

## Packaged Drives

### SS2000D3/D6



**High  
Performance  
with  
the  
Simplicity  
of  
AC Input**

The Superior SS2000D3/D6 Packaged Drives are the most reliable and versatile drives for a wide variety of applications.

Both models allow for switch selection of full-step, half-step or microstep, providing the highest performance at high speeds (up to 50,000 microsteps per revolution).

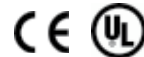
These versatile systems will work with Superior High Torque Motors in sizes NEMA 23, NEMA 34 and NEMA 42.

Additional specifications available at [www.danahermotion.com](http://www.danahermotion.com)

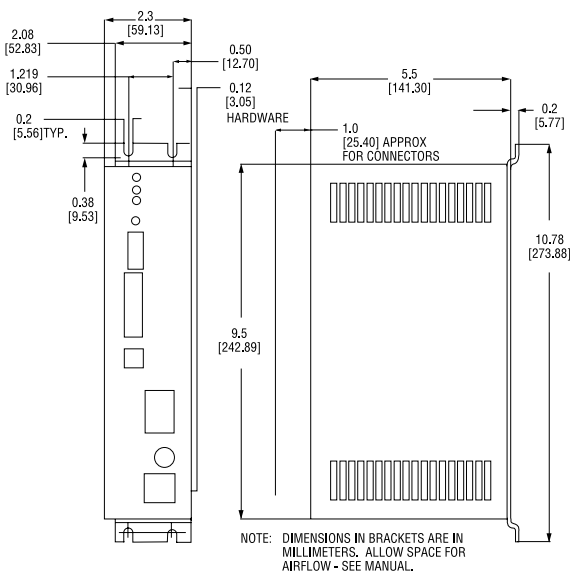
- Switch selection of full/half-steps or microstep resolution up to 50,000 pulses/rev.
- Switch selectable motor current from 1 through 6 amperes for the SS2000D6, 0.5 through 3 amperes for the SS2000D3
- SS2000D3 operates KML061-KML093 motors
- SS2000D6 operates KML091-KML113 motors

- "Bullet-proof", fully protected design
- 120 VAC input, 170 VDC bus voltage
- UL Recognized for use in US and Canada
- CE Compliant
- Bipolar Chopper Drive
- Latched short circuit protection (phase-to-phase and phase-to-ground)
- Unlatched under voltage and transient over voltage protection

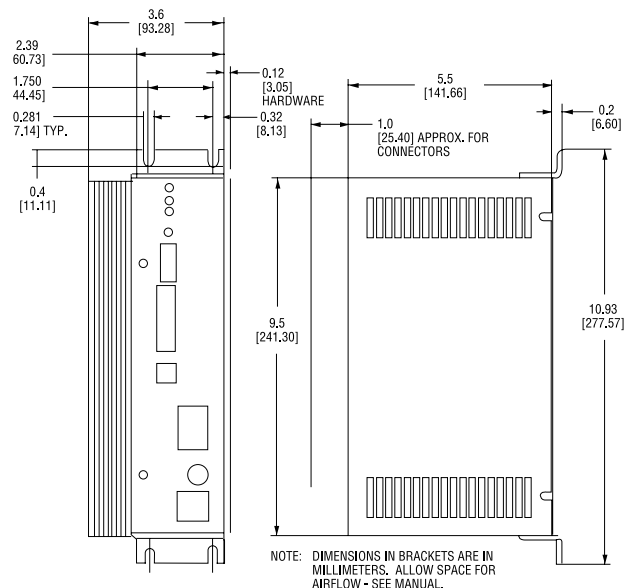
- Optically isolated inputs
- Boost Current, Reduce Current and Windings of functions
- Drive Ready Output
- Built-in AC line filter plus MOV
- Self-test function



