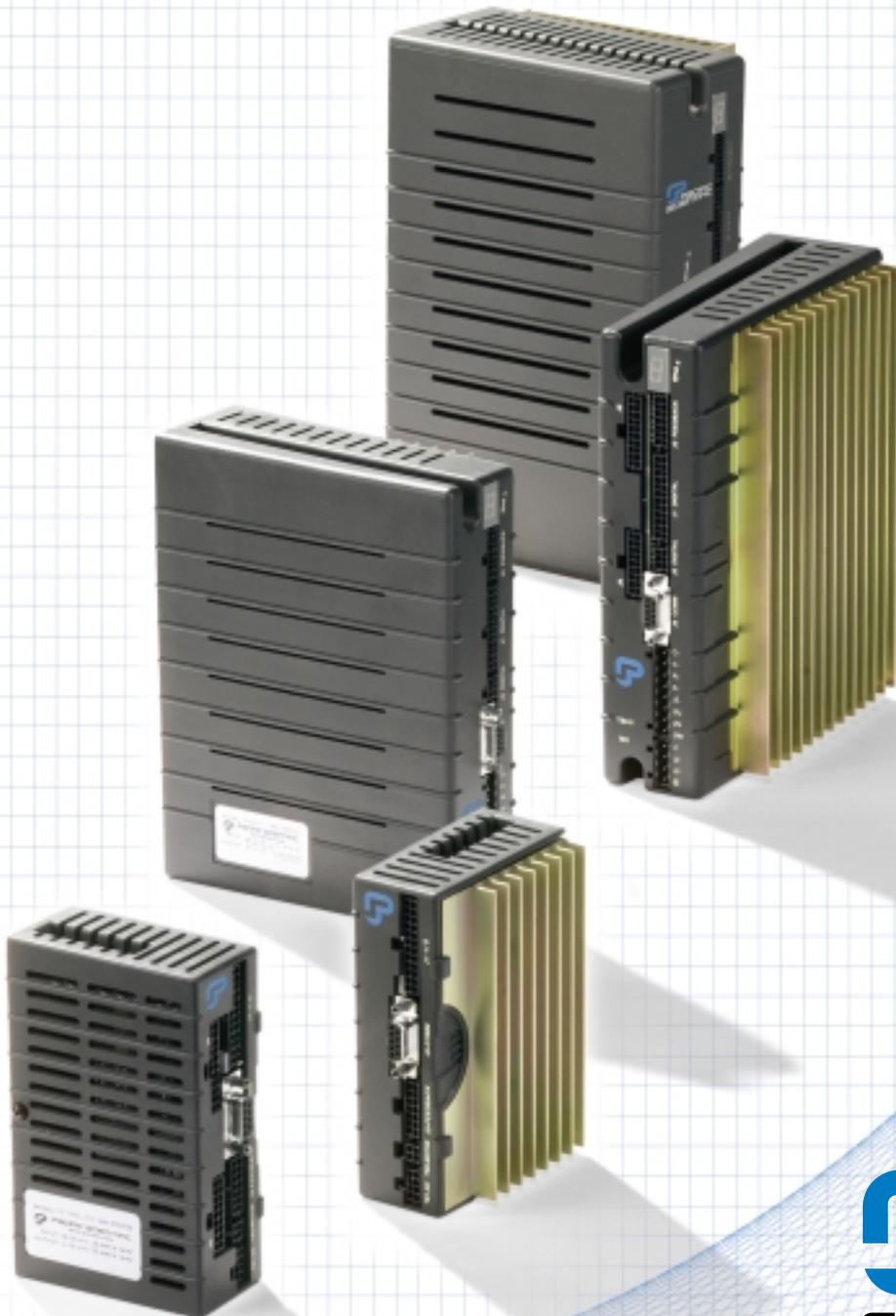


Smart servos.
Motion simplified.

PC3400 SERIES DIGITAL BRUSHLESS SERVO DRIVES




**PACIFIC
SCIENTIFIC**
HIGH PERFORMANCE MOTORS & DRIVES

PC3400 SERIES SERVO DRIVES

The PC3400 series of brushless servo drives **cost-effectively** provides all you could ask for in a drive — a high level of intelligence with advanced features . . . in a small package. But they don't stop there. These drives offer on-board programmable, optically isolated I/O with 6 inputs and 2 outputs (with the option for even more) for high-speed gearing and registration control, as well as camming for complex motion coordination. Like all Pacific Scientific drives, the PC3400 accepts step-and-direction and analog commands as well.

ToolPAC, Pacific Scientific's Windows®-based setup configuration and development utility, makes it easy to set up, program and solve problems in your application. ToolPAC works to set up our new generation of intelligent stepper drives, too — giving you maximum flexibility for your machine's motion.

