection class</b>	keyboard IP 65 rear panel IP 40
<b>Encoder power supply</b>	5 Vdc or 12 Vdc 120 mA <sub>MAX</sub>
<b>Power</b>	10 W <sub>MAX</sub>
<b>Power supply</b>	90 to 230 Vac $\pm 10\%$ - 50/60 Hz
	24 Vac $\pm 10\%$ - 50/60 Hz
<b>Analog output</b>	$\pm 10$ Vdc optoisolated
<b>Inputs</b>	optoisolated
<b>Connections</b>	by removable terminal block
<b>Dimensions</b>	front panel: 100x193 mm – depth: 135 mm