### SS2000 D3 Mounting Diagram

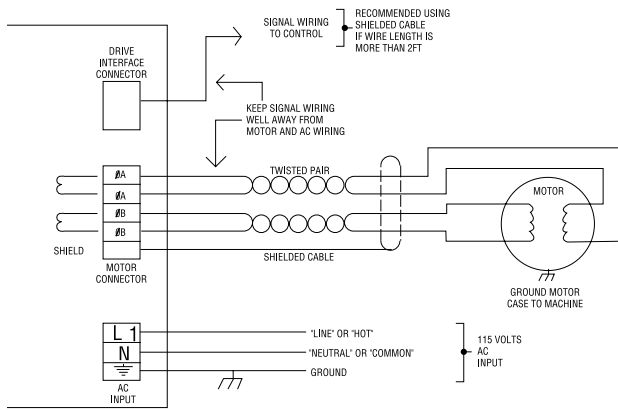


### SS2000 D6 Mounting Diagram



## Packaged Drives (Continued)

### SS2000 D3/D6 Wiring Practices



### Systems Data

#### MOTORS FOR USE WITH THE SS2000 D3/D6

Motor	Resistance (ohms)	Inductance (mH)	Current Setting (amperes)	Power Supply Current	
				Standstill (amps DC)	Maximum (amps DC)
KML061F02*	3.60	16.0	1.0	0.25	0.50
KML062F03*	3.00	16.0	1.5	0.25	0.50
KML063F03*	4.10	24.0	2.0	0.50	1.00
KML091F05	1.10	11.0	3.0	0.75	1.50
KML091F07	0.77	7.5	3.0	0.75	1.50
KML092F07	1.10	11.0	3.0	0.75	1.50
KML092F13	0.27	2.9	6.0	1.50	4.00
KML093F07	1.40	18.0	3.0	0.75	1.50
KML093F10	0.63	8.3	6.0	1.50	3.00
KML093F14	0.36	4.5	6.0	1.50	3.00
KML111F05	2.30	40.4	3.0	0.75	1.50
KML111F09	0.93	15.8	6.0	1.50	3.00
KML112F08	1.50	31.2	4.0	1.00	2.00
KML112F10	1.00	22.0	6.0	1.50	3.00
KML112F13	0.41	8.4	6.0	1.50	3.00
KML113F10	1.30	31.0	6.0	1.50	3.00
KML113F12	0.82	19.60	6.0	1.50	3.00

For motor dimensions and torque speed curves, see pages 12–15.

\* Consult factory for NEMA 23 Torque Speed Data.

### Ordering Information

To order SS2000D3 and SS2000D6 products, call 704-588-5693.

## Packaged Drives (Continued)

### SS2000D3i/D6i Packaged Motor Controller and Drive



**The Convenience  
of a Controller  
and  
Microstepping  
Drive in One  
Compact Package**

SS2000D3i/D6i series of step motor positioning systems provide a microstepping controller and drive in one convenient compact package.

The SS2000D3i/D6i step motor systems include all of the superior features of the SS2000D3/D6 drive, and a position controller with BASIC-like programming language in one package.

These versatile systems will work with Superior High Torque Motors in sizes NEMA23, NEMA34 and NEMA42.

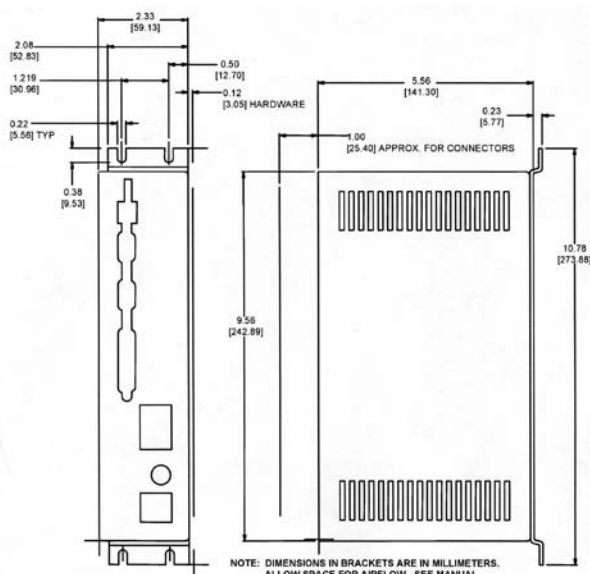
The integral step motor drive utilizes a unique digital microstepping current control technique to provide smooth motor performance.

Additional specifications available at [www.danahermotion.com](http://www.danahermotion.com)

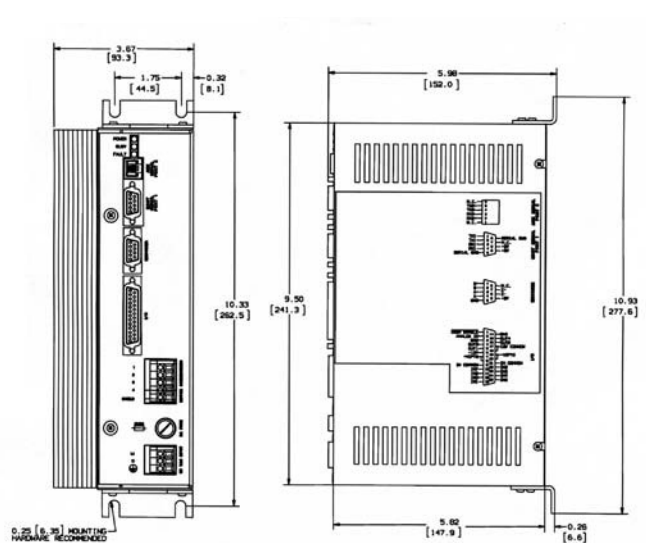
- Packaged drive, control and power supply
- 120V  $\pm$ 10% AC input
- Utilizes robust SS2000D3/D6 drive design
- Motor phase current selectable up to 6 amps (D6i)
- Simplified motor selection
- Short-circuit Protection
- Optically isolated I/O, 8 Inputs, 4 Outputs
- Windows based software development utility for easy programming on any PC
- Easy to use BASIC-like programming language
- Additional 8 inputs and 4 outputs, non-isolated
- 16 bit microprocessor
- Encoder input for closed loop operation (differential or single ended)
- One 0-10V analog input (10 bit resolution)
- BCD interface with separate connector
- 2 serial ports, RS232 / 485 up to 38K baud
- Built-in AC line filter and MOV's for transient protection
- Patent-pending digital microstepping current control
- Smoother motor operation at low speeds
- Meets IEC 1000-4-4 standard for electrical fast transient ("noise") immunity
- UL recognized and CE compliant
- Optional terminal board for easy wiring