The 3400's DC input drives measure one-fifth the size of our venerable SC900 drive models. These small yet ruggedly designed drives provide a compact profile making them a perfect fit for specialty machinery as well as semiconductor and packaging applications.

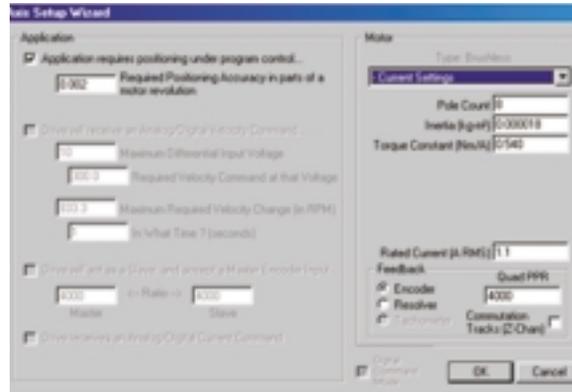
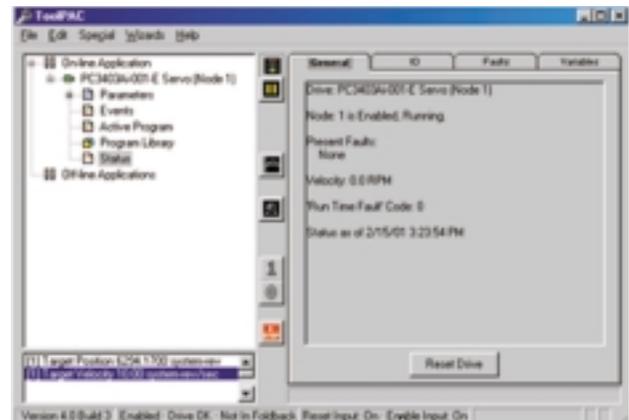
With five continuous power levels, ranging from 3-20A_{RMS} (up to 7.6 kW of continuous power), the 3400 series drives are capable of controlling all Pacific Scientific high-performance brushless servomotors, including the new PMB series motors. Global regulatory compliance makes sure your machine is accepted — anywhere.

You can see that this addition to the Pacific Scientific family of drives continues the tradition of great value for your drive investment. Whatever your application, the PC3400 series drives will work for you.

DC-powered drive with a new PMB motor. Perfect for your high-volume applications!

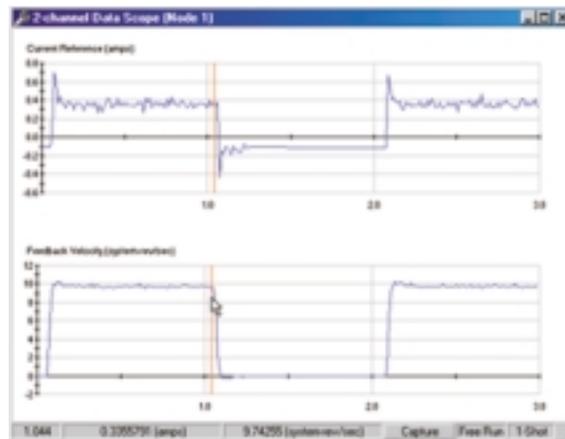
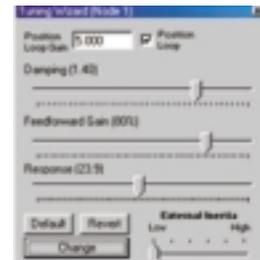


Drive status screen helps you monitor drive operation at any time.



Axis Setup Wizard guides you through configuration — select a mode of operation, choose a motor and you're off and running.

The tuning Wizard guides you through system tuning. Parameters are intuitive and easy to adjust.



Digital oscilloscope assists in setup and tuning.

DRIVE / MOTOR COMBINATIONS

This table contains recommended pairings of Pacific Scientific PC3400 drives with PMA, PMB and S series brushless servomotors. In matching the PC3400 family with its brushless servomotors, Pacific Scientific engineers analyzed real-world motion control applications and optimized the windings for maximum system performance. The combination of Pacific Scientific motors and drives results in higher performance and efficiency, delivering more — from .18 to 48.5 Nm — continuous usable torque in your application.

