

Product Info SMDx98



- Power Drive for 2(3)-Phase Steppers
- Automatic motor set up at power on
- Automatic operating parameter setup
 - o High dynamic and motion performance
- 24...130Volt, 4...10Ampere



optional
heat sink

- 200 to 10000 steps / revolution
for all common lead screw pitches
- High and constant torque from step to step
- Inputs: (opto isolator)
PULSE, DIRECTION, IN1[OFF, RESET, GATE]
Wide range input 3,5...24V
Step frequency up to 200 kHz
- Outputs: (opto isolator)
READY
- Protected against over current, over temperature,
over voltage, low voltage and cross wiring
- Extensive device status information with LEDs
- High quality setup and connector elements
- Automatic current reduction at stand still
- Active ballast circuit protects from over voltage
- Fan control
- Only one supply voltage necessary
- Wall mount or DIN-rail mounting
- Compact, only 157x29x80 mm³ (without heat sink)

The stepper drive for high output power

This power drive sets new standards for the digital control of stepping motors. Utilizing a state-of-the-art digital signal processor (DSP) made it possible to develop new procedures and control technologies. The result is a low cost and very compact power drive especially efficient in highly dynamic applications. The robust drive is suitable for rough industrial environments. A wide range of 2- and 3-phase stepping motors (sizes NEMA23,24 and 34) can be covered.

Automatic Controller Setup At power on, the operating parameters are automatically tuned to achieve optimal dynamic and smooth run drive performance. Consequently the power drive adjusts itself to the respective motor.

Boost and Current Reduction A variable boost function is enabled depending on the actual acceleration rate, i.e. the motor current will be increased additionally. Higher acceleration rates are possible. The current reduction reduces the motor current at stand still to 60% of the set current value.

Dynamic Operating Parameter Adjustment Several conditions are continuously monitored during operation and the operating parameters are automatically adjusted. The constant motor torque range stretches and dynamic positioning moves are also possible in the higher speed range.

StandBy Mode With lower speeds down to stand still the power drive gradually switches to the stand by mode. The motor is absolutely quiet and this with full torque. A big advantage for office and lab environments.

Fan Control According to the implemented fan the installation position is not critical

Active Ballast This circuit decreases over voltages when motor is in deceleration state. So its possible of using simple standard power supplies.

Digital Phase Current Controller The power drive design is fully digital and the phase current is measured directly in the motor wirings. The strict focus was here to achieve optimal operating performance such as low resonance run, high step angle accuracy and high and constant torque from step to step.

Variants / Order Code

SMD298-xx 2-phase power drive
SMD398-xx 3-phase power drive

-00 standard
-05 Control Input IN1 -> ENABLE