

# Product End of Life Notice

Rev 3/2017

PCU/PSC PID Controllers to Newer PID Controllers



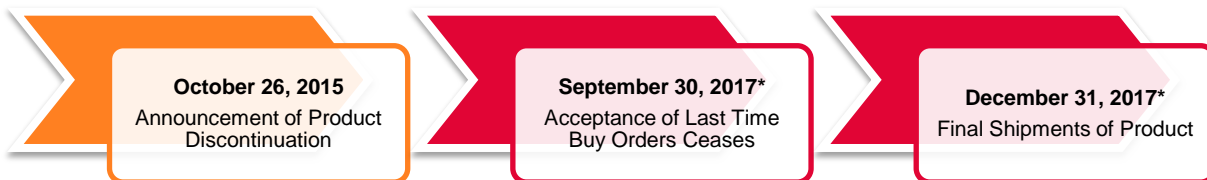
## Introduction

The Process Control Unit (PCU) and Process Setpoint Controller (PSC) were introduced as part of Red Lion's first foray into the PID controller market. Released over two decades ago, these devices were designed for controlling a process like material flowing through a pipe. Red Lion has since introduced new controller products with advanced features, designed to take the place of the PCU and PSC in process applications requiring PID control.

This document describes the alternatives available and provides information on how their features compare with one another.

## Timing

Red Lion Controls intends to honor the standard warranty obligation for this product when ordered and delivered in accordance with the following transition schedule:



### October 26, 2015

- Announcement to customers
- Red Lion begins accepting non-cancellable, non-returnable last time buy orders
- Orders may be scheduled for delivery between now and December 31, 2017

### September 30, 2017

- General availability of the product ceases
- Acceptance of last time buy orders concludes

### December 31, 2017

- Shipment of the product stops

\*Dates may be subject to change depending on product sales

## PCU/PSC PID Controllers to Newer PID Controllers

### **Why is this transition taking place?**

The PXU and PAX2C PID Controllers offer new features and functions that represent significant improvements over the PCU and PSC products. In 2015, Red Lion determined it was appropriate to discontinue the products in favor of newer technology.

### **What happens to my current investment in PCU and PSC PID Controllers?**

Maintaining excellent compatibility for easy and cost-effective transition is an important design criterion when designing next generation products. Red Lion Controls recommends the PXU and PAX2C as a designated replacement for the PCU and PSC PID Controllers. The PXU provides many of the basic requirements for PID control at an economic price. The PAX2C offers advanced features and functionality, like field installable option cards, ramp/soak capability, heater current monitor and support for additional PID Control.

All PCU and PSC part numbers, as well as the three (3) option cards that accompany them, are affected by this announcement. The option card part numbers are OMD00000, OMD00001 and OMD00003.

Refer to the following for more information:

- Appendix A: Comparison of PCU PID Controllers to PXU and PAX2C PID Controllers
- Appendix B: Comparison of PSC PID Controllers to PAX2C PID Controllers
- Appendix C: Product Cross Reference Guide

# PCU/PSC PID Controllers to Newer PID Controllers

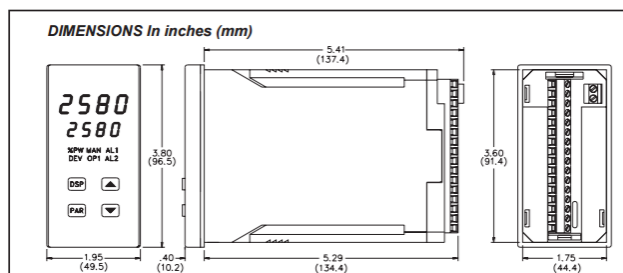
## Appendix A

### Comparison of PCU PID Controllers to PXU and PAX2C PID Controllers

The chart below compares the features of the 3 products.



Series	PCU	PXU	PAX2C
<b>Power</b>	115/230 VAC	100 to 240 VDC, 24 VDC Model Dependent	40 to 250 VAC, 21.6 to 250 VDC
<b>Input</b>	0 to 10 VDC, 0 (4) to 20 mA	Thermocouple, RTDs and Process Signals	Thermocouple, RTDs and Process Signals
<b>Auto-tune</b>	Yes	Yes	Yes
<b>Analog Output</b>	0 to 10 VDC, 4 to 20 mA Model Dependent	0 to 10 VDC, 4 to 20 mA Model Dependent	0 to 10 VDC, 4 to 20 mA Field Installable Option Card
<b>Setpoint Output</b>	Relay, Solid State and Triac Modules	Relay and Solid State Model Dependent	Relay, Solid State and Triac, Field Installable Option Cards
<b>Communication</b>	RS485 Model Dependent	RS485 Model Dependent	Modbus Standard, RS232, RS485, DeviceNet and Profibus, Field Installable Option Card
<b>2nd Analog Input</b>	Model Dependent	N/A	Yes, Field Installable Option Card
<b>Motorized Valve Positioner</b>	Model Dependent	N/A, Contact Tech Support	N/A, Contact Tech Support
<b>Front Panel Rating</b>	NEMA4X/IP65 Model Dependent	IP65	NEMA4X/IP65
<b>Pricing</b>	Model Dependent	Model Dependent	Model Dependent