AC INPUT DRIVES

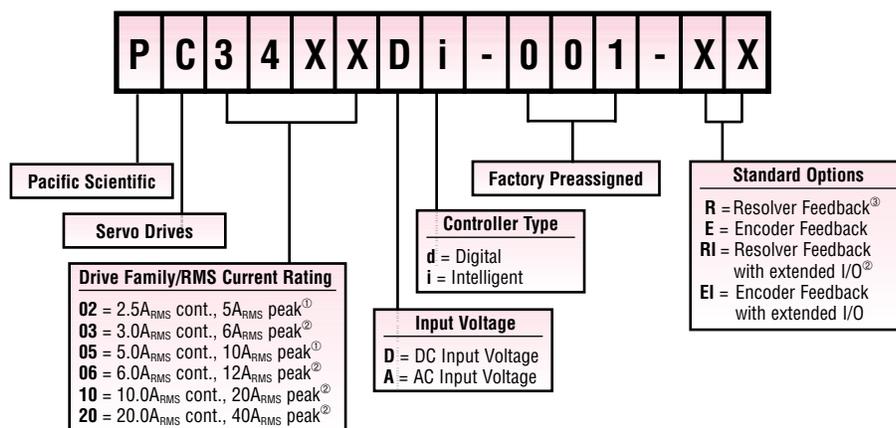
MOTORS	PC3403A		PC3406A		PC3410A		PC3420A	
	OUTPUT CURRENT							
	CONT 3.0A _{RMS}	PEAK 6.0A _{RMS} (2 Sec.)	CONT 6.0A _{RMS}	PEAK 12.0A _{RMS} (2 Sec.)	CONT 10.0A _{RMS}	PEAK 20.0A _{RMS} (1 Sec.)	CONT 20.0A _{RMS}	PEAK 40.0A _{RMS} (.5 Sec.)
Maximum Continuous Rated Torque (Nm) @ Speed (RPM) Range								
PMA1	0.18 - 0.60 @ 8,750 - 10,000		—		—		—	
PMA2	0.47 - 2.1 @ 3,600 - 6,800		1.3 - 1.8 @ 5,800 - 7,200		—		—	
PMA4	3.9 - 8.4 @ 850 - 1,600		3.1 - 9.9 @ 650 - 4,500		3.2 - 8.9 @ 2,750 - 4,750		—	
PMA5	—		9.1 @ 1,650		8.6 - 20.5 @ 1,200 - 2,400		13.1 - 18.3 @ 2,500 - 3,500	
PMA6	—		—		—		24.5 - 48.5 @ 950 - 1,800	
PMB1	0.41 @ 11,000		—		—		—	
PMB2	0.45 - 1.4 @ 4,200 - 10,000		—		—		—	
PMB3	1.9 - 4.9 @ 1,250 - 2,700		1.6 - 4.4 @ 2,900 - 5,750		2.8 - 4.0 @ 4,450 - 4,600		—	
S20	0.32 - 1.4 @ 3,750 - 12,000		0.55 - 2.3 @ 4,600 - 8,000		—		—	
S30	1.5 - 5.0 @ 1,200 - 4,300		2.3 - 4.1 @ 2,600 - 4,600		3.6 @ 3,700		—	

DC INPUT DRIVES

MOTORS	PC3402D		PC3405D	
	OUTPUT CURRENT			
	CONT 2.5A _{RMS}	PEAK 5.0A _{RMS} (1 Sec.)	CONT 5.0A _{RMS}	PEAK 10.0A _{RMS} (1 Sec.)
Maximum Continuous Rated Torque (Nm) @ Speed (RPM) Range				
PMB11	0.22 @ 1,000		0.20 @ 5,450	
PMB12	0.40 @ 700		0.38 @ 3,500	
PMB13	—		0.50 @ 2,350	
PMB21	—		0.61 @ 1,300	
PMB22	—		1.1 @ 600	

MODEL NUMBER CODES

To construct a motor model number code, select the combination of features required and put all the coded information in the proper sequence. Please account for an entry in each field. The model number shown is an example of a properly specified motor.

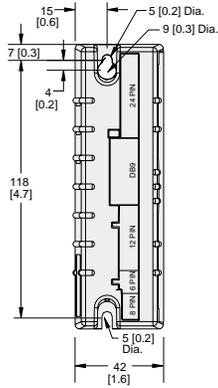


NOTES:

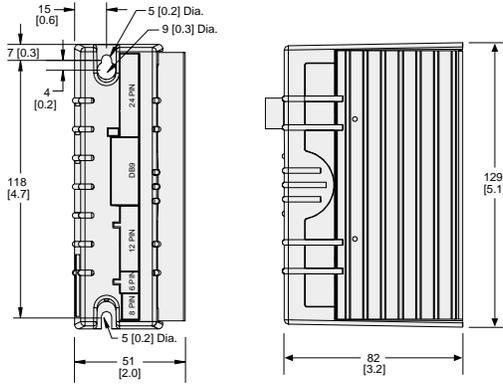
- ① DC Input drives only.
- ② AC Input drives only.
- ③ Resolver Feedback option on AC input voltage drives only.

