

RCP2/RCP3 Program Controller  
that supports Absolute Unit ABU

# PSEL-C-ABU

The Absolute specification has been added to these PSEL controllers



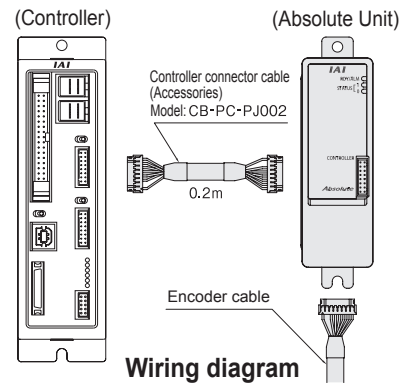
**PSEL-C**  
1- and 2-axis specification



**PCON-ABU**  
Module for PCON and PSEL controller

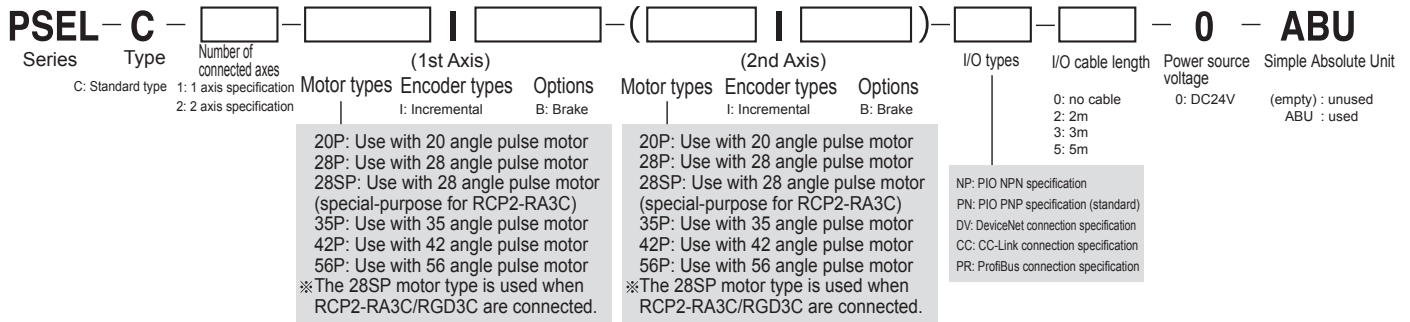
## Features

- 1** Once installed, the simple Absolute Unit ABU eliminates the need for home return. The unit works immediately when connected to a power source.
- 2** The controller can interpolate on two axes. The proprietary SEL language enables easy programming of even difficult operations.
- 3** Encoder data can be saved for a maximum of 20 days.



### Model details

※ When using the 1-axis specification, the 2-axis content is not needed.

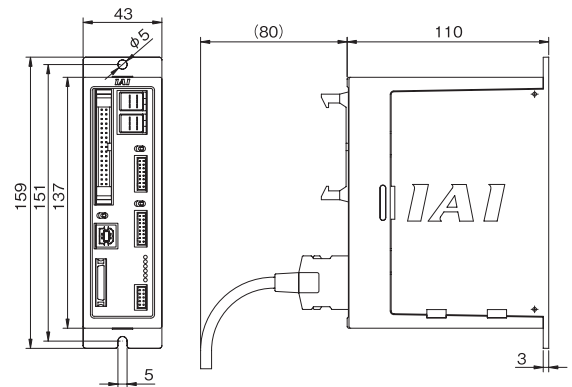


### PSEL controller specification

Item	Specification
Connection actuator	RCP2/RCP3 Series Actuators (Note 1)
Input voltage	DC24V±10%
Current amperage	Max 5.5A
Number of controlled axes	1 Axis/2 Axes
Number of programs	64 points
Number of program steps	2000 steps
Number of multitask programs	8 points
Number of positioning points	1500 points
Data storage device	FLASHROM (can be added as an optional system memory backup)
Data input method	Teaching box or personal computer software
Number of I/O points	Input 24 points / output 8 points (can choose NPN or PNP)
Serial communications functions	RS232C (Half-pitch connector) / USB connector
Field network	DeviceNet / CC-Link / ProfiBus support
Ambient temperature and humidity	0~40°C 10~95% (no freezing)
Ambient atmosphere	No corrosive gas, no extreme amounts of dust
IP Code	IP20
Weight	Approx. 450g
External dimensions	43mm (W) ×159mm(H) ×110mm (D)

Note 1 High thrust (RA10C), High speed (HS8C/HS8R) and waterproof (RCP2W-SA16) models cannot operate with this unit.

### PSEL controller external diagram



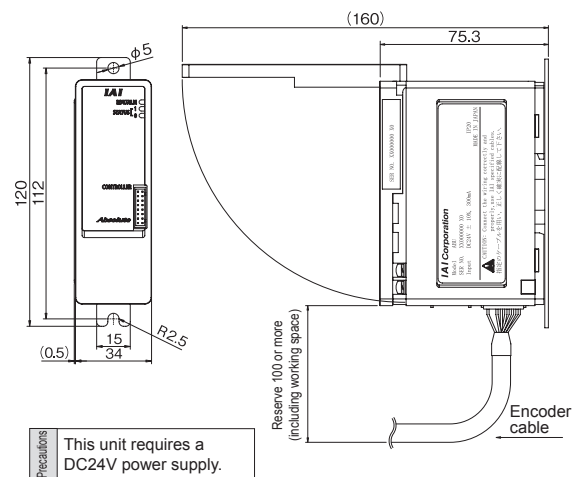
### ABU Absolute Unit specification

Item	Specification
Model	PCON-ABU
Connection actuator	RCP3/RCP2 Series (※1)
Controller connection cable (accessories)	Model CB-PC-PJ002 (0.2m)
Simple Absolute Unit main unit	Model ABU
Backup battery (accessories)	Model AB-7 (Ni-MH battery with life of around 3 years)
Power supply voltage	DC24V±10%
Power supply amperage	max300mA
Ambient operating temperature	0~40°C (around 20°C is ideal)
Ambient operating humidity	95%RH or less (non-condensing)
Operating atmosphere	No corrosive gas, no dust
Weight	330g
Permissible number of revolutions when encoder is recording data (※2)	800rpm    400rpm    200rpm    100rpm
Position data retention time period (※2)	120h    240h    360h    480h

(※1) This unit cannot be used with the following models: RCP2-RA2C, RA10C, HS8C, HS8R, GRS, RTB, RTC, RCP2W-SA16C.

(※2) This changes according to the value set as the number of permissible encoder revolutions while position data is being recorded. (800rpm →120h/400rpm →240h/200rpm →360h/100rpm →480h)

### External diagram of the ABU Absolute Unit



### Safety precautions for users

- During encoder data recording, an error will occur if the actuator slider and rod are moved faster than a predetermined speed. For permissible speed (number of revolutions), please see the ABU Absolute Unit specification noted above.
- The PC software that can be used on the PSEL controller to support the ABU Absolute Unit is program IA-101-X-MW/USB, Ver. 7.4.0.0 or later. For the teaching box, use program IA-T-XA, Ver. 1.50 or later, or SEL-T/TD, Ver.1.09 or later.