

Application Note 51444 (Revision NEW, 5/2012) Original Instructions

Features:

- 'Dirt buster' technology with improved, 4x stronger actuator and self cleaning valve
- Patent-pending 'Silt Buster' cleaning technology
- Advanced control algorithms and diagnostic capability
- Optimal control configuration for redundancy
- Same mounting base footprint as CPC*
- Enhanced functionality

Benefits:

- Powers through 40 µm sized dirt, reducing or eliminating filter / filter servicing
- Clears silt build-up without disrupting operation integrity
- Industry-leading stability and bumpless, precision throttlevalve control
- Configuration flexibility meets your system needs
- Easily upgrade existing CPC* or Voith E360 I/H



CPC-II Upgrade Program

(Current-to-Pressure Converter, Generation 2)

Woodward reserves the right to update any portion of this publication at any time. Information provided by Woodward is believed to be correct and reliable. However, no responsibility is assumed by Woodward unless otherwise expressly undertaken.

CPC-II Upgrade Program (Current-to-Pressure Converter, Generation 2)

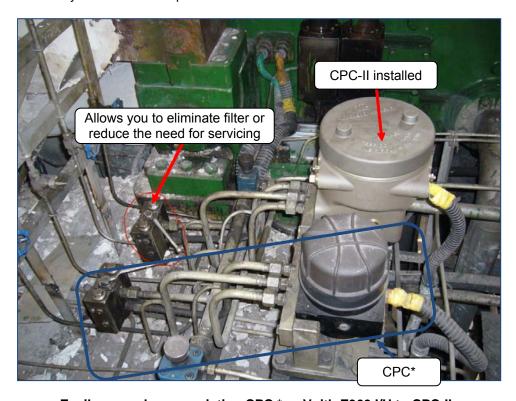
Maximize uptime with Woodward's 'dirt buster' technology

Upgrade your Woodward CPC* or Voith E360 I/H throttle valve controller with Woodward's CPC-II electro hydraulic current-to-pressure-regulating converter. The CPC-II addresses the steam turbine market's #1 reliability problem: oil contamination.

CPC-II:

- powers through 40 µm sized dirt to reduce—and often completely eliminate— turbine control filter servicing
- clears silt build-up without disrupting operation integrity
- utilizes industry-leading stability and bumpless precision throttle valve control
- offers an easy upgrade of existing CPC or Voith converters

The robust strength of the CPC-II is combined with Woodward's industry-leading control point algorithm, advanced diagnostics and PC-based service tools. This powerhouse solution enables control stability during normal turbine operation and bumpless control during plant upsets. You maximize uptime and productivity because you've minimized process over- or undershoot conditions.



Easily upgrade your existing CPC * or Voith E360 I/H to CPC-II

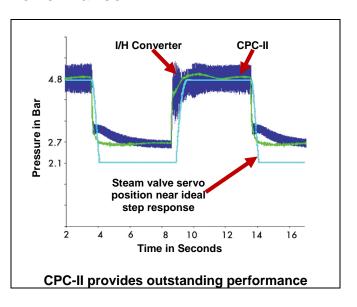
2 Woodward

^{*} CPC is no longer available after July, 2012. Recommended replacement is CPC-II.

CPC-II Performance

Compared to conventional I/H converter systems, the CPC-II output is quiet and stable. Conventional I/H converters produce excess pressure "noise", causing increased wear in the servo system, while over-damped dynamics cause slow response.

The CPC-II provides stable pressure, reducing system wear and providing rapid, accurate response to demand signals.



CPC-II Capabilities and Advantages

Capability / Function	CPC-II	CPC *	Voith E360 I/H
Dirty oil resistant	*		
Silt build-up resistant	*		
Valve linearization compensation	*		
Corrosive contamination resistant	*		Х
Sticky (high-friction) port compensation	*		
Accepts redundant pressure set point inputs	₩		
Accepts redundant pressure sensor inputs	₩		
Accepts external pressure sensor	*		
Accepts external cylinder position sensor	✓		
Internal health monitoring	✓		
Manual stroking function	*		Х
Isolated inputs and outputs	*		
Performance trending tool	*		
Performance / stability adjustments	*	Х	

As indicated in the chart, left, CPC-II gives you greatly improved functionality. From increased inlet pressure options (to 25 bar), through isolated inputs and outputs and advanced redundancy management, to monitoring and managing performance, CPC-II offers you maximum operating efficiency advantages.

Ease of Upgrade

CPC-II is a direct replacement for the CPC*. Mounting and oil interface manifolds remain in the same locations for ease of upgrade (see CPC-II Product Spec 03352 for exact dimension details).

Woodward offers an adapter kit sold separately for upgrading Voith E360 I/H throttle control units (ADAPTOR KIT PN: 8928-7240).

To begin your upgrade project, contact your local Woodward representative today.

Current Models*	Area Classification	Control Pressure Range	Upgrade to New Models
8901-455 8901-457 8901-459 Class I, Division 2	(0 to 10) bar	9907-1200	
9907-1102 9907-1106	07-1102 ATEX Zone 2	(0 to 25) bar	9907-1198
9907-046 9907-477 9907-802	Class I, Division 1 Class I, Division 2	(0 to 10) bar	9907-1199
9907-803 ATEX Zone 1 & Zone 2 9907-1103	(0 to 25) bar	9907-1197	

^{*} CPC is no longer available after July, 2012. Recommended replacement is CPC-II.

Woodward 3

We appreciate your comments about the content of our publications.

Send comments to: icinfo@woodward.com

Please reference publication 51444.



PO Box 1519, Fort Collins CO 80522-1519, USA 1000 East Drake Road, Fort Collins CO 80525, USA Phone +1 (970) 482-5811 • Fax +1 (970) 498-3058

Email and Website—www.woodward.com

Woodward has company-owned plants, subsidiaries, and branches, as well as authorized distributors and other authorized service and sales facilities throughout the world.

Complete address / phone / fax / email information for all locations is available on our website.