



Drive shown above is 50HP

Magnetek designed the SD1000™ specifically for use in higher voltage, high performance mining applications such as continuous haulage, conveyors, pumps, traction controls and other mining equipment.

The Magnetek SD1000™ Severe Duty AC Traction Drive can be connected to either a permanent magnet or an induction AC motor. This combination of AC motor and controller is the best choice for high system efficiency at a wide range of motor speeds. Based on a proven line of state-of-the-art industrial controllers, Magnetek has been successfully providing traction drives for commercial applications since 1997.

KEY BENEFITS

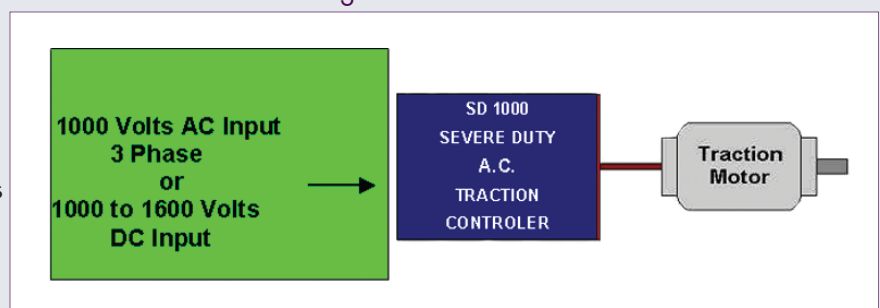
- Flux Vector or V/F Control Method
- Input Voltage Range 1000 VAC +/-20% or custom for DC

COMMUNICATIONS

- Ethernet
- Modbus TCP
- IMPULSE® Link RJ45

Power Connection Block Diagram

Power Source Options



Magnetek can design a custom drive for your specific application, including a line of 1000 VAC Air or Liquid Cooled Drives starting at 50HP.

SD1000™ Severe Duty AC Traction Drive

Severe Duty
with AC or
DC Input

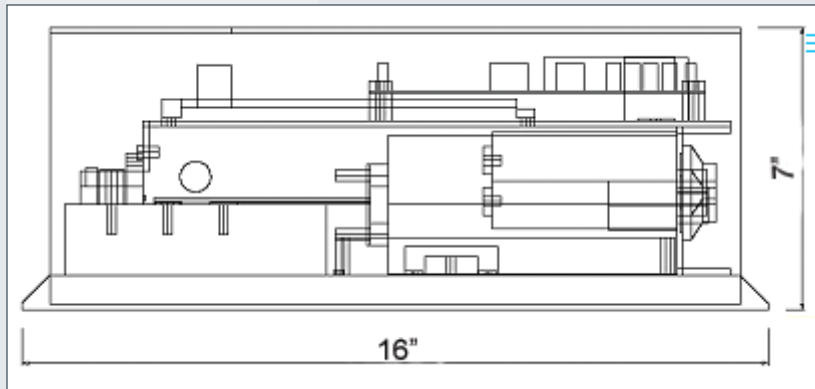
PRODUCT FEATURES AND APPLICATIONS

PERFORMANCE FEATURES

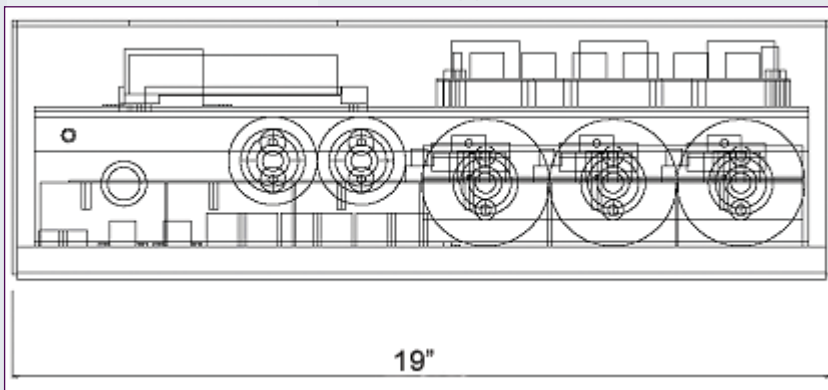
- Compatible with AC or DC systems
- Smooth torque from stall to 400 Hz
- Quiet operation
- 96-98% efficiency
- Third generation Insulated Gate Bipolar Transistors (IGBT's)
- Laminated DC bus design to reduce RFI and EMI emissions
- Integrated pre-charge contactor
- No need for buck-boost converter when used with an Ultra-capacitor System
- Adjustable over- and under-voltage suppression algorithm
- Motor speed limit protection
- Individually adjustable pedal response

- Air or liquid cooled
- Multi-line, multi-language keypad display unit used to monitor and make application adjustments.
- Performance-economy mode
- Surface mount technology
- 32 bit Risc Microprocessor
- Aluminum enclosure for RFI shielding
- Total digital control
- Serial communication port
- Digital and analog outputs for dash controls
- Automatic tuning function for use with custom motors
- 12 VDC supply start and run signals
- 12 V forward/reverse input switch

SD1000™ side dimensional view (approximate dimensions)



SD1000™ front dimensional view (approximate dimensions)



PROTECTIVE FEATURES

- Output short circuit
- Output over current
- Output phase loss
- Over- and under-voltage
- Motor overload protection
- Over-temperature protection
- Over 3300 Volts of isolation between high voltage circuits and the control circuits

APPLICATIONS

- Continuous haulage
- Conveyor systems
- Pumps
- Traction controls