PC3400 SERIES SERVO DRIVES dimensions **mm**
(in.)

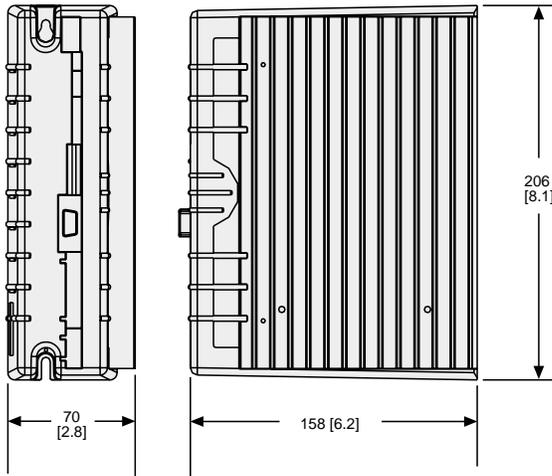
PC3402D



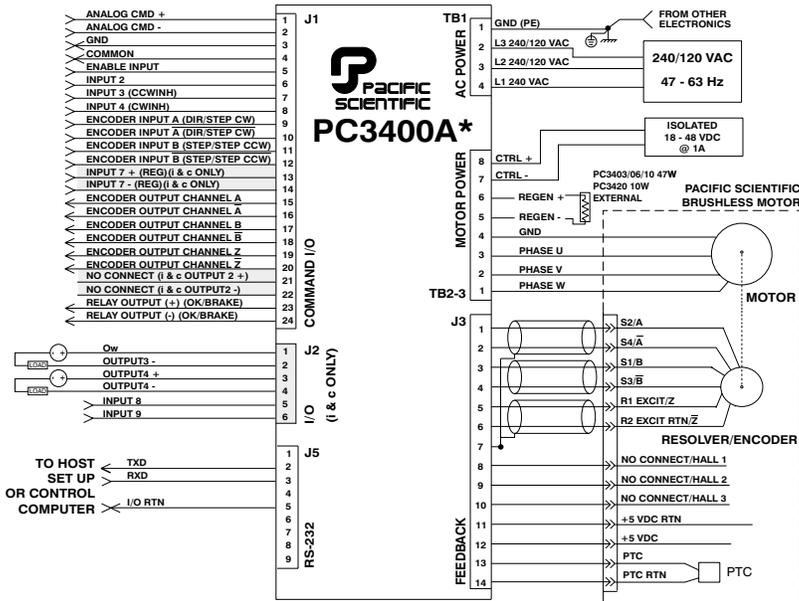
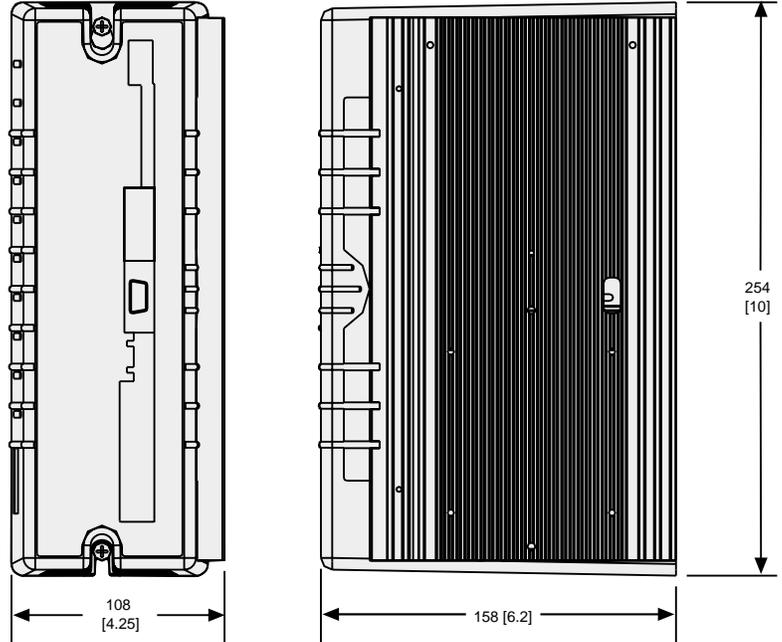
PC3405D



PC3403A, PC3406A



PC3410A, PC3420A



HIGH PERFORMANCE MOTORS & DRIVES

4301 Kishwaukee Street, P.O. Box 106
Rockford, Illinois 61105-0106
(815) 226-3100 Fax (815) 226-3080

Locations:

Rockford, IL Wilmington, MA
Juarez, Mexico

* Pinout for AC input drives shown for reference. Contact Pacific Scientific for DC model connections.