### SS2000 D3i Mounting Diagram

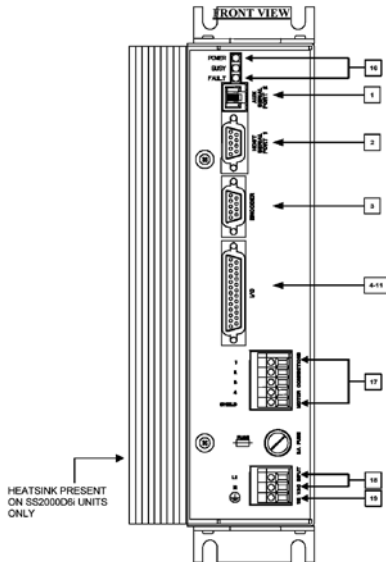


### SS2000 D6i Mounting Diagram



## Packaged Drives (Continued)

### SS2000 D3i/D6i Hardware Connections

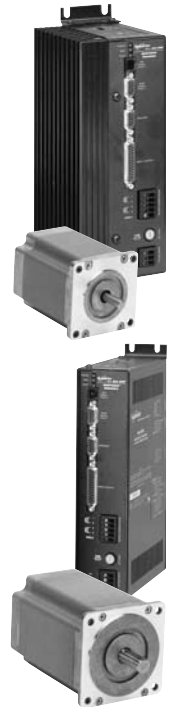


### MOTORS FOR USE WITH THE SS2000 D3i/D6i

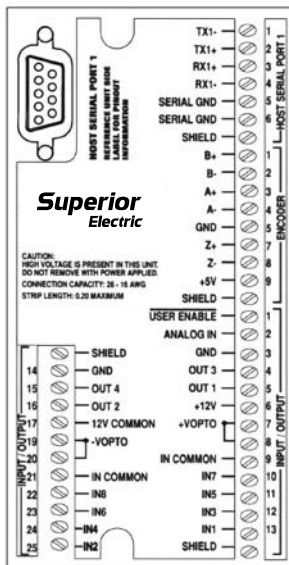
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For motor dimensions and torque speed curves, see pages 12–15.

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### SS2000 D3i/D6i External Wiring Card

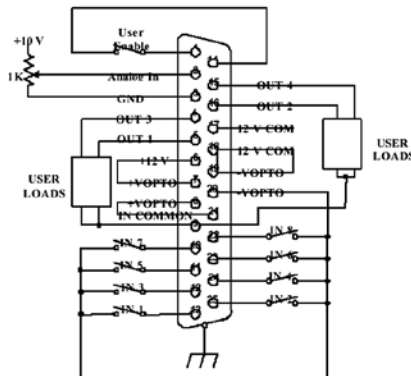


### Ordering Information

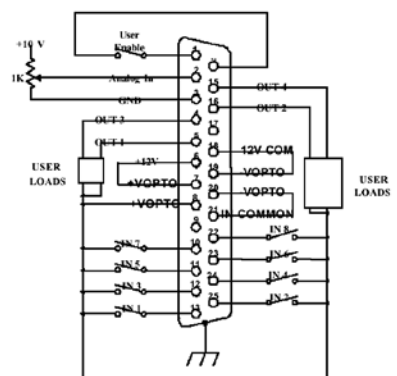
To order SS2000D3i, SS2000D6i, SS2000D3i-WOC (without serial cable), SS2000D6i-WOC (without serial cable), 221156-011 (10 ft RS232 serial cable) and XWC (external wiring card), call 704-588-5693.

### SS2000 D3i/D6i Input/Output Connections

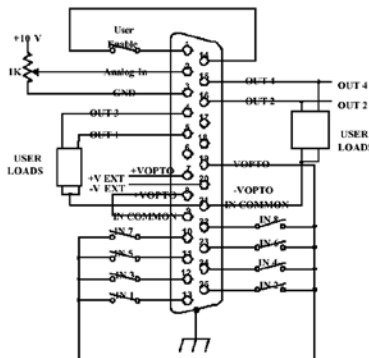
#### Internal Power Supply Inputs Sinking – Outputs Sinking



#### Internal Power Supply Inputs Sourcing – Outputs Sinking



#### External Power Supply Inputs Sinking – Outputs Sinking



#### External Power Supply Inputs Sourcing – Outputs Sinking

