[Standard Specifications for PSC7000 Servo Controller]

Items			Specifications
DSPM Card Specifications	Processing Form		Multi-tasks and real time processing
	DSP		TMS320VC33PGE-150 (TEXAS INSTRUMENT, 75MHz)
	User Memory	Main Mamory	SRAM CY7C1062AV33-8BGC (Cypress) X1,512K long word
		Backup Memory	SRAM HM62V16514LTTI-5 (Renesas) X1,512K word
		Flash Memory	S29PL064J60BF1120A (SPANSION) X1,4M X 16bit
	Battery for Memory Backup		CR2032
	Loading for User Tasks		Built-in flash memory, compactFlash memory card
	Programming Language		Real time BASIC language, Control block language, PC ladder language
	Scanning time		Set up minimum scanning time at 50 or 62.5 microseconds
	Processing Speed	BASIC Tasks	Addition of real numbers (32 bits): 0.67 microseconds
		PC Ladder Tasks	Both of contact and coil: 0.013 microseconds
		Control Blocks	Addition of real numbers (32 bits): 0.013 -0.08 microseconds
	Power Supply		Supply 5V and 3.3V from cPCI backplane
MCIM Card Specifications	Analog Output	Numbers of Channels	5 Channels (Common to COMMON)
		Output Type	Resolution: +/-13 bits
		Output Characteristics	Gain error: +/-55 LSB (least significant bit), Offset error: +/-11 LSB, Low pass filter: 1.6 KHz
	PG Input	Numbers of Channels	5 channels (A, B, and Z phases), Totally 15 input
		Input Type	5V differential input or 12V emitter follower, Totem pole, Open collector input photocoupler isolation
		Max. Frequency	300 KHz (per single phase), 1.2 MPPS
	Latch Input	Numbers of Channels	5 channels (MARK and ORG), Totally 10 input
		Input Type	12 -24 V input
		Input Characteristics	0.1 milliseconds delay
	Connectors		80 pins, Screw-locked type
	Power Supply		Supply 5V and 3.3V from cPCI backplane
cPCI Slots			Prepare three slots on control card, Two slots exclusively prepared for DSP card and MCIM card.
Auxiliary Memory			Standard conpactFlash memory card (conform to PC card ATA): 256MB/CFI-256MDG, and 512MB/Cfi-512MDG
LED	Show battery OK with green color		Light on Battery voltage 2V or over
	Show CPU OK with green color		Light when watchdog timer is normal.
	Dot Matrix 20x7		Display current coneditions
	CF Access Display with red color		Light when having access to compactFlash card
Power Supply		5V	Supply from power card via PSC backplane (+/-15V is not used).
Power Capacity		5V,4A	DSPM-2A (x1), MCIM-1 (x2), Fully light dot matrix LED, 10V for all channels on analog output, Maximum slot comsumed current on CF card
System Switch			Switching Disable, Enable, Reset among AutoRun
External Connection		USB Port	Connect with the programming terminals (USB2.0)
		Ethernet (Option)	Programming terminal or the like.
Boundary Dimensions			W65 x H220 x D250 mm
Operation Environment		Temperature during storage	-20 to 85 degree C
		Temperature for operation	0 to 55 degree C
Model			PSC7000 Control Card

⚠ *Attention for safer handling and operation ofthe drives:* Please read the instruction manuals for the drives prior to their operation.

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RELIANCE ELECTRIC LIMITED

www.reliance-electric.co.jp

Headquarters and Plant
2-3-2 Fuku-ura Kanazawa-ku Yokohama, 236-8641 Japan
Tel.+08-045-701-1770 Fax.+08-045-783-7486

Sales Department:
Tel.+08-045-791-3115 Fax.+08-045-785-0276

Osaka office
Shin-Ohsaka Uenotoyo building 7-4-17 Nishinakajima Yodogawa-ku
Osaka, 532-0011 Japan
Tel.+08-06-6889-5715 Fax.+08-06-0889-5788