PCU and PSC Dimensions

# PCU/PSC PID Controllers to Newer PID Controllers

## Appendix B

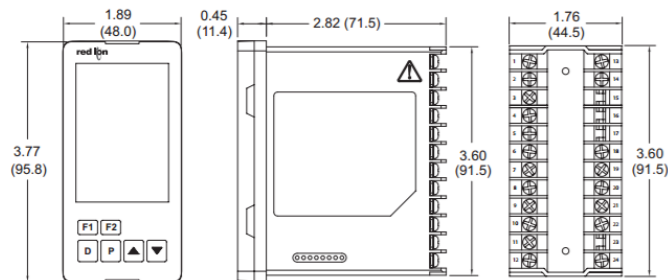
### Comparison of PSC PID Controllers to PAX2C PID Controllers

The chart below compares the features of the 2 products.



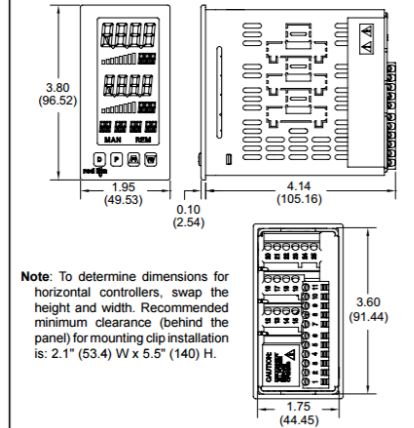
Series	PSC	PAX2C
Power	115/230 VAC	40 to 250 VAC, 21.6 to 250 VDC
Input	0 to 10 VDC, 0 (4) to 20 mA	Thermocouple, RTDs and Process Signals
Auto-tune	Yes	Yes
Analog Output	0 to 10 VDC, 4 to 20 mA Model Dependent	0 to 10 VDC, 4 to 20 mA Field Installable Option Card
Setpoint Output	Relay, Logic and Triac Modules	Relay, Solid State and Triac, Field Installable Option Cards
Communication	RS485 Model Dependent	Modbus Standard, RS232, RS485, DeviceNet and Profibus, Field Installable Option Card
2nd Analog Input	Model Dependent	Yes, Field Installable Option Card
Ramp/Soak Capability	Yes	Yes
Motorized Valve Positioner	Model Dependent	N/A, Contact Tech Support
Front Panel Rating	NEMA4X/IP65 Model Dependent	NEMA4X/IP65
Pricing	Model Dependent	Model Dependent

DIMENSIONS In inches (mm) - 1/8 DIN



PXU Dimensions

DIMENSIONS In inches (mm)



Note: To determine dimensions for horizontal controllers, swap the height and width. Recommended minimum clearance (behind the panel) for mounting clip installation is: 2.1" (53.4) W x 5.5" (140) H.

PAX2C Dimensions

## PCU/PSC PID Controllers to Newer PID Controllers

### Appendix C

#### Product Cross Reference Guide

The PCU and PSC PID controllers require plug-in modules for full operation – the OMD00000, OMD00001, and OMD00003. To determine the appropriate PXU or PAX2C (PX2C below) replacement, start by finding the PCU or PSC part number in the first column. Then, go to the column with the appropriate option card in the heading in order to find a recommended replacement.

#### Example

**Currently using:** PCU11000 with OMD0003

**Recommended replacement:** PX2CVR00 with PAXCDS50 and PAXCDL10

Please note that some of the newer products are modular in construction, meaning it may take more part numbers to achieve the same operation. If there are any questions, please contact Tech Support at [support@redlion.net](mailto:support@redlion.net).

PID Controller	with OMD00000	with OMD0001	with OMD0003
PCU00000	PXU10030	PX2CVR00 + PAXCDS50	PXU20030
PCU00001	PXU11A30	PX2CVR00 + PAXCDS50	PXU21A30
PCU00002	PXU11A30	PX2CVR00 + PAXCDS50	PXU21A30
PCU00004	PXU11A30	PX2CVR00 + PAXCDS50 + PAXCDC10	PXU21A30
PCU00005	PXU11A30	PX2CVR00 + PAXCDS50 + PAXCDC10	PXU21A30
PCU00104	PX2CVR00 + PAXCDS50 + PAXCDC10 + PX2FCA00	PX2CVR00 + PAXCDS50 + PAXCDC10 + PX2FCA00	PX2CVR00 + PAXCDS50 + PAXCDC10 + PX2FCA00
PCU00204	PX2CVR00 + PAXCDS20 + PAXCDC10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDC10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDC10 + PX2FCA10
PCU00205	PX2CVR00 + PAXCDS20 + PAXCDC10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDC10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDC10 + PX2FCA10
PCU00307	Contact Tech Support	Contact Tech Support	Contact Tech Support
PCU01000	PXU31A30	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU01001	PXU31A30	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10

