

BASIC STEPPER MOTOR TRAINER

Model Number : GOTT-STEPPER-403A



DESCRIPTION

The GOTT Stepper Motor Trainer is a PC based system that is used to teach the principles and operations of stepper motors. Stepper motors are motors which rotate one step when supplied with a pulse. They are readily interfaced to microcomputers and other digital devices. The control signals required are virtually always the same, regardless of motor size. Position and speed control through pulse control system by interface PC, Thus, the facilities provided on the GOTT Stepper Motor Trainer enable students to write programs for a small unit that gives experience which is valid for any application of stepping motors.

FEATURES

- Industrial stepper motor driver and controller
- Speed and position control
- Linear spindle drive
- Encoder for position checking
- 4mm socket and plug wiring

MAIN TECHNICAL PARAMETER

2-PHASE BIPOLAR MICROSTEP DRIVER

GOTT 403A



FEATURES

- Input voltage 24-40 VDC
- Switch selectable motor current from 1.3-3.5 amps/phase
- 15 switch selectable step resolutions both in decimal and binary, up to 51200 steps/rev
- Mode of operation : Step & Direction, CW & CCW
- Up to 200KHz step clock rate
- Optically isolated 5VDC differential input for step, direction, enables.
- Dual H-bridge, inaudible PWM amplifier
- Pulse width modulated current control chopping at 20KHz
- Switch selectable idle current reduction 0 or 50%
- Strong protection including over voltage, over current
- LED indicating power and fault status
- Suitable to drive 4 or 8 lead size 11,14,17,23,34

2-PHASE HYBRID STEPPING MOTOR GOTT5641



ITEM	SPECIFICATION	ITEM	SPECIFICATION
Step Angle	1.8°	Insulation Resistance	100M Min., 500VDC
Step Angle Accuracy	±5% (full step, no load)	Dielectric Strength	500VAC for one minute
Resistance Accuracy	±10%	Shaft Radial Play	0.02Max. (450 g-load)
Inductance Accuracy	±20%	Shaft Axial Play	0.08Max. (450 g-load)
Temperature Rise	80°C Max. (rated current, 2 phase on)	Max. radial force	75N (20mm from the flange)
Ambient Temperature	-20°C ~ +50°C	Max. axial force	15N

GENERAL SPECIFICATION

Input power	AC 240V, 50Hz, 1-phase
Leakage protection	Leakage current: 30mA
Output	24V DC current output 0~10V analogue signal source
Capacity	<1KVA
Working environment	-10°C ~ +40°C

EXPERIMENT TOPICS :

- Principle of a stepping motor
- Spindle drive control
- Wiring with controller and driver
- Position control by configuration pulse number
- Sequence control
- Auto Forward Reverses
- Forward (Right Limit)
- Reverse (Left Limit)
- Timer Counter

Manuals :

- (1) All manuals are written in English
- (2) Model Answer
- (3) Teaching Manuals

General Terms :

- (1) Accessories will be provided where applicable.
- (2) Manual & Training will be provided where applicable.
- (3) Design & specifications are subject to change without notice.
- (4) We reserve the right to discontinue the manufacturing of any product.

Warranty :

2 Years

ORDERING INFORMATION :

ITEM	MODEL NUMBER	CODE
BASIC STEPPER MOTOR TRAINER	GOTT-STEPPER-403A	282-111

* Proposed design only, subject to changes without any notice.