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RELIANCE ELECTRIC

PSC7000 PROGRAMMABLE SERVO CONTROLLER

PSC 7000 PROGRAMMABLE SERVO CONTROLLER

UL/cUL/CE

PSC 7000 PROGRAMMABLE SERVO CONTROLLER

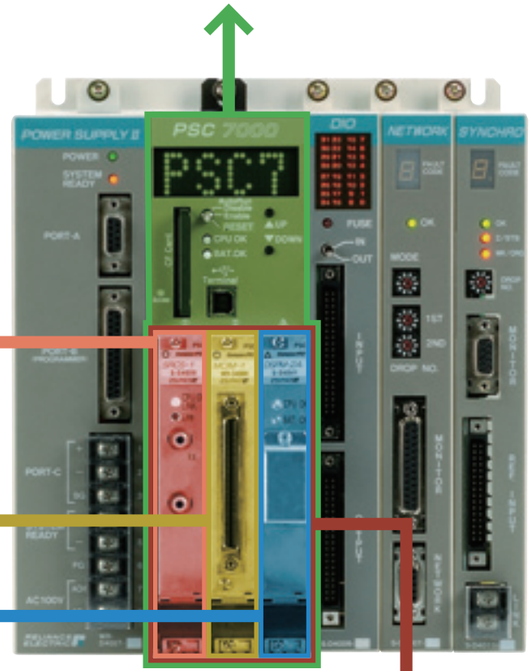
Advanced servo controller ot Reliance Electric

Limitless expansion capability given to programmable servo controller

PSC7000 series servo controllers are the enhanced servo controllers com-patible with the present PSC series servo controllers. When combined with the latest VZ7000 series servo drives in Reliance Electric, the PSC 7000 series servo controllers can pro-vide the most suitable solution for multi-axes synchronous control appli-cations and servo applications.

PSC7000 control card

The PSC7000 control card is a card putting together neces-sary primary functions into one card in order to realize servo controlling. Upon using high speed processors, the user can realize servo control for the whole system, which is capable of arbitrarily programming by the user. The PSC7000 control card provides input and output circuits necessary for servo controlling such as feedback input and analog input.



SERCOS module

The SERCOS module can realize the SERCOS communication between the controllers the drives.

PG module

TThe PG module has independently 5 channel each of input and output circuits (PG input and analog output) per one card. One PG module can control independently 5 axes, the maximum two sets of the PG modules can be mounted on the PSC7000 control card. Consequently, the maximum 10 axes can be controlled.

DSP module

The DSP module with built-in high speed proces-sors executes the servo control programs. At least one DSP module is necessary in the PSC7000 control card.

Slots for module cards
(conform to CompactPCI standard)

Three slots capable of mounting various modules are arranged on the lower part of the PSC7000 control card . Various modules such as the DSP module and PG module can be mounted into the slots as the need arises.
(Note: The PIMG and ConpactPCI are the registered trade-marks of the PCI Industrial Computers Manufacturers Group)

Features for PSC7000 Servo Controller

High speed synchronous communication between drives
High speed synchronous communication between drives is attained with the SERCOS communication.

High speed operation
High speed operation at 150MFLOPS is attained by means of high speed DSP.

Multi-axis application
Applicable to high speed synchronous communication with the maximum 10 axes per one rack (in case of PG input and analog output).
Applicable to high speed synchronous communication with the maximum 224 axes, as 32 axes per one rack (in case of the SERCOS communication).

Applicable to various signal feedback control.
Realize high performance control systems using SERCOS communication, Synchlink communication, resolver.and high resolution encoders or the like as well as conventional PG signal feedback control.

Applicable to various networks
Applicable to various networks such as DCSnet, CC-Link, and DeviceNet.

Connection of. USB2.0 and Ethernet
Attain quick connection with the PC while programming and serv1c1ng the PSC7000 controller, and shorten required time for downloading and uploading of the application programs. Realize real-time observation for the internal states of the drives by means of oscilloscope functions for high speed sampling when debugging the application programs of the PSC7000 controller.

Compactflash card
Use compact, large capacity compactflash cards capable of accessing at high speed in the PSC7000 controller as record media of the application programs. Realiza to store failure information and production records at an application level.

Watch function
Keep. records of time when any failure happens in the system.

One example of system formation