PCU/PSC PID Controllers to Newer PID Controllers

<b>PID Controller</b>	<b>with OMD00000</b>	<b>with OMD0001</b>	<b>with OMD0003</b>
PCU01002	PXU31A30	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU01004	PXU31A30	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU01005	PXU31A30	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU01108	PX2CVR00 + PAXCDS20 + PAXCDL10 + PX2FCA00	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA00	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA00
PCU01208	PX2CVR00 + PAXCDS20 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10
PCU01209	PX2CVR00 + PAXCDS20 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10
PCU01306	Contact Tech Support	Contact Tech Support	Contact Tech Support
PCU02000	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU02001	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU02002	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU02004	PX2CVR00 + PAXCDS20 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10
PCU02005	PX2CVR00 + PAXCDS20 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10
PCU02108	PX2CVR00 + PAXCDS20 + PAXCDL10 + PX2FCA00	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA00	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA00
PCU02208	PX2CVR00 + PAXCDS20 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10
PCU02209	PX2CVR00 + PAXCDS20 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10
PCU02306	Contact Tech Support	Contact Tech Support	Contact Tech Support
PCU10000	PX2CVR00 + PAXCDS20	PX2CVR00 + PAXCDS50	PX2CVR00 + PAXCDS50
PCU10001	PX2CVR00 + PAXCDS20	PX2CVR00 + PAXCDS50	PX2CVR00 + PAXCDS50
PCU10002	PX2CVR00 + PAXCDS20	PX2CVR00 + PAXCDS50	PX2CVR00 + PAXCDS50

PCU/PSC PID Controllers to Newer PID Controllers

<b>PID Controller</b>	<b>with OMD00000</b>	<b>with OMD0001</b>	<b>with OMD0003</b>
PCU10004	PX2CVR00 + PAXCDS20 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10
PCU00005	PX2CVR00 + PAXCDS20 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10
PCU10104	PX2CVR00 + PAXCDS20 + PAXCDC10 + PX2FCA00	PX2CVR00 + PAXCDS50 + PAXCDC10 + PX2FCA00	PX2CVR00 + PAXCDS50 + PAXCDC10 + PX2FCA00
PCU10204	PX2CVR00 + PAXCDS20 + PAXCDC10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDC10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDC10 + PX2FCA10
PCU10205	PX2CVR00 + PAXCDS20 + PAXCDC10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDC10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDC10 + PX2FCA10
PCU10307	Contact Tech Support	Contact Tech Support	Contact Tech Support
PCU11000	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU11001	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU11002	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU11004	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU11005	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU11108	PX2CVR00 + PAXCDS20 + PAXCDL10 + PX2FCA00	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA00	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA00
PCU11208	PX2CVR00 + PAXCDS20 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10
PCU11209	PX2CVR00 + PAXCDS20 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10
PCU11306	Contact Tech Support	Contact Tech Support	Contact Tech Support
PCU12000	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU12001	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10

PCU/PSC PID Controllers to Newer PID Controllers

<b>PID Controller</b>	<b>with OMD00000</b>	<b>with OMD0001</b>	<b>with OMD0003</b>
PCU12002	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PCU12004	PX2CVR00 + PAXCDS20 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10
PCU12005	PX2CVR00 + PAXCDS20 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10
PCU12108	PX2CVR00 + PAXCDS20 + PAXCDL10 + PX2FCA00	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA00	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA00
PCU12208	PX2CVR00 + PAXCDS20 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10
PCU12209	PX2CVR00 + PAXCDS20 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PX2FCA10
PCU12306	Contact Tech Support	Contact Tech Support	Contact Tech Support
PSC00004	PX2CVR00 + PAXCDS20 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10
PSC00005	PX2CVR00 + PAXCDS20 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10
PSC01001	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PSC01002	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PSC01004	PX2CVR00 + PAXCDS20 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10
PSC01005	PX2CVR00 + PAXCDS20 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10
PSC02001	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PSC02002	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PSC02004	PX2CVR00 + PAXCDS20 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10
PSC02005	PX2CVR00 + PAXCDS20 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10



PCU/PSC PID Controllers to Newer PID Controllers

<b>PID Controller</b>	<b>with OMD00000</b>	<b>with OMD0001</b>	<b>with OMD0003</b>
PSC10004	PX2CVR00 + PAXCDS20 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10
PSC10005	PX2CVR00 + PAXCDS20 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10
PSC11001	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PSC11002	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PSC11004	PX2CVR00 + PAXCDS20 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDC10
PSC11005	PX2CVR00 + PAXCDS20 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10
PSC12001	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PSC12002	PX2CVR00 + PAXCDS20 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10	PX2CVR00 + PAXCDS50 + PAXCDL10
PSC12004	PX2CVR00 + PAXCDS20 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10
PSC12005	PX2CVR00 + PAXCDS20 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10	PX2CVR00 + PAXCDS50 + PAXCDL10 + PAXCDC10